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INTERIM REMEDIAL MEASURE – SOIL REMOVAL WORK PLAN PETERS DRY CLEANING LOCKPORT, NEW YORK

SITE NO. 932128

WORK ASSIGNMENT NO. D007619-14

Prepared for:

New York State Department of Environmental Conservation

Albany, New York

Prepared by:

MACTEC Engineering and Consulting, P.C.
Portland, Maine

MACTEC: 3612122244

MARCH 2014

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Submitted by:	Approved by:
_____	_____
Jeff McCrady	Mark Stelmack, P.E.
Project Engineer	Principal Professional

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

CAMP	Community Air Monitoring Plan
COCs	contaminants of concern
Department	New York State Department of Environmental Conservation
HASP	Health and Safety Plan
IRM	interim remedial measure
MACTEC	MACTEC Engineering and Consulting, P.C.
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
OSHA	Occupational Safety and Health Administration
Site	Peter's Dry Cleaning Site
TSDF	treatment, storage, or disposal facility
WP	Work Plan

1.0 INTRODUCTION

MACTEC Engineering and Consulting, P.C. (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC [Department]), is submitting this Work Plan (WP) for the Peters Dry Cleaning Site (Site), in Lockport, Niagara County, New York. This WP is being submitted under the NYSDEC Work Assignment #D007619-14, and in accordance with the Superfund Standby Contract between MACTEC and the Department.

The WP presents the activities and work to be completed by MACTEC, the Department, and the Department-selected Contractor in support of completing this Interim Remedial Measure (IRM). The Department will select a callout Contractor to complete the remedial activities in accordance with the requirements described in this WP. MACTEC, as a representative of the Department, will provide construction oversight, community air monitoring, and quality assurance services. References in the WP to "MACTEC" shall be equivalent to "Engineer" references in the Drawings and Specifications. MACTEC serves as both the design engineer for the project and oversight engineer for the construction.

The following sections of the WP include a background summary of the Site, a brief scope of work for the IRM, and descriptions of the roles and responsibilities of the parties involved in the work. Detailed scope of work information is included in the Drawings and Specifications included in Appendix A and B, respectively. The Community Air Monitoring Plan (CAMP) to be implemented by MACTEC is included in Appendix C. Representative information regarding existing site conditions, including boring logs and soil analytical data, is included in Appendix D. The contained-in determination letter from the Department indicating the approval to dispose of portions of the contaminated soil as non-hazardous waste is included in Appendix E. Appendix F includes a Price Sheet to be filled out and submitted by the Contractor. Compensation for the work will be based on the lump sum and unit prices provided by the Contractor for the payment items established for the work.

2.0 BACKGROUND INFORMATION

The Site is listed as a Class 2 Inactive hazardous waste site; Site No. 932128, in the Registry of Hazardous Waste Sites in New York State (NYS). Peters Dry Cleaning is located at 316 Willow Street in a residential neighborhood in the City of Lockport, Niagara County, New York (Drawing G-001). The Site is approximately 0.41 acres in size and was last used as a commercial dry cleaning facility. The building located on the property and used for the dry cleaning business was demolished in early October 2013, leaving only the foundation and drive way. The remainder of the Site is covered by grass and a gravel parking area, with some trees located along the property boundary.

The Site is surrounded by residential properties, and Altro Park, a City park is located northwest of the Site across Willow Street.

The area surrounding the Site is zoned R1 for residential use, but the Site itself has a special use zoning variance for commercial use. The Site is serviced by public sewer and water, as are the surrounding residential properties.

An IRM is a cleanup activity that may be performed when a source of contamination or exposure pathway (the way in which a person may contact contamination) can be effectively addressed without extensive investigation and evaluation.

The IRM will be conducted in two phases. The first phase of the IRM will consist of the demolition of remnant building structures on-site above and below grade. Remnant structures include foundation walls and the concrete floor slab that were left in place until additional subsurface sampling could be completed. This sampling was conducted in October and March 2014 to better delineate the contamination. The second phase of the work will be removal of contaminated soil, disposal of the soil at an approved offsite disposal facility, backfilling the excavation to grade with clean soil, and seeding the site.

3.0 SCOPE OF WORK

The IRM will include an access control component to deter unauthorized Site access and reduce potential public exposure to accessible contaminant source areas and other on-site contamination while work is being performed. The remnant building slab from the demolished building structure will be removed in its entirety to access contaminated soils underneath and around the slab.

The work area is located inside and outside the Site property boundary. The work area will be accessed from Willow Street by way of a private driveway.

The Contractor shall supply all labor and furnish all materials, supplies, tools and equipment, and all consumable items that are required to complete the work. The work for this IRM is comprised of the following primary tasks:

1. Mobilize equipment and personnel to the Site as required to perform the work.
    a. Provide a frac tank to contain water generated during execution of the work.
    b. Provide carbon vessels to meet pre-treatment requirements of the City of Lockport wastewater treatment plant prior to discharge.
    c. Provide a decontamination Pad or equivalent means for decontaminating small tools and equipment.
    d. Provide other temporary facilities and controls as deemed necessary by the Contractor.
    e. Provide other equipment and materials as required.
2. Remove and dispose of approximately 250 tons of construction and demolition debris as indicated in the provided Drawings.
3. Remove approximately 2,571 tons of contaminated soil as indicated in the provided drawings.
4. Stockpile excavated soil outside the horizontal non-hazardous waste limit determined to be clean by visual inspection and photo-ionization detector for backfill.
5. Complete site restoration activities in accordance with the provided drawings and specifications.
6. Characterize waste generated during execution of the work (waste characterization completed to date may be used to establish waste profiles for the contaminated material). Transport and dispose construction and demolition debris, hazardous waste, non-hazardous waste, and construction water at licensed treatment, storage, or disposal facilities (TSDF) approved by the Department and MACTEC (See contained in approval letter in Appendix E).

The Contractor shall perform the work in a manner that is compliant with its corporate Health and Safety Plan (HASP) and all governing Occupational Safety and Health Administration (OSHA) regulations. If required, the Contractor shall develop a site-specific HASP to direct work with and around the Site's contaminants of concern (COCs). The COCs for the Site are volatile organic compounds.

Minimize erosion and sedimentation during the work in accordance with best management practices as defined in the New York Standards and Specifications for Erosion and Sediment Control, August 2005 by the NYS Soil and Water Conservation Committee. Appropriate erosion and sediment control best management practices) shall be in place prior to commencing earth disturbance activities.

The Contractor shall execute the work by methods that minimize the generation of dust. The Contractor shall employ dust control measures to minimize the creation of airborne dust during execution of the work. Dust control systems shall be implemented, as necessary, to meet local, state, and/or federal regulations for air emissions and dust. The dust control measures will be such that, at a minimum, air quality is in compliance with applicable OSHA regulations.

The Contractor shall be responsible and will be held accountable for assuring that all sampling, analysis, transportation, and disposal requirements of the TSDF as well as Federal, State, and local governments are complied with and properly documented.

For additional details regarding the scope of work, refer to the Drawings and Specifications in Appendices A and B, respectively, of this work plan.

4.0 ROLES AND RESPONSIBILITIES

4.1 CONTRACTOR ROLES AND RESPONSIBILITIES

The Contractor shall be responsible for the work identified in the Drawings presented in Appendix A, and the Specifications presented in Appendix B of this WP, including:

- Executing a callout contract with the Department for the work described in the WP;
- Preparing and submitting for approval of all required submittals. Ensuring that work is conducted in accordance with the Contractor's Site-Specific HASP;
- Ensuring that work is conducted in accordance with the requirements of the Site-Specific CAMP;
- Ensuring that access control measures are implemented in a manner that is protective of the Site and general public;

4.2 ENGINEER ROLES AND RESPONSIBILITIES

MACTEC, as the Engineer shall be responsible for:

- Coordination and correspondence with the Department
- Implementation of the Site-Specific CAMP
- Oversight of Contractor including, but not limited to:
  - Review and approval of (in conjunction with the Department) all submittals;
  - Ensuring that remedial activities are in accordance with the Drawings and Specifications provided;
  - Ensuring that MACTEC's oversight activities are conducted in accordance with MACTEC's Site-Specific HASP;
  - Approving design and cost changes in consultation with the Department;
  - Verifying quantity measurements;
  - Inspecting and approving completed remediation activities as meeting the requirements of the Drawings and Specifications; and
  - Recommending to the Department payment for accepted work.
- Completing a Final Completion Report for the WP for submittal to the Department.

4.3 DEPARTMENT ROLES AND RESPONSIBILITIES

The Department shall be responsible for:

- Executing a callout contract with a Department-approved Contractor to perform the work described in the WP;
- Securing access agreements with the property owner, and abutting property owner at 320 Willow Street;
- Providing input and approval of changes in the work including elements affecting technical changes to the design and cost changes; and
- Approving payment to the Contractor for work verified and completed to the satisfaction of MACTEC.

5.0 SITE ACCESS

The Site is will be accessed from Willow Street. Temporary access roads within the property will be constructed by the Contractor as required to provide truck access to the working face of the excavation The Department has secured access agreements with each property owner and the Contractor has been granted permission by the Department to perform the work on these properties.

The City of Lockport has granted the Contractor permission to utilize the Altro Park parking lot for truck staging and queuing due to the limited available space at the Site.

6.0 SCHEDULE

The proposed schedule is to begin work by April 7, 2014 and complete work within four (4) calendar weeks.

7.0 PRICE SHEET

The Contractor shall provide MACTEC and the Department with a price to perform the work described in this WP consistent with the Contractor's current New York State-approved rates. The Contractor shall provide MACTEC with a breakdown of scope of work costs as noted on the Price Sheet included in Appendix F.

Please provide a completed price sheet to Jeff McCrady (jeff.mccrady@amec.com) at MACTEC and Michael Hinton (mjhinton@gw.dec.state.ny.us) at the Department by April 5, 2014. MACTEC and the Department will review the price provided and, if accepted, the Department will provide Empire GeoServices, Inc. authorization to proceed with the work.

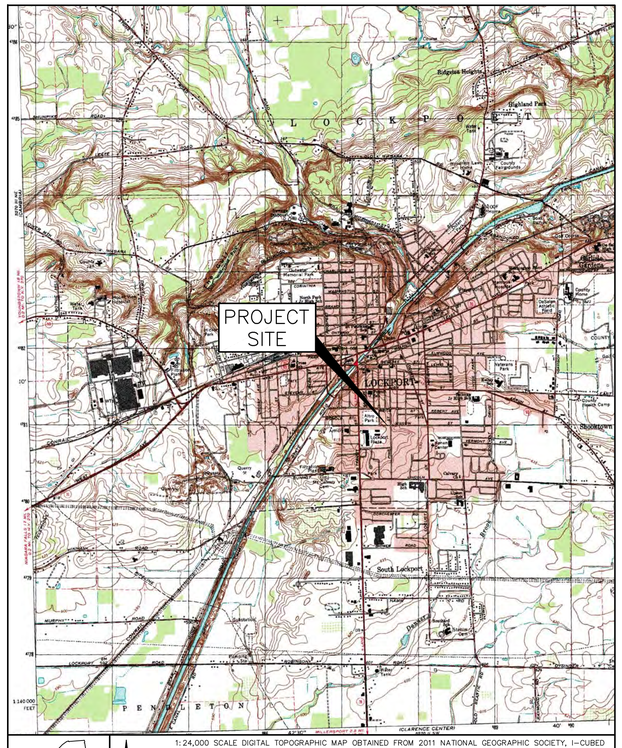
APPENDIX A

DRAWINGS

G-001	Cover Sheet
G-002	Legend, Abbreviations, and General Notes
C-101	Existing Conditions Plan
C-102	Phase 1 Excavation Plan
C-103	Final Excavation Plan
C-104	Restoration Plan
C-201	Sections
C-301	Civil Details 1
C-302	Civil Details 2

INTERIM REMEDIAL MEASURE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
316 WILLOW STREET, SITE NO. 932128
LOCKPORT, NEW YORK

MARCH 2014



LOCUS MAP

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SCALE IN FEET

DRAWING INDEX

SHEET NUMBER	DRAWING TITLE	DISCIPLINE NUMBER
1	COVER SHEET	G-001
2	LEGEND, ABBREVIATIONS, AND GENERAL NOTES	G-002
3	EXISTING CONDITIONS PLAN	C-101
4	PHASE I EXCAVATION PLAN	C-102
5	FINAL EXCAVATION PLAN	C-103
6	RESTORATION PLAN	C-104
7	SECTIONS	C-201
8	CIVIL DETAILS 1	C-301
9	CIVIL DETAILS 2	C-302

SITE MAP

0 75 150 300

SCALE IN FEET

NO.	DATE	DSGN	DR	CHK	APVD
		JPM	MRS	MJS	JPC
C	03/28/14	FINAL DRAFT FOR NYSDEC REVIEW		JPM	MJS
B	03/06/14	DRAFT FOR NYSDEC REVIEW		JPM	JPC
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NO.	DATE	REVISION		BY	APVD

New York State Department of Environmental Conservation

INTERIM REMDIAL MEASURE
PETERS DRY CLEANING
316 WILLOW ST, LOCKPORT, NEW YORK
NYSDEC SITE NO. - 932128

MACTEC Engineering and Consulting, P.C.
P.O. Box 1076, 511 Congress Street
Portland, Maine 04112-7050
(207) 775-5401

MACTEC

COVER SHEET

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	02/28/14
PROJ	3612-12-2244
DWG	G-001
SHEET	1 OF 9

GENERAL NOTES:

1. DRAWING REFERENCES:
   - A. SITE LOCATION, TOPOGRAPHY, AND BOUNDARY INFORMATION BASED ON A PLAN ENTITLED "BOUNDARY SURVEY MAP" FOR PETERS DRY CLEANERS, LOCKPORT, NY, PREPARED BY PRUDENT ENGINEERING, DATED DECEMBER 19, 2013, SCALE 1"=20'.
2. SURVEY INFORMATION:
   - A. MAPPING COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (2011) – NEW YORK STATE PLANE COORDINATE SYSTEM (NYSNET), WEST ZONE (3103).
   - B. VERTICAL DATUM BASED ON NAVD 88 (NYSNET).
   - C. MAPPING UNITS ARE SHOWN IN U.S. SURVEY FEET.
   - D. THE CONTOUR INTERVAL IS 1/2 FOOT.
3. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM A COMBINATION OF FIELD OBSERVATIONS, AVAILABLE MAPS, RECORDS, AND INFORMATION PROVIDED BY THEIR OWNERS. THE LOCATION AND DESCRIPTION SHOULD BE CONSIDERED APPROXIMATE. THERE ALSO MAY BE OTHER FACILITIES, STRUCTURES OR UTILITIES IN THE AREA, THE EXISTENCE OF WHICH IS PRESENTLY UNKNOWN.
4. THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION IS RESPONSIBLE FOR COORDINATING PERMISSIONS AND SECURING ACCESS AGREEMENTS TO PERMIT WORK AND CONSTRUCTION SUPPORT ACTIVITIES ON THE ADJACENT ABUTTER PROPERTIES NOW OR FORMERLY OF MOHAWK, LTD, THADDEUS H. ZIMOWSKI, JAMIE MAUGERI ROBERTS, AND THE NEW YORK, SUSQUEHANNA AND WESTERN RAILWAY, AND THE AMERICAN LEGION CLONAN POST 1000.

ABBREVIATIONS:

AC	AIR CONDITIONER, ACRE
APPROX	APPROXIMATELY
BM	BENCHMARK
BOT	BOTTOM
℄	CENTER LINE
CM	CENTIMETER
CONC	CONCRETE
CP	CONTROL POINT (SURVEY)
D	DEPTH
D_{50}	MEDIAN STONE SIZE
DEPT	DEPARTMENT
DIA. ø	DIAMETER
E	EASTING, EAST, END
EL, ELEV	ELEVATION
EZ	EXCLUSION ZONE
FND.	FOUND
'	FOOT, FEET, MINUTES
G	GAS
GW	GROUNDWATER
H	HORIZONTAL
HDPE	HIGH DENSITY POLYETHYLENE
HR	HOUR
ID	IDENTIFICATION, INSIDE DIAMETER
"	INCHES, SECONDS
INV	INVERT
IRM	INTERIM REMEDIAL MEASURE
L.	LIBER
LB	POUND, LEFT BANK
LF	LINEAR FEET
LOW	LIMIT OF WORK
LTD.	LIMITED
MAG	MAGNETIC
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MW	MONITORING WELL
N	NORTHING, NORTH
NE	NORTHEAST
NO.	NUMBER
NTS	NOT TO SCALE
NW	NORTHWEST
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DEPARTMENT
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
NYSNET	NEW YORK SPATIAL REFERENCE NETWORK
OC	ON CENTER
OD	OUTSIDE DIAMETER
O.H.	OVER HEAD
OHE	OVERHEAD ELECTRIC
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P̲	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
S	SOUTH, SLOPE, START
SE	SOUTHEAST
SF	SQUARE FEET OR SILTATION FENCE
SQ.	SQUARE
SS	STANDARD SPECIFICATIONS, SANITARY SEWER
ST	STORM
SW	SOUTHWEST
TYP	TYPICAL

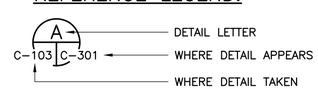
LEGEND – EXISTING:

- PROPERTY LINE
- EASEMENT LINE
- TOPOGRAPHIC CONTOUR (MAJOR, 1' INTERVAL)
- TOPOGRAPHIC CONTOUR (MINOR, 0.5' INTERVAL)
- PAVEMENT
- CONCRETE
- CHAIN LINK FENCE
- WOODEN FENCE
- BUILDING
- TREE LINE OR BRUSH LINE
- OVERHEAD ELECTRICAL
- GAS LINE
- WATER LINE
- GATE VALVE
- SANITARY SEWER LINE
- SANITARY SEWER MH
- SANITARY SEWER CLEANOUT
- UTILITY POLE
- SIGN
- TEST PIT
- WELL LOCATION
- DECIDUOUS SPECIMEN TREE
- CONIFEROUS SPECIMEN TREE
- 2008 IRM

LEGEND – NEW:

- SILTATION FENCE
- CHAIN LINK FENCE
- WOODEN FENCE
- TEMPORARY CONSTRUCTION FENCE
- LIMIT OF WORK
- EXCLUSION ZONE BOUNDARY
- TEMPORARY DEWATERING PIPING
- EXCAVATION LIMIT
- TOPOGRAPHIC CONTOUR (MAJOR, 5' INTERVAL)
- TOPOGRAPHIC CONTOUR (MINOR, 1' INTERVAL))
- SPOT GRADE

REFERENCE LEGEND:



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B	03/06/14	JPM
A	02/28/14	JPM

REVISION: FINAL DRAFT FOR NYSDEC REVIEW; DRAFT FOR NYSDEC REVIEW; DRAFT FOR NYSDEC REVIEW

DR: JPM | CHK: MRS | APVD: MJS

BY: JPM | MJS; JPC | JPM; JPC | APVD: JPC

New York State Department of Environmental Conservation

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COVER SHEET

VERIFY SCALE

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DATE	02/28/14
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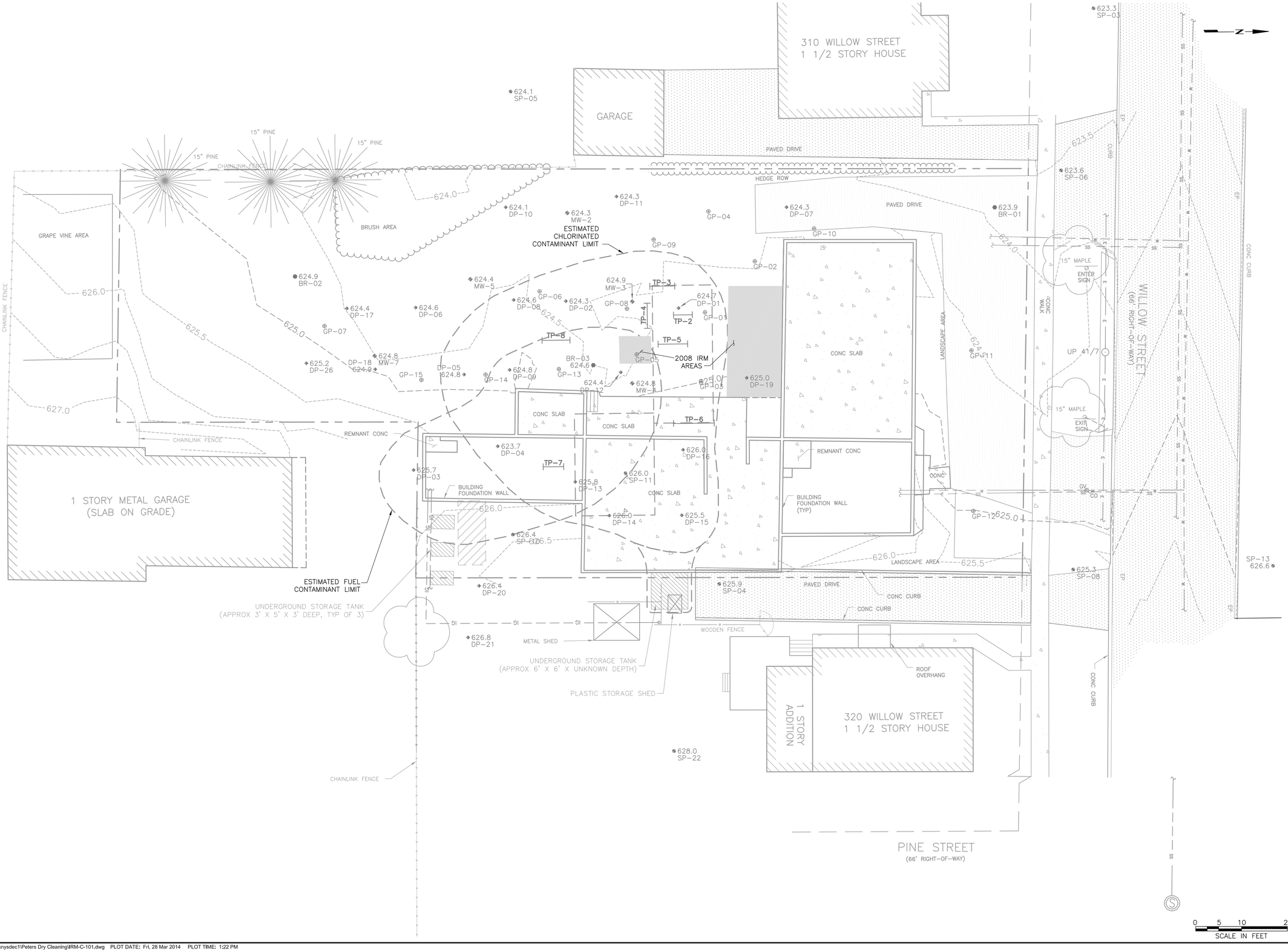
SHEET	2 OF 9



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C	03/28/14	JPM	MRS	MJS	JPC
B	03/06/14	JPM	JPC		
A	02/28/14	JPM	JPC		

REVISION | BY | APVD

FINAL DRAFT FOR NYSDEC REVIEW — JPM — MJS
DRAFT FOR NYSDEC REVIEW — JPM — JPC
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EXISTING CONDITIONS PLAN

VERIFY SCALE

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DATE	02/28/14
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DWG	C-101
SHEET	3 OF 9

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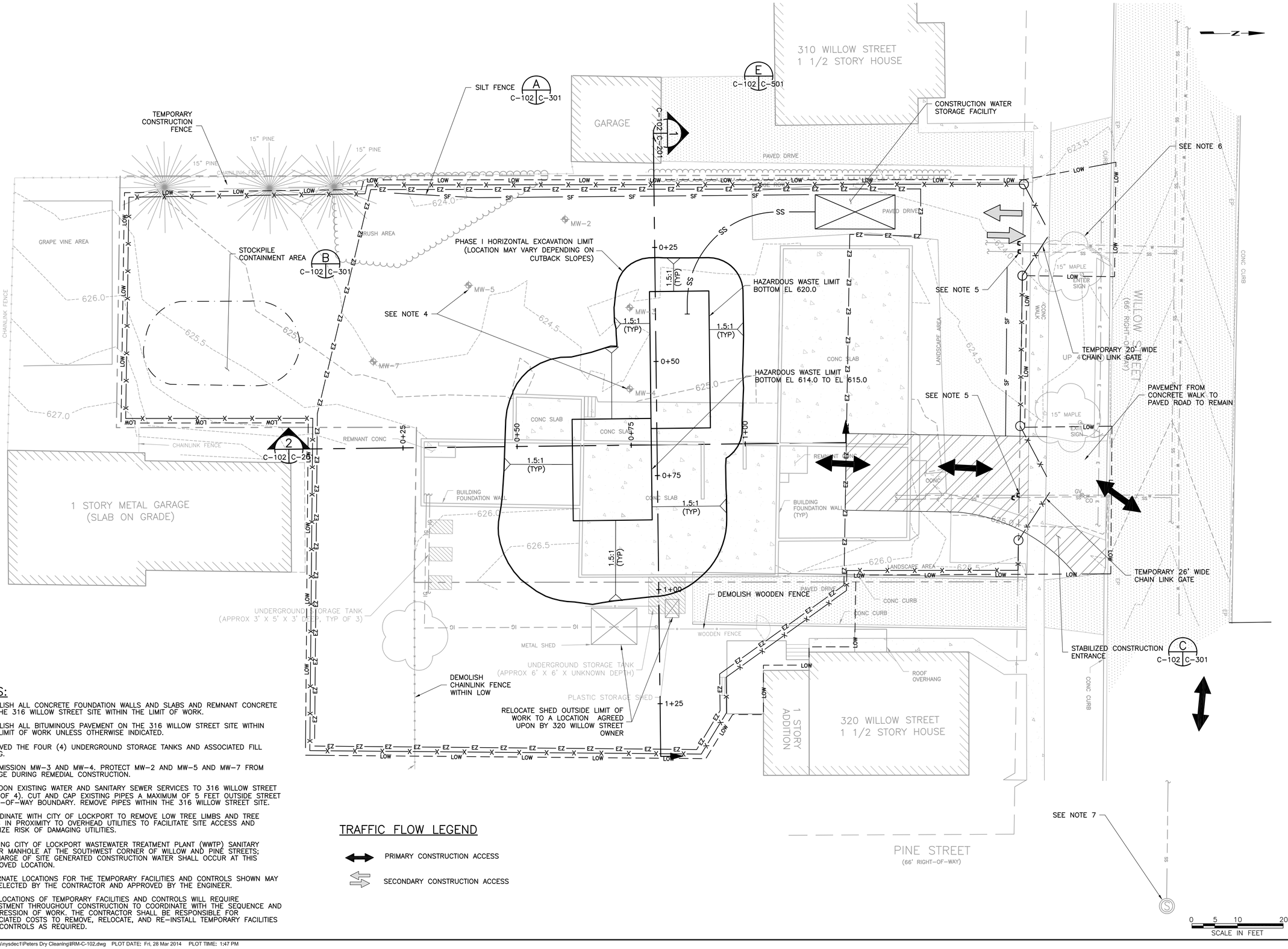

NOTES:

1. DEMOLISH ALL CONCRETE FOUNDATION WALLS AND SLABS AND REMNANT CONCRETE ON THE 316 WILLOW STREET SITE WITHIN THE LIMIT OF WORK.
2. DEMOLISH ALL BITUMINOUS PAVEMENT ON THE 316 WILLOW STREET SITE WITHIN THE LIMIT OF WORK UNLESS OTHERWISE INDICATED.
3. REMOVED THE FOUR (4) UNDERGROUND STORAGE TANKS AND ASSOCIATED FILL PIPING.
4. DECOMISSION MW-3 AND MW-4. PROTECT MW-2 AND MW-5 AND MW-7 FROM DAMAGE DURING REMEDIAL CONSTRUCTION.
5. ABANDON EXISTING WATER AND SANITARY SEWER SERVICES TO 316 WILLOW STREET (TYP OF 4). CUT AND CAP EXISTING PIPES A MAXIMUM OF 5 FEET OUTSIDE STREET RIGHT-OF-WAY BOUNDARY. REMOVE PIPES WITHIN THE 316 WILLOW STREET SITE.
6. COORDINATE WITH CITY OF LOCKPORT TO REMOVE LOW TREE LIMBS AND TREE LIMBS IN PROXIMITY TO OVERHEAD UTILITIES TO FACILITATE SITE ACCESS AND MINIMIZE RISK OF DAMAGING UTILITIES.
7. EXISTING CITY OF LOCKPORT WASTEWATER TREATMENT PLANT (WWTP) SANITARY SEWER MANHOLE AT THE SOUTHWEST CORNER OF WILLOW AND PINE STREETS; DISCHARGE OF SITE GENERATED CONSTRUCTION WATER SHALL OCCUR AT THIS APPROVED LOCATION.
8. ALTERNATE LOCATIONS FOR THE TEMPORARY FACILITIES AND CONTROLS SHOWN MAY BE SELECTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
9. THE LOCATIONS OF TEMPORARY FACILITIES AND CONTROLS WILL REQUIRE ADJUSTMENT THROUGHOUT CONSTRUCTION TO COORDINATE WITH THE SEQUENCE AND PROGRESSION OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSOCIATED COSTS TO REMOVE, RELOCATE, AND RE-INSTALL TEMPORARY FACILITIES AND CONTROLS AS REQUIRED.

TRAFFIC FLOW LEGEND

PRIMARY CONSTRUCTION ACCESS

SECONDARY CONSTRUCTION ACCESS

NO.	DATE	DSGN
B	03/28/14	JPM
A	03/06/14	JPM

DR: JPM | CHK: MRS | APVD: MJS

FINAL DRAFT FOR NYSDEC REVIEW — JPM JPC APVD
DRAFT FOR NYSDEC REVIEW — JPM JPC BY
REVISION

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CIVIL
PHASE I
EXCAVATION PLAN

VERIFY SCALE

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DATE	02/28/14
PROJ	3612-12-2244
DWG	C-102
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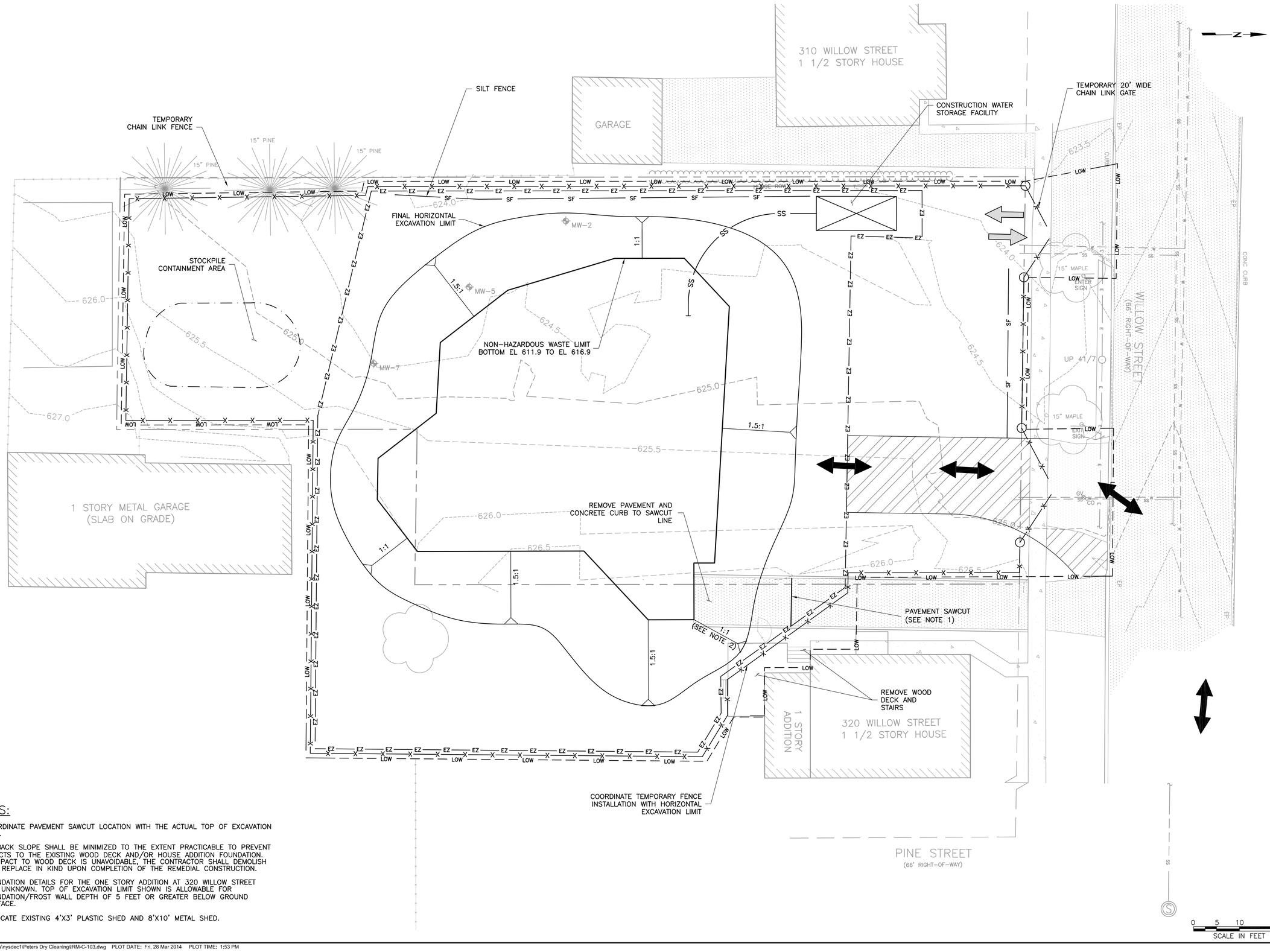

NOTES:

1. COORDINATE PAVEMENT SAWCUT LOCATION WITH THE ACTUAL TOP OF EXCAVATION LIMIT.
2. CUTBACK SLOPE SHALL BE MINIMIZED TO THE EXTENT PRACTICABLE TO PREVENT IMPACTS TO THE EXISTING WOOD DECK AND/OR HOUSE ADDITION FOUNDATION. IF IMPACT TO WOOD DECK IS UNAVOIDABLE, THE CONTRACTOR SHALL DEMOLISH AND REPLACE IN KIND UPON COMPLETION OF THE REMEDIAL CONSTRUCTION.
3. FOUNDATION DETAILS FOR THE ONE STORY ADDITION AT 320 WILLOW STREET ARE UNKNOWN. TOP OF EXCAVATION LIMIT SHOWN IS ALLOWABLE FOR FOUNDATION/FROST WALL DEPTH OF 5 FEET OR GREATER BELOW GROUND SURFACE.
4. RELOCATE EXISTING 4'X3' PLASTIC SHED AND 8'X10' METAL SHED.

DSGN	NO.	DATE	REVISION	CHK	APVD	BY
JPM	D	03/25/14	FINAL DRAFT FOR NYSDEC REVIEW	MRS	MJS	JPM
	C	03/25/14	DRAFT FOR CONTAINED-IN LETTER			JPC
	B	03/06/14	DRAFT FOR NYSDEC REVIEW			JPM
	A	02/28/14	DRAFT FOR NYSDEC REVIEW			JPC
DR		JPM				JPC

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MACTEC

CIVIL
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DATE	02/28/14
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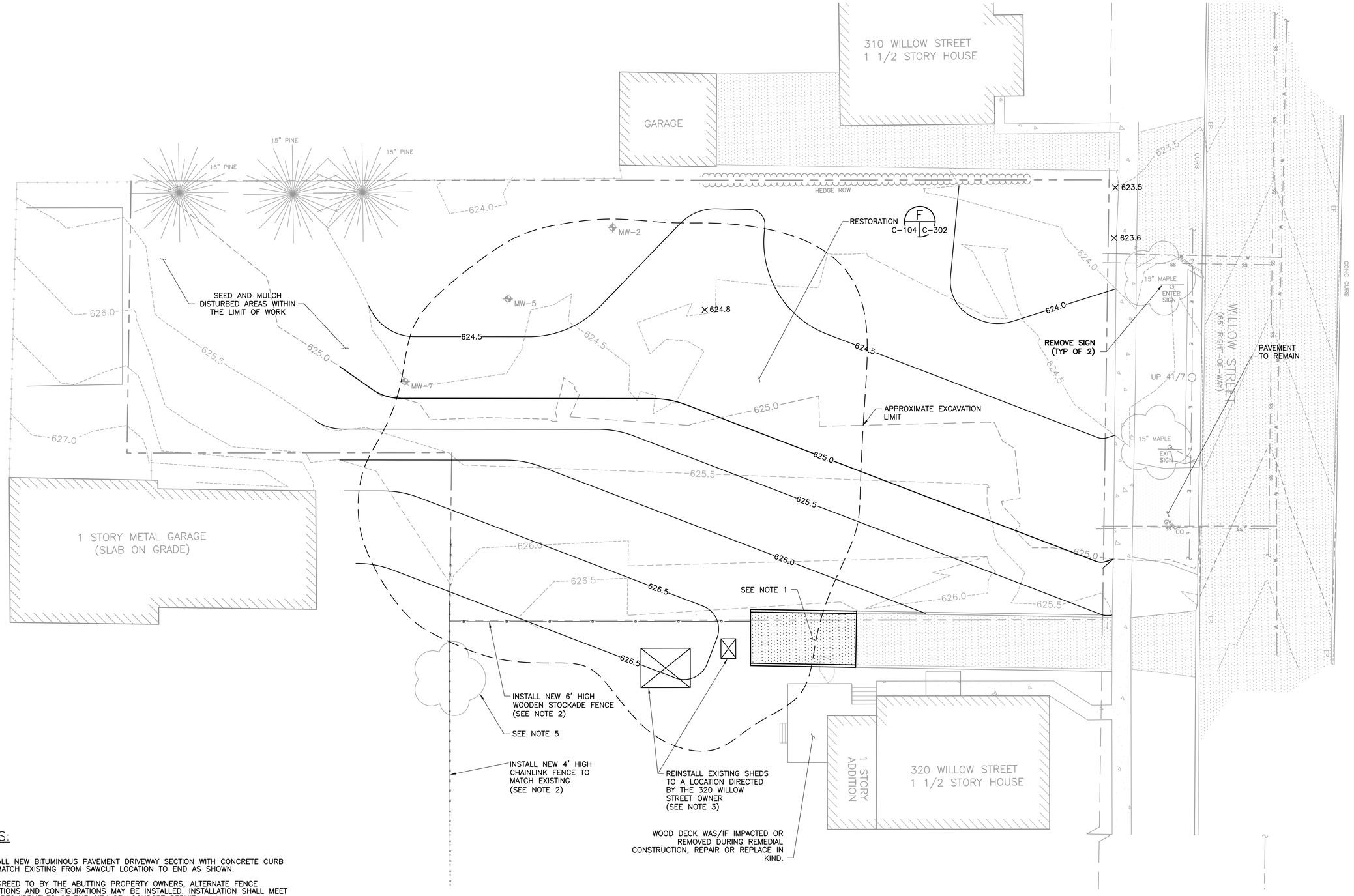
SHEET	5 OF 9



NOTES:

1. INSTALL NEW BITUMINOUS PAVEMENT DRIVEWAY SECTION WITH CONCRETE CURB TO MATCH EXISTING FROM SAWCUT LOCATION TO END AS SHOWN.
2. IF AGREED TO BY THE ABUTTING PROPERTY OWNERS, ALTERNATE FENCE LOCATIONS AND CONFIGURATIONS MAY BE INSTALLED. INSTALLATION SHALL MEET THE REQUIREMENTS OF THE CITY OF LOCKPORT PERMIT.
3. SHED INSTALLATION SHALL MEET THE REQUIREMENTS OF THE CITY OF LOCKPORT PERMIT.
4. GRADE DISTURBED AREAS WITHIN THE LIMIT OF WORK AND BACKFILLED RESTORATION AS TO DIRECT DRAINAGE AS GENERALLY DEPICTED BY THE FINAL GRADE CONTOURS. ADJUSTMENTS MAY BE MADE ON THE 320 WILLOW STREET PROPERTY AS REQUIRED TO BLEND THE RESTORATION AREA GRADING WITH EXISTING AREAS OUTSIDE THE LIMIT OF WORK.
5. ASSESSMENT OF REMEDIAL CONSTRUCTION IMPACTS ON THE EXISTING TREE WILL BE MADE DURING RESTORATION WORK. IF IT IS DETERMINED THAT WORK HAS RESULTED IN ROOT DAMAGE, THE TREE WILL BE REMOVED.

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NO.	DATE	DSGN	DR	CHK	APVD
B	03/28/14	JPM	JPM	MRS	MJS
A	02/28/14	JPC	JPM	JPC	JPC

DRAFT FOR NYSDEC REVIEW
DRAFT FOR NYSDEC REVIEW
REVISION BY APVD

New York State
Department of Environmental Conservation

INTERIM REMEDIAL MEASURE
PETERS DRY CLEANING
316 WILLOW ST, LOCKPORT, NEW YORK
NYSDEC SITE NO. - 932128

MACTEC Engineering and Consulting, P.C.
P.O. Box 1062, 511 Congress Street
Portland, Maine 04112-7050
(207) 775-5401

MACTEC

CIVIL
RESTORATION PLAN

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
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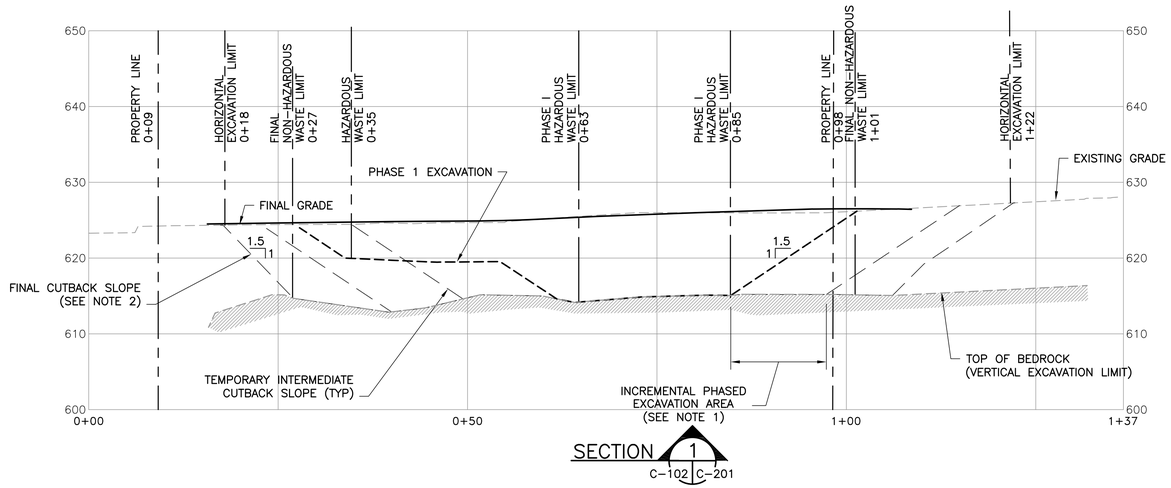
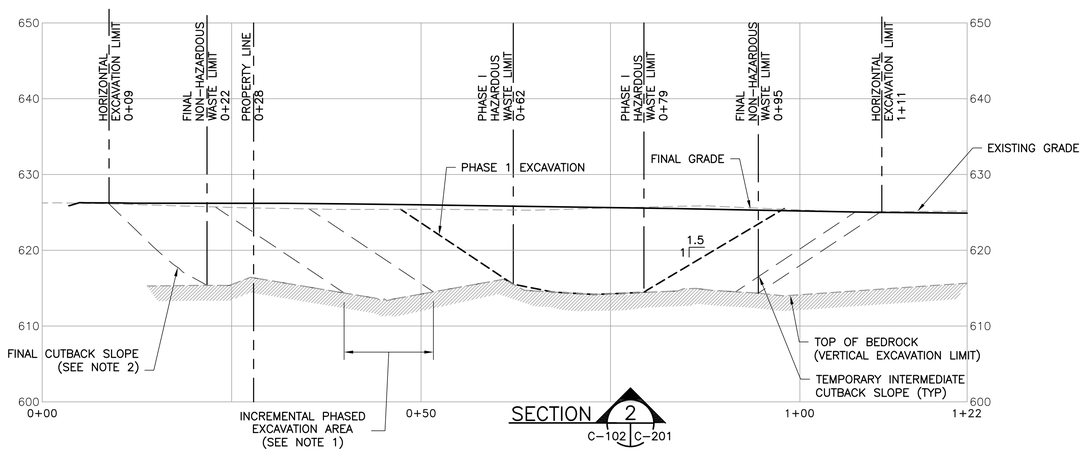
DATE	02/28/14
PROJ	3612-12-2244
DWG	C-104
SHEET	6 OF 9

FILE NAME: Z:\Projects\nysdec1\Peters Dry Cleaning\IRM-C-104.dwg PLOT DATE: Fri, 28 Mar 2014 PLOT TIME: 1:57 PM



SECTION 1
C-102 | C-201



SECTION 2
C-102 | C-201

NOTE:

1. OPEN ACTIVE EXCAVATION AREA TO BE SIZED BY THE CONTRACTOR AS REQUIRED TO COORDINATE WITH THE SEQUENCE OF WORK AND TO MINIMIZE DEWATERING REQUIREMENTS.
2. EXCAVATION CUTBACK SLOPES (INTERMEDIATE AND FINAL) SHALL COORDINATE WITH SOIL TYPE, GROUNDWATER CONDITIONS, AND THE REQUIREMENTS OF OSHA SAFETY STANDARDS.

NO.	DATE	DSGN	DR	CHK	APVD
B	03/28/14	JPM	JPM	MJS	JPC
A	03/06/14	JPM	JPM	MRS	JPC

B - FINAL DRAFT FOR NYSDEC REVIEW - JPM - JPC
A - DRAFT FOR NYSDEC REVIEW - JPM - JPC
REVISION BY APVD

New York State Department of Environmental Conservation

INTERIM REMDIAL MEASURE
PETERS DRY CLEANING
316 WILLOW ST, LOCKPORT, NEW YORK
NYSDEC SITE NO. - 932128

MACTEC Engineering and Consulting, P.C.
P.O. Box 1062, 11 Commercial Street
Portland, Maine 04112-7050
(207) 775-5401

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CIVIL
CROSS SECTION

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DATE	02/28/14
PROJ	3612-12-2244
DWG	C-201
SHEET	7 OF 9

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (STATE STANDARDS) AND THE CONTRACT DOCUMENTS, SPECIFICALLY:

   - SPECIFICATION SECTION 02370 "EROSION AND SEDIMENT CONTROL";
   - DRAWING C–102 "PHASE 1 EXCAVATION PLAN";
   - DRAWING C–103 "FINAL EXCAVATION PLAN"; AND
   - DRAWING C–301 "CIVIL DETAILS 1".

   IF A DISCREPANCY EXISTS BETWEEN THE STATE STANDARDS AND THE CONTRACT DOCUMENTS, THE STATE STANDARDS SHALL TAKE PRECEDENCE.

2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

3. EROSION AND SEDIMENTATION CONTROLS SHALL BE AUGMENTED OR SUPPLEMENTED IF THE INSTALLED MEASURES DO NOT PROVIDE ADEQUATE PROTECTION OF DOWNSTREAM RESOURCES AS DETERMINED BY THE ENGINEER OR DEPARTMENT.

4. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE TEMPORARY SEEDING AND MULCHING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH HAY OR STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO STATE STANDARDS.

5. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH HAY OR STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO STATE STANDARDS.

6. ANY STEEP SLOPES (I.E. SLOPES GREATER THAN 3:1) WILL BE COMPLETELY GRADED AND STABILIZED DAILY, AS CONSTRUCTION PROGRESSES.

7. THE STANDARD FOR STABILIZED CONSTRUCTION ENTRANCE REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE.

8. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF WORK OR ONTO PUBLIC RIGHT–OF–WAYS SHALL BE REMOVED IMMEDIATELY.

9. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING. IF SEEDING IS NOT PERFORMED WITHIN 48 HOURS OF COMPLETION OF FINAL GRADING, ADDITIONAL SURFACE SCARIFICATION SHALL BE COMPLETED PRIOR TO SEEDING.

10. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS TO BE UNDERTAKEN, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROWTH SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE TO SUSTAIN VEGETATIVE GROWTH. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON–VEGETATIVE MEANS OF PERMANENT STABILIZATION SHALL BE EMPLOYED.

11. DEWATERING OPERATIONS SHALL BE UNDERTAKEN IN A MANER TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE SPECIFICATIONS.

12. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED PER THE STATE STANDARDS. CALCIUM CHLORIDE SHALL ONLY BE USED FOR DUST CONTROL DURING FREEZING CONDITIONS.

13. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF WORK WITH APPROPRIATE PROTECTIVE EROSION AND SEDIMENTATION CONTROLS.

14. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH GENERAL EROSION AND SEDIMENT CONTROL NOTE NO. 4 OR COVERED WITH GEOMEMBRANE.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR DOWNGRADIENT OF STORMWATER OUTFALLS/OUTLETS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

SOIL EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE:

1. STABILIZED CONSTRUCTION ENTRANCE

   A. STABILIZED CONSTRUCTION ENTRANCES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24–HOUR PERIOD.

   B. STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES. CHECK FOR DAMAGE/DETERIORATION/CLOGGING AND IMMEDIATELY REPAIR OR RECONSTRUCT AS NECESSARY.

   C. THE PERFORMANCE OF STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED BY LENGTHENING, SCRAPING, OR TOP–DRESSING WITH ADDITIONAL AGGREGATE.

   D. STABILIZED CONSTRUCTION ENTRANCES SHALL HAVE A 6–INCH MINIMUM THICKNESS.

   E. INSPECT ADJACENT IMPERVIOUS SURFACES DAILY (MINIMUM). IMMEDIATELY REMOVE VISIBLE ACCUMULATED SEDIMENT DEPOSITED ON PAVED SURFACES VIA SWEEPING, VACUUMING, OR WASHING. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PROPERLY DISPOSE OF SEDIMENT.

2. SEDIMENT BARRIERS

   A. SILTATION FENCE

      A.1. SILTATION FENCES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24–HOUR PERIOD.

      A.2. REMOVE THE SEDIMENT DEPOSITS OR INSTALL A SECONDARY BARRIER UPSLOPE FROM THE EXISTING BARRIER WHEN SEDIMENT DEPOSITS REACH ONE HALF THE HEIGHT OF THE FENCE. PROPERLY DISPOSE OF SEDIMENT.

      A.3. REPLACE OR REPAIR FENCES WITHIN 24 HOURS OF OBSERVED FAILURE (E.G., DAMAGE OR DECOMPOSITION; FENCE MOVED OUT OF POSITION; UNDERCUTTING, OVERTOPPING, OR FLOW CHANNELS AROUND THE END OF FENCES).

      A.4. MAINTAIN SILTATION FENCES UNTIL THE CONTRIBUTING AREA IS STABILIZED.

3. TEMPORARY SEEDING AND MULCHING

   A. AREAS RECEIVING TEMPORARY SEEDING AND MULCHING SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24–HOUR PERIOD.

   B. WHERE SEED/MULCH HAS MOVED OR SOIL EROSION HAS OCCURRED, REPAIR THE AREA APPROPRIATELY AND RE–APPLY SEED AND/OR MULCH. APPLY NETTING, TACKIFIER, OR OTHER ANCHORING TECHNIQUES AS NECESSARY TO PREVENT FAILURE. ADDITIONAL TEMPORARY MEASURES MAY ALSO BE INSTALLED TO CONTROL STORMWATER RUNOFF AND SEDIMENT MOVEMENT.

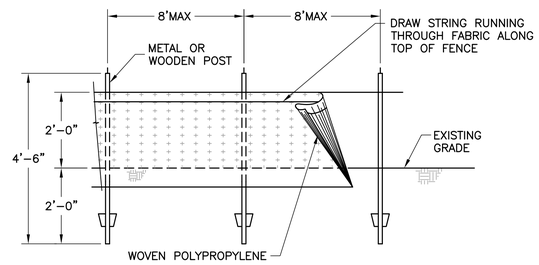
   C. CONTINUE INSPECTION AND MAINTENANCE OF AREAS RECEIVING TEMPORARY SEEDING AND MULCHING UNTIL AT LEAST 90% OF THE SOIL SURFACE IS BE COVERED BY MATURE, ESTABLISHED VEGETATION CAPABLE OF CONTROLLING SOIL EROSION AND SURVIVING SEVERE WEATHER.

4. DUST CONTROL

   A. THE PROJECT SITE AND ADJACENT RESIDENTIAL PROPERTIES SHALL, AT A MINIMUM, BE INSPECTED DAILY.

   B. APPLY DUST CONTROL MEASURES WHEN FUGITIVE DUST BECOMES EVIDENT.

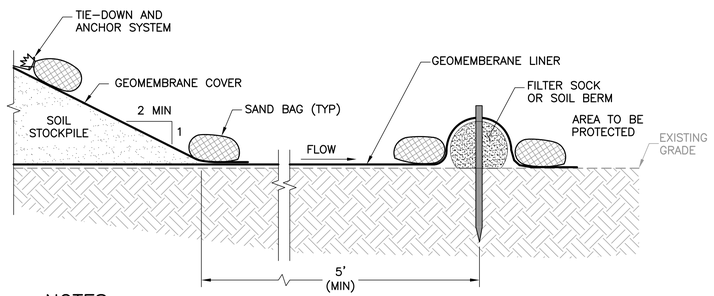
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED ONCE UPGRADIENT AREAS ARE STABILIZED WITH ESTABLISHED VEGETATION, HOT MIX ASPHALT.



NOTE:

WHERE REQUIRED AT CRITICAL LOCATIONS, SILTATION FENCE REINFORCED WITH HOG OR CHICKEN WIRE OR INTEGRAL PLASTIC MESH REINFORCING MAY BE USED.

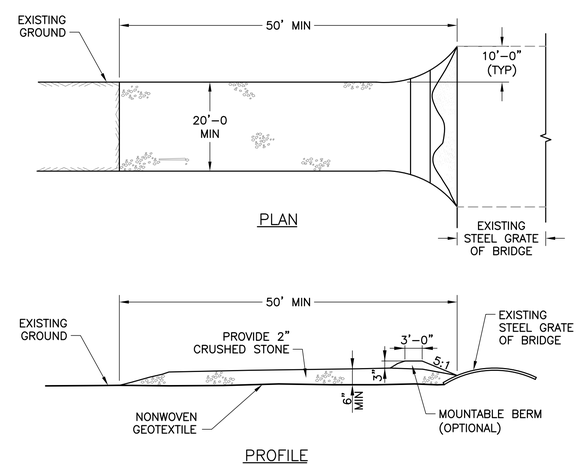
SILTATION FENCE (A)
NTS
C–102 | C–301



NOTES:

1. GEOMEMBRANE COVER IS NOT REQUIRED FOR STOCKPILES OF IMPORTED CLEAN MATERIAL OR EXCAVATED SOIL SUITABLE FOR RE–USE HOWEVER, COVERS MAY BE UTILIZED AS A DUST CONTROL MEASURE.
2. CONTAMINATED SOIL STOCKPILES SHALL BE COVERED TO THE EXTENT PRACTICABLE.
3. CONTAIMINATED SOIL STOCKPILES SHALL BE LOCATED WITHIN THE EXCLUSION ZONE. STOCKPILES OF IMPORTED MATERIALS AND/OR EXCAVATED SOIL SUITABLE FOR RE–USE MAY BE LOCATED INSIDE OR OUTSIDE THE EXCLUSION ZONE BUT WITHIN THE SITE PROPERTY BOUNDARY.

SOIL/SEDIMENT STOCKPILE CONTAINMENT (B)
NTS
C–102 | C–301



STABILIZED CONSTRUCTION ENTRANCE (C)
NTS
C–102 | C–301

NO.	DATE	DSGN
A	03/28/14	JPM

FINAL DRAFT FOR NYSDEC REVIEW

REVISION	CHK	APVD
	MJS	JPC
	MRS	JPM
	DR	JPC

New York State Department of Environmental Conservation

INTERIM REMDIAL MEASURE
PETERS DRY CLEANING
316 WILLOW ST, LOCKPORT, NEW YORK
NYSDEC SITE NO. - 932128

MACTEC Engineering and Consulting, P.C.
P.O. Box 7050, 511 Congress Street
Portland, Maine 04112–7050
(207) 775–5401

MACTEC

CIVIL
CIVIL DETAILS 1

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
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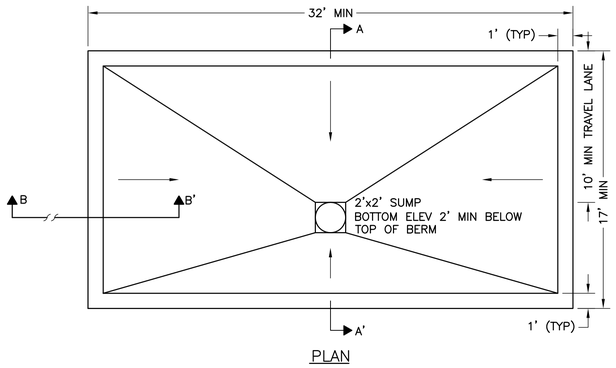
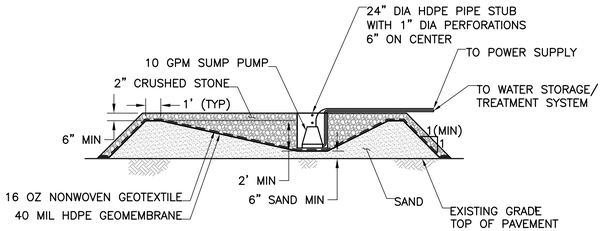
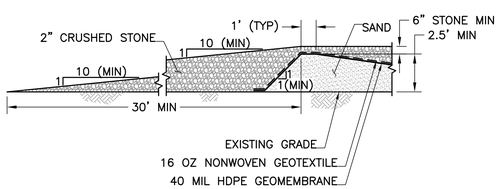
DATE	02/28/14
PROJ	3612-12-2244
DWG	C-301
SHEET	8 OF 9



PLAN



SECTION A–A'

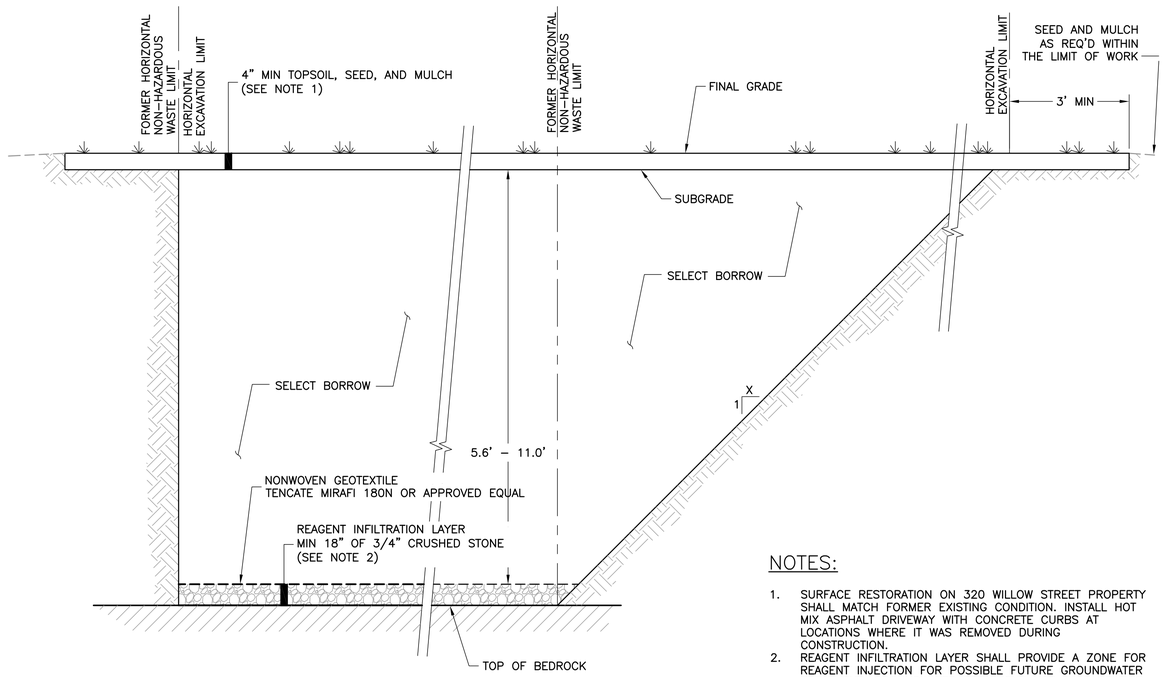


SECTION B–B'

NOTE:

CONTRACTOR MAY PROPOSE ALTERNATE MEANS AND METHODS OF DECONTAMINATION FOR APPROVAL BY THE ENGINEER.

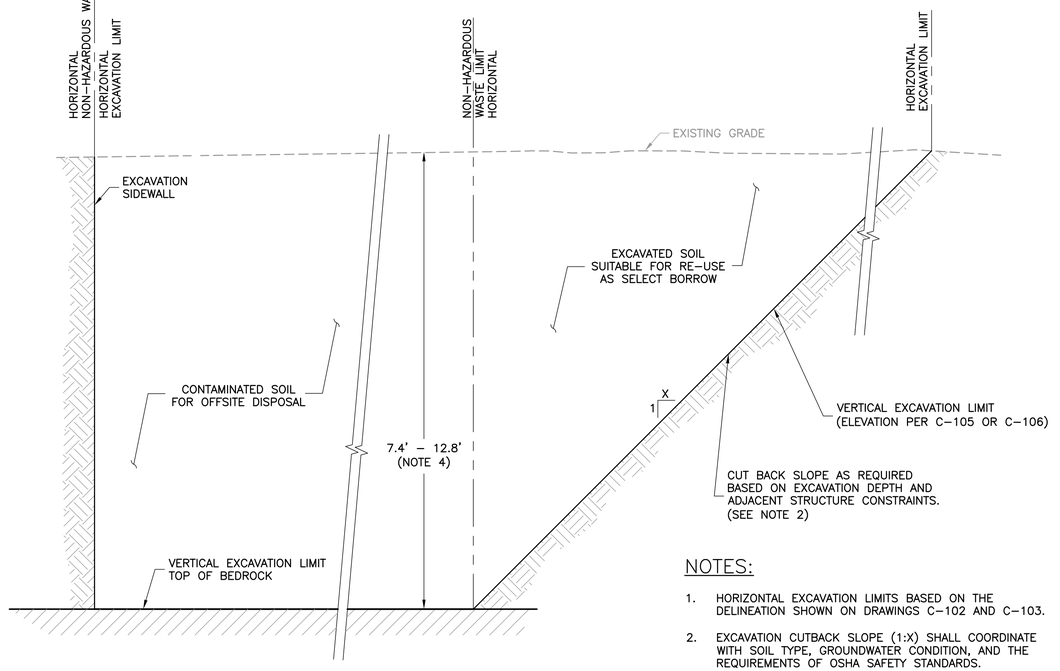
VEHICLE DECONTAMINATION PAD D
NTS C–102 C–302



RESTORATION F
NTS C–104 C–302

NOTES:

1. SURFACE RESTORATION ON 320 WILLOW STREET PROPERTY SHALL MATCH FORMER EXISTING CONDITION. INSTALL HOT MIX ASPHALT DRIVEWAY WITH CONCRETE CURBS AT LOCATIONS WHERE IT WAS REMOVED DURING CONSTRUCTION.
2. REAGENT INFILTRATION LAYER SHALL PROVIDE A ZONE FOR REAGENT INJECTION FOR POSSIBLE FUTURE GROUNDWATER TREATMENT. GROUNDWATER TREATMENT NOT PART OF THIS CONTRACT.



EXCAVATION E
NTS C–103 C–302

NOTES:

1. HORIZONTAL EXCAVATION LIMITS BASED ON THE DELINEATION SHOWN ON DRAWINGS C–102 AND C–103.
2. EXCAVATION CUTBACK SLOPE (1:X) SHALL COORDINATE WITH SOIL TYPE, GROUNDWATER CONDITION, AND THE REQUIREMENTS OF OSHA SAFETY STANDARDS.
3. PROVIDE EXCAVATION DEWATERING AS REQUIRED.
4. VERTICAL EXCAVATION LIMIT IS DEFINED AS THE TOP OF BEDROCK WHICH IS APPROXIMATELY 7.4 TO 12.8' BELOW EXISTING GROUND SURFACE WITHIN THE HORIZONTAL EXCAVATION LIMIT.

NO.	DATE	DSGN	DR	CHK	APVD
A	03/28/14	JPM	JPM	MRS	MJS
				REVISION	APVD
				FINAL DRAFT FOR NYSDEC REVIEW	JPC
				BY	JPC

New York State Department of Environmental Conservation

INTERIM REMDIAL MEASURE
PETERS DRY CLEANING
316 WILLOW ST, LOCKPORT, NEW YORK
NYSDEC SITE NO. - 932128

MACTEC Engineering and Consulting, P.C.
P.O. Box 70025, 51 Commercial Street
Portland, Maine 04112-7050
(207) 775-5401

MACTEC

CIVIL
CIVIL DETAILS 2

VERIFY SCALE
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DATE	02/28/14
PROJ	3612-12-2244
DWG	C-302
SHEET	9 OF 9

FILE NAME: Z:\Projects\nysdec1\Peters Dry Cleaning\IRM-C-302.dwg PLOT DATE: Fri, 28 Mar 2014 PLOT TIME: 2:04 PM

APPENDIX B

SPECIFICATIONS

01025	Measurement for Payment
01330	Submittal Procedures
01410	Regulatory Requirements
01450	Construction Quality Control
01500	Temporary Facilities and Controls
01560	Dust and Odor Control
01720	Field Engineering and Surveying
02105	Chemical Sampling and Analysis
02110	Waste Removal, Handling, and Storage
02120	Off-Site Transportation and Disposal
02221	Select Site Demolition
02231	Clearing and Grubbing
02240	Dewatering
02245	Construction Water Management
02250	Shoring (Sheeting and Bracing)
02300	Earthwork
02370	Erosion and Sediment Control
02921	Seeding and Soil Supplement

APPENDIX C

COMMUNITY AIR MONITORING PLAN

MACTEC
engineering and constructing a better tomorrow

March 27, 2014

Division of Environmental Remediation
Region 9
New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Attention: Mr. Michael J. Hinton, Project Manager

Subject: **Community Air Monitoring Plan – Interim Remedial Measure**
Peters Dry Cleaning; Site Number 932128
MACTEC Engineering and Consulting, P.C. Project No. 3612122244

Dear Mr. Hinton:

This Community Air Monitoring Plan (CAMP) has been prepared by MACTEC Engineering and Consulting, P.C. (MACTEC) in response for Work Assignment No. D007619-18 from the New York State Department of Environmental Conservation (NYSDEC) for the Peters Dry Cleaning site (Site) in Lockport, Niagara County, New York. MACTEC will be overseeing an interim remedial measure (IRM) consisting of the excavation, transport and disposal of contaminated soil at the Site on behalf of the NYSDEC. As part of the IRM a CAMP has been devised in accordance with the New York State Department of Health (NYSDOH) Generic CAMP (Appendix 1A).

This NYSDOH CAMP is a stand-alone companion document to the Site-specific health and safety plan (HASP), and is further defined below. The Site-specific HASP provides details related to health and safety for on-site activities for MACTEC personnel and the CAMP details air monitoring activities to protect the surrounding community. The NYSDEC call out contractor will conduct work under their own work plan and HASP.

Purpose. This CAMP will be implemented during the excavation and removal of soils from the proximity of the Site. The purpose of the CAMP is to provide a measure of protection for the downwind community, more specifically off-site receptors including residents and workers, from potential airborne contaminant releases as a result of remedial work activities performed at the Site.

Particulate Air Monitoring. Particulate monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance for Site Investigation and Remediation (Appendix 1B). Dust and particulate monitoring will be conducted near the approximate upwind and downwind perimeters of the exclusion zone, when possible, or where dust generating operations are apparent. Dust monitoring may be suspended during periods of precipitation and snow cover.

Particulate air monitoring will be conducted with a DataRAM-4 (or a similar device). This instrument is equipped with an audible alarm (indication of exceedance) and is capable of measuring particulate matter less than 10 micrometers in size (PM-10). It will continually record emissions (calculating 15-minute running average concentrations) generated during field activities. The dust monitoring devices will be checked and recorded periodically throughout the day of intrusive activities to assess emissions and the need for corrective action.

Particulate monitoring response and action levels include:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

Volatile Organic Compound Air Monitoring. Volatile organic compound (VOC) air monitoring will be conducted in conjunction with the dust monitoring program. VOC air monitoring will be

conducted using a RAE Systems MiniRAE 2000 VOC instrument (or a similar photoionization detector device) to provide real-time recordable air monitoring data. VOC monitoring will be conducted for ground intrusive (continuous monitoring) and non-intrusive activities (periodic monitoring).

VOCs will be monitored and recorded at the downwind perimeter of the immediate work area. Upwind concentrations will be measured before field activities commence and periodically throughout the day to establish background conditions. The downwind VOC monitoring device will also be checked periodically throughout the day to assess emissions and the need for corrective action.

VOC monitoring response and action levels include:

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If the organic vapor level remains sustained above 5 ppm at the perimeter of the work area, activities must be shutdown and work will be re-evaluated.

Weather conditions, including the prevailing wind direction, will be observed and recorded for each day of site activities. As work and weather conditions change throughout the day, the locations where the VOC monitoring devices are set up may be adjusted accordingly.

Documentation and Calibration. The volatile organic compound air monitoring device shall be calibrated prior to daily field activities according to manufacturer's instructions and standard industrial hygiene practices. In addition, monitoring instruments will be checked for “drift” upon completion of daily field activities. Calibration measurements will be recorded on a field data record. Field measurements will be recorded and available for State (NYSDEC and NYSDOH) personnel to review. The particulate monitoring device is factory calibrated on an annual basis. Upon completion of field activities, available monitored data recorded will be downloaded, evaluated and summarized in the Remedial Investigation Report.

Meteorological Data. Wind direction is the only meteorological data considered relevant for the remedial activities and CAMP. To evaluate wind direction, a windsock, wind vane, or other equivalent equipment will be used. Wind direction will be established at the start of each work day, and may be reestablished during the day should a significant shift in wind direction be noted. These results will be utilized to position the particulate monitoring and VOC monitoring equipment in appropriate upwind and downwind locations. Wind direction and location of the monitoring stations will be noted on daily field logs.

If you have questions or concerns, please contact Chuck Staples, or Jayme Connolly, at 207-775-5401.

Sincerely,

MACTEC Engineering and Consulting, P.C.

Jayme Connolly
Project Manager

Charles Staples, C.G.
RI Task Lead

Enclosures:

Appendix 1A:	NYSDOH Generic CAMP
Appendix 1B:	Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance for Site Investigations and Remediation

APPENDIX 1A

NYSDOH GENERIC CAMP

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

APPENDIX 1B

FUGITIVE DUST AND PARTICULATE MONITORING FROM DER-10 TECHNICAL GUIDANCE FOR SITE INVESTIGATIONS AND REMEDIATION

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50° C (14 to 122° F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

APPENDIX D

BORING LOGS AND ANALYTICAL DATA

APPENDIX E

CONTAINED-IN DETERMINATION LETTER

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A, 12th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9625 • **Fax:** (518) 402-9627
Website: www.dec.ny.gov

MAR 27 2014

Joe Martens
Commissioner

Mr. Charles Staples, C.G. (charles.staples@amec.com)
Senior Scientist
AMEC Environment and Infrastructure
511 Congress Street, Suite 200
Portland, ME 04101

Re: "Contained-In" Determination Request
Peter's Dry Cleaning Site 932128

Dear Mr. Staples:

We have completed our review of the soil sampling data from the borings locations (soil samples labeled DP-02, DP-03, DP-04, DP-06, DP-08, DP-09, DP-12, DP-15, DP-16, DP-18, DP-19, DP-20, GP-02, GP-05, GP-06, GP-08, GP-09, GP-13, GP-14, GP-15, SP-04 and TP-008) submitted with your March 26, 2014 request for a "contained in" determination for the referenced project.

Concentrations detected for individual VOCs were all significantly less than their current "contained in" soil action levels and Land Disposal Restriction concentrations. Most of the individual VOCs were not detected above the detection limit. No hazardous constituents exhibited a hazardous waste characteristic by exceeding their TCLP regulatory level.

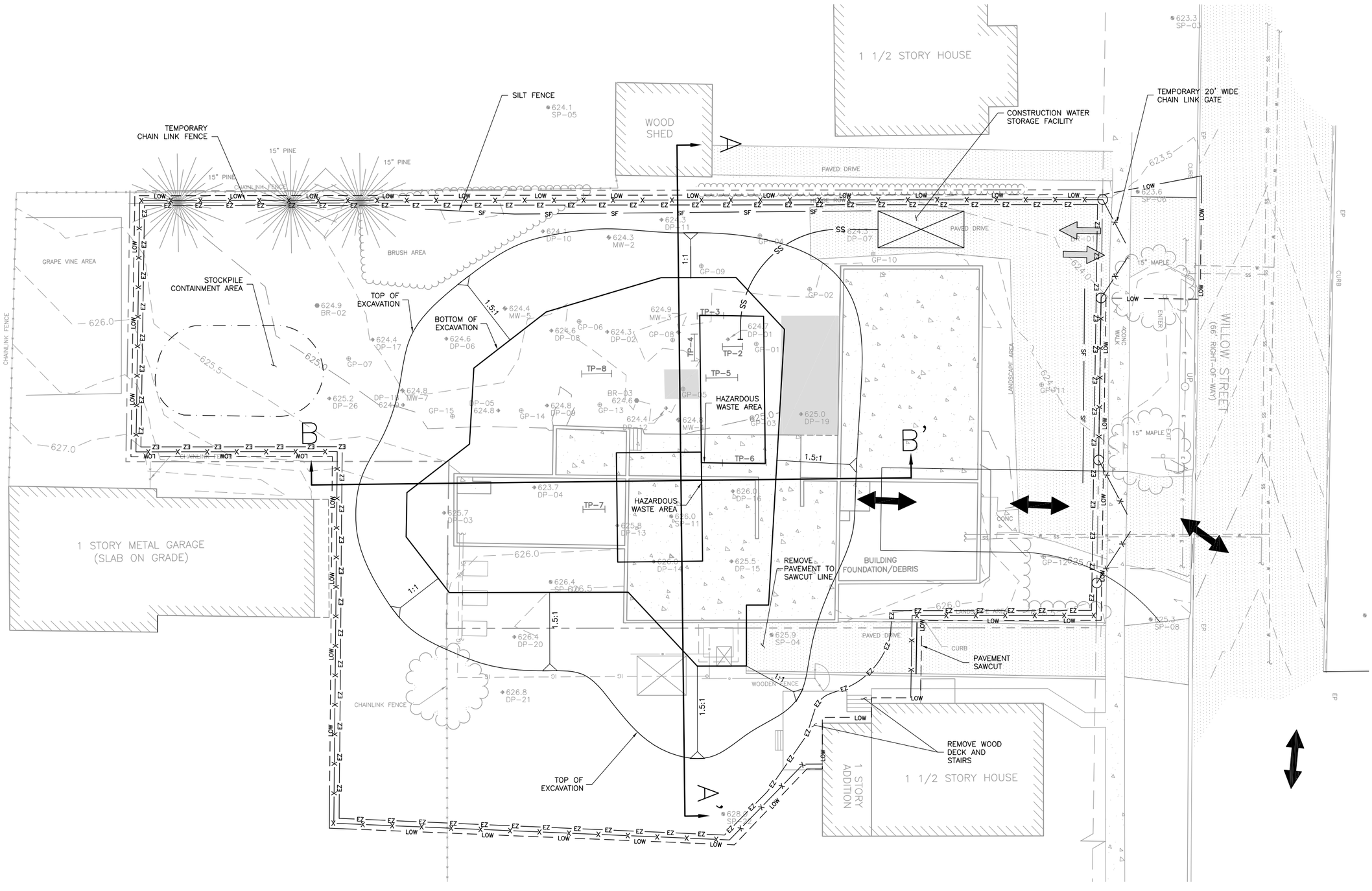
Concentrations for tetrachloroethene and trichloroethene were below the soil "contained in" action level and the Land Disposal Restriction concentration. Therefore, soil to be excavated within the above boring locations excluding the two hazardous waste areas (see attach Drawing C-103), approximately 2240 tons, do not have to be managed as hazardous waste and can be transported to Modern Disposal Services permitted landfill, Model City, NY.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9622 or email me at hjwilkie@gw.dec.state.ny.us.

Sincerely,

Henry Wilkie
Environmental Engineer 1
Remedial Section B

ecc: M. Hinton, DER Region 9



NOTES:

1. FOUNDATION OF ONE STORY ADDITION AT 320 WILLOW STREET IS UNKNOWN. TOP OF EXCAVATION LIMIT SHOWN IS ALLOWBLE FOR FOUNDATION/FROST WALL DEPTH OF 5 FEET OR GREATER BELOW GROUND SURFACE.
2. RELOCATE EXISTING 4'X3' FIBERGLASS SHED AND 8'X10' METAL SHED.

N

0 5 10 20
SCALE IN FEET

NO.	DATE	DSGN	DR	CHK	REVISION	BY	APVD
C	03/25/14	JPM	JPC	MRS	DRAFT FOR CONTAINED-IN LETTER	JPM	JPC
B	03/06/14				DRAFT FOR NYSDEC REVIEW	JPM	JPC
A	02/28/14				DRAFT FOR NYSDEC REVIEW	JPM	JPC

APVD: MJS — JPC

New York State Department of Environmental Conservation

INTERIM REMDIAL MEASURE
PETERS DRY CLEANING
316 WILLOW ST, LOCKPORT, NEW YORK
NYSDEC SITE NO. - 932128

MACTEC Engineering and Consulting, P.C.
P.O. Box 7050, 11 Commons Street
Portland, Maine 04112-7050
(207) 775-5401

MACTEC

CIVIL
EXCAVATION PLAN

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 3612-12-2244
DWG C-103
SHEET 5 OF 9

FILE NAME: P:\Projects\CADD-PORT\Projects\nysdec1\Peters Dry Cleaning\IRM-C-103.dwg PLOT DATE: Tue, 25 Mar 2014 PLOT TIME: 5:51 PM

APPENDIX F

PRICE SHEET

Price Sheet

INTERIM REMEDIAL MEASURE – SOIL REMOVAL

New York State Department of Environmental Conservation
Peters Dry Cleaning – NYS Site Number 932128
Lockport, Niagara County, New York

LUMP SUM/ UNIT PRICE ITEMS

Payment Item Number	***Task Description***	***Unit***	***Estimated Quantity***	***Unit or Lump Sum Price***		***Total Amount ($)***
				Words	***Figures***	
1	Mobilization/Demobilization	Lump Sum	1			
2	Demolition	Lump Sum	1			
3	C&D Transportation and Disposal	Ton	250			
4	Removal, Transportation, and Disposal of UST Contents	Gallon	2,220			
5	Soil Excavation	Lump Sum	1			
6	Construction Water Management	Lump Sum	1			
7	Documentation Testing	Each	22			
8	Hazardous Waste Transportation and Disposal	Ton	411			
9	Non-Hazardous Waste Transportation and Disposal	Ton	2,160			
10	Final Restoration	Lump Sum	1			

Grand Total Price: $ _____

(Price in figures)

Authorized Signature: _____

Name: _____ Title:_____