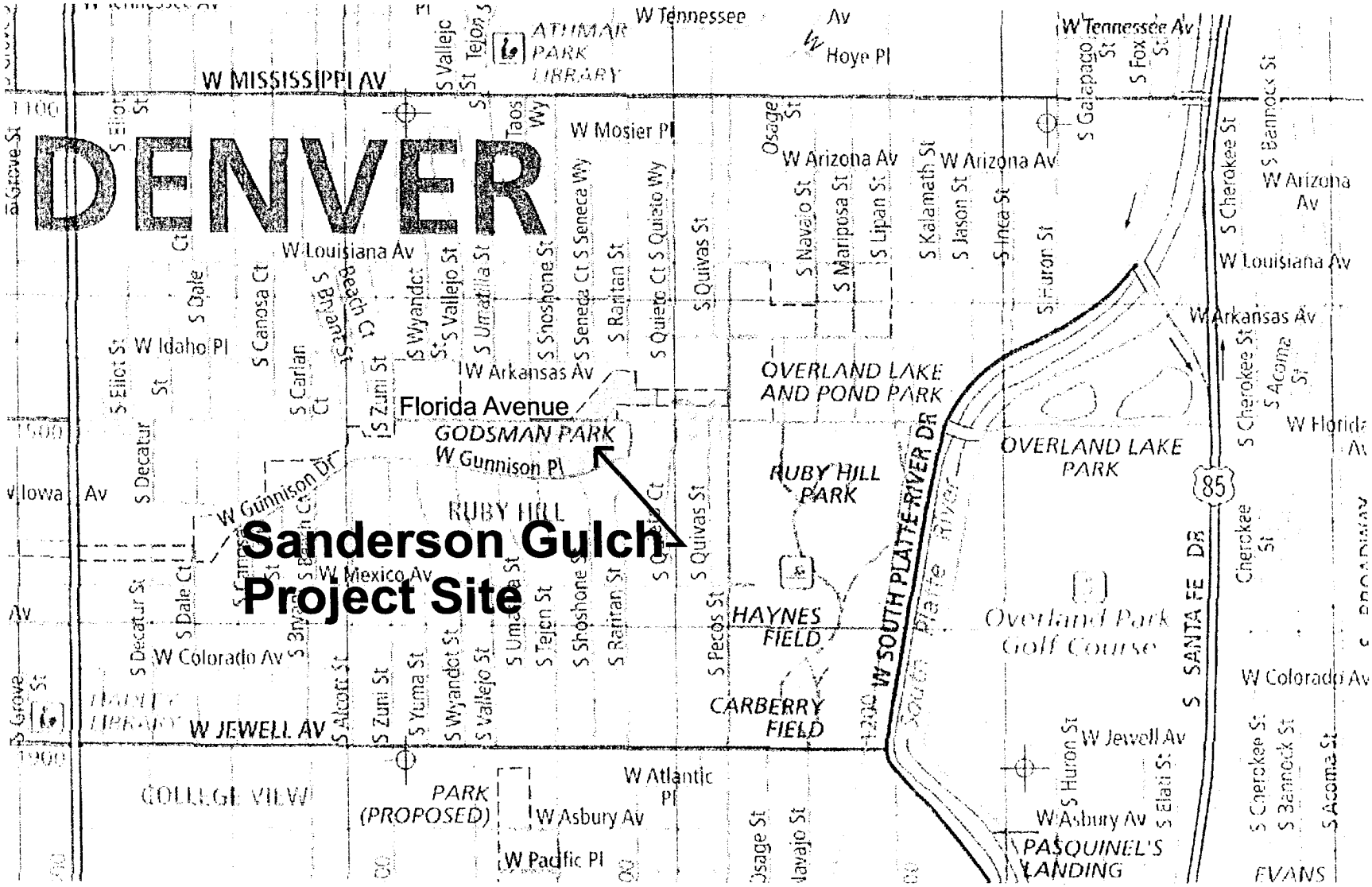

Figure 1: Vicinity Map

SANDERSON GULCH

Sanderson Gulch Channel Improvements
Urban Drainage & Flood Control District
Corps File No. 200480202
Project Location Map
Fig. 1

July 1, 2004

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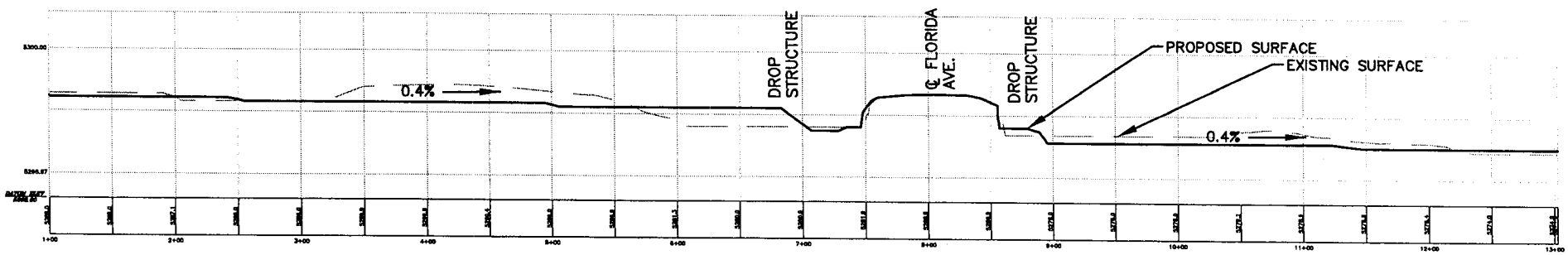
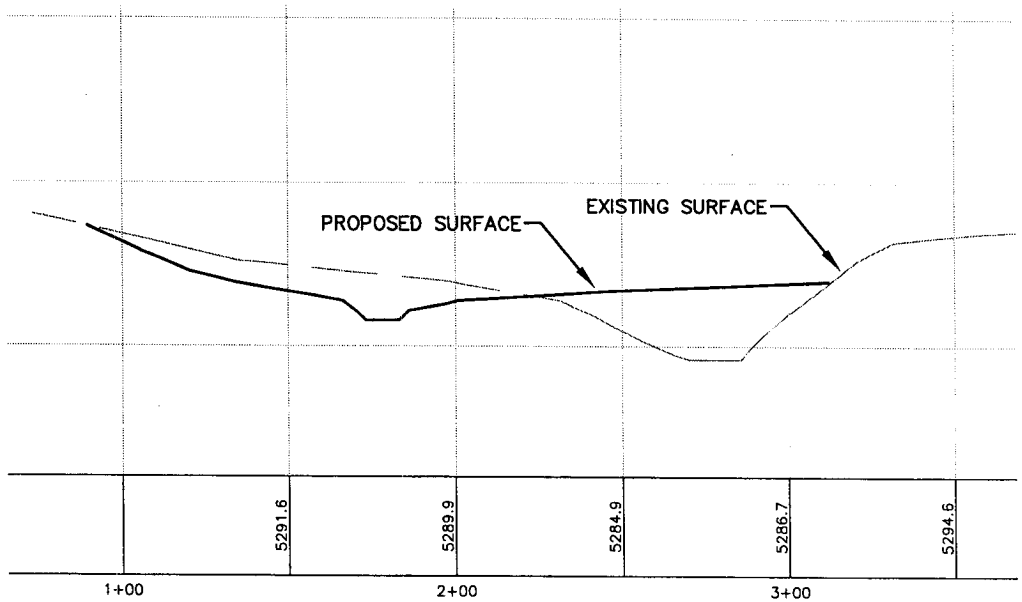


CHANNEL CENTELINE

N.T.S.



CHANNEL CROSS-SECTION

N.T.S.

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Urban Drainage & Flood Control District
Corps File No. 200480202

Description of Work
Fig. 2

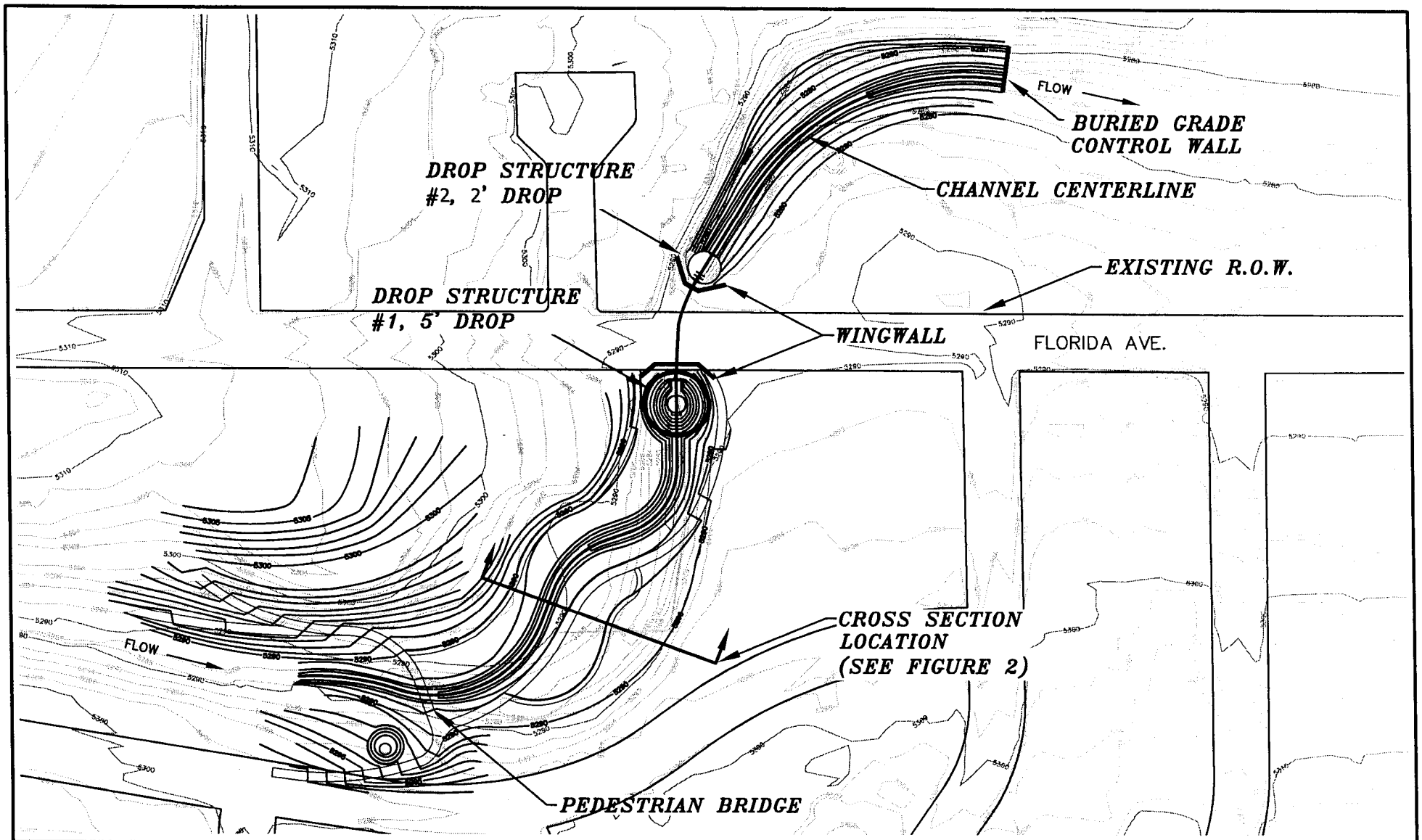
Matrix Design Group, Inc.
Integrated Design Solutions
1601 Blake Street, Suite 200
Denver, CO 80202
Phone 303-572-0200
Fax 303-572-0202

SANDERSON GULCH

PROJECT

FIGURE 2
EXISTING AND PROPOSED CROSS-SECTIONS OF CHANNEL

		SCALE	DATE ISSUED
DESIGNED BY:	RDK		
DRAWN BY:	LDZ	SCALE: AS SHOWN	JULY, 2004
CHECKED BY:	RDK	SCALE: AS SHOWN	



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Corps File No. 200480202

Description of Work
Fig. 3

Matrix Design Group, Inc.
Integrated Design Solutions
1601 Blake Street, Suite 200
Denver, CO 80202
Phone 303-572-0200
Fax 303-572-0202

SANDERSON GULCH

PROJECT

FIGURE 3
GRADING PLAN AND STRUCTURES

	SCALE	DATE ISSUED
DESIGNED BY: RDK/MSL		
DRAWN BY: LDZ	AS SHOWN	JULY, 2004
CHECKED BY: RDK/MSL	AS SHOWN	

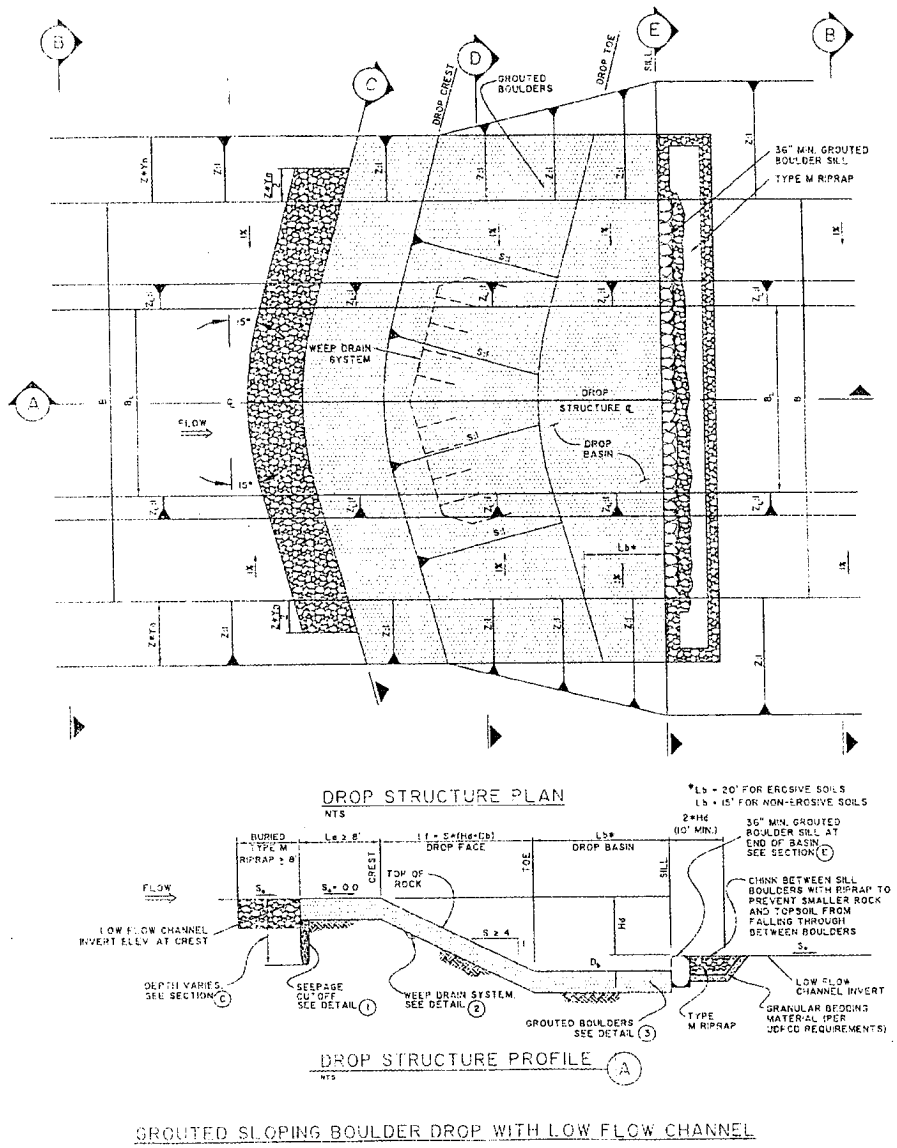

Figure 4: Plan View and Cross Sections of Drop Structures

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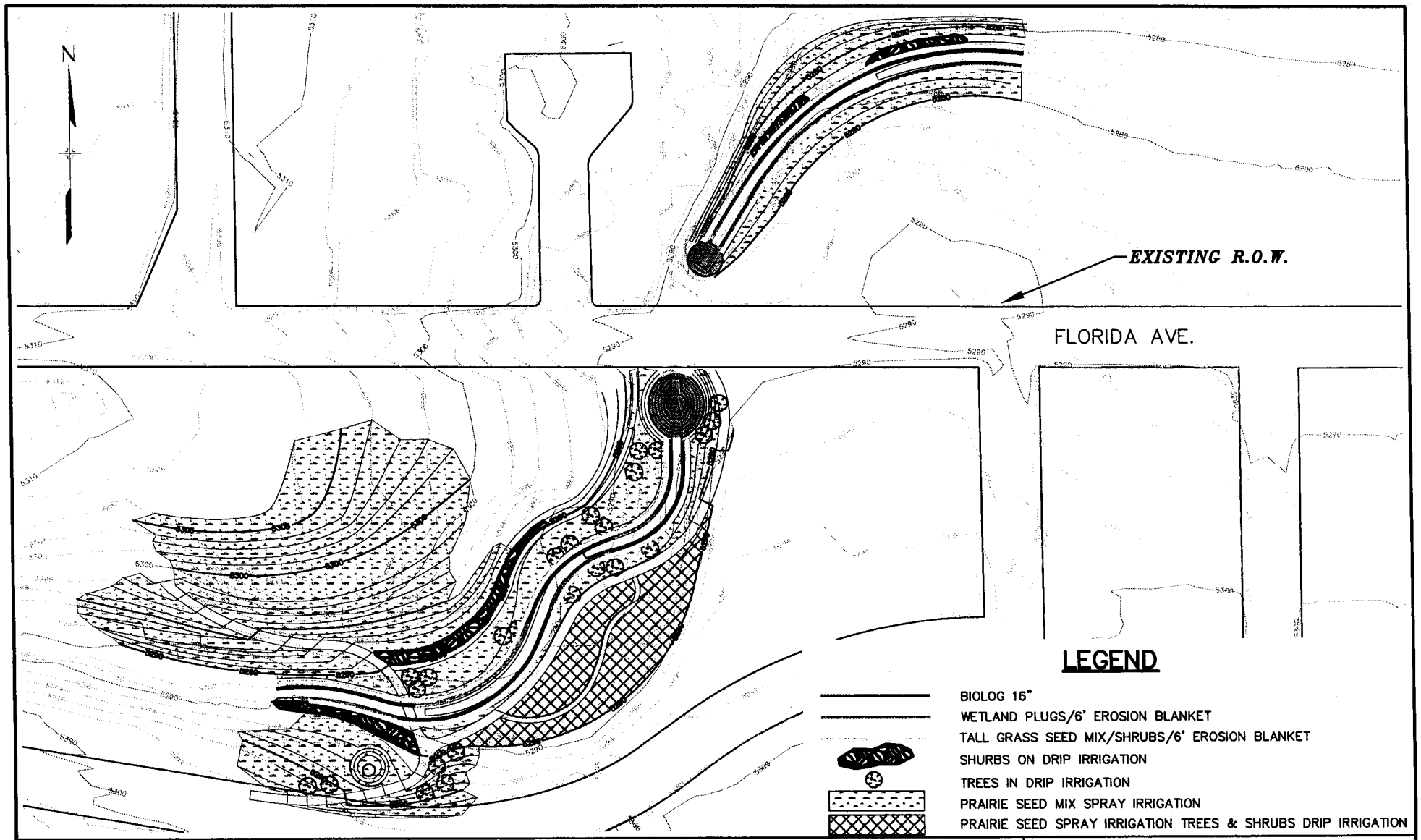
Corps File No. 200480202

SANDERSON GULCH

July 1, 20(

Description of Work

Fig. 4



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Mitigation Plan
Fig. 5

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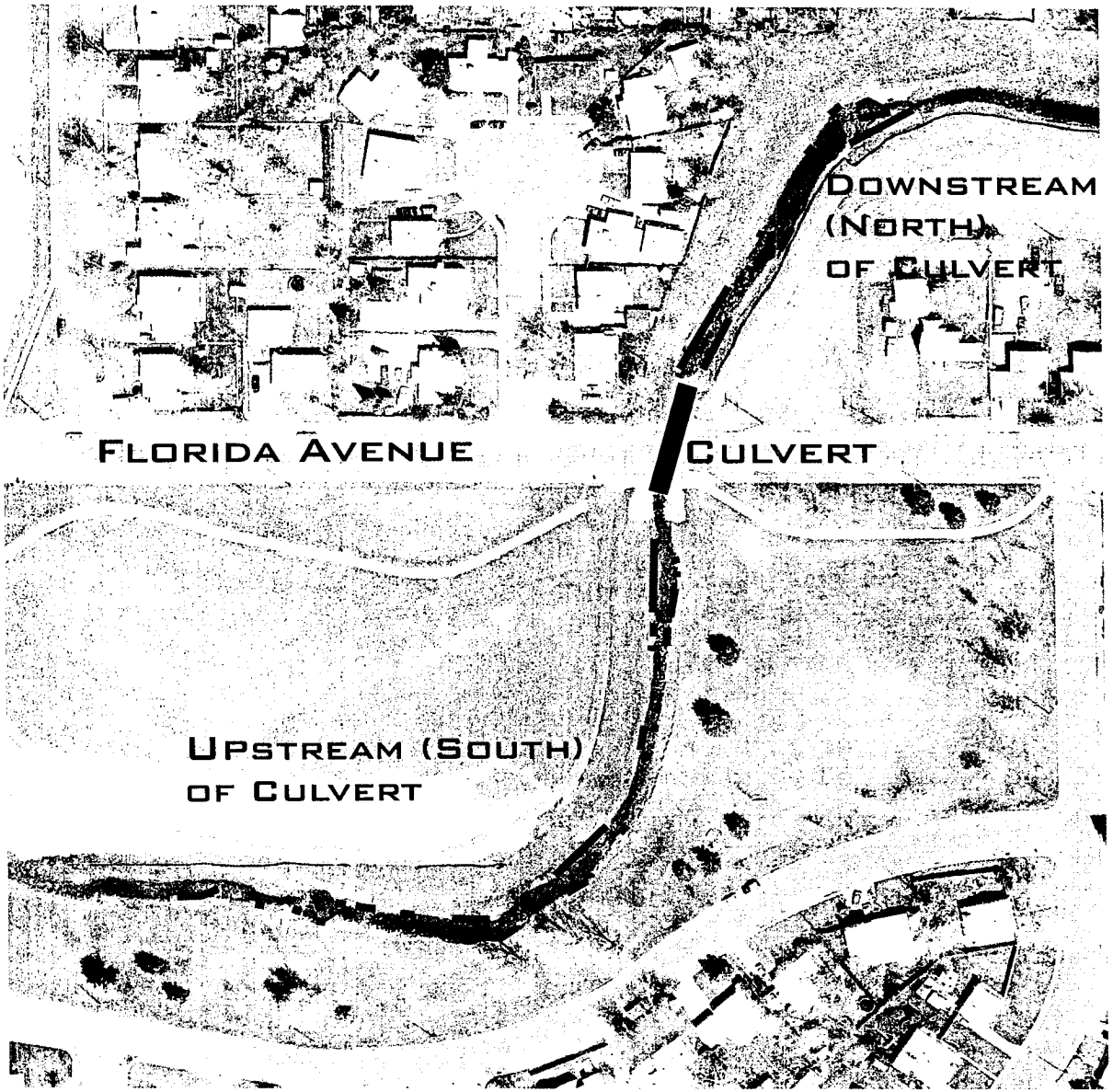
PROJECT

FIGURE 7
PLANTING & MIGRATION PLAN

	SCALE	DATE ISSUED
DESIGNED BY: RDK/MSL		
DRAWN BY: LDZ	AS SHOWN	JULY, 2004
CHECKED BY: RDK/MSL	AS SHOWN	



KEY

Wetland Fringe

Measurements Downstream (North) of Culvert on March 31, 2004

Average width of linear wetland was about one foot. Therefore, total square feet of wetland downstream from the culvert is calculated as follows:
186' (left bank) + 120' (right bank) = 306' x 1' =
306 square feet + 378 square feet (island) =
684 square feet = **0.016 acres of wetlands**

Measurements Upstream (South) of Culvert on April 4, 2004

The total amount of wetlands in the project area upstream from the culvert is calculated as follows:
251' (left bank) + 93' (right bank) = 344' x 1' =
344 square feet = **0.08 acres of wetlands**

The total wetland acreage within the project area is 0.024 acres

Figure 9: Wetlands Delineation and Impact Areas

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Sanderson Gulch Channel Improvements
Urban Drainage & Flood Control District
Corps File No. 200480202
Existing Conditions
Fig. 6

SANDERSON GULCH

Matrix Design Group Inc.

July 1, 2004