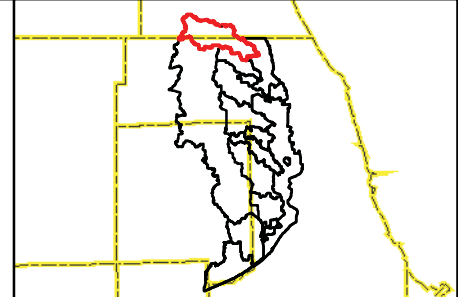


- 100-Year Storm Event Flood Inundation Without Project
- Reservoir
- Channel Improvements
- Culvert/Bridge Modification
- Levee/Floodwall

- Approximate Creek Channel Location
- Municipal Boundary
- Watershed Boundary
- County Boundary
- Problem Areas**
- Modeled
- Regional



CLIENT:
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED TRIBUTARY OVERVIEW**

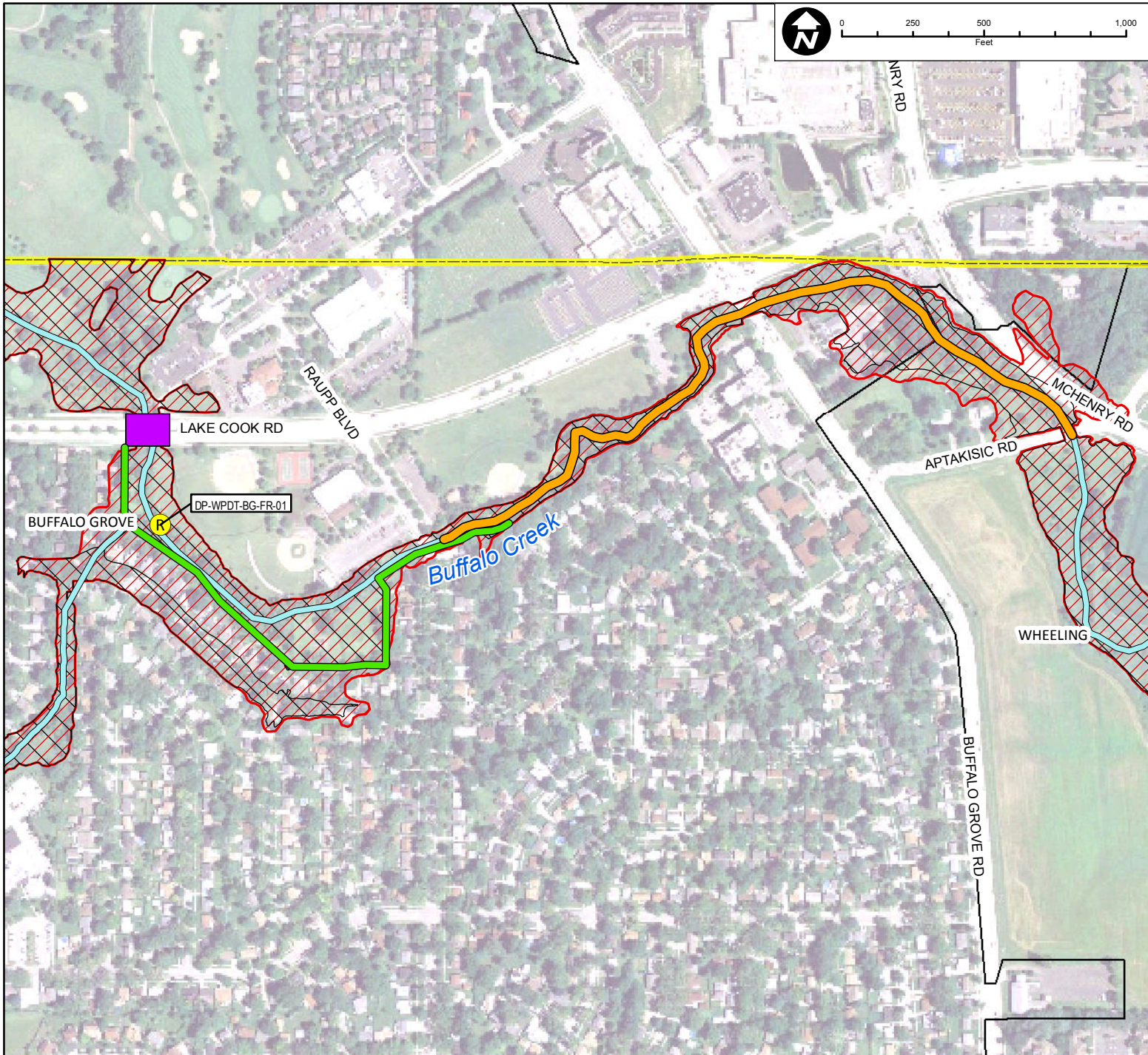
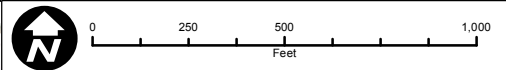
PROJ. NO. 08-0043
 DATE: 03-23-2010
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FIGURE 3.3.1

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DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
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Map Document: Z:\MWR\DC\08-0043 Phase B\Water\Buffalo\exhibits\Buffalo Creek Overview\Figure 3.3.1.mxd 11/19/2010 -- 8:08:31 AM



Subwatershed: Buffalo Creek
 Alternative: BUCR-1A
 Alternatives Description: 2,200 feet of floodwall from Lake-Cook Road to Raupp Blvd.
 Channel improvements from Raupp Blvd to Aptakisic Road.
 Partially bulkhead Lake-Cook Road to provide flood storage by increasing the flood elevation on the Buffalo Grove Golf Course.

Concept Level Cost: \$10,750,201
 Benefits: \$1,147,163
 B/C Ratio: 0.1

Legend

- 100-Year Storm Event Flood Inundation Without Project
- 100-Year Storm Event Flood Inundation With Project
- Reservoir
- Culvert/Bridge Modification
- Channel Improvements
- Levee/Floodwall
- Approximate Creek Channel Location
- Municipal Boundary
- Watershed Boundary
- Problem Areas**
- Modeled
- Regional



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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

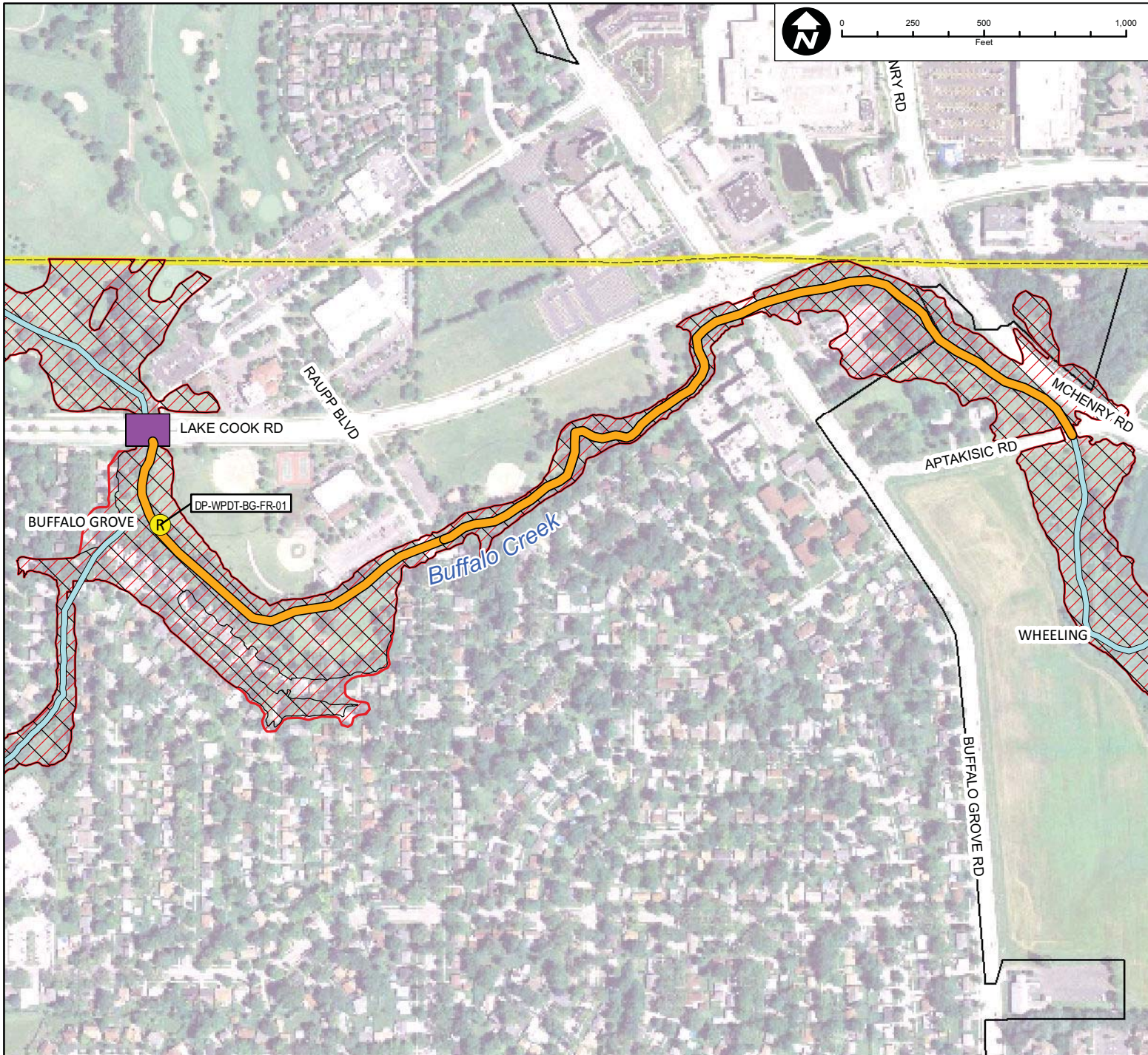
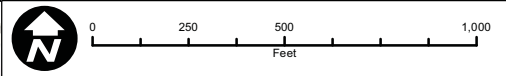
TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-1A**

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DSGN.	DRW	4-10		
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.6



Subwatershed: Buffalo Creek
 Alternative: BUCR-1B
 Alternatives Description: Channel improvements from Lake-Cook Road to Aptakisic Road.
 Partially bulkhead Lake-Cook Road crossing to provide flood storage by increasing the flood elevation on the Buffalo Grove Golf Course.

Concept Level Cost: \$613,435
 Benefits: \$808,186
 B/C Ratio: 1.3

Legend

- 100-Year Storm Event Flood Inundation Without Project
- Culvert/Bridge Modification
- Approximate Creek Channel Location
- Problem Areas** Modeled
- 100-Year Storm Event Flood Inundation With Project
- Channel Improvements
- Municipal Boundary
- Regional
- Reservoir
- Levee/Floodwall
- Watershed Boundary



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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

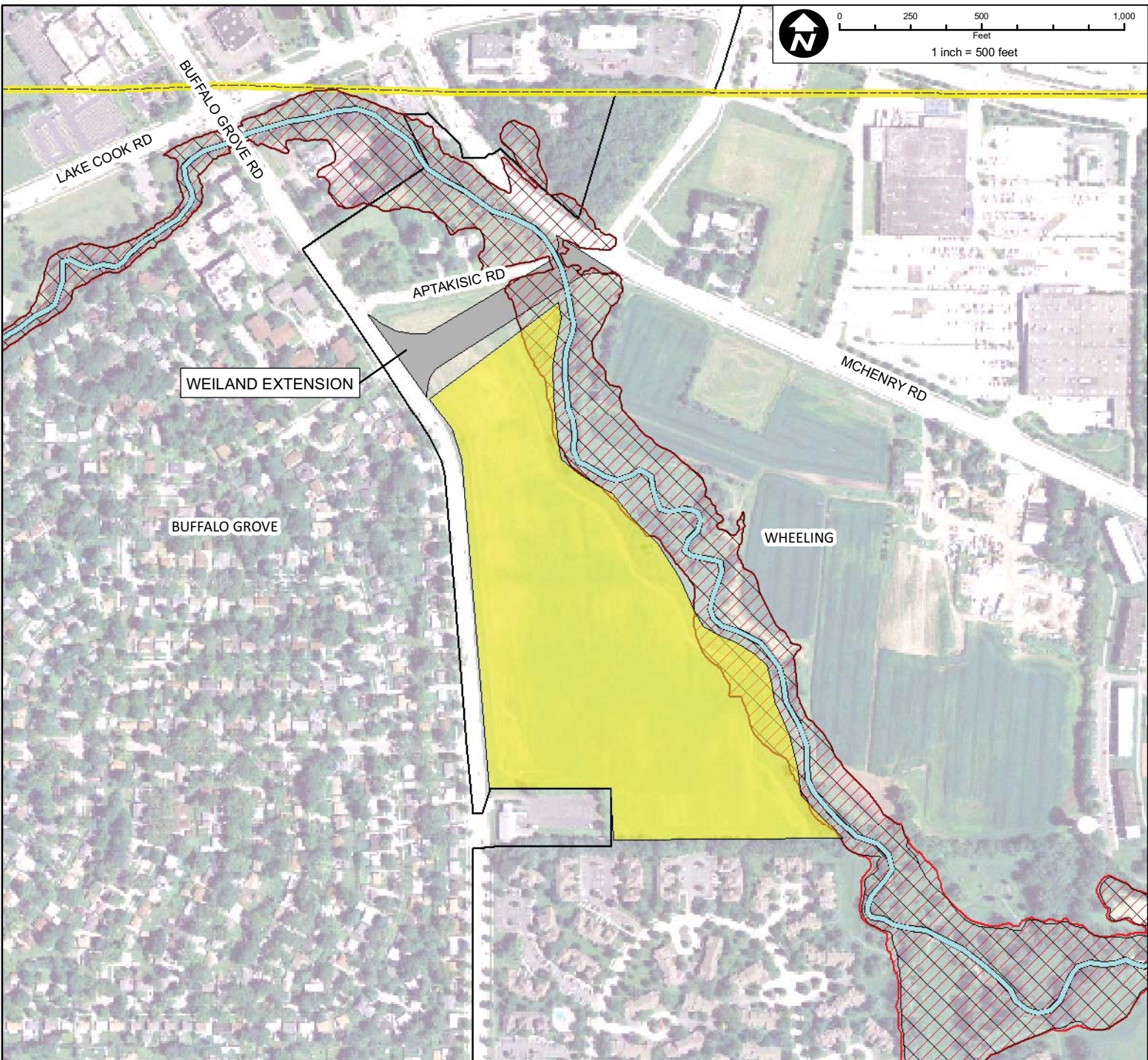
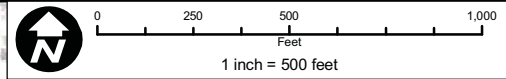
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 BUFFALO CREEK WATERSHED RECOMMENDED ALTERNATIVE BUCR-1B**

PROJ. NO. 08-0043
 DATE: 08-12-10
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DSGN.	DRW	4-10		
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.7

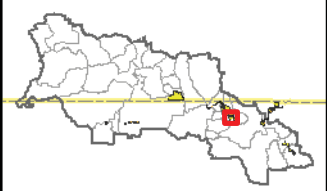


Subwatershed: Buffalo Creek
 Alternative: BUCR-2A
 Alternatives Description: Provide 310 A-F of flood storage on un-developed private property in Wheeling, and account for a potential Weiland Road Extension.

Concept Level Cost: \$47,711,974
 Benefits: \$1,778,274
 B/C Ratio: 0.04

Legend

- | | | | | | | |
|--|---|--|-----------------------------|--|------------------------------------|---|
| | 100-Year Storm Event Flood Inundation Without Project | | Culvert/Bridge Modification | | Approximate Creek Channel Location | Problem Areas
Modeled
Regional |
| | 100-Year Storm Event Flood Inundation With Project | | Channel Improvements | | Municipal Boundary | |
| | Reservoir | | Levee/Floodwall | | Watershed Boundary | |



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TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-2A**

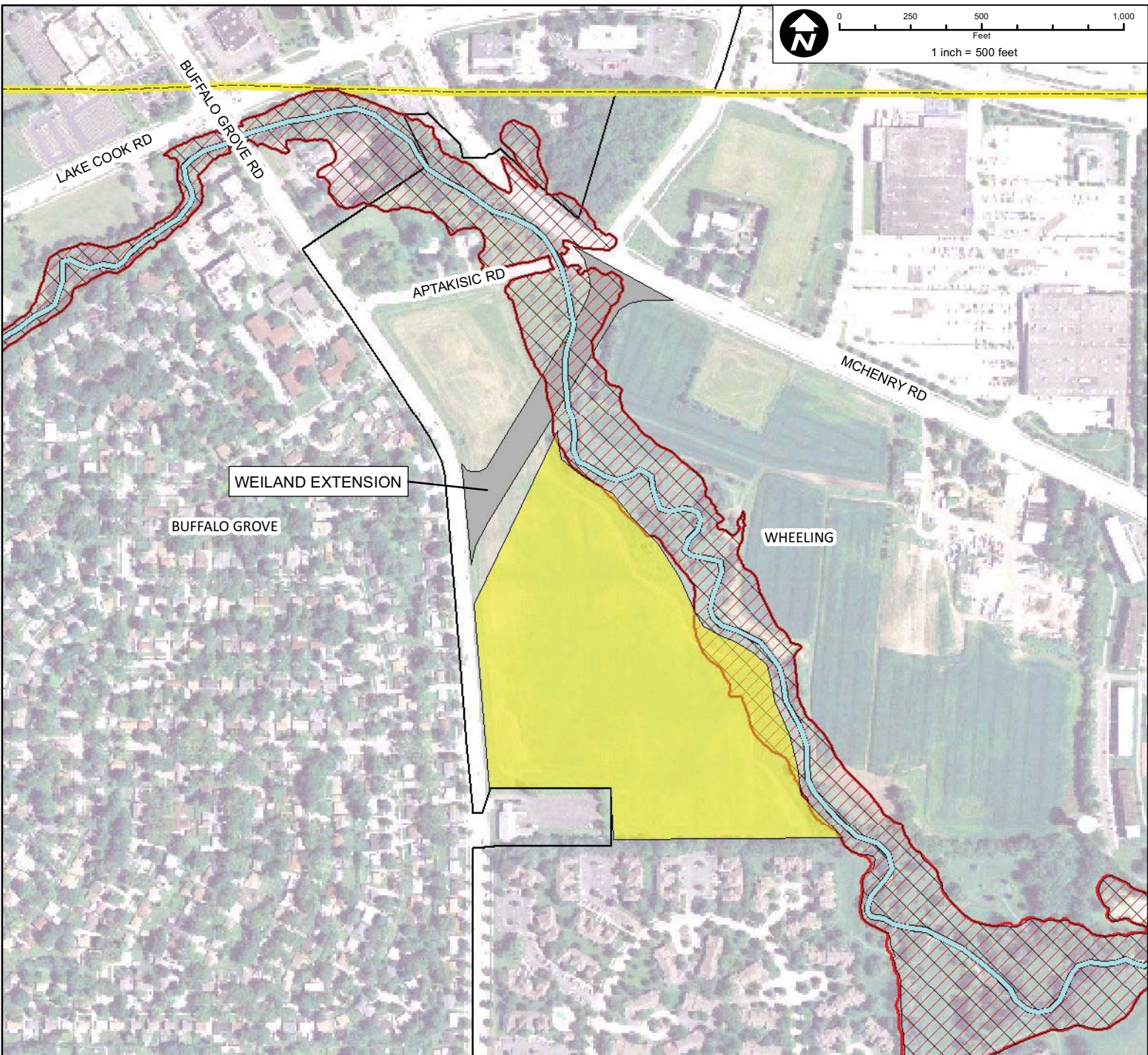
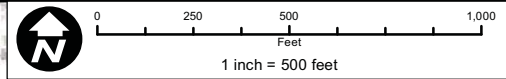
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DSGN.	DRW	4-10	SCALE: 500'	
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
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FIGURE 3.3.8

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Subwatershed: Buffalo Creek
 Alternative: BUCR-2B
 Alternatives Description: Provide 300 A-F of flood storage on un-developed private property in Wheeling, and account for a potential Weiland Road Extension.

Concept Level Cost: \$40,815,895
 Benefits: \$1,724,056
 B/C Ratio: 0.04

Legend

- | | | | | | | |
|--|---|--|-----------------------------|--|------------------------------------|---|
| | 100-Year Storm Event Flood Inundation Without Project | | Culvert/Bridge Modification | | Approximate Creek Channel Location | Problem Areas
Modeled
Regional |
| | 100-Year Storm Event Flood Inundation With Project | | Channel Improvements | | Municipal Boundary | |
| | Reservoir | | Levee/Floodwall | | Watershed Boundary | |



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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-2B**

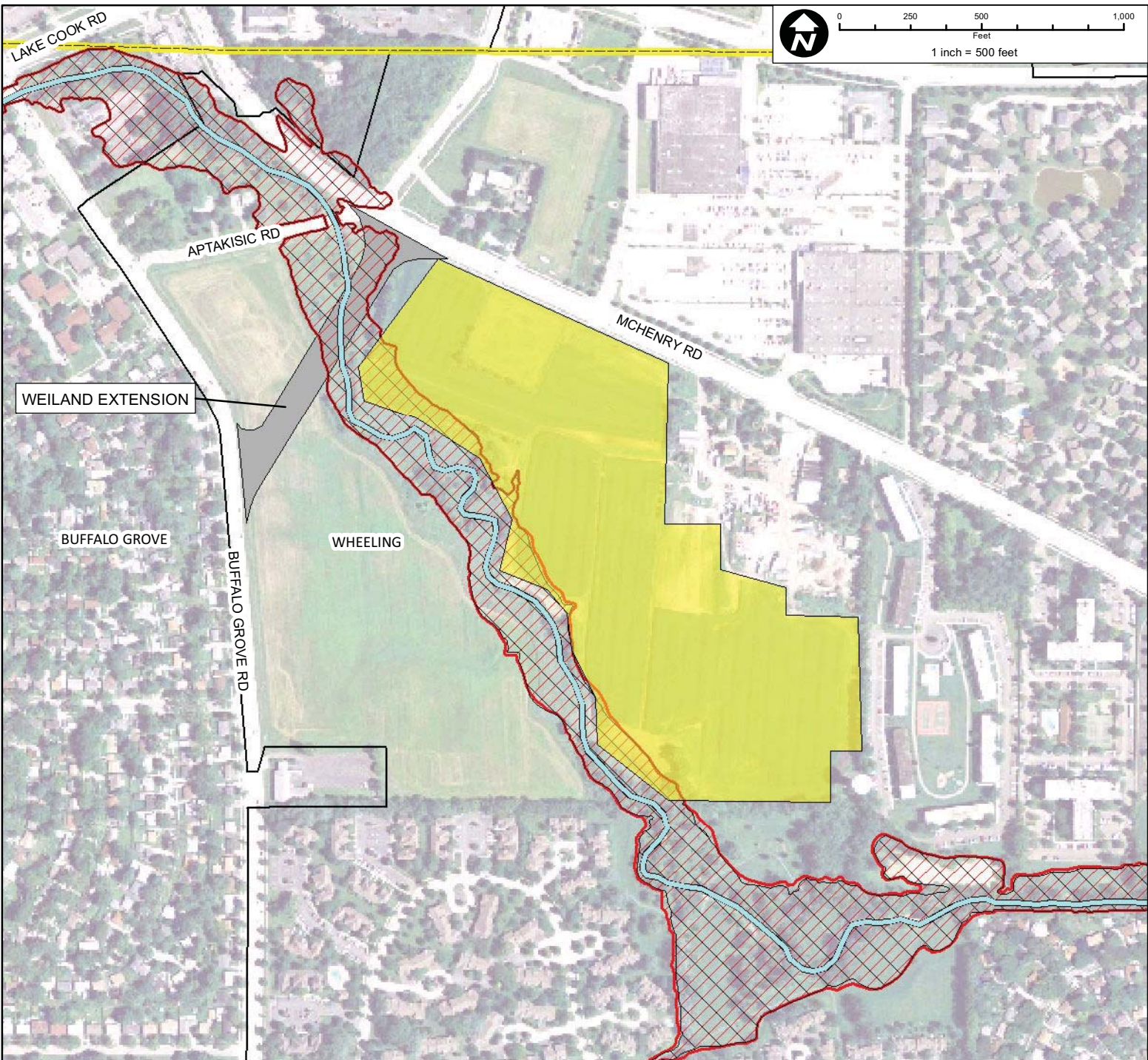
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 DATE: 03-23-2010
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DSGN.	DRW	4-10	SCALE: 500'	
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.9

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Subwatershed: Buffalo Creek
 Alternative: BUCR-2C
 Alternatives Description: Provide 300 A-F of flood storage on un-developed private property in Wheeling, and account for a potential Weiland Road Extension.

Concept Level Cost: \$47,971,982
 Benefits: \$1,747,756
 B/C Ratio: 0.04

Legend

- 100-Year Storm Event Flood Inundation Without Project
- Culvert/Bridge Modification
- Approximate Creek Channel Location
- Problem Areas Modeled
- 100-Year Storm Event Flood Inundation With Project
- Channel Improvements
- Municipal Boundary
- Problem Areas Regional
- Reservoir
- Levee/Floodwall
- Watershed Boundary



CLIENT:
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-2C**

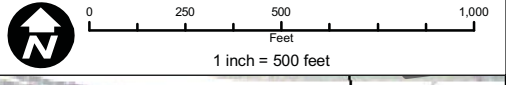
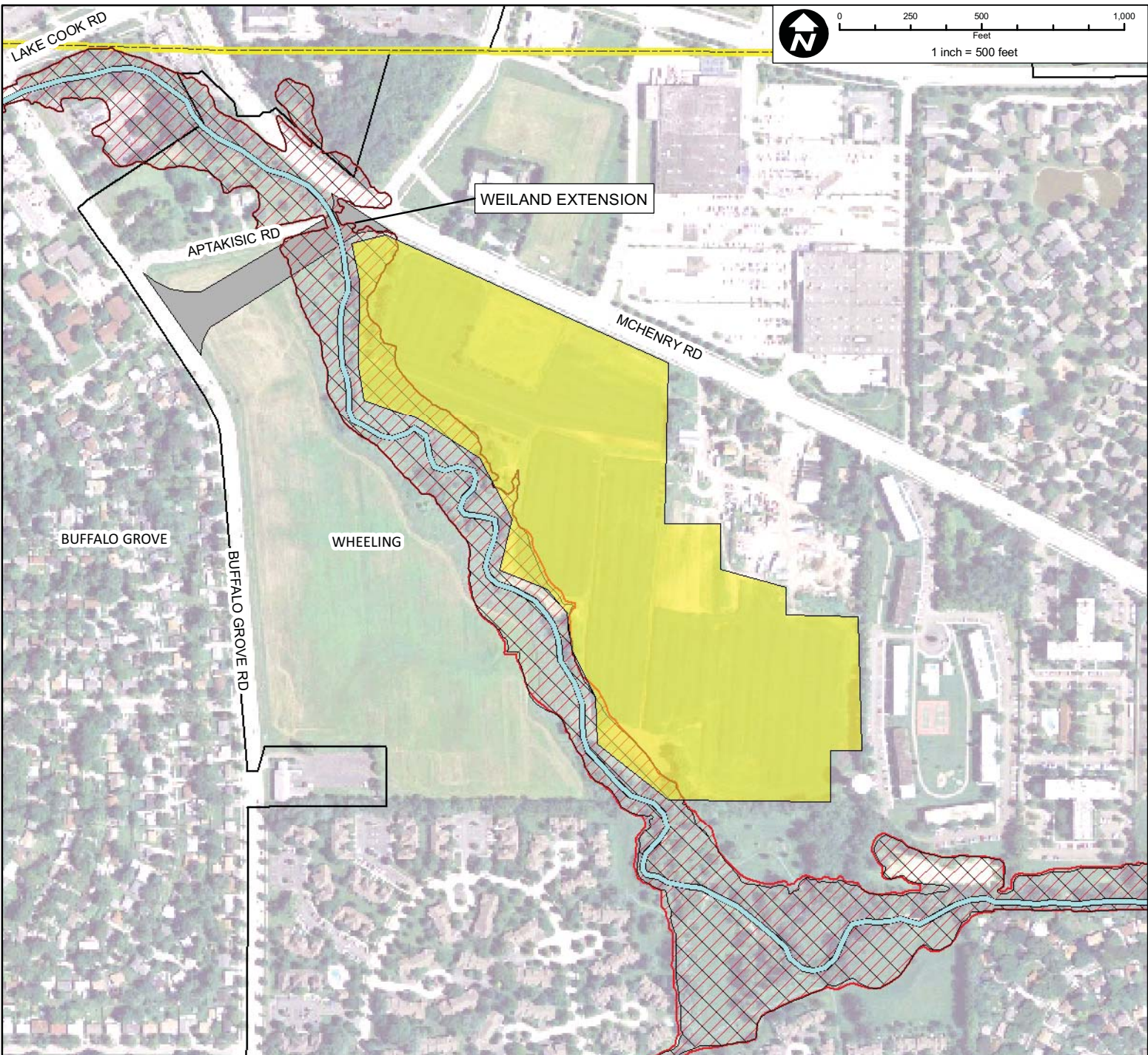
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 DATE: 03-23-2010
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DSGN.	DRW	4-10	SCALE: 500'	
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CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.10

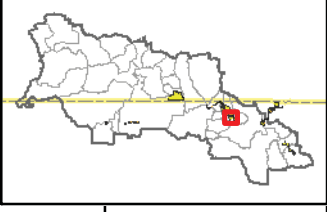
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Subwatershed: Buffalo Creek
 Alternative: BUCR-2D
 Alternatives Description: Provide 305 A-F of flood storage on un-developed private property in Wheeling, and account for a potential Weiland Road Extension.

Concept Level Cost: \$49,603,841
 Benefits: \$1,747,756
 B/C Ratio: 0.04

Legend						
	100-Year Storm Event Flood Inundation Without Project		Culvert/Bridge Modification		Approximate Creek Channel Location	Problem Areas Modeled Regional
	100-Year Storm Event Flood Inundation With Project		Channel Improvements		Municipal Boundary	
	Reservoir		Levee/Floodwall		Watershed Boundary	



CLIENT:
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-2D**

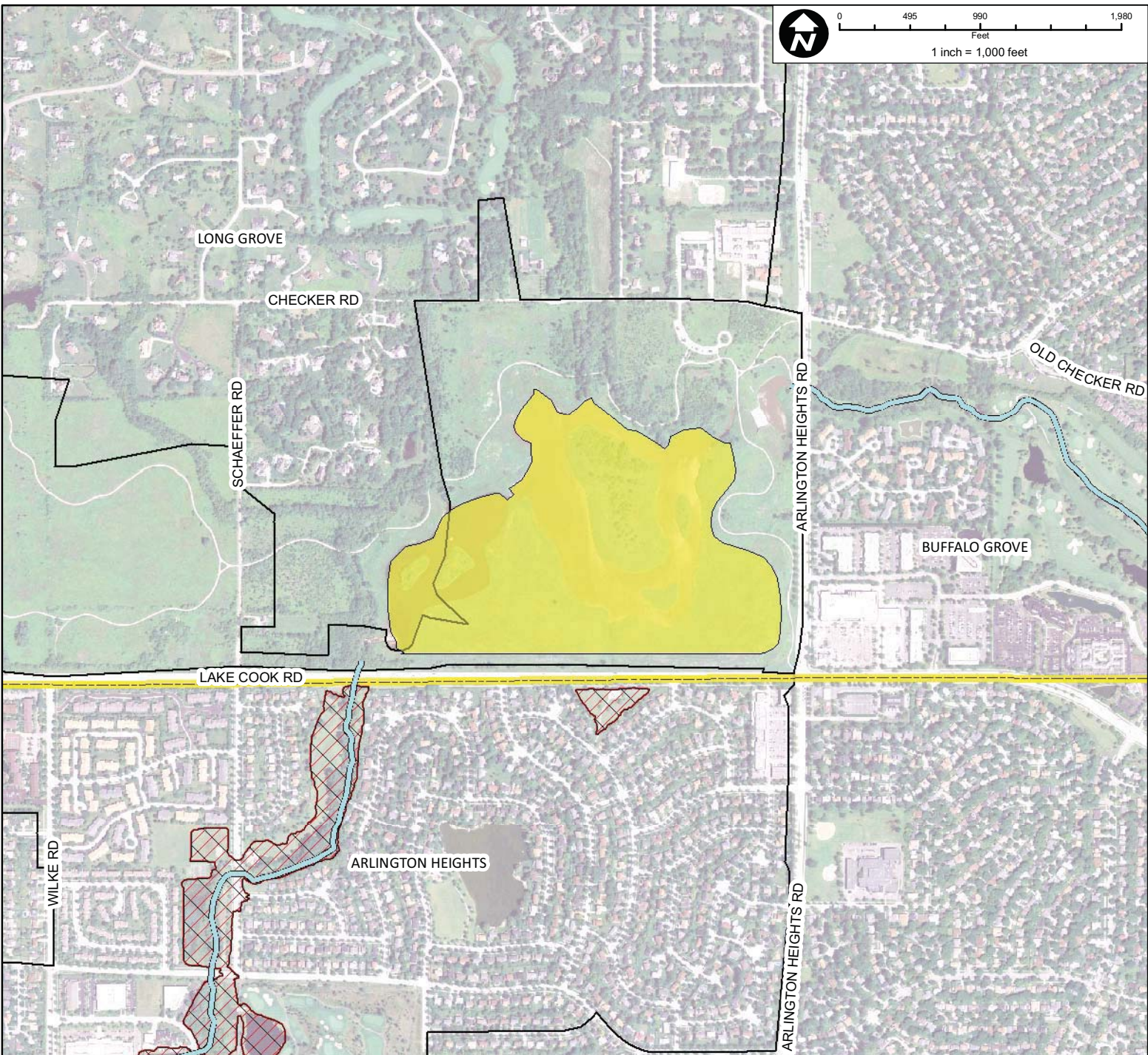
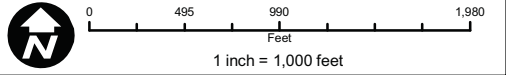
PROJ. NO. 08-0043
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DSGN.	DRW	4-10	SCALE: 500'	
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CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.11

Map Document: (Z:\MWRD\GCC\08-0043 Phase B\Water\Buffalo\text\ib\ib\Detailed Watershed Plan Sheets 2.mxd) 8/24/2010 10:23:54 PM



Subwatershed: Buffalo Creek
 Alternative: BUCR-3
 Alternatives Description: Provide 800 A-F of flood storage by expanding the existing Buffalo Creek Flood Control Reservoir.

Concept Level Cost: \$62,642,321
 Benefits: \$1,962,520
 B/C Ratio: 0.03

Legend

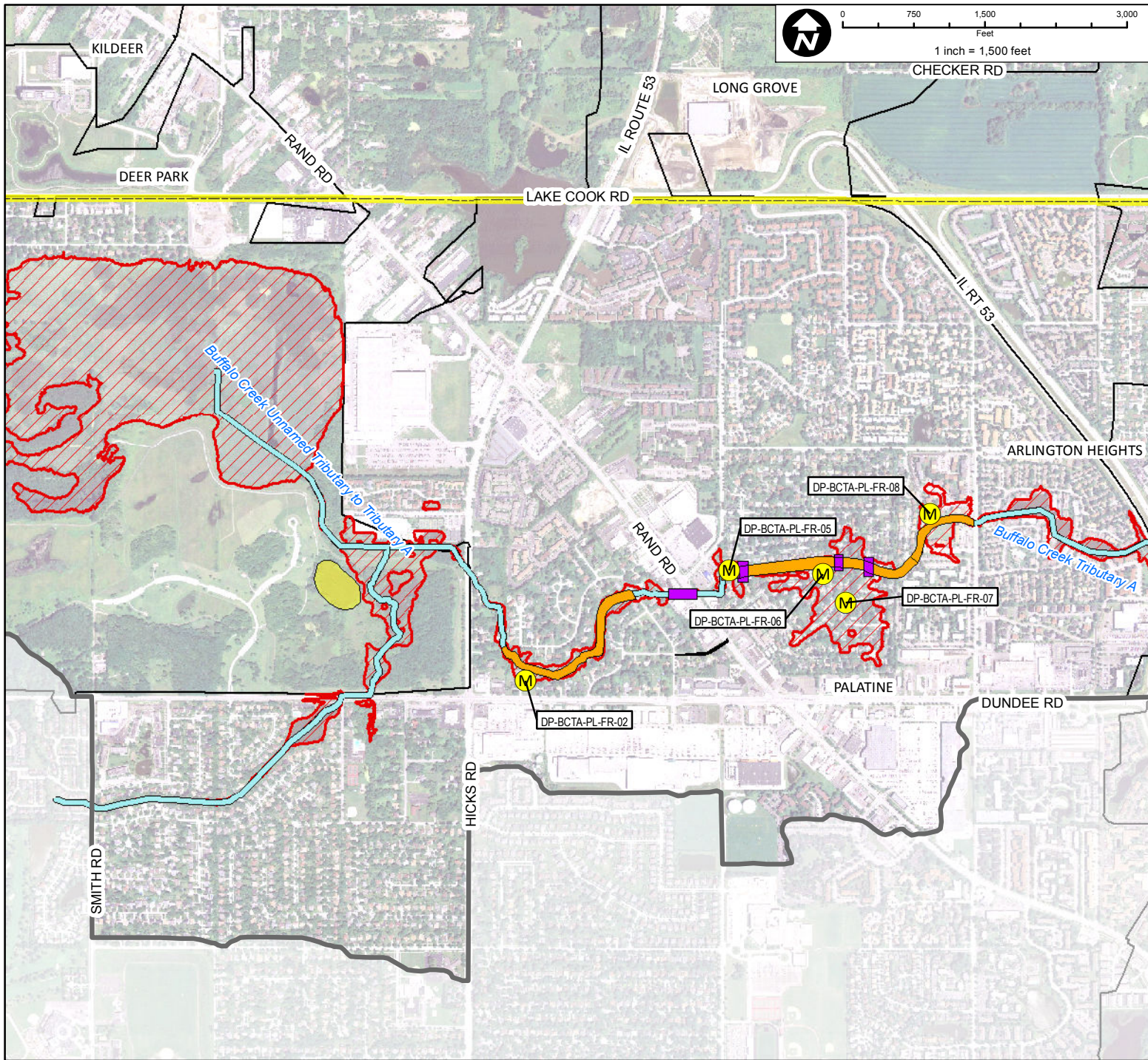
	100-Year Storm Event Flood Inundation Without Project		Culvert/Bridge Modification		Approximate Creek Channel Location	Problem Areas	
	100-Year Storm Event Flood Inundation With Project		Channel Improvements		Municipal Boundary		
	Reservoir		Levee/Floodwall		Watershed Boundary		Regional

CLIENT: METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO	TITLE: LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN BUFFALO CREEK WATERSHED PROPOSED ALTERNATIVE BUCR-3	PROJ. NO. 08-0043
		DATE: 03-23-2010
		SHEET 1 OF 1
		DRAWING NO.

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	DWN.			GIS USER	DRW
	CHKD.			PLOT DATE	
	FILE:				

FIGURE 3.3.12

Map Document: (Z:\MWR\RDCC\08-0043 Phase B\Water\Buffalo\text\ibis\Detailed Watershed Plan Sheets 2.mxd) 8/23/2010 7:12:39 AM

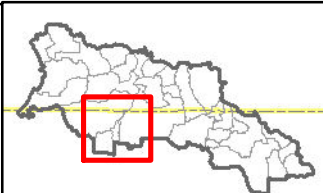


Subwatershed: Buffalo Creek
 Alternative: BUCR-4
 Alternatives Description: 45 A-F compensatory storage at confluence of Buffalo Creek Tributary A and Unnamed Tributary B in Forest Preserve.
 Channel improvements from Hicks Road to Lynda Road, and Laurel Drive to Baldwin Road.
 Culvert replacement at Capri, Iris, Laurel Drive, and Rand Road.

Concept Level Cost: \$8,544,202
 Benefits: \$5,671,193
 B/C Ratio: 0.7

Legend

- 100-Year Storm Event Flood Inundation Without Project
- Culvert/Bridge Modification
- Approximate Creek Channel Location
- Problem Areas - Local
- 100-Year Storm Event Flood Inundation With Project
- Channel Improvements
- Municipal Boundary
- Problem Areas - Modeled
- Reservoir
- Levee/Floodwall
- Watershed Boundary
- Problem Areas - Regional



CLIENT:
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-4**

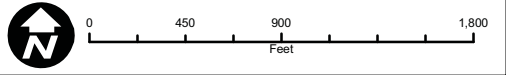
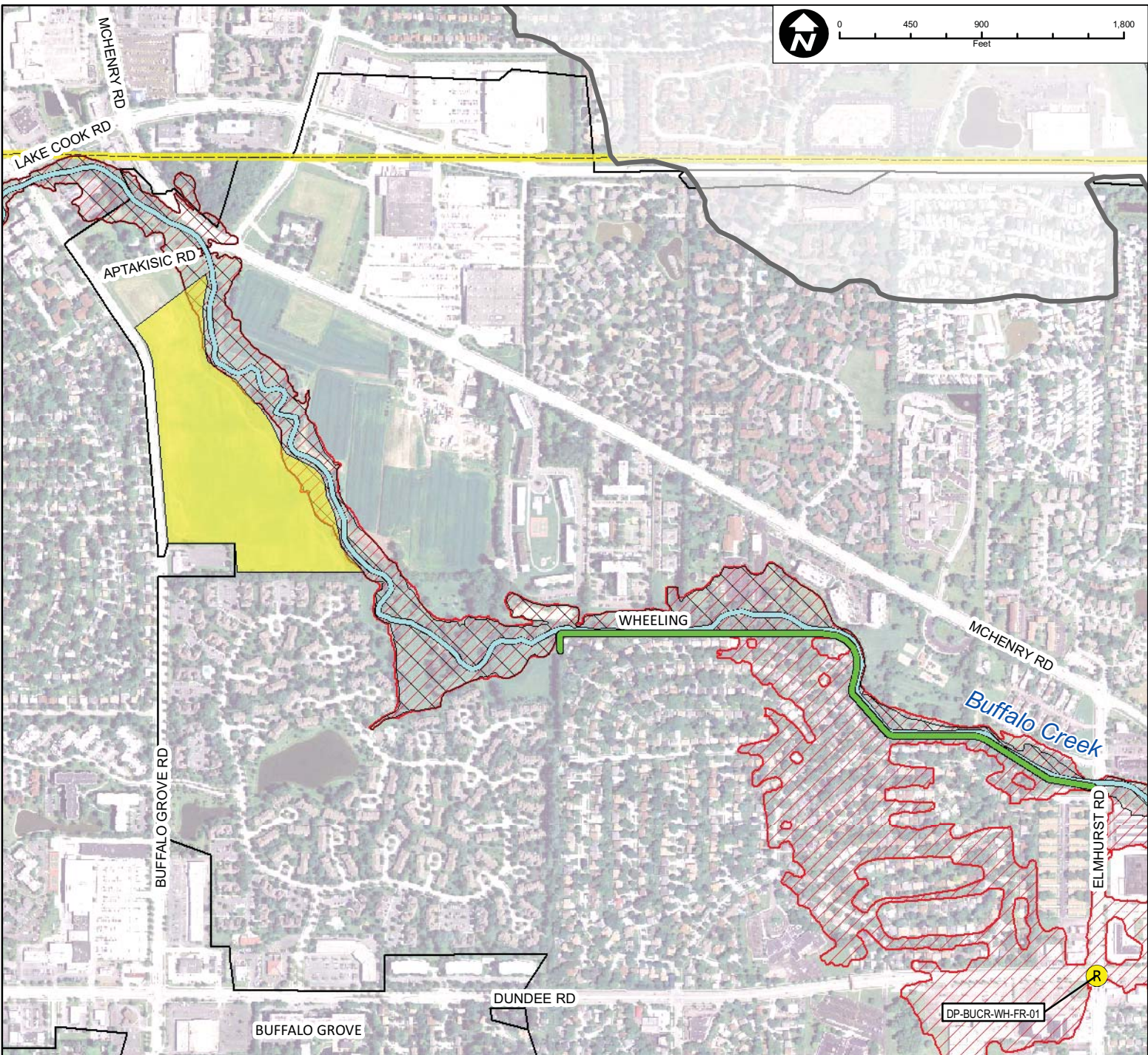
PROJ. NO. 08-0043
 DATE: 03-23-2010
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CHKD.			PLOT DATE	
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FIGURE 3.3.13

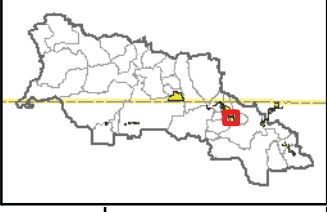
Path: Z:\MWRDGC\08-0043 Phase B\Water\Buffalo\exhibits\BUCR.mxd



Subwatershed: Buffalo Creek
 Alternative: BUCR-5
 Alternatives Description: 4,125 feet of floodwall from 3,960 feet upstream of Elmhurst Road to the upstream face of Elmhurst Road.
 Provide 310 A-F of flood storage on un-developed private property in Wheeling.

Concept Level Cost: \$61,687,084
 Benefits: \$1,925,650
 B/C Ratio: 0.03

Legend	
	100-Year Storm Event Flood Inundation Without Project
	100-Year Storm Event Flood Inundation With Project
	Reservoir
	Culvert/Bridge Modification
	Channel Improvements
	Levee/Floodwall
	Approximate Creek Channel Location
	Municipal Boundary
	Watershed Boundary
	Modeled Problem Areas
	Regional Problem Areas



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TITLE:
LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN BUFFALO CREEK WATERSHED RECOMMENDED ALTERNATIVE BUCR-5

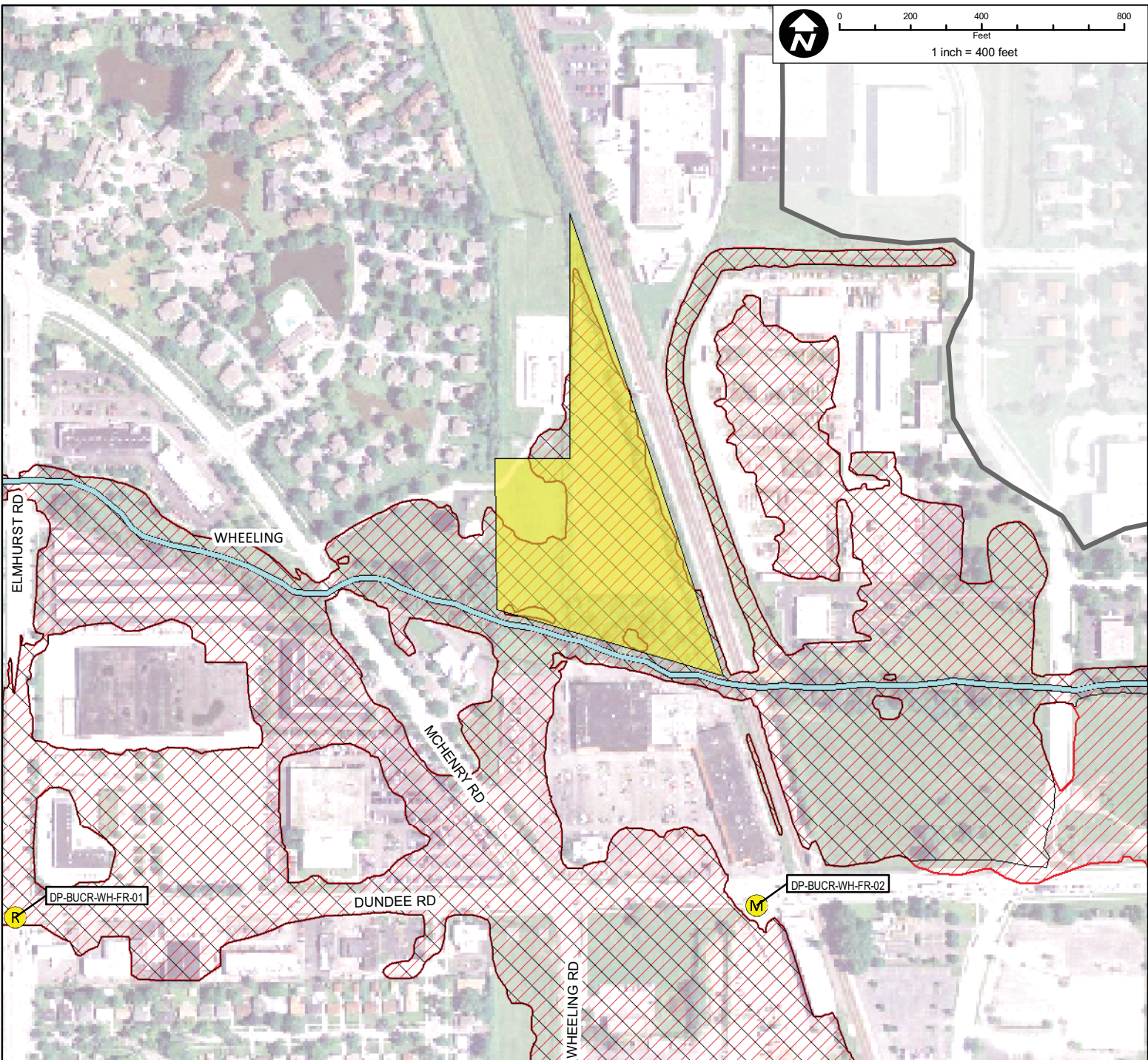
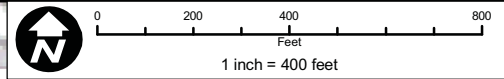
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 DATE: 03-23-2010
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CHKD.			PLOT DATE	
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FIGURE 3.3.14

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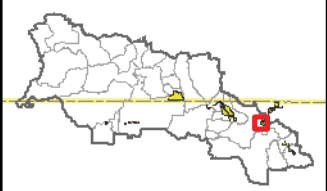


Subwatershed: Buffalo Creek
 Alternative: BUCR-6
 Alternatives Description: Provide 100 A-F of flood storage by expanding the Village of Wheeling water tower basin.

Concept Level Cost: \$9,897,117
 Benefits: \$785,113
 B/C Ratio: 0.08

Legend

- | | | | |
|---|-----------------------------|------------------------------------|---|
| 100-Year Storm Event Flood Inundation Without Project | Culvert/Bridge Modification | Approximate Creek Channel Location | Problem Areas
Modeled
Regional |
| 100-Year Storm Event Flood Inundation With Project | Channel Improvements | Municipal Boundary | |
| Reservoir | Levee/Floodwall | Watershed Boundary | |



CLIENT:
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-6**

PROJ. NO. 08-0043
 DATE: 03-23-2010
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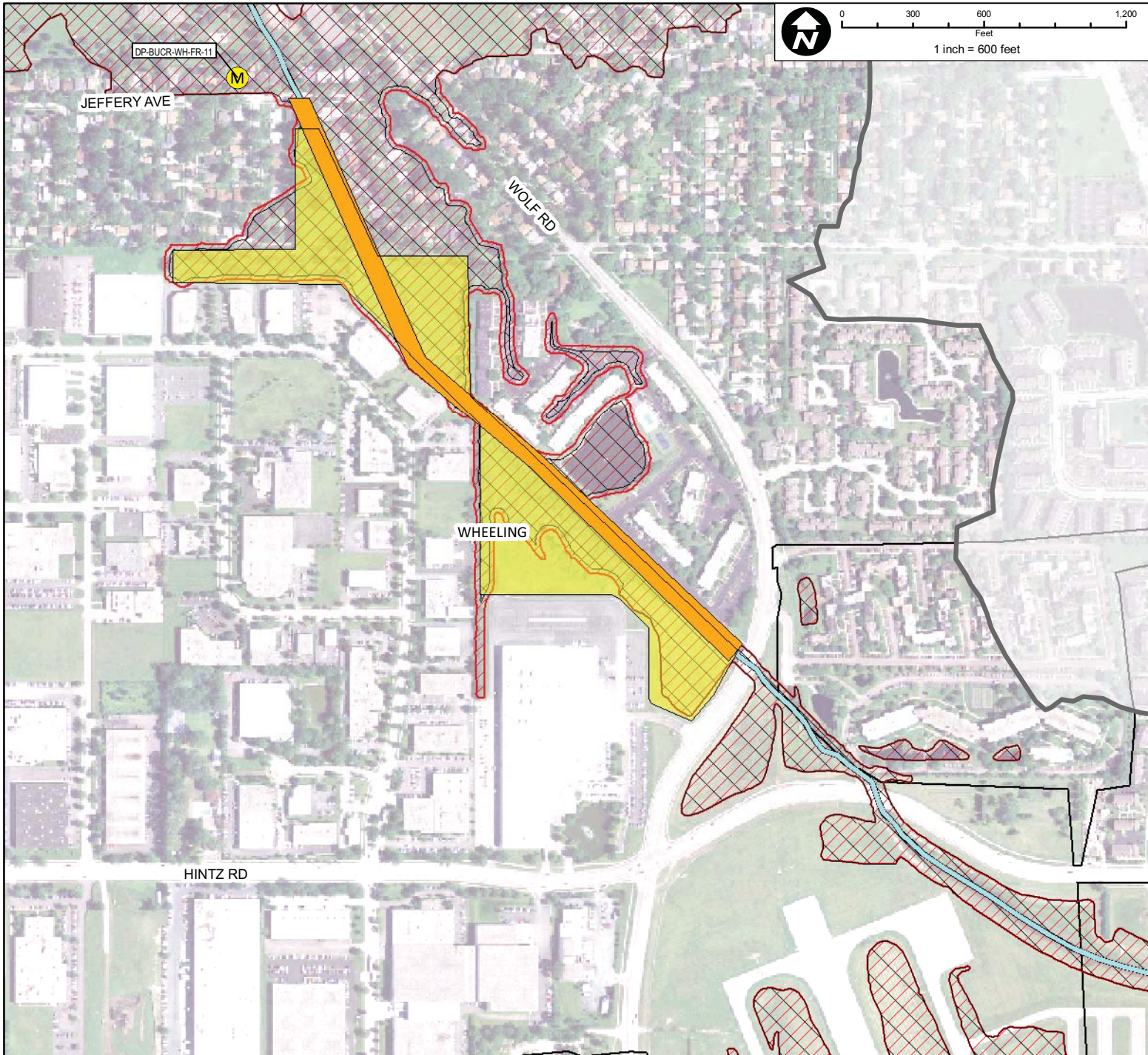
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DSGN.	DRW	4-10	SCALE: 400'	
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
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FIGURE 3.3.15

Map Document: (Z:\MWR\RDCC\08-0043 Phase B\Water\Buffalo\text\ibhis\Detailed Watershed Plan Sheets 2.mxd) 8/24/2010 10:24:53 PM

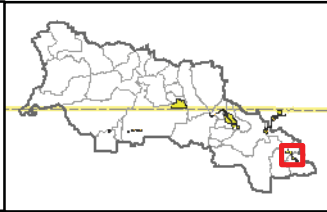
Map Document: (Z:\MWR\DC\08-0043 Phase B\Water\Buffalo\exhibits\Detailed Watershed Plan Sheets 2.mxd) 3/24/2010 12:24:54 PM



Subwatershed: Buffalo Creek
 Alternative: BUCR-7
 Alternatives Description: Provide 90 A-F storage volume within existing storage areas along Buffalo Creek.

Concept Level Cost: \$11,163,497
 Benefits: \$827,772
 B/C Ratio: 0.07

Legend		Problem Areas	
	100-Year Storm Event Flood Inundation Without Project		Modeled
	Culvert/Bridge Modification		Regional
	100-Year Storm Event Flood Inundation With Project		Approximate Creek Channel Location
	Reservoir		Municipal Boundary
	Channel Improvements		Watershed Boundary
	Levee/Floodwall		

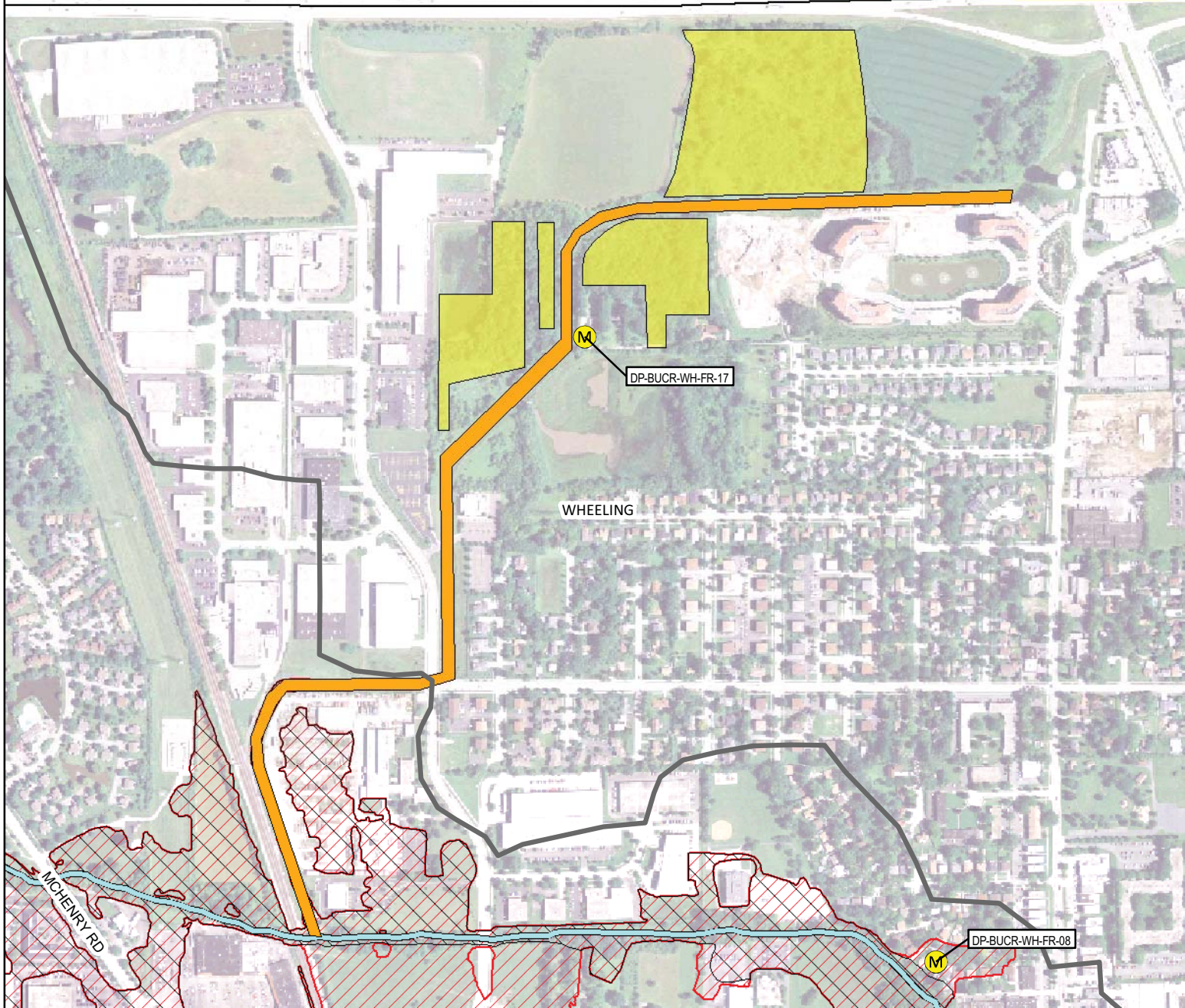


CLIENT: METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO	TITLE: LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN BUFFALO CREEK WATERSHED PROPOSED ALTERNATIVE BUCR-7	PROJ. NO. 08-0043
		DATE: 03-23-2010
		SHEET 1 OF 1
		DRAWING NO.
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	DWN. GIS USER DRW	
	CHKD. PLOT DATE	
	FILE:	



0 350 700 1,400
Feet
1 inch = 700 feet

BUFFALO GROVE



Subwatershed: Buffalo Creek

Alternative: BUCR-8

Alternatives Description: Provide 320 A-F of flood storage on Village of Wheeling and private property.

Channel improvements from the Swaminarayar Temple main entrance to upstream of Milwaukee Avenue.

Widen the diversion channel by approximately 20 feet from the diversion structure to the Swaminarayar Temple

Concept Level Cost: \$45,504,471

Benefits: \$907,186

B/C Ratio: 0.02

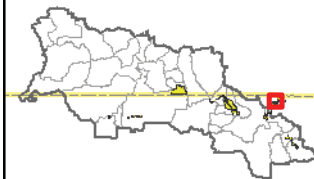
Legend

- 100-Year Storm Event Flood Inundation Without Project
- 100-Year Storm Event Flood Inundation With Project
- Reservoir

- Culvert/Bridge Modification
- Channel Improvements
- Levee/Floodwall

- Approximate Creek Channel Location
- Municipal Boundary
- Watershed Boundary

- Problem Areas**
- Modeled
 - Regional



CLIENT:

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:

**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
BUFFALO CREEK WATERSHED
PROPOSED ALTERNATIVE BUCR-8**

PROJ. NO. 08-0043

DATE: 03-23-2010

SHEET 1 OF 1

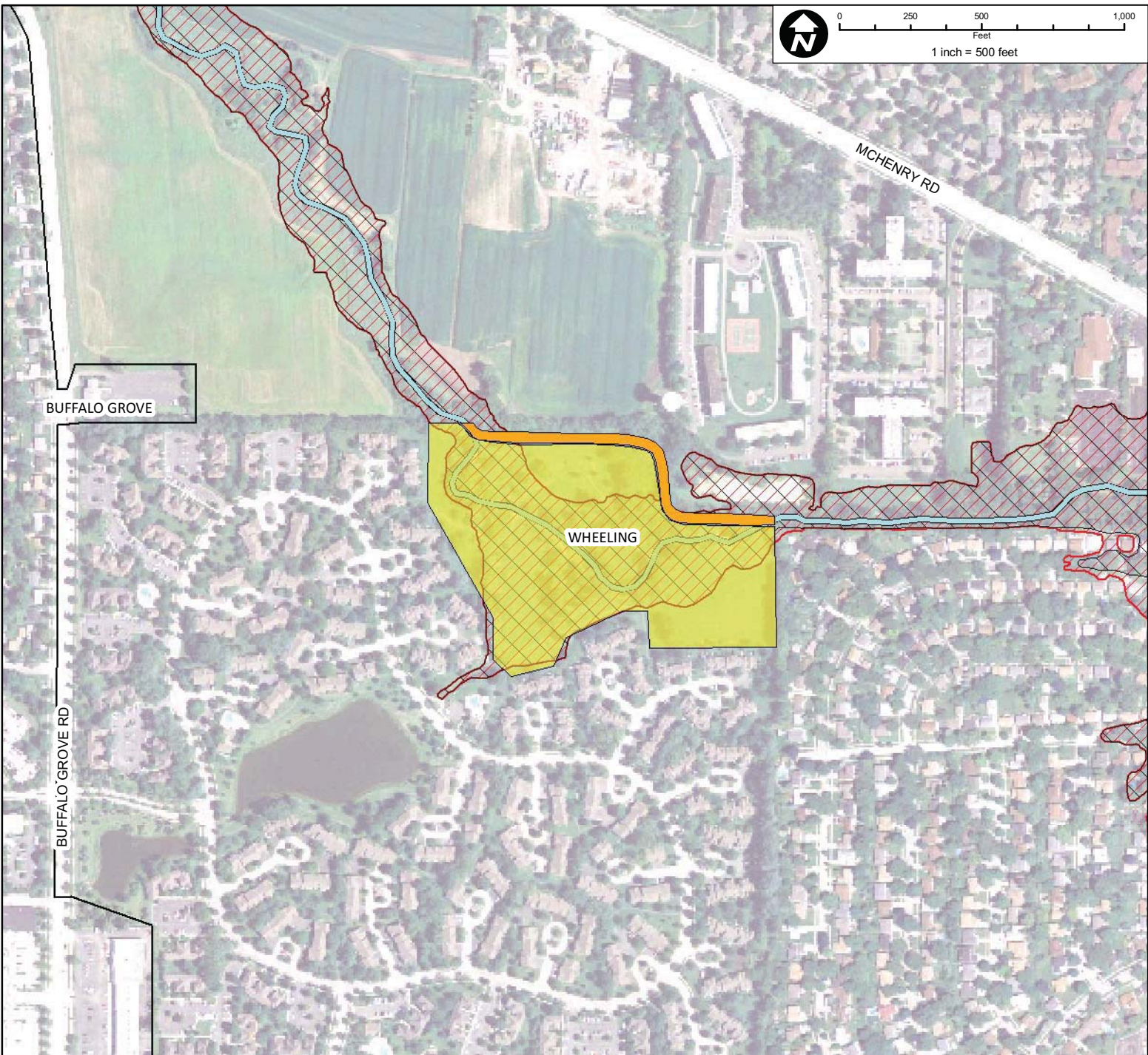
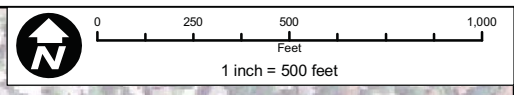
DRAWING NO.



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DSGN.	DRW	4-10	SCALE: 400'	
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.17

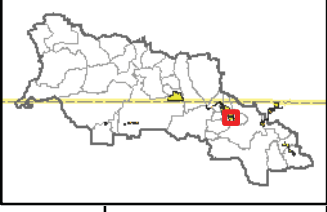


Subwatershed: Buffalo Creek
 Alternative: BUCR-9
 Alternatives Description: Provide 255 A-F of flood storage on private land in Wheeling.
 Channel improvements from 2,800ft downstream of Aptakisic Road to 4,000ft upstream of IL Route 83.

Concept Level Cost: \$30,146,042
 Benefits: \$1,760,381
 B/C Ratio: 0.06

Legend

	100-Year Storm Event Flood Inundation Without Project		Culvert/Bridge Modification		Approximate Creek Channel Location	Problem Areas Modeled Regional
	100-Year Storm Event Flood Inundation With Project		Channel Improvements		Municipal Boundary	
	Reservoir		Levee/Floodwall		Watershed Boundary	



CLIENT:
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TITLE:
**LOWER DES PLAINES RIVER DETAILED WATERSHED PLAN
 BUFFALO CREEK WATERSHED
 PROPOSED ALTERNATIVE BUCR-9**

PROJ. NO. 08-0043
 DATE: 03-23-2010
 SHEET 1 OF 1
 DRAWING NO.

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DSGN.	DRW	4-10	SCALE: 500'	
DWN.			GIS USER	DRW
CHKD.			PLOT DATE	
FILE:				

FIGURE 3.3.18

Map Document: (Z:\MWRD\GCC\08-0043 Phase B\Water\Buffalo\text\ibis\Detailed Watershed Plan Sheets 2.mxd) 8/23/2010 11:22:04 AM