

OU3
2010 DREDGE AREAS AND
PRODUCTION DREDGE AREAS 1 of 1

LEGEND

- 2010 DREDGE AREA
- 2010 PRODUCTION DREDGE AREAS

SCALE (1" = 400')



SITE NOTES

1. HORIZONTAL CONTROL IS REFERENCED TO THE NAD83 WISCONSIN STATE PLANE COORDINATE SYSTEM (WISCONSIN CENTRAL ZONE)
2. VERTICAL DATUM IS REFERENCED TO NAVD 88.
3. AREAS SHOWN REPRESENT THE DREDGE LIMITS DERIVED FROM THE DESIGN FILES FROM ANCHOR OEA.

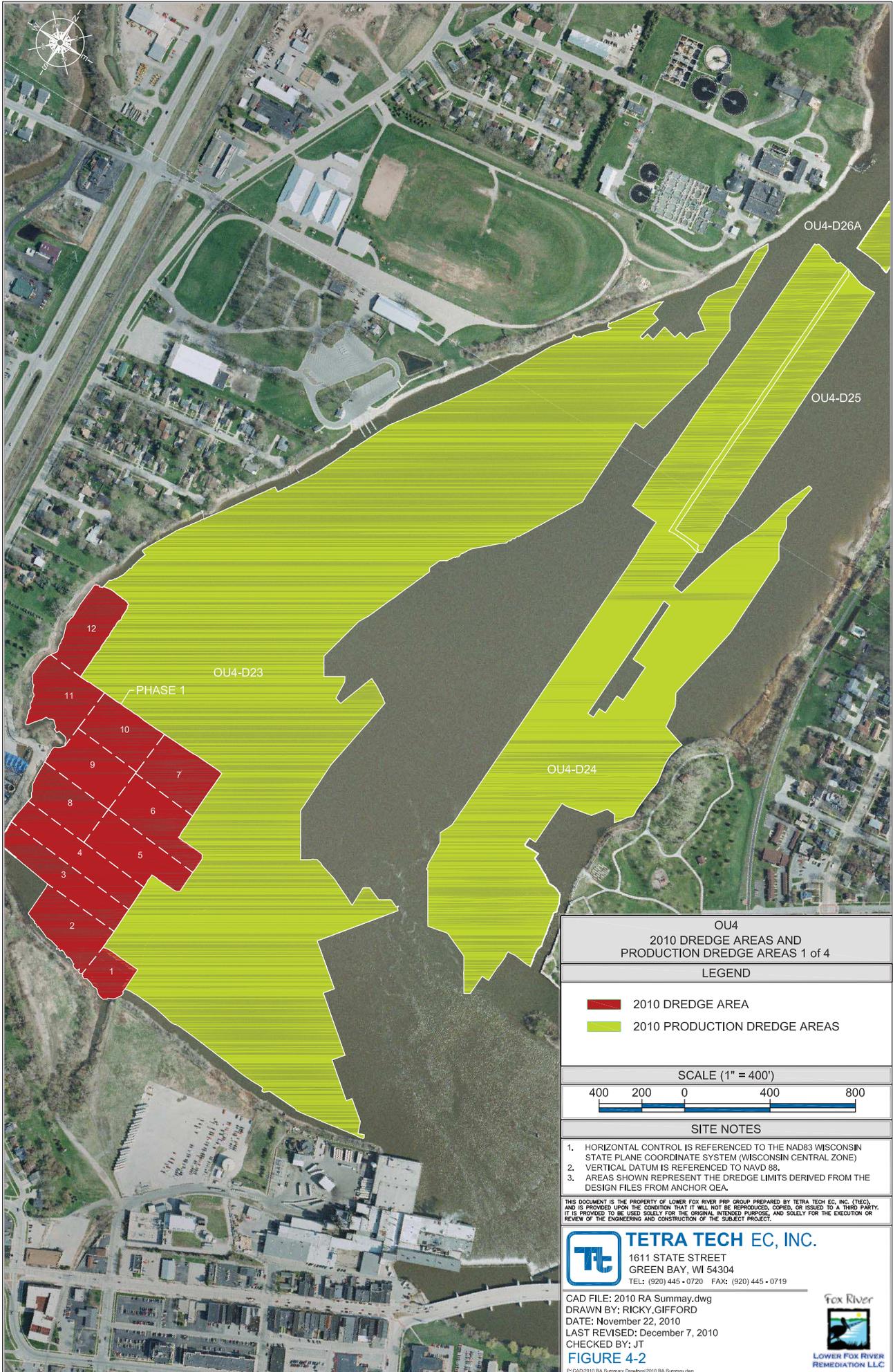
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DRAWN BY: RICKY GIFFORD
DATE: November 22, 2010
LAST REVISED: December 7, 2010
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FIGURE 4-1





**OU4
2010 DREDGE AREAS AND
PRODUCTION DREDGE AREAS 1 of 4**

LEGEND

- 2010 DREDGE AREA
- 2010 PRODUCTION DREDGE AREAS

SCALE (1" = 400')



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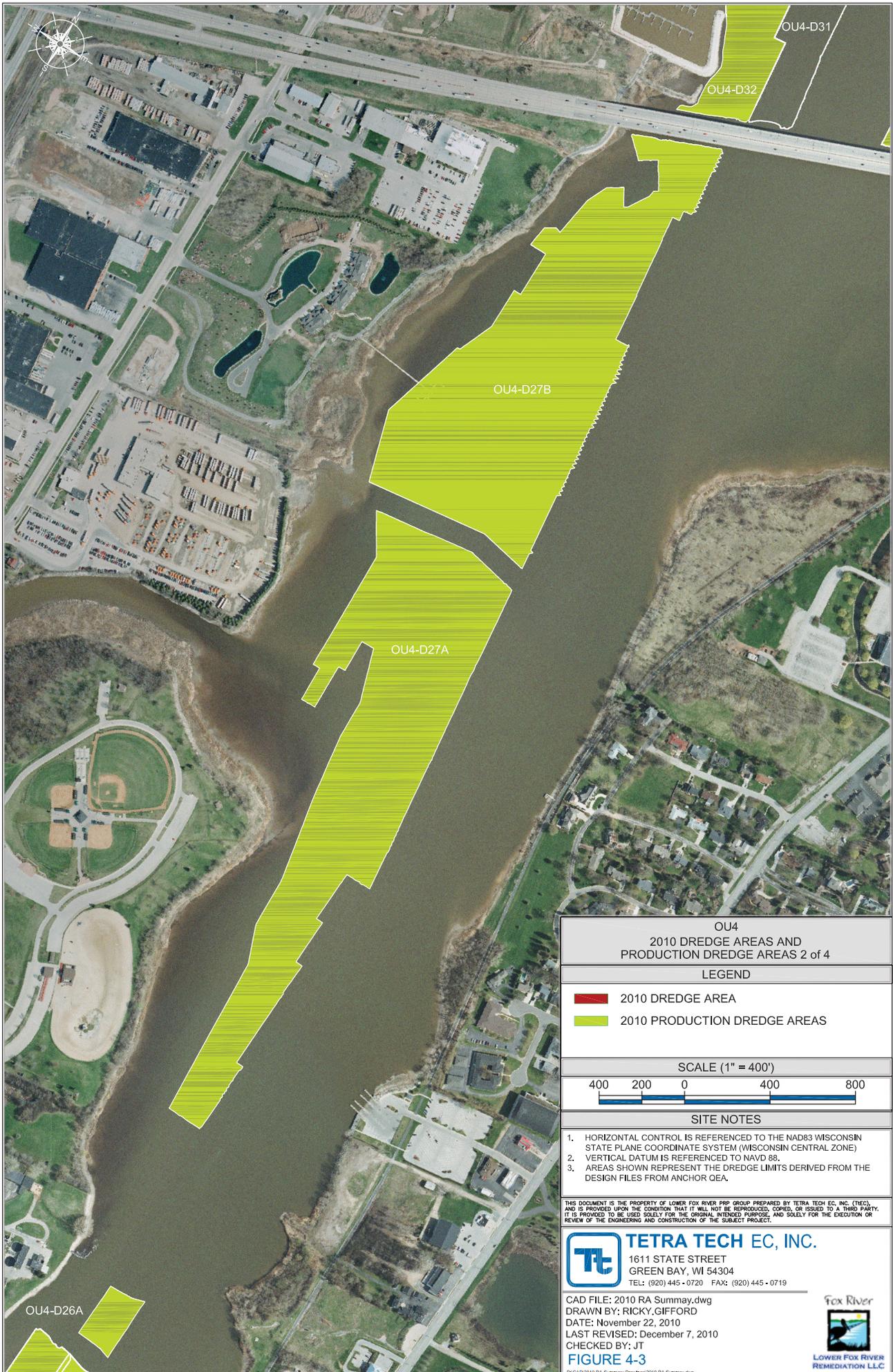
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FIGURE 4-2





OU4
2010 DREDGE AREAS AND
PRODUCTION DREDGE AREAS 2 of 4

LEGEND

- 2010 DREDGE AREA
- 2010 PRODUCTION DREDGE AREAS

SCALE (1" = 400')



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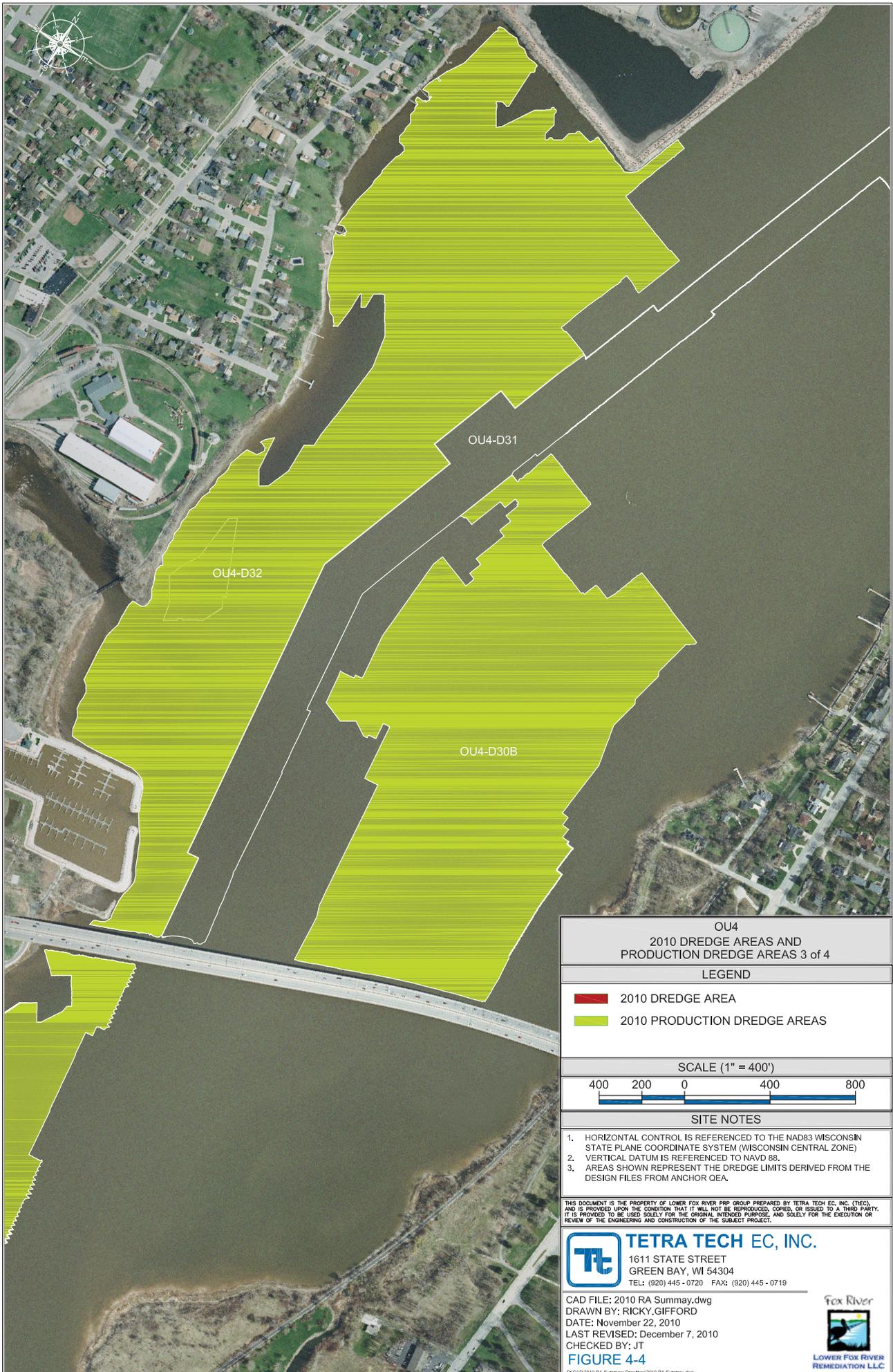
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FIGURE 4-3



LOWER FOX RIVER
REMEDIATION LLC

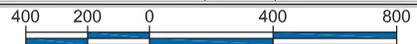


OU4
2010 DREDGE AREAS AND
PRODUCTION DREDGE AREAS 3 of 4

LEGEND

- 2010 DREDGE AREA
- 2010 PRODUCTION DREDGE AREAS

SCALE (1" = 400')



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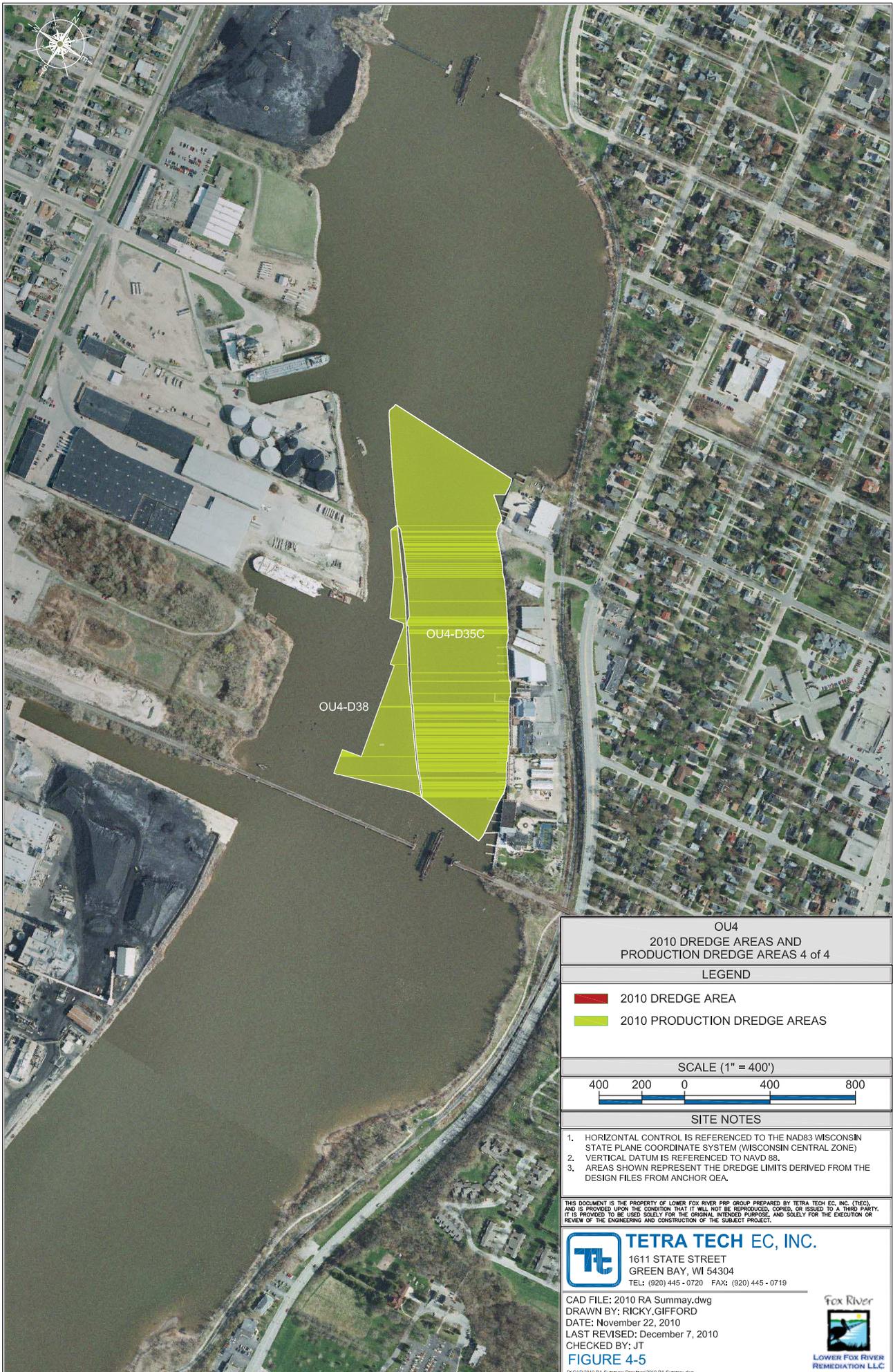
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FIGURE 4-4



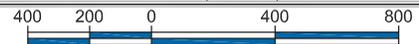


OU4
2010 DREDGE AREAS AND
PRODUCTION DREDGE AREAS 4 of 4

LEGEND

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- 2010 PRODUCTION DREDGE AREAS

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FIGURE 4-5



LOWER FOX RIVER
REMEDIATION LLC

**Table 4-2
2010 QA Survey Volume Removed by Area**

Area	Total Volume Removed*	Target Volume including Overdredge Allowance	Dredge Area Completed**
OU3-D16A	3,279 cy	3,737 cy	No**
OU3-D16B	2,077 cy	2,157cy	No**
OU3-D17C	491 cy	600 cy	No**
OU3-D18B	1,102 cy	1,353 cy	No**
OU3-D19A	1,611 cy	1,763 cy	No**
OU3-D19B	19,611cy	19,934 cy	No**
OU3-D20A	8,181 cy	7,992 cy	No**
OU3-D21	2,812 cy	3,345 cy	No**
OU3-D22	1,942 cy	1,600 cy	No**
OU3-D57B	4,305 cy	4,581 cy	No**
OU3-D60	166 cy	235 cy	No**
OU4-PHASE1	67,157 cy	71,713 cy	No
OU4-D23 [†]	182,082 cy	202,089 cy	No
OU4-D24 [†]	113,511 cy	149,113 cy	No
OU4-D24-Extension [†]	6,620 cy	10,961 cy	No
OU4-D25 [†]	27,211 cy	28,563 cy	No
OU4-D26A [†]	3,518 cy	5,245 cy	No
OU4-D27A [†]	28,433 cy	53,662 cy	No
OU4-D27B [†]	24,599 cy	55,184 cy	No
OU4-D30B [†]	108,734 cy	145,846 cy	No
OU4-D32 [†]	45,212 cy	173,746 cy	No
OU4-D35C [†]	63,482 cy	130,186 cy	No
OU4-D38 [†]	14,882 cy	21,792 cy	No
Total	731,017 cy	1,095,397 cy	

* Total Volume Removed is the sum of Remedial Action Level (RAL) volume removed, Over-dredge removed, and Beyond Over-Dredge volume removed.

** Areas have met 90% completion criteria based on comparison of post-dredge bathymetric surface to the approved design surface; no post-dredge confirmation samples have been collected.

[†] Production dredge areas, not dredged to RAL.

Charts and drawings for Section 4 detailing each individual dredge area can be found in the figures section of the report.

4.5 Summary of Dredging 2010

Dredging was a critical part of the remediation of OU2-5 in 2010. As stated previously, dredging operations began in OU4 area D35C on April 5, 2010, and concluded for the season on November 13, 2010. Hydraulic dredging was performed in either a production mode, using the 12” dredge, or final-pass mode to the production design surface, using one or two 8” dredges. Depending on the DMU, multiple passes may have been required to achieve final elevation by the 8” dredges. Appendix D contains Table D-1, indicating actual quantities of material dredged from all areas worked in during 2010.

Table D-1, 2010 Production Summary, includes: verified removal quantity data; the dates on which final QA surveys were conducted; design data; dredge data (including high subgrade and overdredge volumes); and area data (including the percentage of design surface elevation achieved).

4.5.1 Total Sediment Volume Removed

The volume of *in situ* sediment removed has been measured and tracked using hydrographic survey techniques. Pre-dredge and post-dredge surveys were processed and compared to one another in order to calculate overall volume of sediment removed. Table 4-3 presents the total volume (including over-dredge) removed from OU3 and OU4 in 2010.

**Table 4-3
Volume of *In situ* Sediment Removed in 2010**

Operable Unit	Production Volume Removed (cy)	Completion Volume Removed (cy)	RAL Volume Removed (cy)
OU3	45,576	0	32,068
Phase 1	67,157	0	54,684
OU4	618,284	0	593,293
Total	731,017	0	680,045
Total	731,017		

Note: Sediment removed from the Phase 1 Area is included in the Production Volume amount since these DMUs have not been formally closed and accepted as such by the A/OT, pending additional sampling there.

4.5.2 Estimated PCB Mass Removal for 2010 Dredge Areas

As a result of the preparation of a Tech Memo and ongoing work group discussions among the A/OT and the design team it was agreed that the calculation of estimated PCB mass removal for 2010 would be deferred. Plans are to determine this information when modifications to the calculation methodology are finalized and include it in a future RA Summary Report.