

Weekly Field Report
Week: 05-04-14 through 05-10-14
New Bedford Harbor Lower Harbor CAD Cell (LHCC)

This Weekly Field Report was prepared to serve as a summary of field activities conducted throughout the week for Phase I dredging of the New Bedford Harbor Lower Harbor CAD Cell (LHCC) in New Bedford, Massachusetts.

1. Introduction:

The weekly field report describes the activities carried out by the Contractor (Cashman), the Owner's Representative (Apex Companies, LLC), and any subcontractors completing work within the scope of the project requirements.

This Weekly Field Report represents the twenty seventh Report associated with Phase I dredging of the LHCC in New Bedford Harbor, and the associated handling and disposal of dredged materials at CAD cells within the Harbor, and at designated open-water disposal sites approved for this Project.

This 27th Report for the LHCC dredging activities includes:

- Daily Inspection Reports from dredging oversight performed during the week of May 4th through May 10th, 2014. These reports include notes on the equipment used on site, and a summary of contractor activities. (See Attachment 1);
- Water Quality Monitoring Forms completed for the week of May 4th through May 10th, 2014, (Attachment 2) summarizing monitoring survey data recorded during active dredging. Included with the attached forms is Figure 1 Lower Harbor CAD Cell Phase I Water Quality Monitoring Plan, which shows the locations of the water quality monitoring events conducted during this reporting period. Per the approved Water Quality Monitoring Plan and associated performance standards for the dredging efforts being conducted during this reporting period, Apex has:
 - Conducted three days of water quality monitoring, since the arrival of the dredge plant *Dale Pyatt* was considered a new activity.
 - Performed visual inspections of dredged materials before the disposal of a scow for any visible debris or other items that could potentially become a hazard to navigation prior to the scow's departure for the offshore disposal site.

Summary:

The Contractor, Cashman Dredging and Marine Contracting, Co. LLC (Cashman) continued LHCC dredging activities for the week, starting out with the use of dredge plant, *Bobby D*, then shifting dredging operations to the dredge plant *Dale Pyatt* upon its arrival to the LHCC site on May 6th. Dredging was conducted daily May 5th through May 10th. Dredging operations focused on the removal of Phase I Bottom of CAD Cell sediments. During this reporting period, dredging operations were conducted using a conventional digging bucket, with dredged materials being disposed offshore at the Rhode Island Sound Disposal Site (RISDS). Cashman was observed conducting these activities during the authorized operational window of 7 AM until sunset, utilizing two dredge plants; two tugs — *Ellsea* and *Lucinda Smith*; three split-hull scows — *Eddie Carroll*, *Mighty Quinn*, and the *M.E.R.C Shevlin*, with capacities of 2800, 3800, and 4800 cubic yards, respectively; along with two small utility boats.

With time of year restrictions currently in place (January 15th through June 15th) all dredging activities were conducted within a silt curtain perimeter surrounding the LHCC footprint.

2. Operational Notes:

Dredging:

Dredging of LHCC Phase I Bottom of CAD sediments continued during the week. Apex conducted three days of water quality monitoring since the arrival of the *Dale Pyatt* was considered a new activity for the Project. Monitoring was performed May 7th, 8th, and 9th while dredging was being performed to ensure that this activity did not result in an exceedance of any project-specific water quality standards.

Offshore Disposal:

Offshore disposal for LHCC Phase I Bottom of CAD sediments is scheduled and permitted for the Rhode Island Sound Disposal Site. Nine offshore disposal events were recorded during the week as follows - scow *Eddie Carroll* (May 4th, 6th, 7th, 8th, and 9th), scow *Mighty Quinn* (May 7th, 8th, and 10th), and scow *M.E.R.C Shevlin* (May 10th).

Table 1 – Cumulative Dredging Progress

| Period of Activity | Volume (cy) |
|--|-------------|
| Approximate Top of CAD Volume Dredged to Date* | 24,890 |
| Approximate Bottom of CAD Volume Dredged this Reporting Period | 11,500 |
| Approximate Bottom of CAD Volume Dredged to Date* | 60,220 |

* Dredge volume quantities are estimated based on observed scow draft marks and an assumed density of the materials dredged. Scows may contain varying amounts of water along with the dredge materials, thereby influencing the scow draft marks and projected volumes. Given the uncertainty in the density of a composite mix of sediments being dredged, all volumes are confirmed and adjusted as necessary using bathymetric survey data.

3. Monitoring Summary

There were no water quality exceedances observed during this reporting period related to dredging operations. Turbidity monitoring was performed, however since there were no exceedances, no water quality samples were collected for chemical analysis.

Prepared by:
Apex Companies, LLC



John B. McAllister, P.E.
Senior Project Engineer

Attachment 1
Daily Inspection Reports



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Kaios Ryan Date: 5/4/2014

Contractor: Cashman/Weeks Foreman/Supt: -

Weather AM: Ptly. Cloudy Temperature AM: 46
PM: Rain. Winds 15-20knts. W PM: 60

Tides High 0005 AM 1236 PM
Low 0531 AM 1728 PM

Manpower Onsite

| | | | | |
|----------|-------------|---|-------------|-----|
| Captain | <u>0</u> | @ | <u>0</u> | Hrs |
| Engineer | <u>0</u> | @ | <u>0</u> | Hrs |
| Operator | <u>0</u> | @ | <u>0</u> | Hrs |
| Mate | <u>0</u> | @ | <u>0</u> | Hrs |
| Deckhand | <u>0</u> | @ | <u>0</u> | Hrs |
| Other: | <u> </u> | @ | <u> </u> | Hrs |

Equipment Onsite

| | | |
|-----------------------------|------|----------|
| Description: <u>Bobby D</u> | Hrs. | <u>0</u> |
| <u>Eddie Carroll</u> | Hrs. | <u>1</u> |
| <u>Edna</u> | Hrs. | <u>0</u> |
| <u>Lucinda Smith</u> | Hrs. | <u>1</u> |
| <u>Skiff</u> | Hrs. | <u>0</u> |
| <u>SEI 2000</u> | Hrs. | <u>0</u> |

Contractor Activities: (Attach Additional Sheets as Necessary)

0600 No activity on site. 0850 Tug boat Lucinda Smith and scow Eddie Carroll enter the New Bedford Harbor north bound. 0910 Tug boat Lucinda Smith and scow Eddie Carroll head north through the bridge. 0917 Scow Eddie Carroll is tied to the Richie Barber. 1000 No activity on site.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Technician
Copy to: File

Date: 05/04/2014
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File: DIR_LHCC_050414



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young **Date:** 5/5/2014

Contractor: Cashman **Foreman/Supt:** Paul Poirer

| | | | | | |
|----------------|------|-------------------------------------|--------------------|-------------|-----------|
| Weather | AM: | <u>Sunny</u> | Temperature | AM: | <u>64</u> |
| | PM: | <u>Cloudy. Winds 10-15knts. WNW</u> | | PM: | <u>44</u> |
| Tides | High | <u>0052</u> | AM | <u>1325</u> | PM |
| | Low | <u>0617</u> | AM | <u>1819</u> | PM |

Manpower Onsite

| | | | | |
|-----------|----------|---|-----------|-----|
| Foreman | <u>1</u> | @ | <u>12</u> | Hrs |
| Engineer | <u>1</u> | @ | <u>12</u> | Hrs |
| Operators | <u>1</u> | @ | <u>12</u> | Hrs |
| Mate | <u>1</u> | @ | <u>12</u> | Hrs |
| Deckhand | <u>1</u> | @ | <u>12</u> | Hrs |
| Other: | <u>1</u> | @ | <u>12</u> | Hrs |
| | <u>1</u> | @ | <u>6</u> | Hrs |

Equipment Onsite

| | | | |
|--------------|----------------------|------|-----------|
| Description: | <u>Bobby D</u> | Hrs. | <u>6</u> |
| | <u>Eddie Carroll</u> | Hrs. | <u>12</u> |
| | <u>Lucinda Smith</u> | Hrs. | <u>12</u> |
| | <u>Blue Skiff</u> | Hrs. | <u>12</u> |
| | <u>SEI 2000</u> | Hrs. | <u>0</u> |

Contractor Activities: (Continued on next page)

0700-No activity onsite. Bobby D, Lucinda Smith, and Weeks 888 crane tied up inside silt curtain. Eddie Carroll and SEI 2000 are tied to the Richie Barber. Crews for dredge and crane are onsite. 0805-Lucinda Smith repositions Weeks 888. Weeks 888 is pulling the spud on the Bobby D in order to fix the spud cable. 0842-Survey 4 onsite. 0955-Lucinda Smith moves the Weeks 888 off of the Bobby D. 1008-Survey 4 offsite. 1026-Lucinda Smith takes the Weeks 888 and ties it to the Richie Barber. 1048-Lucinda Smith ties to the Eddie Carroll and brings it to the Bobby D. 1110-Eddie Carroll ties up to the Bobby D. 1132-Blue skiff closes the silt curtain. Bobby D begins dredging into the Eddie Carroll. 1220-Bobby D dredging cuts 4 & 5 station 6+23, depth 26'. Eddie Carroll draft marks: bow 5.5', stern 5.5'.

Problems/Issues or Action Items:

Note: The operator for the Bobby D operated the Weeks 888 crane during spud maintenance. Two crane crew were onsite as well.

Visitors:

Signature: 
Title: Environmental Scientist
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Date: 5/5/2014
Page: 1 of 3
File: DIR_LHCC_050514



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young Date: 5/5/2014

Contractor: Cashman Foreman/Supt: Paul Poirer

Weather AM: Sunny Temperature AM: 64
PM: Cloudy. Winds 10-15knts. WNW PM: 44

Tides High 0052 AM 1325 PM
Low 0617 AM 1819 PM

Contractor Activities: (Continued from Page 1)

1238-Bobby D relocates and begins dredging cuts 4 & 5 station 6+11, depth 23'. 1333-Bobby D relocates and begins dredging cuts 4 & 5 station 5+94, depth 22'. 1420-Bobby D relocates and begins dredging cuts 4 & 5 station 5+90, depth 20'. 1505-Bobby D stops dredging, Lucinda Smith moves the Eddie Carroll. 1521-Bobby D relocates and begins dredging cuts 5 & 10 station 6+41, depth 18'. 1604-Bobby D relocates and begins dredging cuts 3 & 10 station 6+75, depth 18'. 1622-Lucinda Smith slides the Eddie Carroll forward. 1735-Bobby D stops dredging. Eddie Carroll final drafts: bow 8', stern 9.5'. 1738-Eddie Carroll inspected and cleared for offshore disposal. 1905-Lucinda Smith takes the Eddie Carroll south through the bridge for offshore disposal.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Scientist

Date: 5/5/2014
Page: 2 of 3

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City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Brett Young

Date: 5/5/2014

Contractor: Cashman

Foreman/Supt: Paul Poirer



Bobby D dredging into the Eddie Carroll

Bobby D dredging into the Eddie Carroll



Material in the Eddie Carroll

Material in the Eddie Carroll

Visitors:

Signature: 
Title: Environmental Scientist

Date: 5/5/2014
Page: 3 of 3

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City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young **Date:** 5/6/2014

Contractor: Cashman **Foreman/Supt:** Paul Poirer

Weather AM: Sunny **Temperature** AM: 62
PM: Cloudy/Rain. Winds 5-10knts. NNW PM: 41

Tides High 0138 AM 1412 PM
Low 0714 AM 1922 PM

Manpower Onsite

| | | | | |
|-----------|----------|---|-----------|-----|
| Foreman | <u>1</u> | @ | <u>11</u> | Hrs |
| Engineer | <u>1</u> | @ | <u>11</u> | Hrs |
| Operators | <u>1</u> | @ | <u>11</u> | Hrs |
| Mate | <u>1</u> | @ | <u>11</u> | Hrs |
| Deckhand | <u>1</u> | @ | <u>11</u> | Hrs |
| Other: | <u>2</u> | @ | <u>1</u> | Hrs |

Equipment Onsite

| | | |
|-----------------------------|------|-----------|
| Description: <u>Bobby D</u> | Hrs. | <u>5</u> |
| <u>Eddie Carroll</u> | Hrs. | <u>15</u> |
| <u>Lucinda Smith</u> | Hrs. | <u>11</u> |
| <u>Blue Skiff</u> | Hrs. | <u>11</u> |
| <u>Survey 4</u> | Hrs. | <u>1</u> |

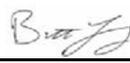
Contractor Activities: (Continued on next page)

0600-No activity observed. Bobby D spuds down inside the silt curtain. Weeks 888 and SEI 2000 tied up to the Richie Barber at CAD Cell 3. 0618-Survey 4 onsite. 0648-Survey 4 offsite. 0700-Bobby D crew onsite. Lucinda Smith and Eddie Carroll expected to make the 0800 bridge opening. 0800-Lucinda Smith and Eddie Carroll make the 0800 bridge opening. 0817-Eddie Carroll ties up to the Bobby D. 0825-Lucinda Smith ties up to the Weeks 888. 0830-Lucinda Smith brings the Weeks 888 to the other side of the Richie Barber to free up the SEI 2000. 0851-Lucinda Smith ties up to the SEI 2000 and brings it south. Dave Norton is onsite. 0905-Dave Norton is offsite. 0915-Bobby D begins dredging into the Eddie Carroll at cut 6 station 6+72, depth 19'. Eddie Carroll drafts: bow 4', stern 4'.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Scientist

Date: 5/6/2014
Page: 1 of 3

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File: DIR_LHCC_050614



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young **Date:** 5/6/2014

Contractor: Cashman **Foreman/Supt:** Paul Poirer

| | | | | | |
|----------------|-----|---|--------------------|-----|-----------|
| Weather | AM: | <u>Sunny</u> | Temperature | AM: | <u>62</u> |
| | PM: | <u>Cloudy/Rain. Winds 5-10knts. NNW</u> | | PM: | <u>41</u> |

| | | | | | |
|--------------|------|-------------|----|-------------|----|
| Tides | High | <u>0138</u> | AM | <u>1412</u> | PM |
| | Low | <u>0714</u> | AM | <u>1922</u> | PM |

Contractor Activities: (Continued from Page 1)

1010-Lucinda Smith comes north through the bridge with the support barge for the Dale Pyatt carrying two dredge buckets on deck. 1025-Apex clears the Mighty Quinn scow for use at LHCC. 1035-Bobby D stops dredging. 1112-Bobby D resumes dredging. 1125-Two Bobby D crew take the skiff to fix the silt curtain. 1215-Dale Pyatt comes north through the bridge. 1220-Crew finished fixing silt curtain. 1244- Dale Pyatt spuds down off Niemiec Marine, Lucinda Smith unties and collects Dale Pyatt's support barge. 1300-Dale Pyatt supprt barge ties to the Dale Pyatt. 1312-Lucinda Smith takes the Weeks 888 to the Dale Pyatt. 1317-Bobby D relocates and begins dredging cuts 5 & 10 station 6+58, depth 20'. 1406-Weeks 888 crane working on the Dale Pyatt. 1416-Lucinda Smith brings the Weeks 888 to the Richie Barber. 1438- Bobby D stops dredging and puts the bucket on the deck. Eddie Carroll final drafts: bow 7.5', stern 8'. 1440-Eddie Carroll inspected and cleared for offshore disposal. 1510-Lucinda Smith takes the Eddie Carroll and ties it off to the support barge alongside Dale Pyatt. 1539-Survey 4 onsite. 1550-Survey 4 offsite. 1553-Bobby D ties up to the Eddie Carroll. 1615-Lucinda Smith brings the Dale Pyatt inside the silt curtain. 1640-Lucinda Smith takes the Weeks 888 and ties it to the Dale Pyatt helper barge. 1650-Dave Norton, Paul Poirer, and Richie Barber board the Dale Pyatt. Bobby D crew departs. 1730-Edna takes the Weeks 888 south and Lucinda Smith takes the Bobby D south. 1740-Dave, Paul and Richie offsite.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Scientist
Copy to: File

Date: 5/6/2014
Page: 2 of 3
File: DIR_LHCC_050614



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Brett Young

Date: 5/6/2014

Contractor: Cashman

Foreman/Supt: Paul Poirer



Bobby D dredging into the Eddie Carroll



Material in the Eddie Carroll



The portion of the silt fence that was repaired



Dale Pyatt being moved to Lower Harbor CAD Cell

Visitors:

Signature: 
Title: Environmental Scientist
Copy to: File

Date: 5/6/2014
Page: 3 of 3
File: DIR_LHCC_050614



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Kyle Miller **Date:** 5/7/2014

Contractor: Cashman **Foreman/Supt:** Paul Poirer

| | | | | | |
|----------------|-----|--|--------------------|-----|-----------|
| Weather | AM: | <u>Clearing</u> | Temperature | AM: | <u>37</u> |
| | PM: | <u>Ptly. Sunny. Winds 10-15knts. WSW</u> | | PM: | <u>64</u> |

| | | | | | |
|--------------|------|-------------|----|-------------|----|
| Tides | High | <u>0224</u> | AM | <u>1500</u> | PM |
| | Low | <u>0822</u> | AM | <u>2037</u> | PM |

Manpower Onsite

| | | | | |
|-----------|----------|---|-----------|-----|
| Foreman | <u>1</u> | @ | <u>11</u> | Hrs |
| Engineer | <u>1</u> | @ | <u>11</u> | Hrs |
| Operators | <u>1</u> | @ | <u>11</u> | Hrs |
| Mate | <u>1</u> | @ | <u>11</u> | Hrs |
| Deckhand | <u>1</u> | @ | <u>11</u> | Hrs |
| Other: | <u>2</u> | @ | <u>1</u> | Hrs |

Equipment Onsite

| | | | |
|--------------|----------------------|------|-----------|
| Description: | <u>Dale Pyatt</u> | Hrs. | <u>12</u> |
| | <u>Eddie Carroll</u> | Hrs. | <u>12</u> |
| | <u>Edna</u> | Hrs. | <u>12</u> |
| | <u>Blue Skiff</u> | Hrs. | <u>12</u> |
| | <u>Survey 4</u> | Hrs. | <u>1</u> |
| | <u>Mighty Quinn</u> | Hrs. | <u>15</u> |

Contractor Activities: (Attach Additional Sheets as Necessary)

0650-Observed dredge Dale Pyatt (with crew) inside the dredge area, but not actively dredging. 0757-Dale Pyatt dredging into the scow Mighty Quinn - average draft marks recorded as 5'6". 1141-Scow Mighty Quinn at capacity for harbor transit - average draft marks were 12'0". Mighty Quinn inspected and cleared for offshore disposal. 1212-Dale Pyatt dredging, materials being loaded into the scow Eddie Carroll - average draft marks were 4'0". 1308-Dredging continues, average draft marks 5'0". 1529-Dredging continues, average draft marks 6'7". 1625-Dale Pyatt stops dredging; scow Eddie Carroll loaded to an average draft of 7'7". 1658-Tug Edna takes scow Eddie Carroll to staging area, A.F Marrese heads south. 1800-Crew of Dale Pyatt (7 crew) and crew of Survey 4 (1 crew) depart site. No further activities. Water quality monitoring was conducted during the day - no issues were observed.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: D.Boye
Title: Sr.Project Manager
Copy to: File

Date: 5/7/2014
Page: 1 of 1
File: DIR_LHCC_050714



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young Date: 5/8/2014

Contractor: Cashman Foreman/Supt: Norm Bourque

Weather AM: Sunny Temperature AM: 61
PM: Cloudy. Winds 5-10knts. SSW PM: 46

Tides High 0311 AM 1550 PM
Low 0924 AM 2149 PM

Manpower Onsite

| | | | | |
|-----------|-------------|---|-------------|-----|
| Foreman | <u>1</u> | @ | <u>12</u> | Hrs |
| Engineer | <u>2</u> | @ | <u>12</u> | Hrs |
| Operators | <u>1</u> | @ | <u>12</u> | Hrs |
| Mate | <u>1</u> | @ | <u>12</u> | Hrs |
| Deckhand | <u>2</u> | @ | <u>12</u> | Hrs |
| Other: | <u> </u> | @ | <u> </u> | Hrs |

Equipment Onsite

| | | | |
|--------------|----------------------|------|-----------|
| Description: | <u>Dale Pyatt</u> | Hrs. | <u>8</u> |
| | <u>Eddie Carroll</u> | Hrs. | <u>12</u> |
| | <u>Mighty Quinn</u> | Hrs. | <u>12</u> |
| | <u>Lucinda Smith</u> | Hrs. | <u>24</u> |
| | <u>Blue Skiff</u> | Hrs. | <u>12</u> |
| | <u>Survey 4</u> | Hrs. | <u>2</u> |

Contractor Activities: (Continued on next page)

0700-No activity on site. Crew onboard Dale Pyatt; dredge and scow Mighty Quinn inside silt curtain. Mighty Quinn drafts are bow 4', stern 4'. 0709-Dale Pyatt begins dredging into the Mighty Quinn. 0738-Dale Pyatt stops dredging to reboot navigation computer. 0745-Dale Pyatt resumes dredging. 0810-Mighty Quinn drafts: bow 5.5', stern 7'. 1046-Mighty Quinn drafts: bow 10', stern 12'. 1128-Dale Pyatt stops dredging into the Mighty Quinn. Final drafts on Mighty Quinn: bow 12', stern 12'. 1136-Mighty Quinn inspected and cleared for offshore disposal. 1110-Lucinda Smith ties the Eddie Carroll to the A.F. Maurice. 1136-Lucinda Smith ties up to the Mighty Quinn. 1215-Lucinda Smith takes the Mighty Quinn south through the 1215 bridge for offshore disposal. 1319 Survey 4 onsite.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Scientist
Copy to: File

Date: 5/8/2014
Page: 1 of 3
File: DIR_LHCC_050814



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young Date: 5/8/2014

Contractor: Cashman Foreman/Supt: Norm Bourque

Weather AM: Sunny Temperature AM: 61
PM: Cloudy. Winds 5-10knts. SSW PM: 46

Tides High 0311 AM 1550 PM
Low 0924 AM 2149 PM

Contractor Activities: (Continued from Page 1)

1322 Edna comes north through the bridge to bring the Eddie Carroll to the Dale Pyatt. 1350 Eddie Carroll ties to the Dale Pyatt. 1405 Dale Pyatt begins dredging into the Eddie Carroll. Eddie Carroll drafts: bow 4', stern 4'. 1450 Survey 4 offsite. 1530 Dale Pyatt continues to dredge into the Eddie Carroll which is drafting: bow 6', stern 6'. 1725 Dale Pyatt stops dredging. Eddie Carroll drafts: bow 7', stern 8'. 1800 Eddie Carroll inspected and cleared for offshore disposal. 1820 Crew departs. Eddie Carroll will be taken offshore when the Lucinda Smith returns with the Mighty Quinn.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Scientist

Date: 5/8/2014
Page: 2 of 3

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File: DIR_LHCC_050814



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young

Date: 5/8/2014

Contractor: Cashman

Foreman/Supt: Norm Bourque



Dale Pyatt dredging into the Mighty Quinn

Dale Pyatt dredging into the Mighty Quinn



Dale Pyatt dredging into the Eddie Carroll

Dale Pyatt dredging into the Eddie Carroll

Visitors:

Signature: 
Title: Environmental Scientist

Date: 5/8/2014
Page: 3 of 3

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City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young **Date:** 5/9/2014
Contractor: Cashman **Foreman/Supt:** Dave Norton

| | | | | | |
|----------------|------|----------------------------------|--------------------|-------------|-----------|
| Weather | AM: | <u>Cloudy</u> | Temperature | AM: | <u>59</u> |
| | PM: | <u>Rainy. Winds 5-10knts. SE</u> | | PM: | <u>53</u> |
| Tides | High | <u>0403</u> | AM | <u>1643</u> | PM |
| | Low | <u>1013</u> | AM | <u>2248</u> | PM |

Manpower Onsite

| | | | | |
|-----------|-------------|---|-------------|-----|
| Foreman | <u>1</u> | @ | <u>12</u> | Hrs |
| Engineer | <u>2</u> | @ | <u>10</u> | Hrs |
| Operators | <u>1</u> | @ | <u>10</u> | Hrs |
| Mate | <u>1</u> | @ | <u>10</u> | Hrs |
| Deckhand | <u>2</u> | @ | <u>10</u> | Hrs |
| Other: | <u> </u> | @ | <u> </u> | Hrs |

Equipment Onsite

| | | | |
|--------------|----------------------|------|-----------|
| Description: | <u>Dale Pyatt</u> | Hrs. | <u>6</u> |
| | <u>Eddie Carroll</u> | Hrs. | <u>0</u> |
| | <u>Mighty Quinn</u> | Hrs. | <u>12</u> |
| | <u>Lucinda Smith</u> | Hrs. | <u>12</u> |
| | <u>Blue Skiff</u> | Hrs. | <u>12</u> |
| | <u>Survey 4</u> | Hrs. | <u>2</u> |

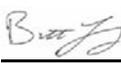
Contractor Activities: (Attach Additional Sheets as Necessary)

0630-No activity on site. Dale Pyatt crew arrives. Mighty Quinn and Dale Pyatt tied up inside silt curtain. Mighty Quinn drafts: bow 4', stern 5.5'. 0640-Survey 4 onsite. 0715-Dale Pyatt begins dredging into the Mighty Quinn. 0825-Dale Pyatt continues to dredge into the Mighty Quinn, drafting bow 6.5', stern 8.5'. 0827-Survey 4 offsite. 1047-Dale Pyatt stops dredging, the scow is full - Mighty Quinn drafts: bow 12, stern 12.5'. 1113-Mighty Quinn inspected and cleared for offshore disposal. 1152-Edna takes the Mighty Quinn off the Dale Pyatt and brings it to the northern staging area. 1300-Eddie Carroll is being cleaned off inside the silt curtain to be taken offsite for repairs. 1625-Lucinda Smith takes the Eddie Carroll to the Richie Barber. 1635-Dale Pyatt crew departs. Forman Dave Norton still onsite. 1725-Lucinda Smith takes the Merc Shelvin north and ties it to the Dale Pyatt. 1815-Lucinda Smith takes the Mighty Quinn south for offshore disposal. 1820-No activity, no crew onsite.

Problems/Issues or Action Items:

None / N/A

Visitors:

Signature: 
Title: Environmental Scientist
Copy to: File

Date: 5/9/2014
Page: 1 of 2
File: DIR_LHCC_050914



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Brett Young

Date: 5/9/2014

Contractor: Cashman

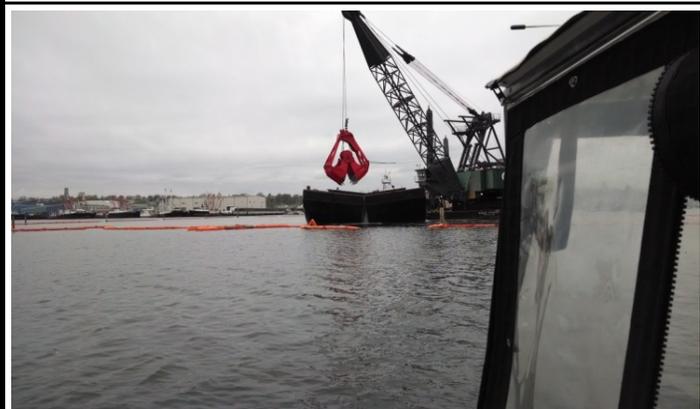
Foreman/Supt: Dave Norton



Dale Pyatt dredging into the Mighty Quinn



Dale Pyatt dredging into the Mighty Quinn



Dale Pyatt cleans off the Eddie Carroll



MERC Shelvin arrives onsite

Visitors:

Signature: *Brett Young*

Date: 5/9/2014

Title: Environmental Scientist

Page: 2 of 2

Copy to: File

File: DIR_LHCC_050914



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Greg Dolan, Adam Hart Date: 5/10/2014

Contractor: Cashman Foreman/Supt: Dave Norton

Weather AM: Overcast/Fog Breezy Temperature AM: 63
PM: Cloudy/Rain. Winds 10-15knts. SSW PM: 73

Tides High 0459 AM 1733 PM
Low 1055 AM 2336 PM

Manpower Onsite

| | | | | |
|-----------|-------------|---|-------------|-----|
| Foreman | <u>1</u> | @ | <u>11</u> | Hrs |
| Engineer | <u>2</u> | @ | <u>11</u> | Hrs |
| Operators | <u>2</u> | @ | <u>4/11</u> | Hrs |
| Mate | <u>2</u> | @ | <u>4/11</u> | Hrs |
| Deckhand | <u>0</u> | @ | <u>0</u> | Hrs |
| Other: | <u> </u> | @ | <u> </u> | Hrs |

Equipment Onsite

| | | | |
|--------------|--------------------------------|------|-----------|
| Description: | <u>Dale Pyatt</u> | Hrs. | <u>11</u> |
| | <u>Eddie Carroll</u> | Hrs. | <u>0</u> |
| | <u>Lucinda Smith</u> | Hrs. | <u>17</u> |
| | <u>Blue Skiff</u> | Hrs. | <u>11</u> |
| | <u>M.E.R.C. Shevlin</u> | Hrs. | <u>17</u> |
| | <u>AF Maurice & SEI 38</u> | Hrs. | <u>0</u> |
| | <u>Mighty Quinn</u> | Hrs. | <u>12</u> |

Contractor Activities: (Continued on next page)

0630-Crew departs Popes Island for Dredge Plant. Survey 4 surveys area just east of the dredge plant, collecting data over the area dredged during yesterday's shift. 0734-Dredging begins, Dale Pyatt placing material from dredge cuts 6 & 7 (sta 7+45, depth approx. -20') into M.E.R.C. Shevlin (starting draft 4.5' bow and stern). Tug Lucinda Smith is tied up to the Mighty Quinn, which is tied up at the spud barge AF Maurice and deck barge SEI 38 between CAD Cell 1 and the Borrow Pit CAD cell. The Deck Barge SEI 38 has a Mantis hydraulic crawler crane on deck and is only being used for storage, as is the AF Maurice. 0849-Dale Pyatt moves further east into dredge cut 8, and re-oriens to face East-south-east. Dredging resumes in Cut 8 at Station 7+40 , 6' Left offset (between coordinates [continued])

Problems/Issues or Action Items:

One operator and one mate left the site early in the shift, at approximately 9am.

Visitors:

Signature: 
Title: Environmental Technician

Date: 5/10/14
Page: 1 of 3

Copy to: File

File: DIR_LHCC_051014



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802

Inspection Report

Inspector: Greg Dolan, Adam Hart

Date: 5/10/2014

Contractor: Cashman

Foreman/Supt: Dave Norton

| | | | | | |
|----------------|------|--|--------------------|-------------|-----------|
| Weather | AM: | <u>Overcast/Fog Breezy</u> | Temperature | AM: | <u>63</u> |
| | PM: | <u>Cloudy/Rain. Winds 10-15knts. SSW</u> | | PM: | <u>73</u> |
| Tides | High | <u>0459</u> | AM | <u>1733</u> | PM |
| | Low | <u>1055</u> | AM | <u>2336</u> | PM |

Contractor Activities: (Continued from Page 1)

815315,2696916 and 815310,2696877). Dredging into the M.E.R.C. Shelvin continues through 1100, from Cut 8 Sta 7+03 and 70' offset (approximate coordinates 815297, 2696835). 1115-the scow is repositioned 40 feet towards the stern of the Dale Pyatt, and dredging continues. 1145-Tug Lucinda Smith ties to the scow M.E.R.C. Shelvin with a draft of 12.5'. Tug Lucinda Smith brings the loaded scow M.E.R.C. Shelvin along the staging area. 1237-Tug Lucinda Smith ties the scow Mighty Quinn alongside the dredge plant Dale Pyatt, Mighty Quinn has a draft of 5'. 1252-The crew from the Dale Pyatt is greasing the bucket. 1321-Tug Lucinda Smith and loaded scow M.E.R.C. Shelvin head south through the bridge for offshore disposal. 1330-Dredge plant Dale Pyatt crew closes silt curtain. 1340-Dredge plant Dale Pyatt begins dredging into the scow Mighty Quinn. 1509-Dredge plant Dale Pyatt stops dredging due to its bucket being stuck in the silt curtain. 1520-Crew boats working on freeing the bucket from the curtain. 1521- Dredge plant Dale Pyatt is no longer entangled in the silt curtain. Crews are repairing the silt curtain. 1535-Silt curtain is repaired. 1537-Dredge plant Dale Pyatt resumes dredging into the scow Mighty Quinn. 1710-Dredge plant Dale Pyatt begins washing off the filled scow Mighty Quinn with a draft of 12'. 1714-Scow Mighty Quinn is inspected and cleared for offshore disposal. 1812-Crew departs from the dredge plant Dale Pyatt. No further activity on site.A50

Problems/Issues or Action Items:

One operator and one mate left the site early in the shift, at approximately 9am.

Visitors:

Signature: 

Date: 5/10/14

Title: Environmental Technician

Page: 2 of 3

Copy to: File

File: DIR_LHCC_051014



**City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802**

Inspection Report

Inspector: Greg Dolan, Adam Hart

Date: 5/10/2014

Contractor: Cashman

Foreman/Supt: Dave Norton



Dale Pyatt placing material from LHCC into M.E.R.C. Shevlin

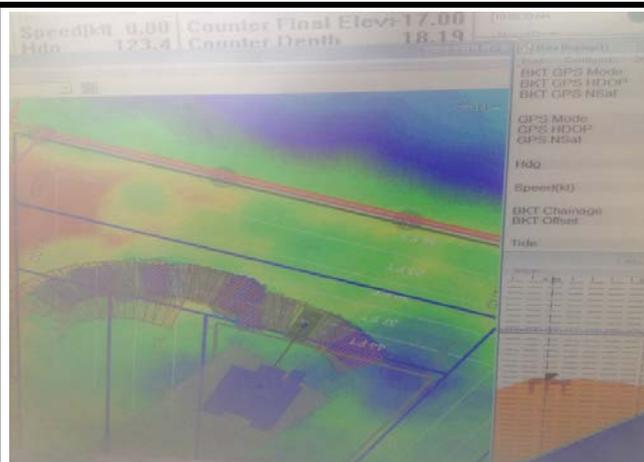


Image of Dredgepack showing location of Dredge plant and location within LHCC at 11am.



Dale Pyatt crew repairing damaged silt curtain.



Dale Pyatt placing material from LHCC into the Mighty Quinn

Signature: 
Title: Environmental Technician

Date: 5/10/14
Page: 3 of 3

Copy to: File

File: DIR_LHCC_051014

Attachment 2
Water Quality Monitoring Forms

PROJECT: New Bedford Harbor Lower Harbor CAD Cell

JOB NUMBER: 6724

DATE: 5/7/2014

MONITORS: Kyle Miller

WEATHER CONDITIONS: High: 44 Low: 64

WIND: 5-7 mph North

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING EVENT: TOP CAD Dredging / BTM CAD Dredging / Disposal

TIDE High: 0216/1459 Low: 0808/2022

Please Note: In some instances, the down-current monitoring event occurred prior to the up-current monitoring event. This is the result of the initial analysis of our field crew indicating one direction of flow, however our checks from our Quality Control program provided a more accurate depiction of the pattern, which is how the information is now presented below.



UP-CURRENT

| Monitoring ID # | NORTHING/EASTING | TIME | TOTAL WATER DEPTH (ft) | SAMPLE DEPTH (ft) | TURBIDITY (NTUs) | GPS FILE NAME | TIDAL STAGE | TYPE OF WQM & DISTANCE FROM LOCATION | NUMBER OF HOURS DREDGING |
|--------------------|------------------|------|------------------------|-------------------|------------------|---------------|----------------|--------------------------------------|--------------------------|
| 050714-00-1-1 | 815146 , 2697092 | 0709 | 4.7 | 1 | 2.14 | | Ebbing | 15' S of Silt Curtain | 00 |
| 050714-00-1-2 | | 0711 | | 2 | 3.64 | | | | |
| 050714-00-1-4 | | 0713 | | 4 | 3.18 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.99 | | | | |
| 050714-02-1-1 | 815089 , 2696276 | 0920 | 10 | 1 | 1.64 | | Flooding | 15' S of Silt Curtain | 02 |
| 050714-02-1-5 | | 0922 | | 5 | 2.29 | | | | |
| 050714-02-1-9 | | 0924 | | 9 | 3.02 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.32 | | | | |
| 050714-04-1-1 | 815054 , 2696169 | 1120 | 12 | 1 | 1.6 | | Flooding | 15' S of Silt Curtain | 04 |
| 050714-04-1-6 | | 1122 | | 6 | 1.64 | | | | |
| 050714-04-1-11 | | 1124 | | 11 | 2.42 | | | | |
| AVERAGE TURBIDITY: | | | | | 1.89 | | | | |
| 050714-06-1-1 | 815116 , 2696247 | 1313 | 9.2 | 1 | 1.45 | | Flooding | 15' S of Silt Curtain | 06 |
| 050714-06-1-4 | | 1315 | | 4 | 1.65 | | | | |
| 050714-06-1-8 | | 1317 | | 8 | 2.37 | | | | |
| AVERAGE TURBIDITY: | | | | | 1.82 | | | | |
| 050714-08-1-1 | 815087 , 2696273 | 1510 | 10 | 1 | 1.36 | | Flooding/Slack | 15' S of Silt Curtain | 08 |
| 050714-08-1-5 | | 1512 | | 5 | 1.34 | | | | |
| 050714-08-1-9 | | 1514 | | 9 | 2.2 | | | | |
| AVERAGE TURBIDITY: | | | | | 1.63 | | | | |

Down-Current

| Monitoring ID # | NORTHING/EASTING | TIME | TOTAL WATER DEPTH (ft) | SAMPLE DEPTH (ft) | TURBIDITY (NTUs) | GPS FILE NAME | TIDAL STAGE | DISTANCE FROM DREDGE/SILT CURTAIN | NUMBER OF HOURS DREDGING |
|---------------------|------------------|------|------------------------|-------------------|------------------|---------------|----------------|-----------------------------------|--------------------------|
| 050714-00-9-1 | 815217 , 2696847 | 0718 | 5.6 | 1 | 1.56 | | Ebbing | 15' N of Silt Curtain | 00 |
| 050714-00-9-2.5 | | 0720 | | 2.5 | 2.31 | | | | |
| 050714-00-9-5 | | 0722 | | 5 | 2.29 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.05 | | | | |
| TURBIDITY INCREASE: | | | | | 0.93 | | | | |
| 050714-02-9-1 | 815238 , 2697020 | 928 | 7.3 | 1 | 1.54 | | Flooding | 15' N of Silt Curtain | 02 |
| 050714-02-9-3 | | 930 | | 3 | 2.8 | | | | |
| 050714-02-9-6 | | 932 | | 6 | 3.21 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.52 | | | | |
| TURBIDITY INCREASE: | | | | | 0.20 | | | | |
| 050714-04-9-1 | 815149 , 2697034 | 1130 | 5.2 | 1 | 1.7 | | Flooding | 15' N of Silt Curtain | 04 |
| 050714-04-9-2 | | 1132 | | 2 | 1.82 | | | | |
| 050714-04-9-4 | | 1134 | | 4 | 3.57 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.36 | | | | |
| TURBIDITY INCREASE: | | | | | 0.48 | | | | |
| 050714-06-9-1 | 815228 , 2697076 | 1322 | 6.9 | 1 | 2.62 | | Flooding | 15' N of Silt Curtain | 06 |
| 050714-06-9-3 | | 1324 | | 3 | 3.24 | | | | |
| 050714-06-9-6 | | 1326 | | 6 | 2.6 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.82 | | | | |
| TURBIDITY INCREASE: | | | | | 1.00 | | | | |
| 050714-08-9-1 | 815248 , 2697035 | 1518 | 6.5 | 1 | 1.9 | | Flooding/Slack | 15' N of Silt Curtain | 08 |
| 050714-08-9-3.5 | | 1520 | | 3.5 | 1.62 | | | | |
| 050714-08-9-5 | | 1522 | | 5 | 2.51 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.01 | | | | |
| TURBIDITY INCREASE: | | | | | 0.38 | | | | |

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor Lower Harbor CAD Cell

JOB NUMBER: 6724

DATE: 5/8/2014

MONITORS: Brett Young

WEATHER CONDITIONS: High: 61 Low: 46

WIND: 5-10 mph Southwest

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING EVENT: TOP CAD Dredging / BTM CAD Dredging / Disposal

TIDE High: 0311/1550 Low: 0924/2149

Please Note: In some instances, the down-current monitoring event occurred prior to the up-current monitoring event. This is the result of the initial analysis of our field crew indicating one direction of flow, however our checks from our Quality Control program provided a more accurate depiction of the pattern, which is how the information is now presented below.



UP-CURRENT

| Monitoring ID # | NORTHING/EASTING | TIME | TOTAL WATER DEPTH (ft) | SAMPLE DEPTH (ft) | TURBIDITY (NTUs) | GPS FILE NAME | TIDAL STAGE | TYPE OF WQM & DISTANCE FROM LOCATION | NUMBER OF HOURS DREDGING |
|--------------------|------------------|------|------------------------|-------------------|------------------|---------------|----------------|--------------------------------------|--------------------------|
| 050814-00-1-1 | GPS Malfunction | 0720 | 6 | 1 | 2.81 | | Ebbing | 15' N of Silt Curtain | 00 |
| 050814-00-1-3 | | 0722 | | 3 | 2.06 | | | | |
| 050814-00-1-6 | | 0724 | | 6 | 3.05 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.64 | | | | |
| 050814-02-1-1 | 815206 , 2696522 | 0930 | 5.1 | 1 | 1.92 | | Ebbing/Slack | 15' N of Silt Curtain | 02 |
| 050814-02-1-2 | | 0932 | | 2 | 3.21 | | | | |
| 050814-02-1-4 | | 0934 | | 4 | 2.72 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.62 | | | | |
| 050814-04-1-1 | 815177 , 2696581 | 1110 | 5.9 | 1 | 2.42 | | Flooding | 15' S of Silt Curtain | 04 |
| 050814-04-1-3 | | 1112 | | 3 | 2.29 | | | | |
| 050814-04-1-5 | | 1114 | | 5 | 2.04 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.25 | | | | |
| 050814-06-1-1 | 815177 , 2696581 | 1400 | 7.4 | 1 | 2.29 | | Flooding | 15' S of Silt Curtain | 06 |
| 050814-06-1-4 | | 1402 | | 4 | 3.58 | | | | |
| 050814-06-1-7 | | 1404 | | 7 | 3.06 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.98 | | | | |
| 050814-08-1-1 | 815062 , 2696536 | 1545 | 9 | 1 | 2.49 | | Flooding/Slack | 15' S of Silt Curtain | 08 |
| 050814-08-1-4 | | 1547 | | 4 | 2.21 | | | | |
| 050814-08-1-8 | | 1549 | | 8 | 2.71 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.47 | | | | |

Down-Current

| Monitoring ID # | NORTHING/EASTING | TIME | TOTAL WATER DEPTH (ft) | SAMPLE DEPTH (ft) | TURBIDITY (NTUs) | GPS FILE NAME | TIDAL STAGE | DISTANCE FROM DREDGE/SILT CURTAIN | NUMBER OF HOURS DREDGING |
|---------------------|------------------|------|------------------------|-------------------|------------------|---------------|----------------|-----------------------------------|--------------------------|
| 050814-00-9-1 | GPS Malfunction | 0730 | 6.3 | 1 | 1.4 | | Ebbing | 15' S of Silt Curtain | 00 |
| 050814-00-9-3 | | 0732 | | 3 | 3.93 | | | | |
| 050814-00-9-6 | | 0734 | | 6 | 2.35 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.56 | | | | |
| TURBIDITY INCREASE: | | | | | 0.00 | | | | |
| 050814-02-9-1 | 815013 , 2697122 | 0920 | 4.3 | 1 | 2.71 | | Ebbing/Slack | 15' N of Silt Curtain | 02 |
| 050814-02-9-2 | | 0922 | | 2 | 2.41 | | | | |
| 050814-02-9-4 | | 0924 | | 4 | 4.95 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.36 | | | | |
| TURBIDITY INCREASE: | | | | | 0.74 | | | | |
| 050814-04-9-1 | 815161 , 2697040 | 1120 | 4.5 | 1 | 1.95 | | Flooding | 15' N of Silt Curtain | 04 |
| 050814-04-9-2 | | 1122 | | 2 | 2.75 | | | | |
| 050814-04-9-4 | | 1124 | | 4 | 3.14 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.61 | | | | |
| TURBIDITY INCREASE: | | | | | 0.36 | | | | |
| 050814-06-9-1 | 815161 , 2697040 | 1415 | 6 | 1 | 2.97 | | Flooding | 15' N of Silt Curtain | 06 |
| 050814-06-9-3 | | 1417 | | 3 | 2.75 | | | | |
| 050814-06-9-5 | | 1419 | | 5 | 4.99 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.57 | | | | |
| TURBIDITY INCREASE: | | | | | 0.59 | | | | |
| 050814-08-9-1 | 815076 , 2697037 | 1555 | 6.8 | 1 | 2.2 | | Flooding/Slack | 15' N of Silt Curtain | 08 |
| 050814-08-9-3 | | 1557 | | 3 | 2.59 | | | | |
| 050814-08-9-7 | | 1559 | | 7 | 3.75 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.85 | | | | |
| TURBIDITY INCREASE: | | | | | 0.38 | | | | |

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

PROJECT: New Bedford Harbor Lower Harbor CAD Cell

JOB NUMBER: 6724

DATE: 5/9/2014

MONITORS: Brett Young

WEATHER CONDITIONS: High: 59 Low: 53

WIND: 10-15 mph Southeast

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING EVENT: TOP CAD Dredging / BTM CAD Dredging / Disposal

TIDE High: 0403/1643 Low: 1013/2248

Please Note: In some instances, the down-current monitoring event occurred prior to the up-current monitoring event. This is the result of the initial analysis of our field crew indicating one direction of flow, however our checks from our Quality Control program provided a more accurate depiction of the pattern, which is how the information is now presented below.



UP-CURRENT

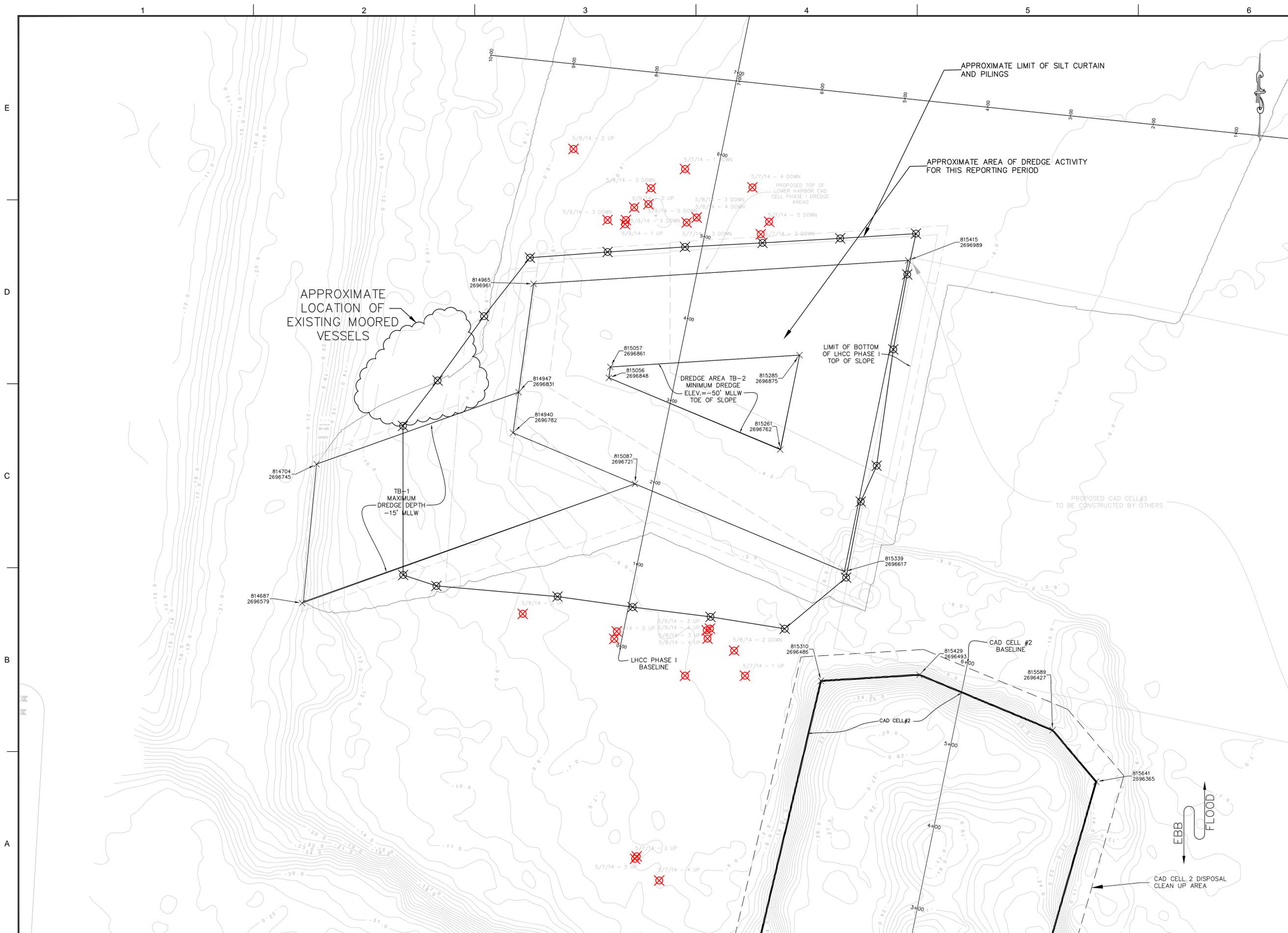
| Monitoring ID # | NORTHING/EASTING | TIME | TOTAL WATER DEPTH (ft) | SAMPLE DEPTH (ft) | TURBIDITY (NTUs) | GPS FILE NAME | TIDAL STAGE | TYPE OF WQM & DISTANCE FROM LOCATION | NUMBER OF HOURS DREDGING |
|--------------------|------------------|------|------------------------|-------------------|------------------|---------------|----------------|--------------------------------------|--------------------------|
| 050914-00-1-1 | 815075 , 2697032 | 0730 | 5 | 1 | 2.14 | | Ebbing | 15' N of Silt Curtain | 00 |
| 050914-00-1-2 | | 0732 | | 2 | 2.58 | | | | |
| 050914-00-1-4 | | 0734 | | 4 | 2.22 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.31 | | | | |
| 050914-02-1-1 | 815174 , 2696569 | 0940 | 6 | 1 | 2.06 | | Ebbing | 15' S of Silt Curtain | 02 |
| 050914-02-1-3 | | 0942 | | 3 | 2.21 | | | | |
| 050914-02-1-5 | | 0944 | | 5 | 2.43 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.23 | | | | |
| 050914-04-1-1 | 815173 , 2696579 | 1320 | 6.6 | 1 | 2.19 | | Flooding | 15' S of Silt Curtain | 04 |
| 050914-04-1-3 | | 1322 | | 3 | 3.61 | | | | |
| 050914-04-1-6 | | 1324 | | 6 | 3.71 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.17 | | | | |
| 050914-06-1-1 | 815173 , 2696579 | 1540 | 8.2 | 1 | 3.11 | | Flooding/Slack | 15' S of Silt Curtain | 06 |
| 050914-06-1-4 | | 1542 | | 4 | 3.76 | | | | |
| 050914-06-1-8 | | 1544 | | 8 | 2.64 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.17 | | | | |
| 050914-08-1-1 | 814952 , 2696566 | 1700 | 11.3 | 1 | 1.81 | | Ebbing | 15' N of Silt Curtain | 08 |
| 050914-08-1-5 | | 1702 | | 5 | 3.25 | | | | |
| 050914-08-1-10 | | 1704 | | 10 | 4.08 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.05 | | | | |

Down-Current

| Monitoring ID # | NORTHING/EASTING | TIME | TOTAL WATER DEPTH (ft) | SAMPLE DEPTH (ft) | TURBIDITY (NTUs) | GPS FILE NAME | TIDAL STAGE | DISTANCE FROM DREDGE/SILT CURTAIN | NUMBER OF HOURS DREDGING |
|---------------------|------------------|------|------------------------|-------------------|------------------|---------------|----------------|-----------------------------------|--------------------------|
| 050914-00-9-1 | 815065 , 2696545 | 0740 | 6.9 | 1 | 2.9 | | Ebbing | 15' S of Silt Curtain | 00 |
| 050914-00-9-3 | | 0742 | | 3 | 2.63 | | | | |
| 050914-00-9-6 | | 0744 | | 6 | 2.16 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.56 | | | | |
| TURBIDITY INCREASE: | | | | | 0.25 | | | | |
| 050914-02-9-1 | 815086 , 2697052 | 0930 | 4.6 | 1 | 2.42 | | Ebbing | 15' N of Silt Curtain | 02 |
| 050914-02-9-2 | | 0932 | | 2 | 2.74 | | | | |
| 050914-02-9-4 | | 0934 | | 4 | 2.45 | | | | |
| AVERAGE TURBIDITY: | | | | | 2.54 | | | | |
| TURBIDITY INCREASE: | | | | | 0.30 | | | | |
| 050914-04-9-1 | 815106 , 2697075 | 1325 | 5.5 | 1 | 2.04 | | Flooding | 15' N of Silt Curtain | 04 |
| 050914-04-9-3 | | 1327 | | 3 | 4.11 | | | | |
| 050914-04-9-5 | | 1329 | | 5 | 4.96 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.70 | | | | |
| TURBIDITY INCREASE: | | | | | 0.53 | | | | |
| 050914-06-9-1 | 815054 , 2697037 | 1550 | 6.9 | 1 | 2.34 | | Flooding/Slack | 15' N of Silt Curtain | 06 |
| 050914-06-9-3 | | 1552 | | 3 | 3.69 | | | | |
| 050914-06-9-6 | | 1554 | | 6 | 5.25 | | | | |
| AVERAGE TURBIDITY: | | | | | 3.76 | | | | |
| TURBIDITY INCREASE: | | | | | 0.59 | | | | |
| 050914-08-9-1 | 815103 , 2697056 | 1710 | 7.2 | 1 | 3.33 | | Ebbing | 15' S of Silt Curtain | 08 |
| 050914-08-9-3 | | 1712 | | 3 | 4.4 | | | | |
| 050914-08-9-6 | | 1714 | | 6 | 4.5 | | | | |
| AVERAGE TURBIDITY: | | | | | 4.08 | | | | |
| TURBIDITY INCREASE: | | | | | 1.03 | | | | |

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Figure 1
Lower Harbor CAD Cell Phase I – Water Quality Monitoring



ROCKVILLE, MD
SOUTH WINDSOR, CT - BOSTON, MA -
NEW BEDFORD, MA - HOLYOKE, MA

125 BROAD STREET, 5TH FLOOR
BOSTON, MA 02210

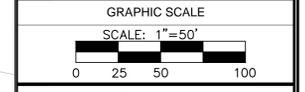
58H CONNECTICUT AVENUE
SOUTH WINDSOR, CT

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| | | |
|---------|---|--|
| PROJECT | NEW BEDFORD HARBOR DEVELOPMENT COMMISSION LOWER HARBOR CAD CELL | |
| | OWNER | NEW BEDFORD HARBOR DEVELOPMENT COMMISSION 52 FISHERMAN'S WHARF, NEW BEDFORD, MA 02740 |

| | | | |
|---|-----------|-------------------|-----|
| 1 | 9/25/2012 | EPA COMMENTS | GCD |
| 2 | 2/21/2013 | DRAFT SUITABILITY | MCK |

| DATE | DESCRIPTION | BY |
|---------------|-------------|----|
| PROJECT NO. | 6724 | |
| CADD FILE | | |
| DESIGNED BY | CHM | |
| DRAWN BY | GCD | |
| CHECKED BY | GCD | |
| DATE | MAY 2013 | |
| DRAWING SCALE | AS NOTED | |



SHEET TITLE

BOTTOM OF LOWER HARBOR CAD CELL PHASE 1 WATER QUALITY 5/4/14- 5/10/14

DRAWING NO.

WQM-1

6 OF 15