

3 SURVEY CIRCLE, SUITE 1 NORTH BILLERICA, MA 01862



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#### FILL MANAGEMENT PLAN

Expansion of St. Mary Cemetery 90 River Road Tewksbury, Massachusetts 01876

July 31, 2013

Prepared for:	The Archdiocese of Boston, Inc. 276 North Street Salem, MA 01970 John Walsh, Assistant to the Executive Director 781-322-6300
Care of:	Cemetery Services, Inc. 2 Salem Street Lawrence, MA 01843 Joe Viel 978-208-0266
Prepared by:	W.L. French Excavating Corp. 3 Survey Circle, Suite 1 Billerica, Massachusetts 01864 617-924-1234



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#### **1.0 INTRODUCTION**

This Fill Management Plan was prepared by W.L. French Excavating Corp. (W.L. French) in support of expansion of the St. Mary Cemetery at 90 River Road, in Tewksbury, Massachusetts. The site location is shown on Figure 1 – Site Locus Map. The area of expansion of the cemetery by filling and grading two areas of land is shown on Figure 2 –Site Plan.

The expansion is intended to provide level land for future use by St. Mary Cemetery. Expansion of the cemetery adjacent to the existing operating areas is proposed by importing fill material and grading the area. An estimated 450,000 cubic yards of fill material are proposed for the area of cemetery expansion. The proposed fill area is approximately 26 acres in area and will be filled approximately 10 - 15 feet to meet existing grades of the established cemetery. Soil placed within 6 to 8 feet of the proposed finish grade will likely be re-excavated in the future as the area is utilized as a cemetery. Soils at depth greater than 8 feet will not likely be excavated again under anticipated future use of the property as a cemetery.

Anticipated sources of fill material include large volumes of excess soil from excavation and construction projects in eastern Massachusetts. The intended fill material will include existing historic urban fill soil, soil/slurry mixtures from foundation installations, and native deposits of soil including sand, gravel, organic soils, estuarine deposits, marine sands, and Boston Blue Clay. Soil intended for reuse in the filling operation must meet Acceptance Criteria established for this location. The derivation of the Acceptance Criteria is explained herein. Testing of soil prior to acceptance and/or additional documentation of the soil source(s) with background information is required and is described herein.

It is anticipated that the fill project will take 3 years to complete based upon the size of the area to be filled, projections of volumes of fill material likely available, and anticipated daily operations at the site. Filling operations are subject to inspection by the Tewksbury Conservation Commission per a Negative Determination of Applicability relevant to the Massachusetts Wetlands Protection Act. A copy of the Negative Determination of Applicability is included in Appendix A. A Notice of Intent (NOI) and a Storm Water Pollution Prevention Plan (SWPPP) were prepared and implemented in accordance with USEPA NPDES requirements for a Construction General Permit disturbing over 1 acre of land. A copy of the SWPPP with NOI is included in Appendix B.

This plan was forwarded to and discussed with Massachusetts Department of Environmental Protection (MADEP) personnel and various Tewksbury municipal officials including the Town Manager, Selectmen, Board of Health, Planning Board, Traffic Control Division of Tewksbury Police Department, Department of Public Works, and Conservation Commission. These discussions provided relevant information regarding the filling operation to expand St. Mary Cemetery described within this plan so these officials have general awareness of this project and ongoing site activities. Additional comments from these officials will be appended to this plan as received.



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MADEP issued an Administrative Consent Order (ACO) for compliance purposes for acceptance of soil at this site. A copy of the ACO is included in Appendix C.

The content of this plan will be reviewed and revised periodically as site conditions, available fill sources, environmental regulations, project objectives and other perceptions change as the project proceeds.



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#### 2.0 PARTIES INVOLVED

Several parties will be involved with the placement of fill material at the St. Mary Cemetery expansion.

#### **Project Location:**

St. Mary Cemetery Expansion 90 River Road Assessor Map 15, Lots 7 and 13 Tewksbury, Massachusetts

#### **Project Owner:**

The Archdiocese of Boston, Inc. 276 North Street Salem, MA 01970 John Walsh, Assistant to the Executive Director 781-322-6300

#### **Owners Authorized Representative for St. Mary Cemetery Expansion:**

Cemetery Services, Inc. 2 Salem Street Lawrence, MA 01843 Joe Veil 978-208-0266

#### **Daily Management of Filling Operations:**

W.L. French Excavating Corp. 3 Survey Circle, Suite 1 Billerica, MA 01862 Bill French, Jr., President 617-924-1234

#### Placement of Topsoil/Revegetation and Maintenance:

Cemetery Services, Inc. 2 Salem Street Lawrence, MA 01843 Joe Veil 978-208-0266



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#### **Review and Approval of Soil Submittal Packages:**

Independent Consultant/MA Licensed Site Professional hired by WL French Excavating Corp.
McPhail Associates, Inc.
2269 Massachusetts Avenue
Cambridge, MA
617-868-1420
Peter Dechaves, LSP
Joseph Lombardo, LSP
Tom Fennick, LSP
Ambrose Donovan, LSP



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#### **3.0 SITE DESCRIPTION**

The cemetery expansion and fill operation with will take place on a portion of the St. Mary Cemetery at 90 River Road in Tewksbury, Massachusetts. St. Mary Cemetery is located in the northwest portion of Tewksbury. The Tewksbury/Lowell boundary line is approximately 500 feet west of St. Mary Cemetery. The center of Lowell is approximately 5 miles to the west.

St. Mary Cemetery is readily accessed from River Road. Route 133 (Andover Street) is located approximately 0.25 miles southwest of the entrance to St. Mary Cemetery. Access to Interstate 495 is located approximately 3 miles southeast of the project site via Route 133.

Abutters to St. Mary Cemetery include: the Merrimack River to the north; a golf course (Trull Brook Golf Course) to the east; a residential condominium complex on Merrimack Meadow Lane and other residential neighborhoods in Lowell to the west; and additional residential properties to the south across River Road in Tewksbury.

The Tewksbury Assessor's Office records identify St. Mary Cemetery as Map 15, Lot 7 and Lot 13. The Archdiocese of Boston purchased the property in the late 1950's. St. Mary Cemetery began operation in 1961. The property consists of approximately 106 acres of land in an area zoned for residential use (RG). The parcels together are rectangular in shape with dimensions of approximately 2750 feet north-south and 1,650 feet east west. Approximately 25 acres of the property (southwest portion) are currently used for cemetery operations. Wooded areas are located on the northern and eastern portions of the property. A wetland area is located on the north central portion of the property. Filling and grading for cemetery expansion will take place to the south of the wetland area and north and east of current cemetery operations. Soil excavated from cemetery plots and other miscellaneous materials generated during cemetery operations were staged in the area to be filled prior to the start of the expansion.

Wetlands are located on the north central portion of the property. Filling and grading will take place to the south of the wetlands. An estimated habitat of rare wetland wildlife is mapped on the north portion of the site along the Merrimack River approximately 1000 feet from the proposed cemetery expansion area. Wetland areas identified by Tighe & Bond in December 2012 and habitat areas are shown on Figure 2 and Figure 3.

A Negative Determination of Applicability relevant to the Massachusetts Wetlands Protection Act was issued by the Tewksbury Conservation Commission on July 2, 2013 pursuant to a Request for Determination of Applicability for this project. The Tewksbury Conservation Commission stated inspection of sedimentation and erosion controls placed for this project will be performed prior to starting of filling operations as may issue additional requirements as needed during the progress of the project.



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Other resource areas were not identified in the area of filling and grading. The 100-year flood plain is located along the Merrimack River. Open Protected Space was identified to the east of St. Mary Cemetery on the abutting golf course. No MADEP Disposal Sites were identified at St. Mary Cemetery. A Mobil Gas Station at 940 Andover St. Tewksbury, MA, approximately 0.25 miles southwest from the St. Mary Cemetery property, is listed as a MADEP Disposal Site. An active remediation system is in operation at this Mobil Station. A spill of transformer/mineral oil was reported at a utility pole on River Road approximately 1,500 feet east of St. Mary Cemetery. Other MADEP Disposal Sites where a release of oil or hazardous materials occurred were not identified within 3000 feet of St. Mary Cemetery.

The municipal water supply for the Town of Tewksbury is taken from the Merrimack River. The intake is located approximately 2000 feet downstream from St. Mary Cemetery. Private wells are also in operation in Tewksbury. A list of private wells obtained from Tewksbury Board of Health records by Tighe & Bond in March 2013 is included in Appendix D.

Tewksbury Board of Health Records indicate one private well is located on the St. Mary Cemetery property. The well is currently categorized as a potable domestic water supply well. However, the well is utilized for irrigation and for supply to an ornamental water fountain rather than as a potable source. Tewksbury Water Department records indicate that St. Mary Cemetery is connected to the municipal water system. Tewksbury Board of Health confirmed the St. Mary Cemetery well is used for irrigation. The status of the well at St. Mary Cemetery is being review by property ownership and will likely be changed with regulatory agencies.

Other private wells are located within 1,500 feet of St. Mary Cemetery. An irrigation well is operated at the golf course abutting to the east. An irrigation well is located at the residence at 168 Merrimack Meadows Lane, abutting to the west. Other wells were present at distance of at least 1,900 feet away.

The Tewksbury Zoning Map indicates the nearest Groundwater Overly District is 1.75 miles east of St. Mary Cemetery. The MassDEP BWSC MCP Numerical Ranking System Map indicates the site is not over a medium yield or high yield aquifer. Therefore, groundwater beneath the site is not considered a current or potential drinking water resource.

Prior to beginning the filling and grading activities for cemetery expansion, WLF will excavate and stockpile suitable overburden soil. Some or all of the overburden soil will be used to construct an earthen berm(s) between the filling operation area and the condominium complex abutting to the west. Other berms may be constructed beyond the northern limits of the current operating portion of St. Mary Cemetery and between the filling operation and the abutting golf course to the east, if determined necessary during project progress. The berm(s) will be stabilized with vegetation. The berm(s) will act as a buffer between the filling and grading project and abutters to minimize potential visual, sound, and dust impacts. Once fill placement



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grades are achieved, the overburden soil may be used to achieve final grades or may remain in berms.

Four ground water monitoring wells will be installed and sampled in conjunction with the St. Mary Cemetery Expansion project. Wells will be placed in assumed down-gradient and crossgradient locations from the proposed areas of soil placement. Proposed locations of wells are shown on Figure 2. Two wells will be located in an assumed down-gradient direction (northerly toward the Merrimac River) from the cemetery expansion area. The other two wells will be located laterally to the east and laterally to the west of the cemetery expansion area. Well construction and development details, sampling test results, and other relevant monitoring well information will be added to Appendix G as obtained. Monitoring wells will be decommissioned upon completion of the cemetery expansion project.

Monitoring wells will be sampled following USEPA Low Flow procedures prior to the start of the cemetery expansion project to establish background levels of constituents in groundwater and again 2 years after completion of the cemetery expansion project. Groundwater samples will be tested for: Volatile Organic Compounds (EPA 8260), Semivolatile Organic Compounds (EPA 8270), MCP 14 Metals, PCBs, Herbicides, Pesticides, and Extractable Petroleum Hydrocarbons. During the time of fill placement, groundwater samples will be tested annually for Volatile Organic Compounds and MCP 14 Metals only. Groundwater sample test data will be added to Appendix G as obtained.



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#### 4.0 SOIL ACCEPTANCE CRITERIA

Soil Acceptance Criteria were established prior to the start of the expansion project for various constituents in soil intended for use as fill material. The criteria were based on review of available and applicable soil standards, guidelines, values, criteria, and background levels established by MADEP in various regulations, guidelines, and MADEP technical guidance documents; white papers and discussions of the MA LSP Association; concentration ranges of typical contaminants detected in historic urban fill, naturally-deposited soil, Boston Blue Clay, and other soil, and discussions with MADEP personnel. The Acceptance Criteria were established to be protective of surrounding natural resource areas including wetlands on the property and the Merrimack River, construction workers at the site, visitors, and surrounding residents.

A summary of applicable standards, guidelines, and background levels evaluated is presented in Table 1 – Summary of Values Used to Establish Acceptance Criteria. Based upon compilation of the information and the current and future use of the property, Acceptance Criteria were established and are presented in Table 2 – Summary of Soil Acceptance Criteria.

#### **Chemical Criteria**

Chemical constituents within candidate soil must be below established Acceptance Criteria. Criteria were established for the following: 14 MCP Metals with consideration for others, Semi-volatile Organic Compounds (SVOCs), Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds (VOCs), Polychlorinated Biphenyls (PCBs), pH/corrosivity, Specific Conductance, Moisture Content/Free Liquids, Reactivity (cyanide and sulfide), Ignitibility/Flash Point, Herbicides, Pesticides, and other potential constituents based on location-specific history.

Detection limits for laboratory tests must be appropriate and adequate for evaluation and comparison to Acceptance Criteria. MADEP CAM methods and levels must be utilized where applicable.

Averaging of concentrations will not be allowed to meet Soil Acceptance Criteria. Soil containing a constituent at a concentration at or exceeding Soil Acceptance Criteria will not be accepted. All soil must meet Soil Acceptance Criteria as established herein.

#### Visual, Olfactory, and Field Screening Criteria

All soil intended for reuse in the cemetery expansion as filling and grading material will meet visual, olfactory and field screening criteria prior to being accepted and/or placed. Visual inspection of soil is to be performed at time of soil borings, test pits, stockpile sampling, at time of excavation, and/or upon arrival at the St Mary Cemetery site prior to acceptance and



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placement. Soil will exhibit no indication of staining or other discoloration indicative of a release or impact of oil or hazardous material or other nuisance conditions. Deminimis and incidental debris only (< 5% by volume) consisting of asphalt, brick, and/or concrete less than 6 inches in any dimension will be considered on a case-by-case basis provided the material can be placed greater than 6 to 8 feet below proposed finished grade. No wood, metal, wire, plastic, textile, ceramic, ash, tires, pipe, potential asbestos containing material, or other debris will be accepted.

Loads arriving with material not meeting acceptance criteria or determined to contain contaminants at levels at or exceeding acceptance criteria based on quality assurance/quality control sampling will be rejected and removed from St. Mary Cemetery at the expense of the Generator of that material. Loads not meeting acceptance criteria at the time of delivery to St. Mary Cemetery due to debris, odors, or other nonconformance with Acceptance Criteria will be rejected prior to off-loading or reloaded immediately by W.L. French. Such loads will be removed from St. Mary Cemetery immediately in the truck they were delivered in. Should QA/QC testing indicate soil as delivered is not below Acceptance Criteria, then the Generator of that soil and the party contracting with W.L. French for placement of soil at St. Mary Cemetery will promptly remove such soil from St. Mary Cemetery. Should the Generator and/or contracting party not promptly remove unacceptable soil, W.L. French will promptly act to remove that soil from St. Mary Cemetery. W.L. French will pursue cost recovery from the Generator and/or the contracting party for all costs associated with removal from St. Mary Cemetery of soil not below all Acceptance Criteria.

Soil will contain no nuisance odors such as petroleum, chemicals, solvent, and/or organic material/hydrogen sulfide as described on soil boring or test pit logs, stockpile sampling plans, and/or upon arrival at the project location. Soil with natural organic/hydrogen sulfide odor that is mixed with an odor reducing agent at the location of origin will be evaluated on a case-by-case basis. The MSDS for all odor reducing products is required with soil submittal packages.

Soil must be field screened for Total Organic Vapors following the MADEP Jar Headspace Screening Procedure (MADEP Policy #WSC-94-400 Attachment 2, modified to be based upon an isobutylene response factor rather a Benzene standard) at time of sample collection from borings, test pits, stockpiles or other locations. Soil must also be field screened at the time of excavation and load out to St. Mary Cemetery at a frequency of 1 field screening test per approximately 50 cubic yards of soil. Soil must contain less than 2 parts per million volume (ppmv) total organic vapors (TOV) above ambient background by the jar headspace screening procedure to meet Acceptance Criteria.

Soil mixed with bentonite or other slurry material will be accepted on a case-by-case space availability basis. A description of the process and materials generating the soil with slurry must be provided. The MSDS for all slurry and additive products must be submitted for review. If



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needed, pH must be adjusted to meet Acceptance Criteria prior to arrival at the fill site. Soil with slurry mixture is subject to field screening for pH upon arrival at the fill site and subject to rejection if Acceptance Criteria are not met.

Soil will contain no free liquid at the time of loading or upon arrival at the project site. Soil containing free liquid is subject to rejection upon arrival and inspection.

#### Source Site History and Use Criteria

Relevant site history and uses of each soil origin/source with regard to the presence, use, disposal, and/or release of oil or hazardous material must be provided in submittal packages prior to acceptance at St. Mary Cemetery. Reports including MCP phase reports, URAMs, RAMS, LRAs, ASTM Environmental Site Assessment Reports, or similar documentation must be submitted and will be reviewed with regard to suitability of soil as fill material for this project.

## 5.0 SOIL CHEMICAL TESTING REQUIREMENTS

Testing is required on soil proposed for acceptance as fill material from sources such as developed areas with historic urban fill soil, locations identified as an MCP Disposal Site or other oil or hazardous material release or spill locations, locations with history of manufacturing or industrial use, locations with current or past chemical or petroleum storage, or soil known to contain naturally-occurring elevated levels of metals including Boston Blue Clay and soil from Worcester County with arsenic. Naturally-deposited soil originating from locations with no documented source of petroleum, hazardous materials, historic urban fill, soil known to contain elevated levels of metals such as Boston Blue Clay, or other site history that may indicate some type of detrimental impact to soil, will be accepted without testing provided a written statement from the Generator and a Qualified Environmental Professional (LSP, CHMM, PG, PE, etc.) documents the background conditions associated with that soil relative to the presence of oil and hazardous materials.

Upon review of initial submittal package information from a soil source, source-specific supplemental testing to delineate limits of constituents exceeding Acceptance Criteria must be conducted to the satisfaction of W.L. French and the independent LSP performing soil submittal package review prior to acceptance. W.L. French and the soil submittal review consultant will provide a source-specific delineation testing plan including locations, parameters, and frequency for supplemental testing that must meet Acceptance Criteria prior to acceptance.

#### **Required Test Parameters**

Test parameters required on soil to be considered for acceptance include:



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- Volatile Organic Compounds (EPA 8260)
- Semi-volatile Organic Compounds (EPA 8270 full list)
- Metals MCP 14 metals
- PCBs
- Total Petroleum Hydrocarbons (summation of EPH Fractions can be substituted)
- Hexavalent Chromium if Total Chromium > 30 mg/kg
- pH/Corrosivity
- Specific Conductance (conductivity)
- Field Screening for Total Organic Vapors (PID following MADEP Jar Headspace Screening Procedure based upon an isobutylene response factor)
- Herbicides (may be excluded or limited based on site history)
- Pesticides (may be excluded or limited based on site history)
- Ignitibility/Flash point (may be excluded or limited based on site history)
- Reactive Cyanide (may be excluded or limited based on site history)
- Reactive Sulfide (may be excluded or limited based on site history)
- Others as deemed prudent based on soil source site history.

Current and appropriate versions of applicable methods are to be used in accordance with MADEP Compendium of Analytical Methods. Detection limits for analyses must be appropriate for comparison to acceptance criteria. Generator and Qualified Environmental Professional/LSP must ascertain data is appropriate for use as intended.

#### **Required Chemical Testing and Frequency**

Initial testing is required at the minimum frequencies below. Supplemental contaminant limit delineation and frequency testing is required for the following situations when an Acceptance Criteria is exceeded within or in proximity to soil requested for reuse at St. Mary Cemetery:

	General Source/Origin Description	Test Profile Frequency
1	Naturally Deposited Soil:	No testing with Generator and Qualified
	Not from an area of known or suspected	Environmental Professional/LSP Certification
	high background levels of contaminants,	Statement including documentation of site
	Not proximate to urban fill soil,	background/area conditions
	No MCP Disposal Sites nearby,	
	No industrial or manufacturing history	
2	Naturally deposited soil in proximity to	1 test profile per 1,000 cu yds (1,500-1,700 tons)
	but not abutting Urban Fill or an MCP	and
	Disposal Site	Supplemental delineation testing of specific
		areas for specific contaminants with exceedance
		of any Acceptance Criteria to define/confirm



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		limits of acceptable soil at 1 test per 100 cu yd.
3	Boston Blue Clay and Marine Soils;	1 test profile per 1,000 cubic yards (1,500 –
		1,700 ton) for initial review,
	Naturally-deposited Soil from an area of	and
	naturally occurring high background	Supplemental delineation testing of specific
	levels of constituents or otherwise	areas for specific contaminants with exceedance
	regulated soil	of any Acceptance Criteria to define/confirm
		limits of acceptable soil at 1 test per 100 cu yds.
4	Urban Fill Soil	1 test profile per 500 cu yds (750-850 ton)
		and
		Supplemental delineation testing of specific
		areas for specific contaminants with exceedance
		of any Acceptance Criteria to define/confirm
-		limits of acceptable soil at 1 test per 100 cu yd.
5	Soil from Industrial, Commercial,	Minimum 1 test profile per 500 cu yds (750-850
	Manufacturing site with history of	ton)
	Tannery, Textiles, Chemical/Paint	and
	Production, Circuit Board manufacturing,	Supplemental delineation testing of specific
	Plating/metal finishing, Foundry	areas for specific contaminants with exceedance of any Acceptance Criteria to define/confirm
	operations, Coal Gasification, Dry Cleaning, Salvage Yards,	limits of acceptable soil at 1 test per 100 cu yd.
	Herbicide/pesticide use, storage or	Additional test parameters such as cyanide may
	distribution facilities.	be required.
	No soil or fill shall be obtained from or	be required.
	immediately contiguous to such locations	
	unless an LSP provides a report detailing	
	why such soils conform to St. Mary	
	Cemetery Acceptance Criteria.	
6	Soil from source not otherwise described	Minimum 1 test profile per 500 cu yds (750-850
-	above where historic test data indicates	ton)
	exceedance of St. Mary Cemetery	and
	Acceptance Criteria, or where past use or	Supplemental delineation testing of specific
	site history indicated use or storage of oil	areas for specific contaminants with exceedance
	or hazardous materials at more than	of any Acceptance Criteria to define/confirm
	household quantities.	limits of acceptable soil at 1 test per 100 cu yd.
		Additional test parameters such as cyanide may
		be required.

For acceptance purposes, soil density will be considered 1.5 tons per cubic yard for soil sampled from a stockpile, and no greater than 1.7 ton per cubic yard for soil sampled in-situ via borings or



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test pits. Further technical justification will be required for acceptance of soil with assumed density greater than 1.7 ton per cubic yard.

#### Test Data Quality and Usability

Test data provided for review and acceptance must be considered current. If aged data (greater than 1 year old) is to be utilized for acceptance, then a statement from the qualified environmental professional making the submittal must be provided indicating site conditions have not changed since collection of data and that no documented releases that may impact site condition have occurred since data was collected.

Prior to submittal, the environmental professional making the submittal must perform a QA/QC evaluation of the data to ascertain data is representative and usable for its intended purpose.

The St. Mary Cemetery Expansion Project Owner proposes to once monthly collect and test a grab sample to confirm soil as received meets established Acceptance Criteria. Monthly quality control/quality assurance grab sample collection and testing will be performed by an independent third party yet to be determined. This information will be utilized by W.L. French as made available. Other sampling and testing may be performed by W.L. French should soil as received appear to be inconsistent with the characterization data and information used to obtain acceptance.

Soil deemed not meeting Acceptance Criteria due to debris, odors, or other observations at the time of arrival at St. Mary Cemetery will not be accepted. W.L. French will reload such soil into the truck upon which it arrived and reject the load. No additional loads will be accepted from that source until appropriate explanation and assurance that no additional similar loads will be delivered to St. Mary Cemetery is provided by the Generator, Generator's LSP, and the party contracting delivery of soil to St. Mary Cemetery.

Loads of soil selected for monthly quality control/quality assurance sampling performed at the direction of St. Mary Cemetery owner result will be segregated pending receipt of test results. Should the test results indicate that contaminants detected in soil tested for quality assurance/quality control purposes is not below all Acceptance Criteria, then arrangements must be made promptly by the Generator and/or party contracting for soil placement to immediately remove that soil from St. Mary Cemetery. If the Generator and/or party contracting for soil placement for soil placement fail to promptly remove unacceptable soil, then W.L. French will promptly remove the soil from St. Mary Cemetery and manage the soil at an appropriate location. W.L. French will seek recovery from the Generator and/or party contracting for soil placement for all costs associated with removal of any unacceptable soil from St. Mary Cemetery.



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#### 6.0 SOIL SUBMITTAL AND APPROVAL PROCESS

A Soil Submittal Package must be provided by representatives of each soil source/origin for review and approval by representatives of St. Mary Cemetery expansion project.

A complete package is to be provided to:

W.L. French Excavating Corp. 3 Survey Circle, Suite 1 Billerica, MA 01864 Attention: Dan Walsh, LSP 617-924-1234 dwalsh@wlfrench.com

W.L. French will perform a preliminary review to establish whether the submittal is complete and soil is appropriate for reuse as fill material at St. Mary Cemetery. The submittal will then be assigned a Profile Number and forwarded to the independent Licensed Site Professional contracted by W.L. French to perform the final review and approval.

Upon completion of the initial review, supplemental information, clarification, or additional delineation/frequency testing can be requested prior to acceptance. The source making the submittal must provide the information, clarification, or additional test data as requested for the approval process to proceed.

Upon completion of the submittal review process and determination that soil meets acceptance criteria, an Acceptance Letter will be issued. The Acceptance Letter will reference the assigned Profile Number, will state a review of information as provided was performed and found adequate and appropriate for acceptance, the quantity of soil that is approved, samples/soils that are not acceptable, and any other conditions applicable to the acceptance of applicable the soil. Soil submittal packages and Approval Letters will be retained by W. L French and the review consultant.

The review process will typically take from 1 to 4 business-days depending on the number of submittals in the queue for review, the amount of soil requested for approval, and available capacity. Submittal packages awaiting supplemental information will be placed back into the review queue. Supplemental review will start once all required information is received.

All submittals must be complete at time of submittal. No partial packages with information to be submitted later will be considered for review. No preliminary reviews of data summaries will be performed.



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A complete submittal package must contain the following:

- Soil Submittal Checklist
- Soil Reuse Submittal form completely filled out and signed by the Generator
- LSP/QEP Opinion Letter stating relevant site history and use, and a statement that the soil requested for acceptance at St. Mary Cemetery Expansion project meets acceptance criteria established in this plan, or other explanations as needed.
- Appropriate Shipping Papers signed by LSP/Qualified Environmental Professional and Generator.
- Laboratory test data reports with Chain of Custody and QA/QC for the soil samples intended for reuse at St. Mary Cemetery. Sample data representative of soil not intended for St. Mary Cemetery must not be included in submittal packages.
- A Data Summary Table comparing source-specific soil test data to St. Mary Cemetery Acceptance Criteria. For values below the detection or minimum reporting limit, the limit should be identified. For example ND < 20 mg/kg, or < 20 mg/kg must be in the summary table. Stating ND alone is not acceptable.
- Supplemental site investigation reports or information supporting acceptance of subject soil at St. Mary Cemetery Expansion project.

Copies of the Soil Submittal Checklist and Soil Reuse Submittal form are included in Appendix E. Soil Acceptance Criteria for use in a data comparison table are listed in Table 2.

The assigned Profile Number must be placed at the top center of each page of the intended shipping papers. Trucks will not be allowed access to St. Mary Cemetery without the Profile Number on shipping papers.

Each truck will be weighed on a certified scaled upon arrival with a load at St. Mary Cemetery and again after dropping the load (unless truck tare weight was previously recorded in the scale program). A net weight will be provided on a scale ticket to each truck leaving the site.



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#### 7.0 SITE ACCESS

Access to St. Mary Cemetery will be from Interstate I-495 via Exit 39 (Route 133) or Exit 38 (Route 38).

From Exit 39 (Route 133 Tewksbury, MA) off I-495 proceed west on Route 133/Andover Street. Turn right on to River Road (Tewksbury). Access to St. Mary Cemetery is on left.

From Exit 38 (Route 38, Lowell, MA) off I-495 proceed north on Route 38 toward Lowell. Turn right (east) on Route 133/Andover Street (Lowell). Turn left on River Road (Tewksbury). Access to St. Mary Cemetery is on left.

Access to St. Mary Cemetery is off River Road in Tewksbury. Upon entering the cemetery, trucks will be directed to the scale and then to the tipping area. Trucks will pass through the scale again prior to exiting the site. Each truck will be provided a scale ticket indicating weight in pounds and/or tons. The Profile Number will be referenced on each scale ticket.

Trucks proceeding to St. Mary Cemetery must not use River Road in Tewksbury from the east or the River Road exit off I-93. Only loads originating locally in Tewksbury may utilize River Road from the east to access St. Mary Cemetery. Use of River Road from the east toward St. Mary Cemetery is otherwise prohibited.

Truck drivers that fail to follow the approved routes will be given one warning. Drivers that repeat use of an unauthorized trucking route will be directed not to return to St. Mary Cemetery with any additional loads.

Operating hours are approximately 7:00 AM to 4 PM. Some allowance can be made until 5 pm for late loads with advanced notice.

Some limited Saturday hours may be available. Advanced request (5 to 7 days) for Saturday opening is required to obtain approval from various parties involved.

Some limited access delays may be experienced due to cemetery operations. Restricted truck access will be allowed during these times.



3 SURVEY CIRCLE, SUITE 1 NORTH BILLERICA, MA 01862



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#### 8.0 SOIL PLACEMENT

Once trucks are scaled, they will be directed to the off-loading area. Loads will be inspected visually, olfactory, and/or using a photoionization detector. The approximate location of placement of loads in the working area will be noted in the daily operating logs.

Loads deemed suspect or unacceptable will be rejected from St. Mary Cemetery. Rejected loads will be reloaded by W.L. French if needed and turned away from St. Mary Cemetery at the Generator's expense. No additional loads will be accepted from that source until the Generator, Generator's LSP, and the party contracting for placement of soil at St. Mary Cemetery provide appropriate explanation and assurance that no additional similar loads will be delivered to St. Mary Cemetery. Rejected loads will be promptly removed by the Generator and/or party contracting for soil placement at St. Mary Cemetery. Should the Generator and/or contracting party fail to remove unacceptable soil from St. Mary Cemetery, W.L. French will promptly remove unacceptable soil and manage the soil at an appropriate location. W.L. French will seek recovery of all costs from the Generator, the Generator's LSP, and/or the party contracting for reuse of soil for unacceptable soil removed from St. Mary Cemetery by W.L. French.

Various areas and depths will be utilized for different soil types as categorized and received. Future operations at the cemetery require certain physical characteristics of soil within 6 to 8 feet of proposed surface grade. Boston Blue Clay and other cohesive materials will be placed greater than 8 feet below proposed final grades. Historic urban fill soils will be placed greater than 6 to 8 feet below final grades. Other naturally-deposited soils and soils relocated at the fill area will be placed within 8 feet of final grades. Specific areas furthest away from wetlands will be dedicated and utilized for placement of soils with slightly elevated conductivity and/or soils mixed with slurry spoils. Other areas may be designated for specific types or volumes of soil from various origins as the cemetery expansion project proceeds.



3 SURVEY CIRCLE, SUITE 1 NORTH BILLERICA, MA 01862



#### Phone [617] 924.1234 / [978] 663.2623 Main Fax [978] 663.5240 Estimating Fax [978] 663.0229

#### 9.0 **PROJECT COMPLETION**

Upon receipt of all fill from an off-site source and a request from the submitting party, W.L. French will sign off as representative of the Receiving Facility on the shipping papers (Material Shipping Record or Bill of Lading). Sign-offs will be forwarded electronically and by U.S. Mail to the party contracting the services or other party as authorized by contracting party. A final report indicating number of loads and tonnage received will be provided with the sign-off paperwork.

Upon completion of the filling and grading project, W. L. French will compile and retain documentation of soil submittal packages, approvals, and tonnage received.

Overburden soil that was relocated to a berm(s) between the active cemetery and the fill area will be spread and graded over the fill material after achieving approved project subgrades.

Once W.L. French has completed fill soil placement, topsoil and revegetation will be overseen by others at the direction Cemetery Services, Inc.



3 SURVEY CIRCLE, SUITE 1 NORTH BILLERICA, MA 01862



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#### **10.0 ADDENDUM TO FILL MANAGEMENT PLAN**

This fill management plan will be modified as needed to meet changing project objectives, environmental regulations, or other requirements. Updates to this plan will be noted on the cover page. Copies of Correspondences with various Municipal, State, or Federal agencies and officials will be added to Appendix F as the project proceeds. Supplemental Information will be added to Appendix G as the project proceeds.

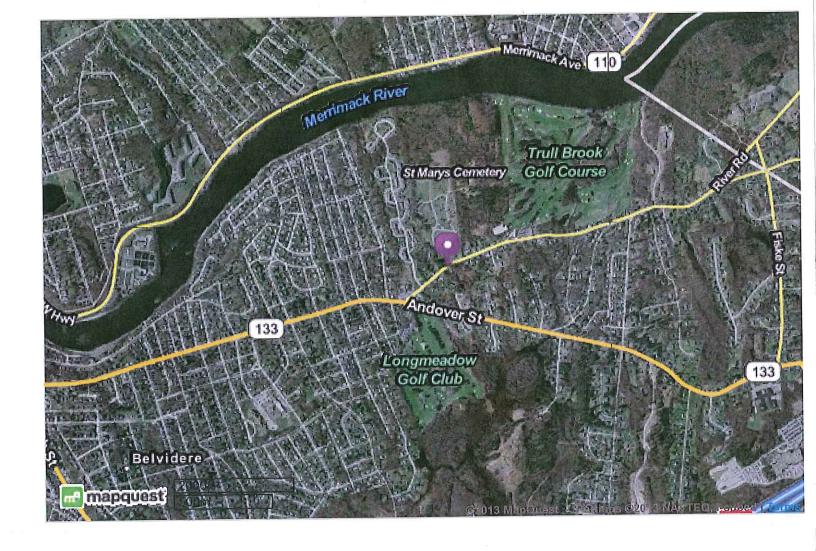
Soil Acceptance Criteria may be modified as the project proceeds to meet changing regulatory criteria such as Reportable Concentrations, cleanup standards, background levels, or other guidelines published by MADEP.

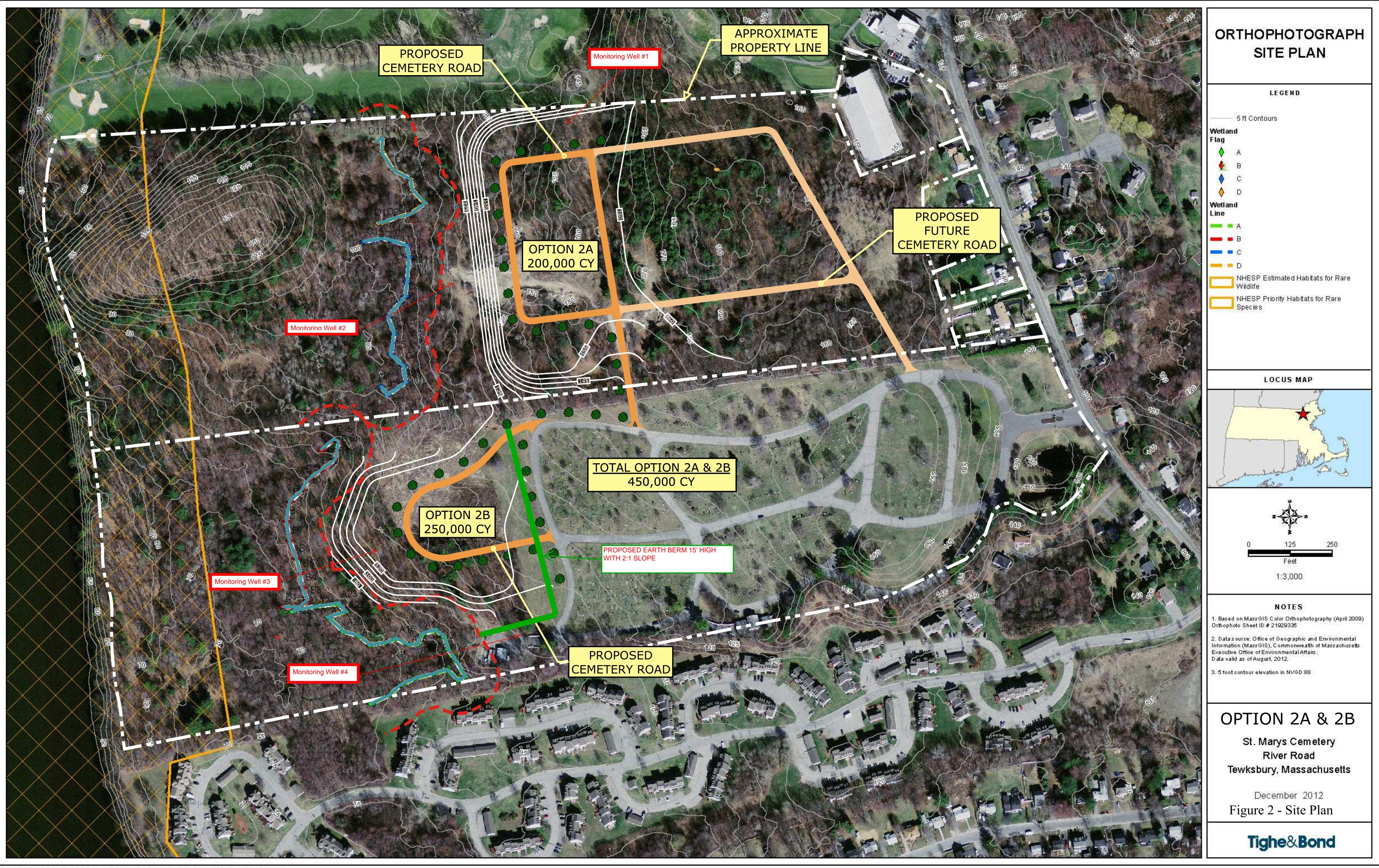
# FIGURES

- FIGURE 1 SITE LOCUS MAP
- FIGURE 2 SITE PLAN
- FIGURE 3 MASS GIS RESOURCE MAP

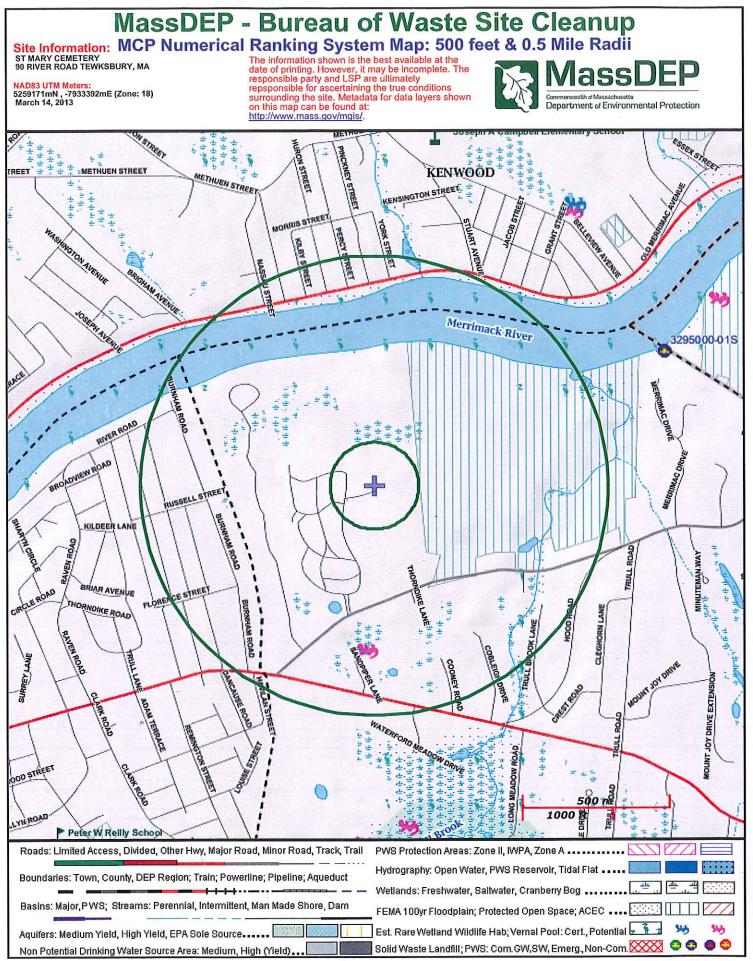
Figure 1 - Site Locus Map St. Mary Cemetery 90 River Road Tewksbury, MA

# Map of: **90 River Rd** Tewksbury, MA 01876-1065





G:\GIS\MA\SiteLocus\Tewksburv\siteplan\_StMarvs.mxd\_Date Saved: 9/25/2012\_User: scs



http://maps.massgis.state.ma.us/images/dep/mcp/mcp.htm

FIGURE 3 - MassGIS Resource Map 3/14/2013

# TABLES

- TABLE 1 Summary of Values Used to Establish Soil Acceptance Criteria
- TABLE 2 Summary of Acceptance Criteria
   Image: Criteria

#### TABLE 1

# SUMMARY OF VALUES USED FOR DERIVATION OF SOIL ACCEPTANCE CRITERIA FILL MANAGEMENT PLAN ST. MARY'S CEMETERY EXPANSION TEWKSBURY, MASSACHUSETTS

CONSTITUENT		_	VALUES F	FOR COMP	ARISON	_			PROPOSED ACCEPTANCE CRITERIA	REASONING
<u> </u>	MCP RCS1 March 2013	MADEP Identified BACKGROUND - Fill Material with Coal or Wood Ash	MADEP Identified BACKGROUND - Natural Soil	MADEP BUD Method 1 Values S-3/GW-3 Table 12	MADEP BUD Method 1 Values S-3/GW-1 Table 10	MADEP BUD Method 1 Values S-2/GW-1 Table 7	Proposed MCP RCS1 2013 Public Hearing Draft			
Source of Information	1	2	2	3	3	3	4			
SEMI-VOLATILE ORGANIC COMPOUNDS (mg/kg)									- 0.7	
2-Methylnaphthalene Acenaphthene	0.7		0.5	240 5000	0.66			-	< 0.7	< RCS-1 < RCS-1
Acenaphthylene	1	. 1	0.5	14					< 1	< RCS-1
Anthracene	1000		1	5000	5000				< 10	< RCS-1 , 10x background
Benzo(a)anthracene	2	,	2	160				-	<7 <2	< RCS-1 < RCS-1
Benzo(a)pyrene Benzo(b)fluoranthene	7		2	16					<7	< RCS-1 < RCS-1
Benzo(g,h,i)perylene	1000	3	1	5000					< 10	< RCS-1 , 10x background
Benzo(k)fluoranthene	70		1	1600	1600				< 10	< RCS-1 , 10x background
Bis(2-ethylhexyl)phthalate Carbozole		not established	not established	230		230 not established	90	-	< 10 < 10	< RCS-1, typical of urban soil typical of urban soil
Chrysene	not established	not established	not established n	ot established 3400	not established 3400		70	-	< 20	< RCS-1, typical of urban soil
Dibenzo(a,h)anthracene	0.7	1	0.5	16				[	< 0.7	< RCS-1
Dibenzofuran		not established		ot established	not established	not established			< 10	< RCS-1, typical of urban soil
Fluoranthene	1000		4	5000 5000	5000				< 40 < 10	< RCS-1 , 10x background < RCS-1 , 10x background
Indeno(1,2,3-cd)pyrene	7		1	160					< 7	< RCS-1 , 10X background < RCS-1
Naphthalene	4		0.5	3000					< 4	< RCS-1
Phenanthrene	10			3000	10				<10	< RCS-1
Pyrene	1000			5000	5000				< 40	< RCS-1
others considered and evaluated on a	case by case i	basis ii not rele	ated to a known i	release of oil	or nazardous	materials		-		
METALS (mg/kg)										
Antimony	20			16					< 10	< RCS-1, DEP input, 10 x background
Arsenic	20			11					< 20	< RCS-1, typical background level
Barium Beryllium	1000			2100			90	-	<380 <4	< RCS-1, DEP input, 7.5 x background < RCS-1, DEP input, 10 x background
Cadmium	2		2	10			40	1 -	< 2, < 20 after fall 2013 MCP changes	< RCS-1, < 10 x background after fall 2013 MCP revisions
Chromium, total	30	40	30	570	570		100		< 30	< RCS-1
Chromium, III	1000			960	960				< 230	< RCS-1, DEP input, 7.5 x background
Chromium, VI Lead	30			570			100		< 30 < 200	< RCS-1
Mercury	300		100 0.3	110			200/300		< 3	< proposed RCS-1 < RCS-1, DEP input, 10 x background
Nickel	20			350			600		< 20, < 150 after fall 2013 MCP changes	< RCS-1/ 7.5x background after fall 2013 MCP revisions
Selenium	400	1	0.5	390	390	390			< 5	< RCS-1, DEP input, 10 x background
Silver	100	5	0.6	110					< 6	< RCS-1, DEP input, 10 x background
Thallium Vanadium	600	30	0.6	37 530			30	-	< <u>6</u> < 100	< RCS-1, DEP input, 10 x background Anticipated RCS-1 after proposed Fall 2013 MCP revisions
Zinc	2500			5000			1000	1 F	< 500	< RCS-1, 5x background
others considered and evaluated on a	case by case l	basis if at natur	ally occurring lev	vels and not 1	eleated to a k	nown release	or oil or hazard	dous	materials	
TOTAL PETROLEUM HYDROCARBONS (mg/kg)	1000	not established	not established	500	8.4	8.4		-	< 500	< RCS-1, 1/2 RCS-1
VOLATILE ORGANIC COMPOUNDS (mg/kg)	various	s not established	not established	various	various	various		┥┝	< 10% or RCS-1 Considered *	lab contaminant/remanants, not a site-related contaminant
PCBs (mg/kg)	2	not established	not established	1.6	1.6	1.6	1		None Detected (< 0.1 mg/kg) **	Not a site-related contaminant
pH/CORROSIVITY	not established	not established	not established	not established	not established	not established		╎╎	5-9	typical of fill soil
SPECIFIC CONDUCTANCE/ (umhos/cm)	not established	not established	not established	not established	not established	not established			< 500 wetland vicinity ,< 2000 elsewhere	< 1/2 MA DEP Unlined Lf limit
FLASH POINT/IGNITABILITY (° F)	not established	not established	not established	not established	not established	not established			> 140 o F, not ignitable	not hazardous waste
REACTIVE SULFIDE (mg/kg)	not established	not established	not established	not established	not established	not established		[	< 500 mg/kg	not hazardous waste
REACTIVE CYANIDE (mg/kg)	not established	not established	not established	not established	not established	not established		[	< 250 mg/kg	not hazardous waste
HERBICIDES (mg/kg)	various		not established	various	various	various			None Detected *	Not a site-related contaminant
PESTICIDES (mg/kg)	various		not established	various	various				None Detected *	Not a site-related contaminant
Free Liquid	various		nov established	varidus	various	various		-		
						1		-	no free liquid at time of loading or upon arrival	
Odor								┥┝	no petroleum, chemical, organic, or nuisance odors	
Other testing may be required based on location-specific hi	story									Cyanide,

Sources of Information:

Massachusettts Contingency Plan 310 CMR 40.0000 in effect as of March 1, 2013.
 MADEP, Technical Update, Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil, May 23, 2002.
 MADEP, Bureau of Waste Prevention, Draft Interim Guidance Document for Beneficial Use Determination Regulations, 310 CMR 19.060, March 18, 2004.
 Proposed changes to MCP RCS-1, 2013 Public Hearing Draft

\* Trace part per billion levels well below RCS-1 of VOCs, Herbicides, Pesticides with very low frequency of detection and no known or potential source considered and evaluated on a case by case basis. \*\* Trace levels PCB below 0.1 mg/kg considered and evaluated on a case by case basis.

Updated 4-12-13 D Walsh Updated 4-23-13 D Walsh Updated 4-24-13 D Walsh Updated 5-2-13 D Walsh Updated 5-2-13 D Walsh Updated 7-11-13 D Walsh Updated 7-22-13 D Walsh

Notes

#### TABLE 2

## SUMMARY OF ACCEPTANCE CRITERIA FILL MANAGEMENT PLAN ST. MARY CEMETERY EXPANSION 90 RIVER ROAD TEWKSBURY, MASSACHUSETTS

CONSTITUENT	ACCEPTANCE CRITERIA	Notes
SEMI-VOLATILE ORGANIC COMPOUNDS (mg/kg)		
2-methylnaphthalene	< 0.7	
Acenaphthene	< 4	
Acenaphthylene	< 1	
Anthracene	< 10	
Benzo(a)anthracene	< 7	
Benzo(a)pyrene	<2	
Benzo(b)fluoranthene	<7	
Benzo(g,h,i)perylene	<10	
Benzo(k)fluoranthene	<10	
Bis(2-ethylhexyl)phthalate	<10	
Carbozole	<10	
Chrysene	<20	
Dibenzo(a,h)anthracene	<0.7	
Dibenzofuran	<10	
Fluoranthene	<40	
Fluorene	<10	
Indeno(1,2,3-cd)pyrene	<7	
Naphthalene	<4	
Phenanthrene	<10	
Pyrene	<40	
others considered and evaluated on a cas	se by case basis if not releated to a known relea	ase of oil or hazardous ma
ETALS (mg/kg)		
Antimony	< 10	
Arsenic	< 20	
Barium	< 380	
Beryllium	< 4	
Cadmium	< 2	1
Chromium III	< 230	
Chromium, Total or VI	< 30	
Lead	< 200	1
Mercury	< 3	
Nickel	< 20	1
Selenium	<5	
Silver	<6	
Thallium	<6	
Vanadium	< 100	1
Zinc	< 500	
others considered and evaluated on a case by case basis if at naturally o	ccurring levels and not releated to a known release of ohm or anthropogenic sour	ce
OTAL PETROLEUM HYDROCARBONS (mg/kg)	< 500	2
OLATILE ORGANIC COMPOUNDS (mg/kg)	< 10% of RCS-1 Considered	3
CBs (mg/kg)	None Detected (< 0.1)	
H/CORROSIVITY	5 - 9	4
PECIFIC CONDUCTANCE/ (umhos/cm)	< 2000	5
LASH POINT/IGNITABILITY (° F)	> 140 ° F/Not Ignitable	
EACTIVE SULFIDE (mg/kg)	500	
EACTIVE CYANIDE (mg/kg)	250	
ERBICIDES (mg/kg)	Not Detected	6
ESTICIDES (mg/kg)	Not Detected	6
RFF LIQUID/PAINT FILTER TEST	No Free Liquid	

FREE LIQUID/PAINT FILTER TEST	No Free Liquid	
ODOR	No odor	7
TOTAL ORGANIC VAPOR SCREENING	< 2 ppmv above background	8
Other testing may be required based on location-specific history		

Notes:	Working Draft 4-12-13 D. Walsh
See Fill Management Plan for further explanation of acceptance criteria, testing needs, and additional considerations.	Updated 4-12-13 dwalsh
See Table 1 of Fill Management Plan for information used to derive Acceptance Criteria.	Updated 4-23-13 Dwalsh
Current EPA/MADEP or other approved method required for laboratory testing; MADEP CAM utilized where applicable.	Updated 4-24-13 dwalsh
Laboratory detection limits must be adequate and appropriate for evaluation and comparison to Acceptance Criteria.	Updated 5-2-13 D Walsh
Averaging not allowed. All constituents must be below Acceptance Criteria for acceptance of soil.	Updated 5-7-12 D Walsh
	Updated 5-10-12 D Walsh
	Updated 7-11-13 D Walsh
1. MCP Reportable Concentrations for these constituents are proposed to change in Fall 2013. Acceptance Criteria will be modified at time of MCP St	andards changes.

- 2. The summation of EPH fractions can be utilized for TPH comparison.
- 3. VOCs present at 10% of the RCS-1 Criteria considered and evaluated on case by case basis.
- 4. pH of slurry spoils/soil mix will be evaluated on a case-by-case basis depending on availability of space and proximity to wetlands.
- 5. Limited volumes from various sources with higher levels considered if space is available away from wetland areas.
- 6. Herbicides and Pesticides must be Not Detected at applicable RCS-1 levels and at MADEP Compendium of Analytical Methods appropriate levels.
- 7. Soil with odor control agent applied at point of origin may be considered. MSDS and other product info must be provided for review prior to acceptance.
- 8. Total organic vapor screening following the MADEP Jar Headspace Screening Procedure referenced in Policy #WSC 94-400 Attachment 2 modified to use isobutylene response factor.

Updated 7-22-13 D Walsh

# APPENDICES

- APPENDIX A Negative Determination of Applicability from Conservation Commission
- APPENDIX B Storm Water Pollution Prevention Plan
- APPENDIX C Administrative Consent Order from MADEP
- APPENDIX D List of Private Water Wells
- APPENDIX E Soil Submittal Package Requirements
- APPENDIX F Correspondences Regarding Fill Management Plan
- APPENDIX G Supplemental Information Added as Project Proceeds

# APPENDIX A

#### **CONSERVATION COMMISSION**

## NEGATIVE DETERMINATION OF APPLICABILITY



Important

# **Massachusetts Department of Environmental Protection** Bureau of Resource Protection - Wetlands WPA Form 2 – Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# A. General Information

When filling out	Fro	om:					
forms on the computer, use only the tab		Tewksbury Conservation Commission					
key to move your cursor -	To	Applicant			Property Owner (if d	ifferent from ap	oplicant):
do not use the		W.L French Excavating, Inc.			St. Mary's Cemetary	/	
return key.		Name			Name		
		3 Survey Circle			90 River Road		
		Mailing Address			Mailing Address		
		North Billerica	MA	01862	Tewksbury	MA	01876
return		City/Town	State	Zip Code	City/Town	State	Zip Code
	1.	Title and Date (or Revised D	ate if app	licable) of Fin	al Plans and Other Do	cuments:	
		St. Mary's Cemetary				June 20	13
		Title				Date	
		Title				Date	
		Title				Date	
	2.	Date Request Filed:					

# **B.** Determination

Pursuant to the authority of M.G.L. c. 131, § 40, the Conservation Commission considered your Request for Determination of Applicability, with its supporting documentation, and made the following Determination.

Project Description (if applicable):

Deposit 450,000 cubic yards of clean fill to create approximately 26.2 acres of land to be used for St. Mary's Cemetery.

**Project Location:** 

**River Road** Street Address 15

Assessors Map/Plat Number

Tewksbury	
City/Town	
7 and 13	
Parcel/Lot Number	



# Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

# WPA Form 2 – Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# B. Determination (cont.)

The following Determination(s) is/are applicable to the proposed site and/or project relative to the Wetlands Protection Act and regulations:

#### **Positive Determination**

Note: No work within the jurisdiction of the Wetlands Protection Act may proceed until a final Order of Conditions (issued following submittal of a Notice of Intent or Abbreviated Notice of Intent) or Order of Resource Area Delineation (issued following submittal of Simplified Review ANRAD) has been received from the issuing authority (i.e., Conservation Commission or the Department of Environmental Protection).

1. The area described on the referenced plan(s) is an area subject to protection under the Act. Removing, filling, dredging, or altering of the area requires the filing of a Notice of Intent.

2a. The boundary delineations of the following resource areas described on the referenced plan(s) are confirmed as accurate. Therefore, the resource area boundaries confirmed in this Determination are binding as to all decisions rendered pursuant to the Wetlands Protection Act and its regulations regarding such boundaries for as long as this Determination is valid.

2b. The boundaries of resource areas listed below are <u>not</u> confirmed by this Determination, regardless of whether such boundaries are contained on the plans attached to this Determination or to the Request for Determination.

3. The work described on referenced plan(s) and document(s) is within an area subject to protection under the Act and will remove, fill, dredge, or alter that area. Therefore, said work requires the filing of a Notice of Intent.

- 4. The work described on referenced plan(s) and document(s) is within the Buffer Zone and will alter an Area subject to protection under the Act. Therefore, said work requires the filing of a Notice of Intent or ANRAD Simplified Review (if work is limited to the Buffer Zone).
- 5. The area and/or work described on referenced plan(s) and document(s) is subject to review and approval by:

Name of Municipality

Pursuant to the following municipal wetland ordinance or bylaw:

Name

Ordinance or Bylaw Citation



## Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

# WPA Form 2 – Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# B. Determination (cont.)

- 6. The following area and/or work, if any, is subject to a municipal ordinance or bylaw but <u>not</u> subject to the Massachusetts Wetlands Protection Act:
- ☐ 7. If a Notice of Intent is filed for the work in the Riverfront Area described on referenced plan(s) and document(s), which includes all or part of the work described in the Request, the applicant must consider the following alternatives. (Refer to the wetland regulations at 10.58(4)c. for more information about the scope of alternatives requirements):
  - Alternatives limited to the lot on which the project is located.
  - Alternatives limited to the lot on which the project is located, the subdivided lots, and any adjacent lots formerly or presently owned by the same owner.
  - Alternatives limited to the original parcel on which the project is located, the subdivided parcels, any adjacent parcels, and any other land which can reasonably be obtained within the municipality.
  - Alternatives extend to any sites which can reasonably be obtained within the appropriate region of the state.

#### **Negative Determination**

Note: No further action under the Wetlands Protection Act is required by the applicant. However, if the Department is requested to issue a Superseding Determination of Applicability, work may not proceed on this project unless the Department fails to act on such request within 35 days of the date the request is post-marked for certified mail or hand delivered to the Department. Work may then proceed at the owner's risk only upon notice to the Department and to the Conservation Commission. Requirements for requests for Superseding Determinations are listed at the end of this document.

- 1. The area described in the Request is not an area subject to protection under the Act or the Buffer Zone.
- 2. The work described in the Request is within an area subject to protection under the Act, but will not remove, fill, dredge, or alter that area. Therefore, said work does not require the filing of a Notice of Intent.
- 3. The work described in the Request is within the Buffer Zone, as defined in the regulations, but will not alter an Area subject to protection under the Act. Therefore, said work does not require the filing of a Notice of Intent, subject to the following conditions (if any).

Erosion controls will be installed by the applicant and inspected by the Conservation Administrator

4. The work described in the Request is not within an Area subject to protection under the Act (including the Buffer Zone). Therefore, said work does not require the filing of a Notice of Intent, unless and until said work alters an Area subject to protection under the Act.



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 2 – Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# B. Determination (cont.)

5. The area described in the Request is subject to protection under the Act. Since the work described therein meets the requirements for the following exemption, as specified in the Act and the regulations, no Notice of Intent is required:

Exempt Activity (site applicable statuatory/regulatory provisions)

6. The area and/or work described in the Request is not subject to review and approval by:

Name of Municipality

Pursuant to a municipal wetlands ordinance or bylaw.

Name

# C. Authorization

This Determination is issued to the applicant and delivered as follows:

by hand delivery on

by certified mail, return receipt requested on

Ordinance or Bylaw Citation

Date

This Determination is valid for **three years** from the date of issuance (except Determinations for Vegetation Management Plans which are valid for the duration of the Plan). This Determination does not relieve the applicant from complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.

Date

This Determination must be signed by a majority of the Conservation Commission. A copy must be sent to the appropriate DEP Regional Office (see <u>http://www.mass.gov/dep/about/region.findyour.htm</u>) and the property owner (if different from the applicant).

Signatures Addition Staphic Deach Jemphic Talis Date



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 2 – Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# D. Appeals

The applicant, owner, any person aggrieved by this Determination, any owner of land abutting the land upon which the proposed work is to be done, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate Department of Environmental Protection Regional Office (see <u>http://www.mass.gov/dep/about/region.findyour.htm</u>) to issue a Superseding Determination of Applicability. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and Fee Transmittal Form (see Request for Departmental Action Fee Transmittal Form) as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Determination. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant if he/she is not the appellant. The request shall state clearly and concisely the objections to the Determination which is being appealed. To the extent that the Determination is based on a municipal ordinance or bylaw and not on the Massachusetts Wetlands Protection Act or regulations, the Department of Environmental Protection has no appellate jurisdiction.



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Request for Departmental Action Fee Transmittal Form Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# A. Request Information

Important:
When filling out
forms on the
computer, use
only the tab
key to move
your cursor -
do not use the
return kev

1.	Person or party making request	(if appropriate,	name the citizen	group's representati	ive):
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Mailing Address			
City/Town	State	Zip Code	
Phone Number	Fax Number (if app	Fax Number (if applicable)	
Project Location			
Mailing Address			
Mailing Address City/Town	State	Zip Code	
-	orm 3), Abbreviated Notice of Resource		
City/Town Applicant (as shown on Notice of Intent (F	orm 3), Abbreviated Notice of Resource		
City/Town Applicant (as shown on Notice of Intent (F (Form 4A); or Request for Determination of	orm 3), Abbreviated Notice of Resource		
City/Town Applicant (as shown on Notice of Intent (F (Form 4A); or Request for Determination of Name	orm 3), Abbreviated Notice of Resource		
City/Town Applicant (as shown on Notice of Intent (F (Form 4A); or Request for Determination of Name Mailing Address	orm 3), Abbreviated Notice of Resource of Applicability (Form 1)):	ze Area Delineati	

# **B. Instructions**

- 1. When the Departmental action request is for (check one):
  - Superseding Order of Conditions (\$100 for individual single family homes with associated structures; \$200 for all other projects)
  - Superseding Determination of Applicability (\$100)

Superseding Order of Resource Area Delineation (\$100)

Send this form and check or money order for the appropriate amount, payable to the *Commonwealth of Massachusetts* to:

Department of Environmental Protection Box 4062 Boston, MA 02211



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Request for Departmental Action Fee Transmittal Form Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

# **B. Instructions** (cont.)

- 2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.
- 3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see <a href="http://www.mass.gov/dep/about/region/findyour.htm">http://www.mass.gov/dep/about/region/findyour.htm</a>).
- 4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

# **APPENDIX B**

### STORMWATER POLLUTION PREVENTION PLAN

# **APPENDIX C**

#### ADMINISTRATIVE CONSENT ORDER FROM MADEP

#### **APPENDIX D**

# LIST OF PRIVATE WATER WELLS

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Table 2 Potable/Irrigation Wells 1/2 MilesSaint Mary's Cemetery90 River Road Tewksbury, MA

Address	Weli Type	Distance (Feet)
12 Hood Rd	I	2,500 SSE
30 Hood Rd	I	2,300 SE
Helvetia St (Long Meadow Golf Course)	D	1,900 SSW
168 Merrimack Meadows Ln	I	500 W (West Abbuter)
90 River Rd	D	Site
170 River Rd (Trull Brook Golf Course)	I	500 E (East Abbuter)
749 Tull Rd	D	2,500 ESE

*I* = *Irrigation Well D* = *Domestic Potable Well* 

# **APPENDIX E**

# SOIL SUBMITTAL PACKAGE REQUIREMENTS

#### SOIL SUBMITTAL PACKAGE CHECKLIST

#### ST. MARY CEMETERY EXPANSION PROJECT 90 RIVER ROAD TEWKSBURY, MA

#### ~ Please RETURN this check list with all supporting information~

Facility Name:	St. Mary Cemetery Expansion Project		
Address:	90 River Road, Tewksbury, MA		
Owner:	Catholic Cemetery Association of The Archdiocese of Boston, Inc. care of Cemetery Services, Inc.		
<b>Operator:</b>	W.L. French Excavating Corp., 3 Survey Circle, Suite 1, Billerica, MA		
<b>Contact Person:</b>	Chris Paulino/Dan Walsh Title: Project Manager Telephone#: 617-924-1234		
<b>Type of Project:</b>	Cemetery Expansion by Soil Fill and Grading Project		

1.	Laboratory Testing performed every 500 cubic yards.	<u>Circle</u> Yes /	
2.	Laboratory Testing performed every 1000 cubic yards.	Yes /	No
3.	Supplemental delineation testing performed at 100 cubic yard frequency	Yes /	No
4.	Laboratory Testing not performed.	Yes /	No
5.	LSP opinion letter states that soil meets acceptance criteria.	Yes /	No
6.	Description of site and contaminants provided. (Describe in LSP Opinion Letter)	Yes /	No
7.	Description of current and former site usage/history is provided. (Describe in LSP Opinion Letter)	Yes /	No
8.	Soil analytical data for specific samples attached and of sufficient quantity with QA/QC and Chain of Custody attached.	Yes /	No
9.	Quantity of Soil is provided.	Yes /	No
10.	Field screening data used to support chemical composition provided.	Yes /	No
11.	Physical description/soil classification is provided.	Yes /	No
12.	Site figure showing soil origin, soil stockpiles, and location of all soil samples is provided.	Yes /	No
13.	Data table comparing all applicable results to St. Mary Cemetery Acceptance Criteria provided.	Yes /	No
14.	Signed & Stamped MSR/BOL are provided.	Yes /	No
15.	St. Mary Cemetery Reuse Submittal Form completed, signed, and attached.	Yes /	No

Please explain in detail any item above which "No" has been circled for in the LSP opinion letter provided with the package for approval. Failure to provide the above information may result in the submittal being denied.

Title



W. L. FRENCH EXCAVATING CORPORATION

COMMERCIAL SITE DEVELOPMENT • CONTRACT TRUCKING • ENVIRONMENTAL MANAGEMENT

# SOIL REUSE SUBMITTAL FORM ST. MARY CEMETERY EXPANSION 90 RIVER ROAD TEWKSBURY, MASSACHUSETTS

#### **PROFILE NUMBER**

(Assigned by WL French Excavating Corp.)

#### A. SITE INFORMATION:

Name:	Contact:	
Address:	Phone:	
City:	State, Zip:	
Release Tracking No. or Site ID No. (if applicable):		

#### **B.** GENERATOR INFORMATION:

Name:	Contact:
Address:	Phone:
City:	State, Zip:

#### C. CONSULTANT INFORMATION:

Company:	Contact:
Address:	Phone:
City:	State, Zip:

# **D. ESTIMATED SOIL QUANTITY:**

Tons:	or Cubic Yards:
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Soil Reuse Submittal - St. Mary Cemetery, 90 River Road, Tewksbury, MA



#### **E. LABORATORY ANALYSIS**

Check the following laboratory analysis performed on the material to be reused (check all that apply)  $\Box$  VOCs, SVOCs, TPH, PCBs

□ MCP14 Metals

□ TCLP (if required by total levels)

□ Conductivity

□ Ignitability/Flash Point

□ Pesticides

□Reactivity □ Herbicides

 $\Box pH$ 

□ Other laboratory analysis performed:

□ Field screening performed (describe below)

□ Attach data summary tables for all soil from source and laboratory reports for only applicable samples

#### F. SITE HISTORY:

□Check if extra sheet attached

Current Use(s):
Past Use(s):
Check additional site history/uses below. Provide additional description as needed:
Tannery Yes No
Textiles Yes No
Foundry Yes No
Dry Cleaning Yes No
Coal Gasification Yes No
Machine Shop Yes No
Salvage/Junk Yard Yes No
Petroleum Storage Yes No
Plating/metal finishing Yes No
Chemical Production Yes No
Circuit Board Manufacturer Yes No
Herbicide or Pesticide use, storage, or disposal Yes No
Historic Urban Fill Soil present Yes No
Boston Blue Clay present Yes No
Soil with elevated natural background of Arsenic or other constituents Yes No
Dumping Ground for dredge spoils, fill soil, ash waste, or other waste Yes No
Source of soil is on an MCP Disposal Site RTN
Source of soil is adjacent/near to an MCP Disposal Site RTNs

2 Soil Reuse Submittal – St. Mary Cemetery, 90 River Road, Tewksbury, MA



# W. L. FRENCH EXCAVATING CORPORATION

COMMERCIAL SITE DEVELOPMENT . CONTRACT TRUCKING . ENVIRONMENTAL MANAGEMENT

#### **G.** PHYSICAL SOIL DESCRIPTION:

Physical Description (sand, gravel, silt, peat, fill, clay etc.):

Check if the following materials are present (check all that apply):

 $\Box$  Coal  $\Box$  Ash

□ Construction Debris □ Vegetative Matter □ Other Material:

# H. SOIL SAMPLING METHODOLOGY:

Sampling Methods (check all that apply):

□ Composite (Acceptance criteria based on grab samples) □ Grab

□ Headspace Screened □ Visually Contaminated □ Olfactory Contaminated

 $\Box$  Other:

 $\Box$  Clay

#### I. SOIL CHARACTERIZATION METHODOLOGY:

Soil Characterization (check all that apply): □ In-situ

	Stoc	kpile	12	1 1
-				

 $\Box$  Other:

No. of Samples Collected:

"Hotspots" identified (material not suitable for reuse at St. Mary's):

Describe how "hotspots" were segregated (if applicable):

#### **J. CERTIFICATION**

I, the generator, having used due diligence and determined that the soil described within this Soil Submittal Package and intended for reuse at St. Mary Cemetery Expansion Project meets the acceptance criteria, screening procedures, and due diligence described within the Fill Management Plan. There is no reason to suspect or believe soil intended for reuse at St. Mary Cemetery has been impacted by any releases of oil or hazardous materials or contains any other contaminants than those at levels described herein. I agree to promptly remove any soil delivered to St. Mary Cemetery that is determined by W.L. French Excavating Corp. to not meet acceptance criteria. Should W.L. French Excavating Corp. take action and remove such soil from St. Mary Cemetery and manage that material elsewhere, W.L. French will seek payment from the Generator for all costs including damages.

Signature of Generator:	Date:

Generator - Printed Name:

Soil Reuse Submittal - St. Mary Cemetery, 90 River Road, Tewksbury, MA



W. L. FRENCH EXCAVATING CORPORATION

COMMERCIAL SITE DEVELOPMENT • CONTRACT TRUCKING • ENVIRONMENTAL MANAGEMENT

### K. SITE DIAGRAM:

A site diagram is required indicating any major structures, roads, excavation areas, soil origin, sample locations, and stockpile locations. All sampling locations must be noted: □Check if Diagram is Attached



Soil Reuse Submittal - St. Mary Cemetery, 90 River Road, Tewksbury, MA

# **APPENDIX F**

# CORRESPONDENCES RELATIVE TO FILL MANAGEMENT PLAN

# **APPENDIX G**

### SUPPLEMENTAL INFORMATION ADDED AS PROJECT PROCEEDS