

WORK PLAN

**CLOSURE OF GROUNDWATER
COLLECTION AND TREATMENT SYSTEM**

**NYSDEC SITE NO. 9-15-066, OPERABLE UNIT 2
CHEEKTOWAGA, NEW YORK**

PREPARED BY



**CBS CORPORATION
PITTSBURGH, PENNSYLVANIA**

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1.0 INTRODUCTION

CBS Corporation¹ has prepared this Work Plan for closure of the groundwater collection and treatment system installed and operated as part of Operable Unit 2 of the Remedial Program at New York State Department of Environmental Conservation (NYSDEC) Site No. 9-15-066 in Cheektowaga, New York (the “Site”). As required by the NYSDEC 1995 Operable Unit 2 Record of Decision (ROD), the collection and treatment system addressed groundwater in the central and southern portion of the Site using former plant storm sewers for subsurface collection and conveyance.² Figure 1 is a Site plan showing the location of this collection system and associated Site groundwater monitoring wells. Beginning in 1999, CBS managed the Remedial Program at the Site, including the operation, maintenance, and monitoring of the groundwater collection and treatment system, as one of the Respondents to an Order on Consent and Settlement Agreement, Index No. B9-0381-91-8 (the “Order”) entered with NYSDEC.

This Work Plan describes the sequence and methods that will be employed in closing the collection and treatment system, the plan for post-closure monitoring, and the schedule of planned activities. This Work Plan also outlines the environmental restrictive covenants that will be placed on the affected portion of the Site by the Niagara Frontier Transportation Authority (NFTA) as the property owner and a Respondent under the Order.

¹ CBS Corporation is the successor by corporate name change to Viacom Inc., which, in turn was the successor to Westinghouse Electric Corporation. For simplicity in this report, references to recent (1999 and later) actions undertaken by “CBS” include actions by its predecessors.

² As described in the 1995 Operable Unit 2 ROD, the former storm sewers were to be isolated from surface water and collect only groundwater for treatment. For the reasons explained in prior submittals, however, including the CBS September 7, 2012 report providing the technical basis for terminating Operable Unit 2, the collection system was not hydraulically isolated from the surface, and flows in the system were predominantly surface water. Accordingly, even though referred to as the “groundwater collection and treatment system,” very little of the water collected or treated was, indeed, groundwater.

CBS presented the rationale for closing the Site groundwater collection and treatment system in the report *Termination of Operation, Maintenance, and Monitoring Activities* submitted to NYSDEC on September 7, 2012 and reviewed with NYSDEC in the meeting of September 12, 2012. As described in that report, the remediation goals and Remedial Action Objectives (RAOs) for volatile organic compounds (VOCs) and metals in groundwater have been met throughout the portion of the Site influenced by the collection and treatment system and all potential environmental benefits have been achieved. Because the only VOC-contaminated water encountered at the Site is that being generated by the continued use of the former plant storm sewers for subsurface collection and conveyance, continued operation of the collection system would be counterproductive. Closure of the system is the prudent and responsible action at this time and is consistent with NYSDEC technical guidance (NYSDEC, 2010), the NYSDEC 1995 ROD for Operable Unit 2, and the requirements of the Order.

2.0 PLANS AND PROCEDURES FOR SYSTEM CLOSURE

This section describes the step-by-step approach to closing the Operable Unit 2 groundwater collection and treatment system at the Site.

2.1 COLLECTION SYSTEM CLOSURE SEQUENCE

The collection system will be closed sequentially starting with the 001 segment and then proceeding, in turn, to the 002 and 003 segments. The work is planned to be completed in one construction contractor mobilization and in an uninterrupted, step-wise manner.

2.1.1 001 SEGMENT

The 001 segment of the collection system was partially closed in 2009 in accordance with the approved Revised Work Plan submitted by CBS to NYSDEC in November 2008. This partial closure involved the permanent plugging of manholes MH-001-02 and MH-001-06 located midway along the 001 segment profile (Figure 1). Plugging of these manholes was designed to split the 001 segment of the collection system, separating the upper portions where water levels were relatively deep below grade from the lower portions where water levels were near or at the ground surface. Closure involved both filling the manholes and plugging permeable pipe bedding materials around the outside of the manholes. Also, in accordance with the Work Plan, an additional groundwater monitoring well, MW-35, was installed just downstream of the pumping sump for the 001 segment of the collection system (*i.e.*, CSMH-001 or “Sump 001”).³ CBS submitted the report on this closure to NYSDEC in September 2009.

Figure 2 provides an overview of the work requirements to complete the closure of the 001 segment. These work activities will first involve the permanent plugging of manholes and

³ The terminal manholes are referred to as CSMH-001, CSMH-002, and CSMH-003, respectively, for the three segments of the collection system from east to west at the Site (Figure 1). In some reports and drawings, these pumping stations are referred to Sumps 001, 002, and 003, respectively.

associated piping at MH-001-09, MH-001-10, and MH-001-13,⁴ all of which are located upstream of previously closed manhole MH-001-06 (Figure 2). At each location, the manhole will first be inspected to assess the thickness of accumulated sediment. If the sediment thickness is appreciable (*i.e.*, greater than 12± inches), sediments will be evacuated from the manhole using a vacuum truck. The collected sediment will be delivered to the groundwater treatment plant area for dewatering and staging prior to off-site disposal. Sediment handling procedures are described in Section 2.2.1. These three manholes will then be permanently sealed using the procedures described in Section 2.2.2.

While these upstream manholes are being closed, water levels will be pumped down in CSMH-001 to dewater the piping system below previously closed manhole MH-001-02. The pumped water will be conveyed through existing piping to the groundwater treatment system for treatment and discharge. Once the manholes and piping are dewatered to the extent practicable, the manholes will be inspected to assess the thickness of accumulated sediment. Where the sediment thickness is appreciable, sediments will be evacuated from the manhole using a vacuum truck and delivered to the treatment plant area for dewatering and staging prior to off-site disposal (Section 2.2.1). Following sediment removal, the sump pump will be pulled from CSMH-001, and the electrical service to this location will be disconnected and permanently locked out at the treatment building. The conveyance line from CSMH-001 will be capped or plugged at both the sump and treatment building. Manholes and associated piping at CSMH-001, MH-001-01, and MH-001-14 will then be permanently sealed using the procedures described in Section 2.2.2 and 2.2.3 (Figure 2).

2.1.2 002 SEGMENT

After completing the work on the 001 segment, work will shift to the 002 segment of the collection system. Figure 3 summarizes the work tasks for closing the 002 segment.

For the 002 segment, the closure sequence will be to begin at manholes at the uppermost portion of the system and work downstream. The treatment system will remain in operation

⁴ Despite multiple attempts to locate it, manhole MH-001-03 could not be found following NFTA's completion of runway extension work in this portion of the Site, and this manhole is assumed to be buried beneath a taxiway. As a result, manhole MH-001-03 is not addressed in this Work Plan.

throughout the process to provide for treatment and discharge of the water draining from the open pipes. The following closure sequence is planned: MH-002-13, MH-002-12, MH-002-10, MH-002-15, MH-002-09, MH-002-07, MH-002-06, MH-002-03, MH-002-02, and MH-002-01.⁵ Appreciable sediment accumulations will be removed (Section 2.2.1), and manholes and associated piping will then be permanently sealed using the procedures described in Sections 2.2.2 and 2.2.3 (Figure 3).

Once manhole MH-002-01 is closed, the sump pump will be pulled from CSMH-002 and the electrical service to this location will be disconnected and permanently locked out at the treatment building. The conveyance line from CSMH-002 will be capped or plugged both at the sump and at the treatment building. Manhole CSMH-002 and its inlet piping will then be permanently sealed using the procedures described in Sections 2.2.2 and 2.2.3.

2.1.3 003 SEGMENT

Closure of the 003 segment of the system will be initiated following the closure of the 002 segment. Figure 4 summarizes the work tasks for closing the 003 segment.

Work on the 003 segment will begin with sediment removal using the procedures described in Section 2.2.1. Work will then proceed with the permanent plugging of manholes MH-003-07 and MH-003-03 and associated piping using the procedures described in Section 2.2.2. Work will then shift to manhole MH-003-01. This manhole will be sealed using the methods described in Sections 2.2.2 and 2.2.3, and the piping downstream of manholes MH-003-02 and MH-003-04 will then be partially filled with grout using the methods described in Section 2.2.4. Once filling of these lines is completed, manholes MH-003-02, MH-003-04, and the Access Manhole will be sealed using the procedures described in Sections 2.2.2 and 2.2.3. The treatment system will remain in operation throughout the 003 closure process to the extent practicable to provide for treatment and discharge of displaced water.

⁵ Despite multiple attempts to locate it, manhole MH-002-05 could not be found following NFTA's completion of parking lot and road construction in this portion of the Site, and this manhole is assumed to be buried. As a result, manhole MH-002-05 is not addressed in this Work Plan.

After all of the upstream manholes on the 003 segment are closed, the sump pump will be pulled from CSMH-003 and the electrical service to this location will be disconnected and permanently locked out at the treatment building. The conveyance line from CSMH-003 will be capped or plugged both at the sump and at the treatment building. Manhole CSMH-003 and its inlet piping will then be permanently sealed using the procedures described in Sections 2.2.2 and 2.2.3.

2.2 COLLECTION SYSTEM CLOSURE METHODS

2.2.1 SEDIMENT REMOVAL

Solids are present in some manholes and associated piping. These solids originated either as wash-in from unsealed connections to surface water (*e.g.*, roof leader, downspouts, and other surface drains) or from fine-grained calcium and magnesium carbonate precipitate formed by mixing waters of elevated pH and high hardness. Except where present in such quantities and depths that they may interfere with the physical introduction of materials used to plug manholes and piping, such solids will generally not affect the ability to effectively close manholes and piping. These solids tend to be very fine-grained and would be expected to readily mix with the introduced materials used in plugging. These solids are chemically compatible with the proposed plugging materials. While the strength of the plugging materials could be reduced somewhat by the presence of solids due to physical mixing and dilution, high strength is not needed to achieve the intended purpose of plugging the manholes and the potential reduction in strength is of no significant consequence to the effectiveness of the closure.

Where sediment accumulations in manholes are appreciable (with 12 inches taken as a nominal value for purposes of initial assessment), such sediments will first be removed from affected manholes. Wherever practicable, manholes will first be dewatered by providing drainage to the groundwater treatment plant. Sediments will be removed from manholes using a vacuum truck. Once the truck is filled (typical capacity of 2,000 to 3,000 gallons), the truck will deliver its load of wet sediments to the area of the groundwater treatment plant. Multiple dewatering boxes will be staged in this area to receive the wet sediments, which will be off-loaded from the vacuum truck into one or more of the boxes. The boxes are

constructed using road-worthy roll-off containers with watertight rear door gaskets and are designed to allow gravity drainage of water from the sludge through a screen and filter medium into a separate chamber. As the sediments dewater, the filtrate will then be pumped to the treatment system. Once the sludge is dewatered sufficiently, the roll-off will be covered and transported, using a licensed waste hauler, to a permitted off-site Subtitle D landfill. The dewatering box will then be returned to the Site, refitted with new filter fabric, and reused.

2.2.2 MANHOLE AND ASSOCIATED PIPE PLUGGING

All 23 remaining manholes in the collection system⁶ and the immediately adjacent sections of associated piping will be permanently sealed by filling the manholes with Portland cement concrete to a level at least two feet above the highest crown elevation of the associated manhole piping. Figure 5 provides a conceptual design detail.

The concrete will be placed using a pumper truck that provides for introduction of the concrete into the bottom of the manhole through a flexible hose and tremie pipe. The concrete mix will be specified with a 1- to 2-inch slump and contain one percent of an accelerating admixture (*e.g.*, Pozzutec 20) to speed the rate of hardening. It is estimated that, on average, approximately 10 cubic yards of concrete will need to be placed in each manhole, resulting in a total placed quantity estimated at 230 cubic yards of Portland cement concrete.

Manholes will be “topped off” above the concrete to just below the manhole cover level using an excavatable controlled low-strength material (CLSM or “flowable fill”) and the manhole covers will be replaced. Surface treatment consistent with surrounding use (*e.g.*, asphalt pavement, concrete pavement, or grass cover) will be the responsibility of NFTA.

2.2.3 PLUGGING OF PIPE BEDDING AT SELECTED MANHOLES

At selected manhole locations, especially manholes located in the downstream portions of the collection system, cement-bentonite grout will be injected to plug the pipe bedding to provide a barrier to migration of groundwater along the exterior of the manhole and adjacent piping. Such grouting is planned for the following locations:

⁶ This total excludes MH-001-03 and MH-002-05.

- 001 Segment – Manholes MH-001-01 and CSMH-001;
- 002 Segment - Manholes MH-002-06, MH-002-02, MH-002-01, and CSMH-002; and
- 003 Segment - Manholes MH-003-04, MH-003-02, MH-003-01, and CSMH-003.

Before plugging the manholes as described in Section 2.2.2, a grout injection hole will be cored through the bottom of the manholes (Figure 5). A Geoprobe® rod with a sacrificial drive point will then be inserted through Hole A and driven about 24 inches into the bedding. The rods will then be retracted about 6 inches to allow pumping of the cement-bentonite grout through the rods and into the bedding.

The cement-bentonite grout will be mixed on-site and injected under pressure into Hole A through a pressure-tight connection at the top of the drill rods. The grout mix is designed with the following composition:

- 45 percent Portland cement;
- 53 percent water; and
- 2 percent bentonite.

On a practical basis, the grout will be mixed in the field using three 94-pound bags of Portland cement and 15 pounds of bentonite in 40 gallons of water. A quantity of 120 gallons of grout, containing 9 bags (846 pounds) of cement and 45 pounds of bentonite, will be the practical target for each manhole. This quantity will be injected at Hole A in each manhole unless back pressure becomes excessive. If the target quantity of grout is not accepted through the first core hole, additional grouting will be attempted through a second injection hole cored in the manhole floor.

Immediately after completing the grouting in each manhole, the drilling equipment will be withdrawn and the manhole will be filled as described in Section 2.2.2.

2.2.4 PIPE FILLING

Historical data have shown that VOC concentrations are one to two orders of magnitude higher in the water encountered in portions of the 003 segment than elsewhere within the collection system. Accordingly, as an added protection to reduce the potential water contact with bedding materials, the piping in the lower portion of the 003 segment will be partially

filled with CLSM (flowable fill) to a minimum depth equal to one-half of the pipe diameter. Pipe sections to be filled are the following:

- MH-003-02 to MH-003-01: 280 feet;
- MH-003-03 to MH-003-01: 120 feet;
- MH-003-04 to MH-003-01: 190 feet; and
- MH-003-01 to CSMH-0003: 40 feet.

A high-fluidity, low-strength CLSM will be pumped into the upstream manhole and allowed to flow to a temporary stop in the downstream manhole.

2.3 TREATMENT SYSTEM CLOSURE

After completing the closure of the 003 segment and processing all water generated in closure of the collection system, the equipment in the treatment plant will be emptied, cleaned, and disconnected. Salvageable equipment will be removed to an off-site location pending its sale or other off-site use. The carbon removed from the three adsorbers will be sent for reactivation and use elsewhere. Non-salvageable equipment and materials, including solids collected from the process vessels and unused treatment chemicals, will be removed for off-site disposal. The discharge pipe from the treatment plant to U-Crest Ditch will be plugged and capped.⁷ After emptying and cleaning, the building will be turned over to NFTA for its use.

⁷ The treatment system effluent is pumped to U-Crest Ditch and does not flow by gravity. The treatment system discharge line does not represent a potential location for post-closure surface water monitoring.

3.0 POST-CLOSURE MONITORING PLAN

As requested by the NYSDEC, monitoring and inspection will be conducted subsequent to the closure activity to assess the effects of the closure on groundwater and surface water quality and to identify any newly manifested discharges to surface water.

Two years of semi-annual post-shutdown groundwater and surface water monitoring will be conducted to ensure Site conditions are not adversely affected by the collection and treatment system shutdown. The data from this post-shutdown monitoring will be reported as it is developed to NYSDEC.

3.1 GROUNDWATER MONITORING

Groundwater monitoring will be conducted semi-annually at wells MW-2, MW-5, MW-28, MW-30, MW-31, MW-34, MW-34D, and MW-35 for two years following the completion of closure activities. Monitoring will also be conducted at well MW-33 as an upgradient or background location.

Sampling of all wells will be conducted using low-flow techniques, and analytical parameters and methods will be the same as currently employed in routine Site groundwater monitoring. Results of this groundwater monitoring will be compared to the RAOs specified in the ROD (Table 1). Attainment of these RAOs throughout this two-year monitoring period will complete post-remedial groundwater monitoring.

If any RAO exceedances occur, NYSDEC will be consulted and additional monitoring and evaluations will be conducted as needed. The response would, of course, depend on the specific constituents and the degree, location, and persistence of exceedances.

3.2 SURFACE WATER MONITORING

Coincident with the semi-annual groundwater monitoring, surface water monitoring will be conducted at discharges from the NFTA storm sewer system that collects surface water from those portions of the airport property where the collection and treatment system has been operating. Figure 6 shows these storm sewers and the proposed discharge monitoring

locations. These locations represent the furthest downstream points that are accessible for sampling and do not receive significant flows from other portions of the airport property or from Genesee Street.

Surface water samples will be collected and analyzed for the following parameters, which are consistent with the discharge authorization for the groundwater treatment system:

pH	cis-1,2-dichloroethylene
Total suspended solids	Trichloroethylene
Toluene	Tetrachloroethylene
Methylene chloride	Cadmium
1,2-dichlorobenzene	Chromium

Lead will also be analyzed in these samples.

Flows will be estimated at the time of each sample collection, and other pertinent observations regarding the discharges (*e.g.*, sheen, precipitate, other solids) will be recorded. The timing of the sampling will coincide with monitoring of the treatment system effluent.

Results will be compared to the baseline sampling data collected in 2008 and 2009 as part of the partial closure of the 001 system (Table 2). If VOC and metals concentrations decrease or remain consistent with the 2008/2009 data, this one-year monitoring period will complete post-remedial surface water monitoring. If VOC or metals concentrations show a statistically significant increase or upward trend, NYSDEC would be consulted.

3.3 INSPECTIONS

In addition to the groundwater and surface water monitoring, the ground surface in the area of the former collection systems will be inspected on a quarterly basis for signs of surface seeps or discharges. If any such surface seeps or discharges are encountered, NYSDEC would be consulted.

3.4 FINAL TERMINATION NOTICE

Following the four rounds of semi-annual post-shutdown monitoring, and assuming that constituent concentrations in groundwater or surface water discharges are not significantly

adversely affected by the shutdown, NYSDEC will be provided a final termination notice that summarizes the post-shutdown groundwater and surface water monitoring. At that same time or before, NFTA will provide NYSDEC the proof of filing of the land use restrictions with the Erie County Recorder of Deeds. NYSDEC will provide the Respondents with written confirmation that no further action is required at the Site.

4.0 RESTRICTIVE COVENANTS

On February 4, 1999, the Respondents filed a “Declaration of Covenants and Restrictions” with the Clerk of Erie County, New York, to give notice to all parties who may acquire interest in the Site in the future of the actions specified in the Order. To supplement that deed notice, and as part of the closure process, NFTA, as the property owner and as it has previously committed to the NYSDEC to do so, will place covenants on the Site property and groundwater that impart the following environmental restrictions:

- The property shall remain in industrial or commercial use and shall not be used for residential development;
- No groundwater wells or other structures shall be installed on the property for the purpose of extracting groundwater for any potential consumptive use; and
- No surface water cisterns or other surface water collection devices or structures designed for the provision of water for consumptive use shall be installed at the Site.

The restrictive covenants will also include a requirement to perform vapor intrusion investigations for any building proposed for construction within the area from which groundwater is currently being recovered, and, if necessary, preventative mitigation where sources of VOCs may adversely impact indoor air quality in any such buildings.

These institutional controls are specifically focused on ensuring that the second of the ROD-specified remediation goals (*i.e.*, prevent human exposure to impacted on-site groundwater) continue to be achieved at the Site. As the property owner, it is the responsibility of NFTA to work with NYSDEC to develop and implement the necessary environmental restrictive covenants. NFTA will provide a complete draft of the restrictive covenants to NYSDEC, along with all related deliverables, by December 31, 2012.

5.0 SCHEDULE

Figure 7 presents the schedule for implementing this Work Plan for closure of the collection and treatment system at the Site. The schedule provides for 20 work days (4 weeks) for NYSDEC review and approval. Contractor procurement, for which the schedule also allows 20 work days, would be initiated during the NYSDEC review.

On this basis, the system closure could begin in late November 2012, approximately six weeks after Work Plan submittal, once the Work Plan is approved and contractors retained. As shown in Figure 7, system closure is expected to require approximately seven weeks following contractor mobilization with completion in early January 2013.

The first round of semi-annual groundwater and surface water monitoring would be conducted within 30 days of closure (*i.e.*, late January 2013). On that basis, semi-annual groundwater and surface water monitoring would be completed July 2014, and the final termination notice would be filed with NYSDEC in the late summer or fall of 2014.

The schedule for the closure implementation tasks is highly weather-dependent, however, as the field work cannot be conducted during periods of severe cold or significant snow cover. Given the time of year, it may not be practical to initiate the closure activity until the spring of 2013. The decision to start or defer construction would be made nearer to the planned start of closure. Also, although the work is planned to be completed in one construction contractor mobilization, it may, depending on the weather conditions, be practical to close a portion of the system (*i.e.*, upper and lower 001 segment) initially and delay the remainder of the work until the spring of 2013.

Furthermore, the project schedule assumes NFTA cooperation regarding Site access, work plan implementation, and completion of the restrictive covenants.

REFERENCES

- CBS Corporation, 2008. *Revised Work Plan, Partial Closure of Groundwater Collection System, NYSDEC Site No. 9-15-066, Operable Unit 2, Cheektowaga, New York. Revision 1.* November 7.
- CBS Corporation, 2009. *Letter Report, Phase 1 Closure of 001 Segment of Groundwater Collection System, NYSDEC Site 9-15-066, Cheektowaga, New York.* September 4.
- CBS Corporation, 2012. *Termination of Operation, Maintenance, and Monitoring Activities, Groundwater Collection and Treatment System, NYSDEC Site No. 9-15-066, Operable Unit 2, Cheektowaga, New York.* September 7.
- New York State Department of Environmental Conservation, 1995. *Record of Decision, Operable Unit No. 2, Westinghouse Electric Corporation Site, Town of Cheektowaga, Erie County, Site No. 9-15-066,* Division of Hazardous Waste Remediation, Albany, New York. December.
- New York State Department of Environmental Conservation, 2010. *Technical Guidance for Site Investigation and Remediation, DER-10,* DEC Program Policy, Office of Remediation and Materials Management. May 3.

TABLES

Table 1
Remedial Action Objectives for Site Groundwater
NYSDEC Site No. 9-15-066

Constituent	Remedial Action Objective in Groundwater ($\mu\text{g/L}$)
1,2-dichloroethylene (total)	5
Toluene	5
1,1,1-Trichloroethane	5
Trichloroethylene	5
Vinyl chloride	2
Cadmium	5
Lead	25

**Table 2
Results of NFTA Storm Sewer Sampling**

Sample Location	Sample Date	Estimated Flow (gpm)	pH (s.u.)	Total Suspended Solids (mg/L)	Constituent Concentration (ug/L)									
					1,2-dichlorobenzene	cis-1,2-dichloroethylene	Methylene Chloride	Toluene	Tetrachloroethylene	Trichloroethylene	Vinyl chloride	Cadmium	Chromium	Lead
001 System														
NFTA Storm Sewer (MH-1A)	12/18/08	15	NA	NA	1.0 U	1.0 U	1.0 U	0.21 J	0.71 J	1.0 U	NA	NA	NA	NA
	04/16/09	14	7.7	2.8 B	1.0 U	1.0 U	1.0 U	0.20 J	0.94 J	1.0 U	1.0 U	1.3 B	3.0 B	6.1
NFTA Storm Sewer (MH-1B)	04/16/09	14	7.9	4.0 U	1.0 U	1.0 U	1.0 U	0.26 J	1.0 U	0.23 J	1.0 U	1.3 B	5.0 U	3.0 U
NFTA Storm Sewer (MH-1C)	04/16/09	S	8.0	11.2	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	3.0 U
002 System														
NFTA Storm Sewer (MH-2A)	12/18/08	22	NA	NA	1.0 U	30	1.0 U	1.0 U	0.88 J	42	NA	NA	NA	NA
	04/16/09	7.0	8.0	4.0 U	1.0 U	20	1.0 U	1.0 U	1.0 U	49	1.0 U	5.0 U	5.0 U	3.0 U
NFTA Storm Sewer (MH-2B)	12/18/08	14	NA	NA	1.0 U	36	1.0 U	0.36 J	15	75	NA	NA	NA	NA
	04/16/09	7.8	11.6	4.0 U	1.0 U	52	1.0 U	0.39 J	19	150	1.0 U	5.0 U	5.3	4.8
NFTA Storm Sewer (MH-2C)	04/16/09	0.1	9.2	110	1.0 U	12	1.0 U	1.0 U	5.4	34	1.0 U	5.0 U	3.2 B	3.0 U
NFTA Storm Sewer (MH-2D)	04/16/09	S	8.7	687	1.0 U	20	1.0 U	0.15 J	1.0 U	71	1.0 U	0.52 B	29	52
003 System														
NFTA Storm Sewer (MH-3)	12/18/08	5.0	NA	NA	2.5 U	37	3 U	3 U	1.2 J	160	NA	NA	NA	NA
	04/16/09	5.0	10.1	9.6	12 U	63	12 U	12 U	12 U	450	12 U	5.0 U	11.5	3.0 U

Table 2
Results of NFTA Storm Sewer Sampling

Notes:

1. For manhole locations, see Figure 6.
2. "NA" indicates not available.
3. "S" indicates water present, but no discernible flow.
4. Data Legend:

Detections and estimated values are in **bold-face** type.

Organic Data Qualifiers:

U - not detected at indicated reporting limit (RL).

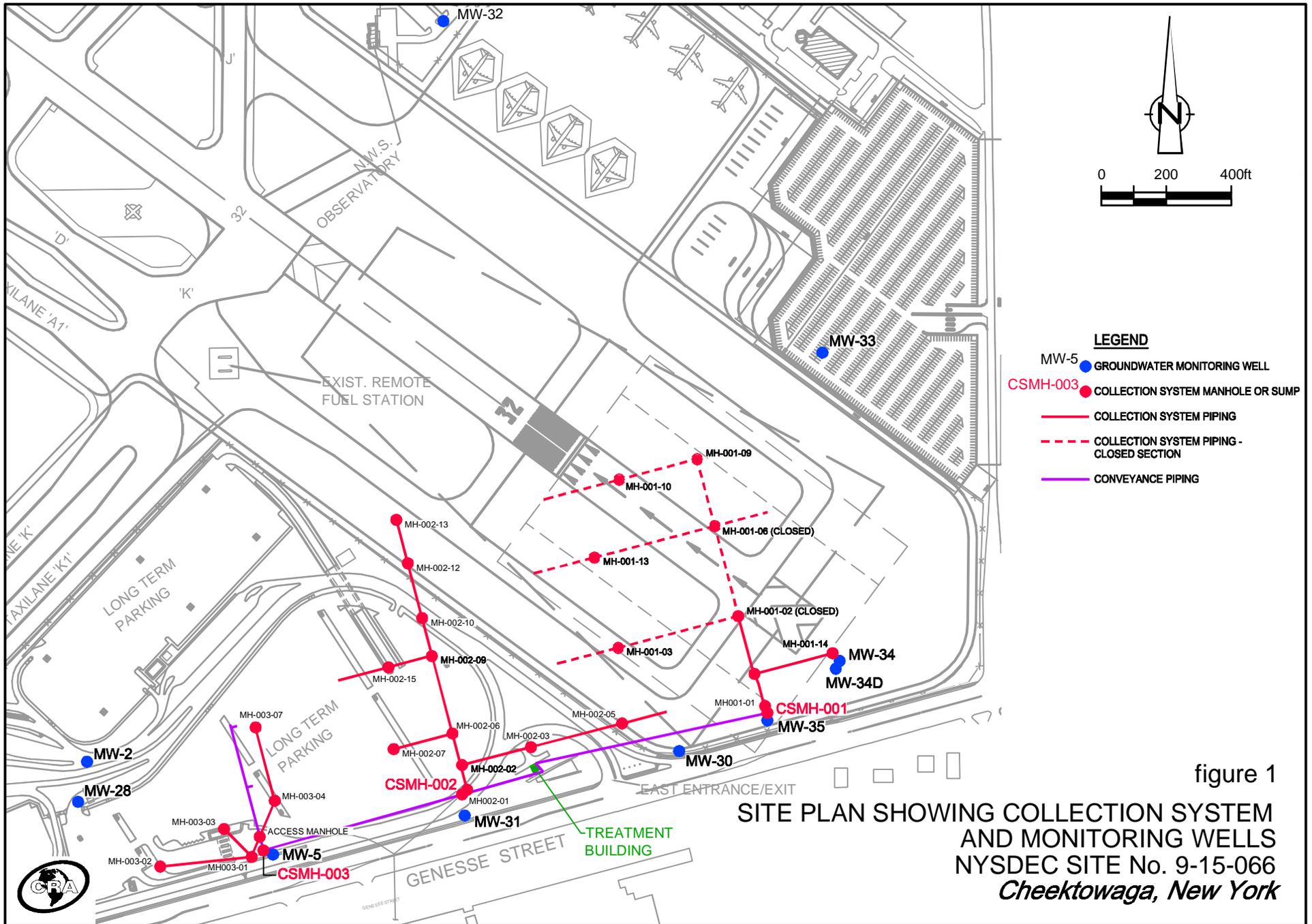
J - estimated concentration above minimum detection limit (MDL), but below reporting limit (RL).

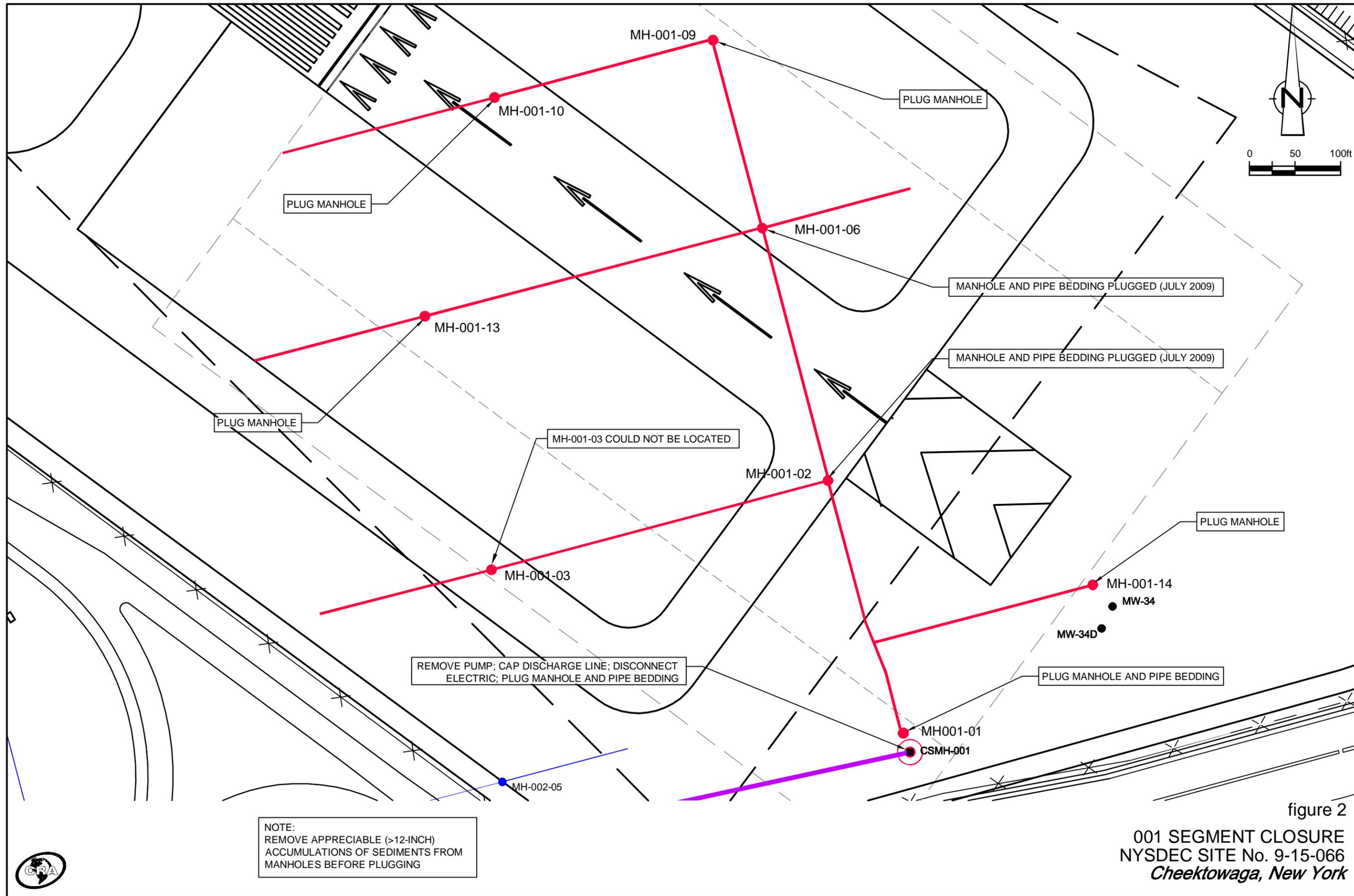
Inorganic Data Qualifiers (also apply to total suspended solids):

U - not detected at indicated RL

B - detected concentration above MDL, but below RL.

FIGURES





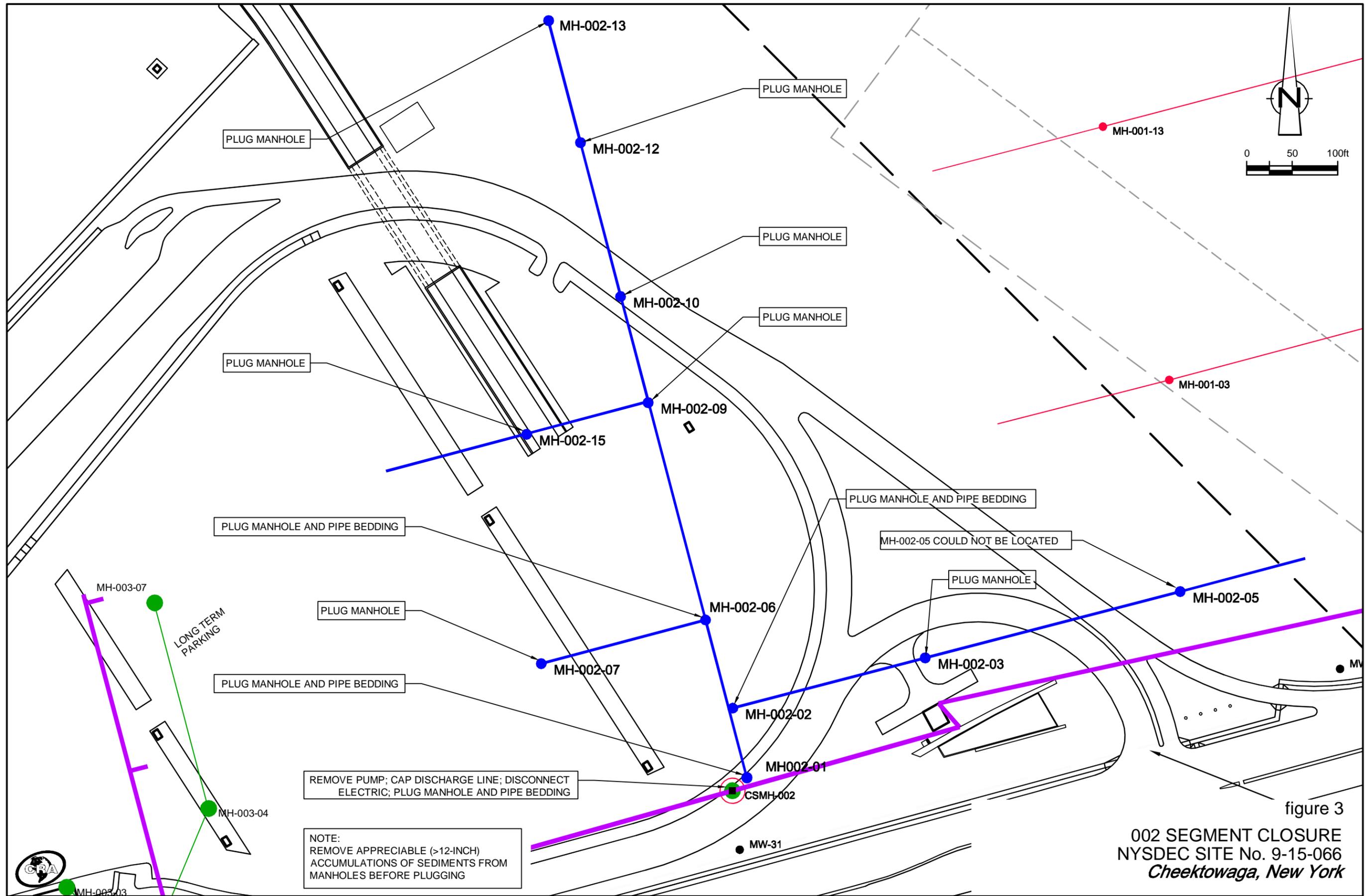


figure 3
 002 SEGMENT CLOSURE
 NYSDEC SITE No. 9-15-066
 Cheektowaga, New York

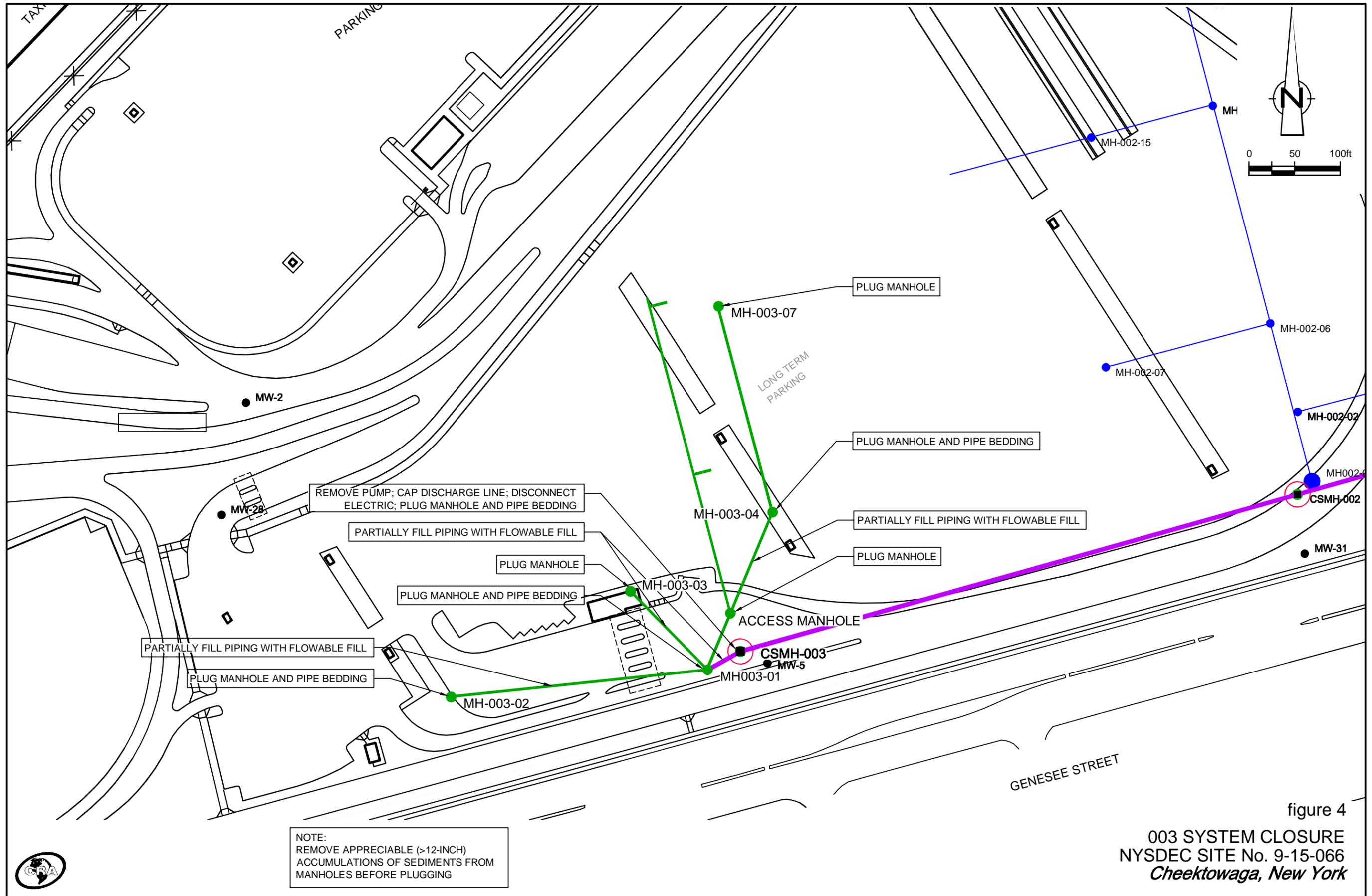


figure 4
 003 SYSTEM CLOSURE
 NYSDEC SITE No. 9-15-066
 Cheektowaga, New York

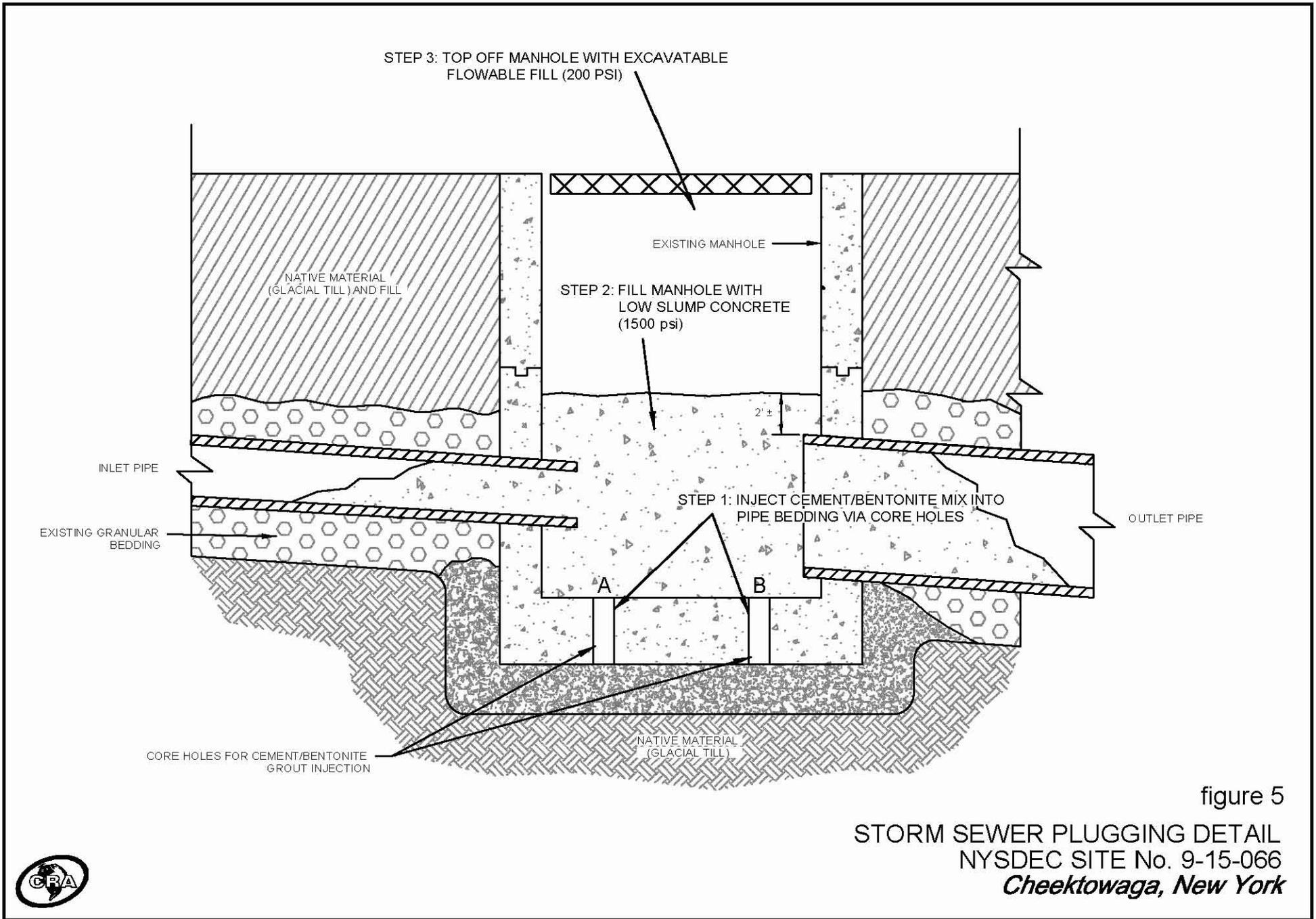
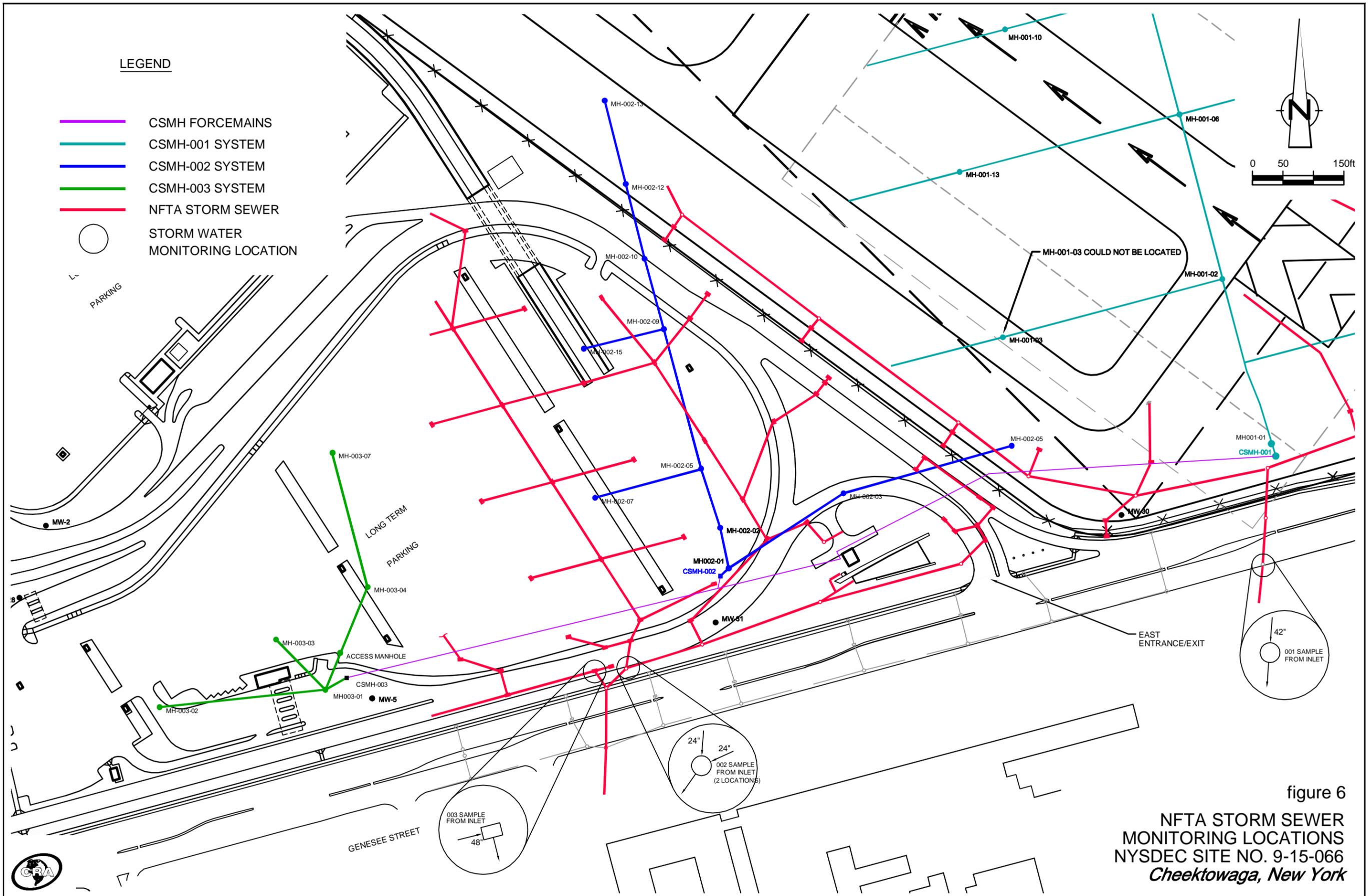


figure 5

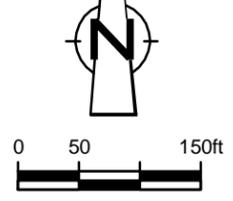
STORM SEWER PLUGGING DETAIL
 NYSDEC SITE No. 9-15-066
Cheektowaga, New York





LEGEND

- CSMH FORCEMAINS
- CSMH-001 SYSTEM
- CSMH-002 SYSTEM
- CSMH-003 SYSTEM
- NFTA STORM SEWER
- STORM WATER MONITORING LOCATION



MH-001-03 COULD NOT BE LOCATED

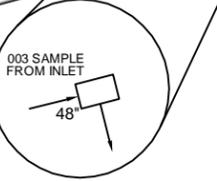
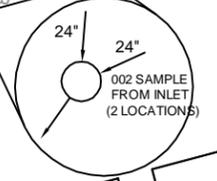
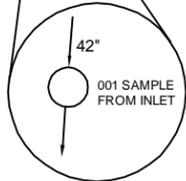


figure 6
 NFTA STORM SEWER
 MONITORING LOCATIONS
 NYSDEC SITE NO. 9-15-066
 Cheektowaga, New York

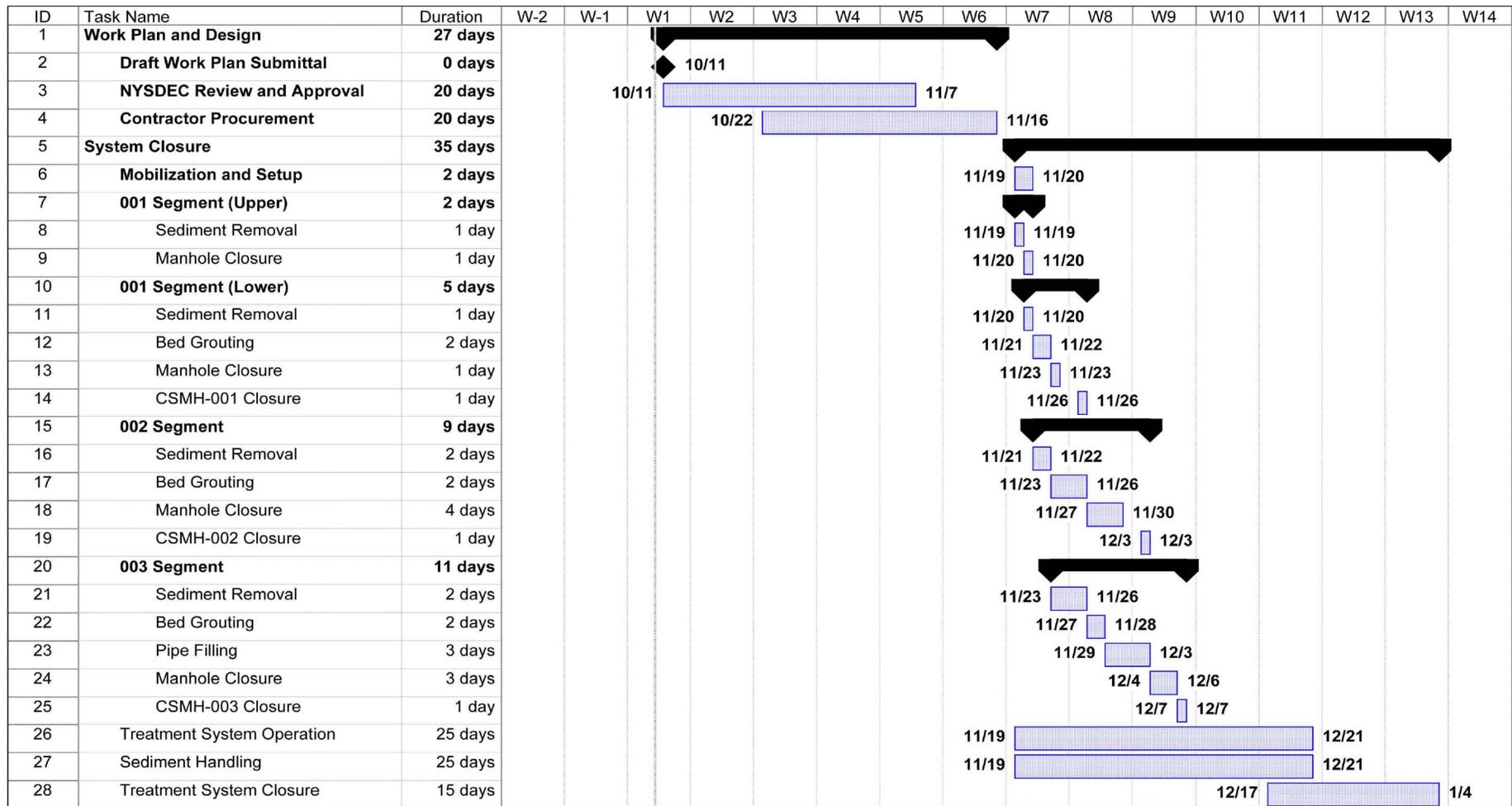


figure 7

COLLECTION AND TREATMENT SYSTEM CLOSURE SCHEDULE
 NYSDEC SITE No. 9-15-066
Cheektowaga, New York

