

Time-Critical Concurrence

Area:

Emory River, Segment 5, B-5 through B-7 and C-4 through C-7

Agreement:

Ash removal activities have been completed in Segment 5 for dredge grids B-5 through B-7 and C-4 through C-7.

The bathymetric survey completed on 5/24/10 indicates that there was significant removal of recoverable ash in grids B-5 through B-7 and C-4 through C-7. In addition, dredge shift records indicating that dredging operations had reached refusal prior to the targeted depth due to material too massive or durable to be hydraulically dredged, such as bedrock or native sediments, were encountered at grids B-5 and B-6 higher than projected from the U.S. Army Corp of Engineers pre-spill bathymetry.

The area was originally dredged by the *Addison* 14" dredge and then dredged again by the *Shirley* 16" dredge. Both dredges are equipped with GPS and excavation controlling software for precision dredging to the pre-spill bathymetry which shows on the operators screens as and is mentioned as the "green line" in the dredge logs. The attached dredge shift reports document times and areas where the hydraulic cutter-head dredge met refusal in the attempt to reach targeted dredge depth in all listed grids.

These results indicate that there is no remaining recoverable ash in Segment 5 for grids B-5 through B-7 and C-4 through C-7.

Attachments:

Figure 5, Ash Remaining to Pre-Spill Surface Segments 1, 2, 3 and 5, dated 2/25/10.

Figure 1, Ash Remaining Through Severson 05-24 Survey, dated 5/24/10.

Figure 2, Bathymetry Removal Areas - Segment 5, B-5 through B-7 and C-4 through C-7, dated 5/25/10. *gr*

Segment 5, Daily Dredge Logs – *Addison* 5/5/10 & *Shirley* 5/23/10.

Concurrence Comments:

Julie L. Pfeiffer

 Jacobs Project Manager

5/26/10

 Date

Katherine Dush

 Tennessee Valley Authority

5/27/10

 Date

Hotroh

 U. S. Environmental Protection Agency

5/27/10

 Date

consulted w/ TBEL



Legend

Ash Remaining: ~438,592 cy

- | | |
|----------------------------|------------------------|
| 0 - 1 inch: ~39 cy | 15 - 15 ft: ~61,785 cy |
| 1 - 6 inches: ~1,315 cy | 16 - 20 ft: ~62,620 cy |
| 6 inches - 1 ft: ~3,302 cy | > 20 ft: ~56,629 cy |
| 1 - 2 ft: ~14,177 cy | |
| 2 - 4 ft: ~45,426 cy | |
| 4 - 6 ft: ~57,924 cy | |
| 6 - 8 ft: ~57,980 cy | |
| 8 - 10 ft: ~46,704 cy | |

Proposed Dredge Area

Area of Interest



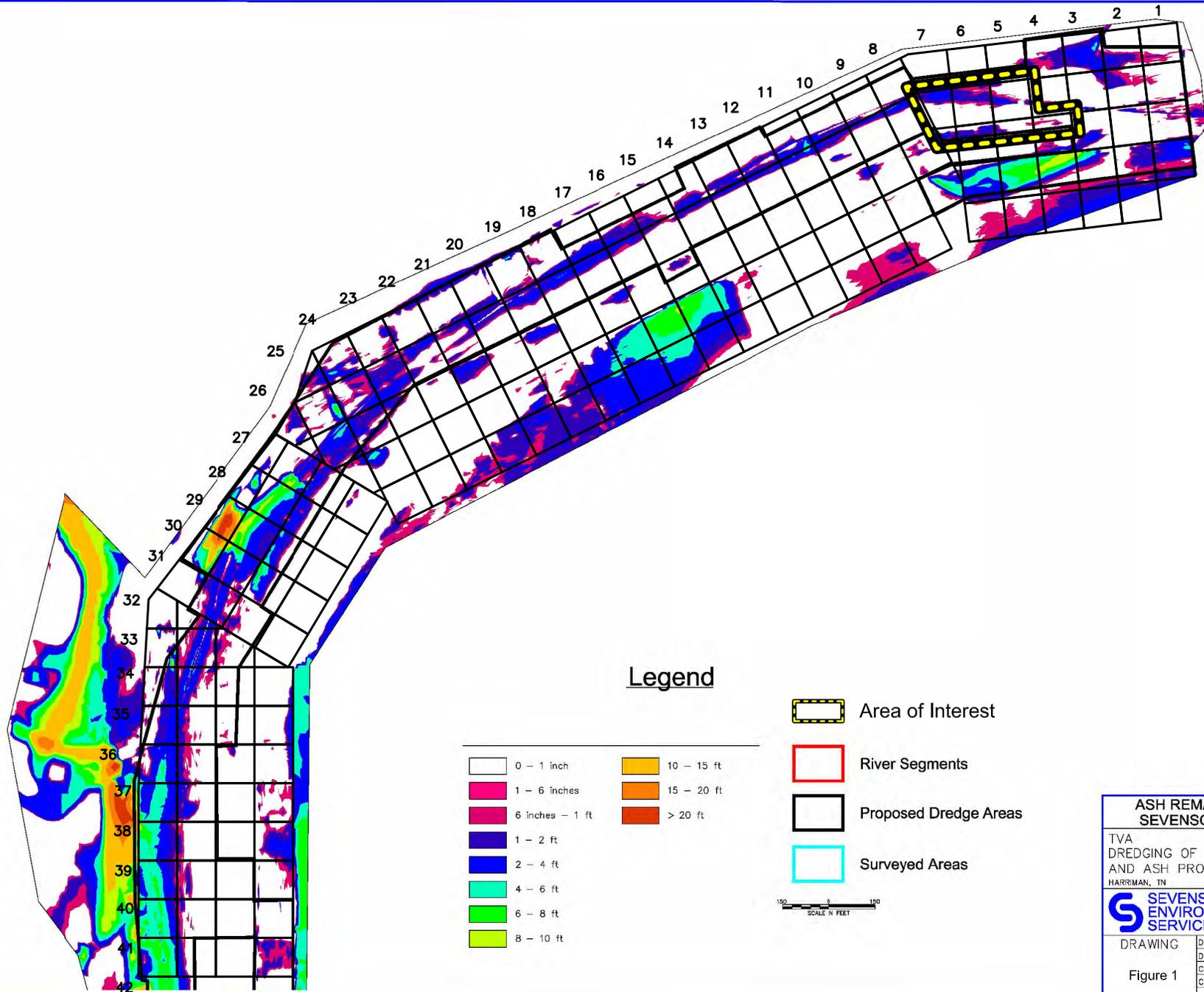
JACOBS

**Ash Remaining to Pre-Spill
Surface Segments 1, 2, 3, and 5**

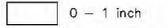
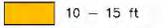
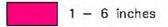
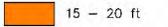
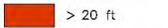
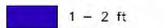
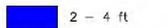
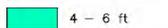
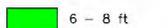
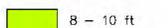
NAME: croberis DATE: 6/25/2010

Figure 5

X:\SVA\Bentley\030_450\0301002626\0301002626.dwg: 11/13/09 10:44:47 AM



Legend

	0 - 1 inch		10 - 15 ft
	1 - 6 inches		15 - 20 ft
	6 inches - 1 ft		> 20 ft
	1 - 2 ft		
	2 - 4 ft		
	4 - 6 ft		
	6 - 8 ft		
	8 - 10 ft		

-  Area of Interest
-  River Segments
-  Proposed Dredge Areas
-  Surveyed Areas



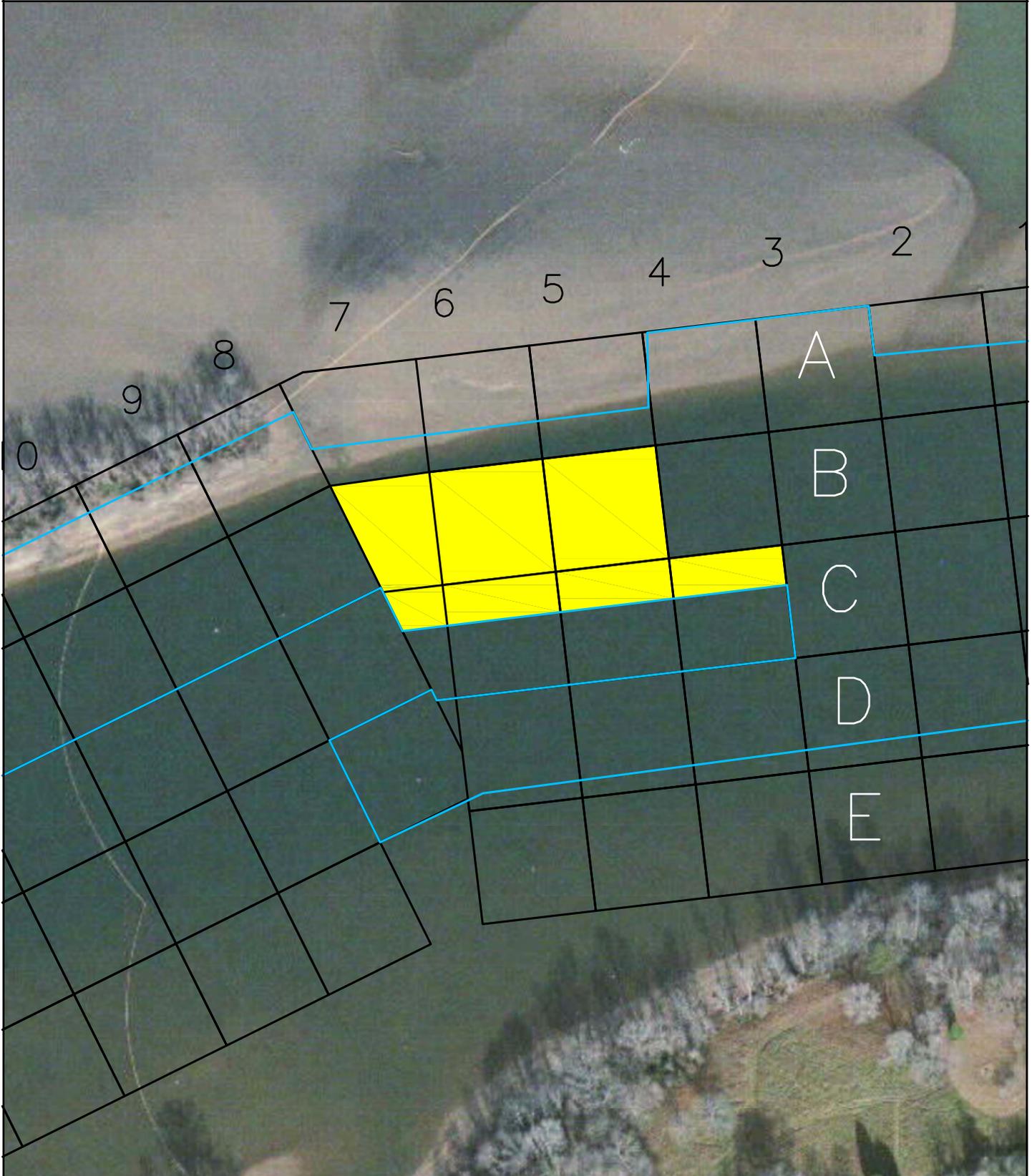
ASH REMAINING THROUGH SEVENSON 05-24 SURVEY

TVA
DREDGING OF THE EMORY RIVER
AND ASH PROCESSING
HARRIMAN, TN

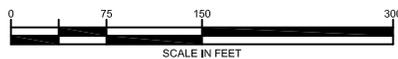


DRAWING	DATE: MAY 24, 2010
Figure 1	DRAWN BY: DAB
	CHECKED BY: JJB
	CAD FILE: volume_remaining_0524_N

Bathymetry Removal Areas - Segment 5



-  Removed From Plan
-  E-trac Dredging Path



JACOBSTM

05/26/10

Figure 2



**Sevenson
Environmental
Services, Inc.**

DAILY DREDGE LOG - TVA ASH REMOVAL

Dredge Shirley

Day Sunday
Date 5-23-10

Dredge Shift: Day

Hours:

Start Time	Stop Time	Hours Dredge	Misc	Mech Down	Avg RPM	Avg Pressure	Operator	Reason for Stopping/Downtime
700	800		100		1650	80		safety meeting, inspect dredge service
800	830	30	25					clean pump
855	1120	225	30				jen	MOVED PORT ANCHOR 9
1150	1340	150	50					clean booster one
1430	1450	20	30					clean pump
1520	1530	10	20					clean rock box
1550	1840	250	30					flush line for shift change
	1910							shift change
		805	405		1210	Total Hours		

Conditions:

Initial Flyash Thickness 1 to 2 Ft

Vegetation Light Medium Heavy

Debris Light Medium Heavy

of Blockage Clears 4

Area Dredged: 5B + 6B at an angle

Shift Start X 2445695 Shift End X 2445527

Y559271 Y559289

Tons Start 192014 Tons End 193332

Comments: X 2445678 could not get to grade

Y 559273 feels like trees + rocks approx 32 ft wide lasted until X 2445560
Y 559287

started with 135 ft swing ended the day with 100 ft swing