



WESTMINSTER

Staff Report

TO: The Mayor and Members of the City Council

DATE: August 14, 2013

SUBJECT: Study Session Agenda for August 19, 2013

PREPARED BY: J. Brent McFall, City Manager

Please Note: Study Sessions and Post City Council meetings are open to the public, and individuals are welcome to attend and observe. However, these meetings are not intended to be interactive with the audience, as this time is set aside for City Council to receive information, make inquiries, and provide Staff with policy direction.

Looking ahead to next Monday night's Study Session, the following schedule has been prepared:

A light dinner will be served in the Council Family Room 6:00 P.M.

CITY COUNCIL REPORTS

1. Report from Mayor (5 minutes)
2. Reports from City Councillors (10 minutes)

PRESENTATIONS

1. Adams 50 School District Mill Levy Override (*Verbal*)
2. Water Conservation and Resource Transition Plan for Parks
3. US 36 Managed Lanes Project Land Exchange

6:30 P.M.

EXECUTIVE SESSION

None at this time.

INFORMATION ONLY ITEMS

1. Citywide Radio System Project Update

Additional items may come up between now and Monday night. City Council will be apprised of any changes to the Study Session meeting schedule.

Respectfully submitted,

J. Brent McFall
City Manager



WESTMINSTER

Staff Report

City Council Study Session
August 19, 2013



SUBJECT: Water Conservation and Resource Transition Plan for Parks

PREPARED BY: Richard Dahl, Park Services Manager

Recommendation

Receive Staff presentation and concur with Staff's recommendations for water conservation and resource transition plan for parks.

Summary Statement

The local environment is trending toward lower precipitation, which puts pressure on public water supplies, especially when a substantial amount of water resources are used to irrigate turf on public and private lands. Staff has implemented water conservation practices, but additional measures could be taken to make further improvements. Parks, Recreation and Libraries is the largest single user of the City's potable water distribution system with 274 accounts assigned to public facility and outdoor landscaping needs. Staff has been developing options to lower the percentage of water use while maintaining the highly prized landscape areas of the City's parks and public facilities. In this spirit, Park Services is pursuing taking limited portions of existing parks and convert them to a drought tolerant/native seed mix that would reduce water and maintenance needs. Staff has identified fourteen park areas that could be converted to native grass stands, but staff is recommending only three pilot sites be converted in 2013/14 to gauge management practices and public response to such a change.

Background

Water conservation will be an ongoing area of focus for the Park Services Division. The Parks, Recreation and Libraries Department, in consultation with the Utilities Planning and Engineering Division, continues to upgrade and improve the efficiency of irrigation at parks, golf courses and streetscapes by installing weather stations, computer irrigation controls, rain sensors and by using approved best management practices.

In 2010, City Council approved the Resource Management Plan (Tiered Maintenance for Parks) which is based on an evapotranspiration (ET) irrigation management system to maintain the 640 acres of bluegrass parks. Beyond the tiered maintenance program and system improvements, weather and economic conditions indicate that additional steps should be taken to minimize water use and reduce maintenance costs.

In 2013 the Park Services Division, working in cooperation with the Utilities Planning and Engineering Division, developed landscape water budgets for both the 144th and the 136th and I-25

interchanges by incorporating Automatic Meter Reading (AMR) and Geographic Information Systems (GIS) technology to determine actionable information about water use and efficiency improvements. The water budget will provide a reasonable estimate of expected water use per site based on the irrigated area and landscape. Comparisons on actual consumption versus water budget estimates will be provided to staff for modifications to the existing computer models.

According to the United States Environmental Protection Agency the earth's average temperature has risen by 1.4°F over the past century, and is projected to rise another 2 to 11.5°F over the next hundred years. Small changes in the average temperature of the planet can translate to large and potentially dangerous shifts in climate and weather. Rising global temperatures have been accompanied by changes in weather and climate. Many places have seen changes in rainfall, resulting in more floods, droughts, or intense rain, as well as more frequent and severe heat waves.

In 2005 the Department of Parks, Recreation and Libraries used 216 million gallons of water at a cost of \$863,675 and in 2012 this number had grown to 319 million gallons and \$1,362,975. Between 2005 and 2012, water costs rose by \$700/acre due to increases in water rates (18%) and additional use, while the park system grew by just 65 acres (5 parks). Additionally, weather patterns that were “out of the norm,” such as the 2012 drought, contributed to increased water consumption. Without more aggressive conservation measures, the City will continue to spend increasing funds to irrigate bluegrass areas in parks.

The City has several areas of native grasses currently within the park system (examples below).



Westfield Village Park – 2013. This park was specifically designed to incorporate large swaths of native and unirrigated grasses especially at the east end of the park where it abuts the College Hills Open Space. The native grass area has taken the better part of five years to establish due to several drought years during this time period.



Armed Forces Tribute Garden, City Park – 2013. City Park has approximately 90 of its 173 acres in unirrigated native grass some of which are adjacent to open space and other portions are designated as future park development.



Legacy Ridge Golf Course – 2013. Opened in 1994 Legacy Ridge Golf Course was designed to incorporate low use and drought tolerant grasses at the periphery and wetland areas of the course. This not only made an interesting and challenging design but also saved ongoing operating and maintenance costs.

Recommended Areas for Conversion of Bluegrass to Native, Drought Tolerant Grass in Parks

Based on budget constraints and precipitation declines, Staff recommends converting some park areas from bluegrass to native, drought tolerant grasses.

The following portions of park areas are recommended for consideration for conversion. This is based on site location, proximity to residences or locations near existing native grass or open space sites:

1.	Upper England Park	2.1 acres
2.	Kensington Park Triangle	1.2 acres
3.	Oakhurst Park Phase II Detention Pond	5.1 acres
4.	Mayfair Park and Greenbelt	1.7 acres
5.	Countryside Park/Pool/Tennis Courts	4.7 acres
6.	Dover Square	1.6 acres
7.	Windsor Park	0.7 acres
8.	Westminster City Park*	4.2 acres
9.	Meadowlark Park	1.0 acres
10.	Kings Mill Park	2.5 acres
11.	Countryside Greenbelt	4.1 acres
12.	Cotton Creek Park*	3.8 acres
13.	Faversham Park	2.8 acres
14.	Countryside Detention Pond	<u>0.7 acres</u>
	Total	36.2 acres

(* indicates reclaimed water)

It is not feasible nor desirable to convert all 14 parks listed above in 2013. As such, Staff is recommending the following three sites be converted as “pilot areas” to gather more information regarding the effectiveness of the program and the acceptance by the general public:

1. Upper England Park 2.1 acres (Attachment 1) - This park will be impacted by the 72nd Ave and Raleigh Bridge and channel construction scheduled for the Fall of 2013. Staff is recommending a complete renovation of this park to include the conversion to native, drought tolerant grasses and a new playground and surrounding landscape, thereby minimizing potential controversy for this area. This site also has severe south facing slopes which are difficult to water and maintain.

2. Kensington Park (Triangle) 1.2 acres (Attachment 2) – Kensington Park is basically two separate areas divided by a small creek that feeds Ketner Lake Open Space. The larger area has totem poles, open play area, trails and a small amphitheater/fire pit that is used for scout activities. Staff is recommending the triangular portion of this park for conversion as it is under-utilized and currently adjacent to open space.

3. Oakhurst Park Phase II Detention Pond 5.1 acres (Attachment 3) – this site falls under the Tier 3 management criteria. The detention pond shares a property boundary with a senior retirement complex and has generated complaints in the past regarding mowing and maintenance when the water was reduced. Conversion to native, drought tolerant grasses should make this area feel more like open space and attract surrounding wildlife.

Staff estimates that it will cost \$1,850/acre to convert Kentucky bluegrass to native, drought tolerant grasses, which includes labor, chemicals, seed and water to establish the new areas. Because an existing irrigation system is already in place, water expenses to establish the grass would be required for at least three years.

Conversion and Establishment Costs

Conversion to drought tolerant, native grasses	\$ 350 per acre
Irrigation costs to establish grass	\$1,000 per acre
Materials and equipment	<u>\$ 500 per acre</u>
Total Cost	\$1,850 per acre

The first year total conversion costs for the three recommended pilot sites would be \$16,650 (9 acres @ \$1,850/per acre.) To establish native grasses, irrigation costs of \$1,000 per acre would continue for two additional years.

By comparison, the annual maintenance costs of an established native grass areas is \$500 per acre which includes limited irrigation for trees and shrub beds. The annual maintenance cost for an acre of blue grass is \$2,100 per acre. Thus, after three years, conversion from blue grass to native grass results in a net savings of \$1,600 per acre per year.

To convert these parks, Staff will do the following:

- Work with Colorado State University (CSU) and local suppliers to determine the appropriate seed mix that meets established criteria for Westminster;
- Alter the existing irrigation system to ensure adequate moisture to existing trees and shrubs;
- Spray all the selected turf areas with herbicide to kill all the turf grasses;
- Mow Drill the area with recommended native, drought tolerant seed mi; and.
- Use best management practices to ensure a quality stand of native, drought tolerant grasses that will be sustainable in all climate conditions.

Fall seeding is recommended to start in late September after the peak Summer heat and continue through mid-October. This allows enough growing time and moisture for development of an adequate root system for the nurse crop (annual rye grass) to protect the native grass seed. Water will be applied by the irrigation system during the establishment phase.

Project Implementation

At the beginning of September, residents living within 0.5 miles of the impacted parks will be sent a letter explaining the program and the benefits of water conservation as they apply to this program. The Public Information Office will also be consulted regarding alternative methods to reach all areas of the City that may have an interest in this program.

Monitoring and Follow-Up

Staff estimates it will take three years to establish conversion areas to their fullest potential. These areas will be closely monitored for weed control and seed mix success. Over-seeding on a yearly basis and supplementing with swaths of wildflowers will also improve the overall look of the conversion areas. In addition to the status of each area Staff will also track any concerns or comments received from residents and timely status updates to Council will be given on a bi-annual basis.

This program meets the City’s Strategic Plan Goals of “Vibrant Neighborhoods In One Livable Community” and “Beautiful and Environmentally Sensitive City.”

Respectfully submitted,

J. Brent McFall
City Manager

Attachments: #1 Map – Upper England Park
 #2 Map – Kensington Park Triangle
 #3 Map – Oakhurst Park Phase II Detention Pond



Upper England Park

Acres
2.1

Potential park areas to convert to drought tolerant grasses



Kensington Park Triangle

Acres
1.2

Potential park areas to convert to drought tolerant grasses



Oakhurst Park Phase II Detention Pond

Acres
5.1

Potential park areas to convert to drought tolerant grasses



Staff Report

City Council Study Session Meeting
August 19, 2013



SUBJECT: US 36 Managed Lanes Project Land Exchange

PREPARED BY: David W. Loseman, Senior Projects Engineer

Recommended City Council Actions

- 1. Direct staff to proceed with the preparation of an agreement with the Colorado Department of Transportation (CDOT) pertaining to the exchange of certain properties associated with the US 36 Managed Lanes Project.
2. Direct staff to pursue upgrades to the US 36 Managed Lanes Project at a cost of \$815,253.

Summary Statement

- In order to build the US 36 Managed Lanes Project, CDOT needed additional rights-of-way for the widening of the highway. Many of the parcels needed for right-of-way were City-owned open space or other City-owned lands. City staff worked with CDOT officials to identify certain CDOT-owned properties located within Westminster that might comprise a reasonable and fair land exchange, especially with respect to the open space parcels that would be lost for right-of-way purposes.
• City staff and CDOT personnel agreed upon a list of CDOT-owned parcels that could be used in such a trade. An appraisal was performed by a licensed real estate appraiser, who was hired by CDOT and the City, to verify the equitability of the land exchange. The result of the appraisal indicated that the City should receive \$815,253 in addition to the property that the City requested.
• Staff is proposing that the monetary payment from CDOT be used to pay for various enhancements to the US 36 Managed Lanes Project. The following elements comprise the requested authorization of expenditures from the proceeds of this land exchange:

Table with 2 columns: Item description and Amount. Items include Wrought iron fence at the Promenade Underpass, Extra 2-feet of wrought iron fence at the Promenade Underpass crossing, Landscape design within the US36 ROW next to the WURP development, Landscape construction costs, Sheridan Bridge additional enhancements to center pier, Illuminated street name signs at the Sheridan bridge, and LED highway street lights. Total amount is \$815,253.00.

Expenditure Required: \$815,253

Source of Funds Proceeds from CDOT land exchange

Policy Issues

Should the City pursue an agreement with CDOT that obligates the City to transfer ownership of strips of open space property along US 36 that are necessary to construct the US 36 Managed Lane Project and, in exchange, receive from CDOT several desirable parcels throughout the City plus \$815,253?

Should Council authorize the expenditure of the proceeds of this land exchange to further enhance numerous project elements along the US 36 corridor located within the City?

Alternatives

The City entered into a Memorandum of Understanding (MOU) on July 18, 2012 with CDOT relating to this land exchange. The subject of this Staff Report is the approval of an agreement that would formalize this understanding. An alternative to the proposed action would be to not approve this agreement. Staff does not recommend this alternative since CDOT and the City have been negotiating in good faith under the terms of the MOU. Staff believes that the results of these negotiations are very favorable to both parties.

Also, Council could elect to not authorize the expenditure of the proceeds of this land exchange to pay for enhancements to the US 36 Managed Lanes Project. Staff does not recommend this alternative since these expenses are associated with project elements that meet Council's goals of a Safe and Secure Community (LED highway lighting) and a Beautiful and Environmentally Sensitive City (landscape enhancements, wrought iron fences and bridge enhancements).

Background Information

In 1995, the City of Boulder sponsored a study of various transportation related improvements and associated issues along the U.S. 36 corridor between I-25 and Foothills Parkway in Boulder. All governmental entities along this corridor as well as RTD, CDOT, various chambers of commerce and several private interests were invited to participate in this investigation. The City of Westminster was represented at all meetings of this group.

Following this effort, on February 12, 2001, City Council adopted Resolution No. 10 that demonstrated the City of Westminster's support of the findings of a US 36 Major Investment Study. This Regional Transportation District (RTD)-sponsored investigation was necessary in order to qualify the corridor for the receipt of federal funding for the US 36 improvements.

In July 2007, CDOT and its consultants completed the Draft Environmental Impact Statement (DEIS) for the reconstruction of US 36. This study assessed the environmental impact of a "no-build" alternative and two "build" alternatives. This led to the completion of the Final Environmental Impact Statement (EIS) and issuance of a Record of Decision (ROD) in December 2009.

Since then, CDOT has managed the preparation of a design/build Request for Proposals (RFP) along with the input and cooperation of RTD and the local agencies along the US 36 corridor, including the City of Westminster. The proposals submitted by the pre-qualified design/construction teams for this project were reviewed by all of the local agencies, RTD and CDOT, and resulted in the selection of the AMES Construction/ Granite Construction team. This team worked on the design of the project since March 2012. Construction is currently underway with an anticipated completion date of December 31, 2014.

To allow construction to proceed in a timely manner, the City entered into a Memorandum of Understanding (MOU) with CDOT relating to the use of City-owned property along the project limits that was needed for right-of-way. The City agreed to this approach but staff also proposed an exchange of this land for properties that CDOT owns throughout the City. These properties include:

- Parcel 300X, a 12.76 acre parcel at the southwest corner of 120th Avenue and Federal Boulevard;
- Parcel 78XREV, a 5.83 acre parcel between US 36, Observatory Heights Subdivision and 80th Avenue;
- Parcel 56XB, a 2.96 acre parcel between 112th Avenue, US 36 and the City-owned property south of 112th Avenue;
- Parcel 56XA, a 7.63 acre parcel between Wadsworth Boulevard, US 36 and the Lower Church Lake Open Space; and
- Parcel 55REVXA, a 0.29 acre parcel between 112th Avenue and the City-owned property at the southeast corner of 112th Avenue and US 36.

These parcels are shown on the attachments to this Staff Report.

The value of all the CDOT-owned parcels that will be conveyed in fee to the City is \$1,672,254 and the portion of this value that will be conveyed in fee to the City as open space is \$1,027,622 as shown in the table below:

Parcel Number	Area in sq ft	Just Compensation
56XA	332,422 (7.63 acres)(OPEN SPACE)	\$471,663
56XB	129,036 (2.96 acres)	\$370,589
300X	555,959 (12.76 acres)(OPEN SPACE)	\$555,959
55REVXA	12,488 (0.29 acres)	\$19,981
78XREV	254,062 (5.83 acres)	\$254,062
TOTAL OF FUTURE OPEN SPACE PARCELS	888,381 (20.39 acres)	\$1,027,622
TOTAL	1,283,967 (29.5 acres)	\$1,672,254

The value of the existing City-owned open space parcels being conveyed to CDOT for right-of-way is \$812,796 as shown in the tables below:

Fee Simple Parcels

Parcel	Area (sf)	Fair Market Value Per Appraisal	Open Space Value
4C	3,595	\$14,380	\$14,380
4D	812	\$7,511	\$7,511
4E	9,440	\$37,760	\$37,760
4F	1,394	\$5,576	\$5,576
4G	1,805	\$7,220	\$7,220
4H	18,355	\$73,420	\$73,420
4I (1/4 O.S.)	41,085	\$205,425	\$51,356
4J	2,995	\$6,739	\$6,739
4K	6,518	\$94,511	\$94,511
Subtotal	311,572(7.2 ac)	\$1,844,781	\$298,473

Easements (City retains ownership)

Parcel	Area (sf)	Fair Market Value Per Appraisal	Open Space Value
PE-4	12,320	\$16,170	\$16,170
PE-4A	92,293	\$295,338	\$295,338
PE-4B	36,336	\$145,344	\$145,344
PE-4G	3,765	\$5,506	\$5,506
SE-4	11,919	\$16,091	\$16,091
SE-4A	1,999	\$2,699	\$2,699
SE-4B	24,574	\$33,175	\$33,175
Subtotal	222,579	\$620,607	\$514,323
Total	534,151	\$2,465,388	\$812,796

As shown above, the value of the land that CDOT is exchanging with the City is more than that of the open space property that the City is giving up in this land exchange. Furthermore, the City is trading fee simple ownership of 7.2 acres of existing open space land in exchange for 20.39 acres of CDOT land which will become open space, or a net increase of 13.19 acres. Therefore, it is staff's opinion that there would be no adverse impacts to the overall open space program in the City.

In 2012, the City and CDOT hired Kevin Shea, Member Appraisal Institute (MAI), to perform an appraisal of all of the properties involved in the land exchange to assure that the agreement is equitable to both parties. The results of the appraisals indicate a value for all of the CDOT parcels to be \$1,672,254 and a value for all of the City-owned parcels to be \$2,487,507. The difference of \$815,253 is the amount that CDOT will pay the City to make this land exchange equitable. Staff believes that the negotiations have resulted in a fair and balanced land exchange and recommend that Council approve this agreement.

Over the course of the design effort for the U.S. 36 Express Lanes Project, Staff has advocated and negotiated for certain elements or "betterments" to the project. These enhancements include landscaping improvements in highway right-of-way on U.S. 36 adjacent to the WURP site, LED lighting along the mainline of the highway and at interchanges, aesthetic enhancements at the Promenade underpass bike trail and bridge underpass and additional aesthetic enhancements to the Sheridan Boulevard bridge. Based on the overall project timing, negotiated costs and benefits to be received by these betterments, staff recommends use of the land swap funds for these purposes. Benefits include improved aesthetics in critical redevelopment areas and significant energy and cost savings with LED lights (estimated at \$44,000 per year in operating savings).

Staff is proposing to utilize a significant portion of the CDOT land exchange funds to install LED highway/street lights along the U.S. 36 medians and interchanges located within Westminster. The base U.S. 36 Managed Lanes project included the addition of highway/street lighting throughout the Westminster and Broomfield sections of the project to bring the highway up to urban standards. Specifically for Westminster, this includes the addition of 124 median lights and 79 interchange lights, along with associated infrastructure. The specifications for the lighting were for traditional, high pressure sodium lights, and those are the lights that CDOT and its contractor (Ames/Granite) were planning to install.

Per Colorado Revised Statute 43-2-135(e), municipalities are responsible for energy and maintenance costs associated with highway/street lighting on state highways located within jurisdictional boundaries. In accordance with an opinion from the Attorney General's Office in 2006, this includes interstates or U.S. highways like U.S. 36. As City Council is aware from the City's recent Street Lighting Study, LED lights offer significant advantages over traditional high pressure sodium lights, including reduced energy

consumption and associated lower energy costs, along with improved aesthetic appearance and an ability to better direct light footprints.

With the results of the recent study in mind, staff spent several months negotiating with Ames/Granite to upgrade the lighting installation to LEDs. Staff believes those efforts have been successful in attaining a reasonable cost for this betterment. Staff is proposing to utilize \$310,017 in the CDOT land exchange funds to upgrade the lights to LEDs and install associated infrastructure. Based on Xcel Energy's current pricing schedule for street light rates, the City of Westminster will achieve a \$44,000 annual cost savings with LED lights as compared to high pressure sodium lights due to lower energy consumption. This represents a 14% return on the initial capital investment, or to look at it another way, the energy cost savings will pay back the capital cost in roughly seven years. In addition to cost savings, the LED lights will give the highway a better appearance throughout Westminster and will allow for improved safety as well.

Staff will be present at Monday evening's Study Session to provide additional details on this agreement and to answer City Council's questions. City Council action on this item addresses three Strategic Plan Goals; Financially Sustainable City Government Providing Exceptional Services, Safe and Secure Community and Beautiful and Environmentally Sensitive City.

Respectfully submitted,

J. Brent McFall
City Manager

Attachments
- Proposed CDOT Land Conveyances

JACOBS

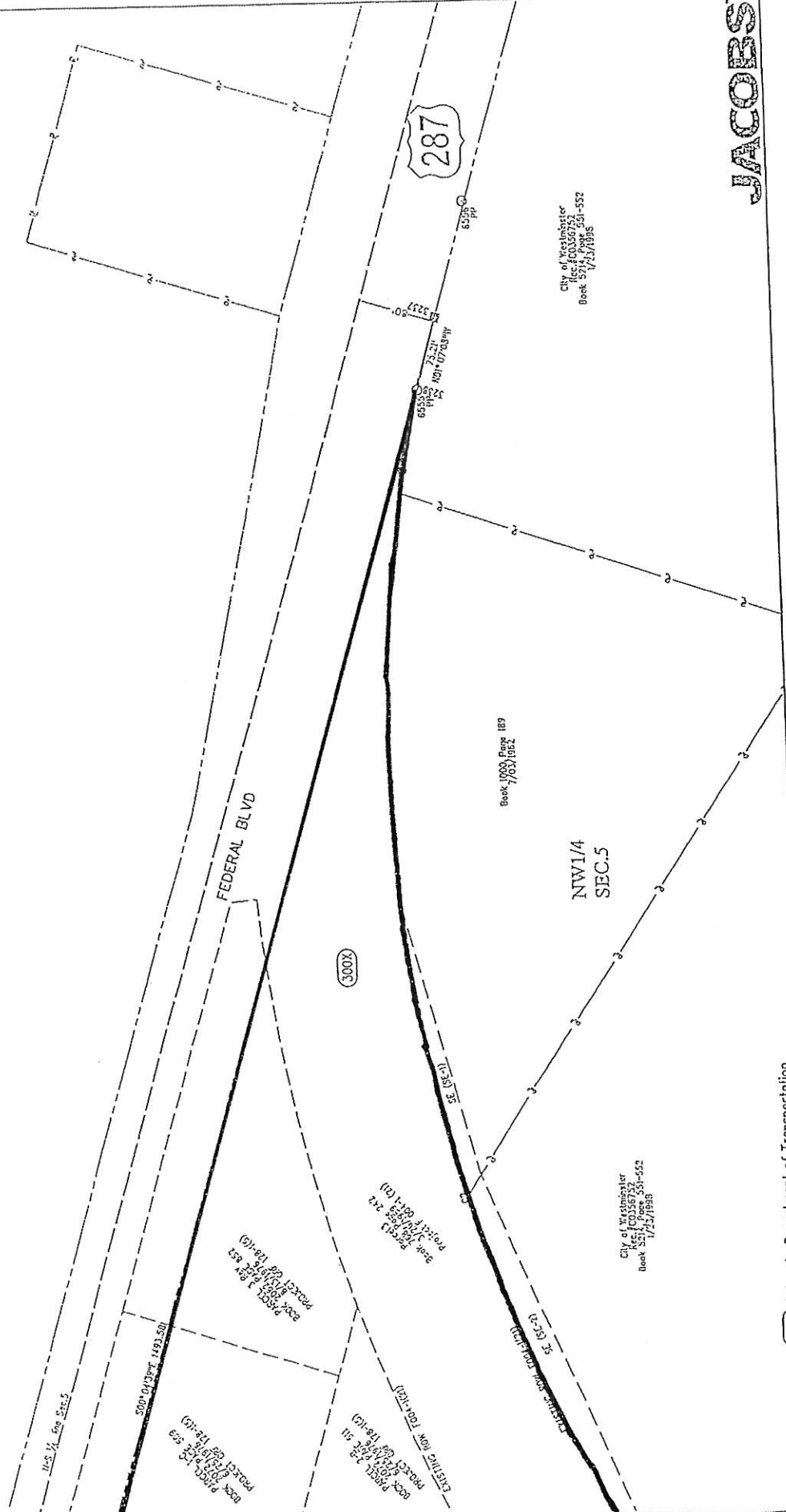
Colorado Department of Transportation
 2000 South Holly
 Denver, CO 80222
 Phone: 303-757-5923 FAX: 303-757-9390
 SLK
 Region 6

Sheet Revisions		Sheet Revisions		Sheet Revisions	
Date	Description	Date	Description	Date	Description
01/27/05	Initial	01/27/05	Initial	01/27/05	Initial
02/01/05	Revised	02/01/05	Revised	02/01/05	Revised

Right of Way Plans
 Plan Sheet
 Project Number: NE 0381-083, Segment C
 Project Location: US36, Woodworth Pkwy to W. 104th Ave
 Section 33S, T1S, R68W, Sects. 2, 3, 11, 12, 12S, R69W/6th PM
 Twp. 33S, R. 68W, S. 11N, 12N
 Date: 01-27-05
 Scale: 1" = 100'

T.2S., R.68W., 6th P.M.
 NE1/4
 SEC.5

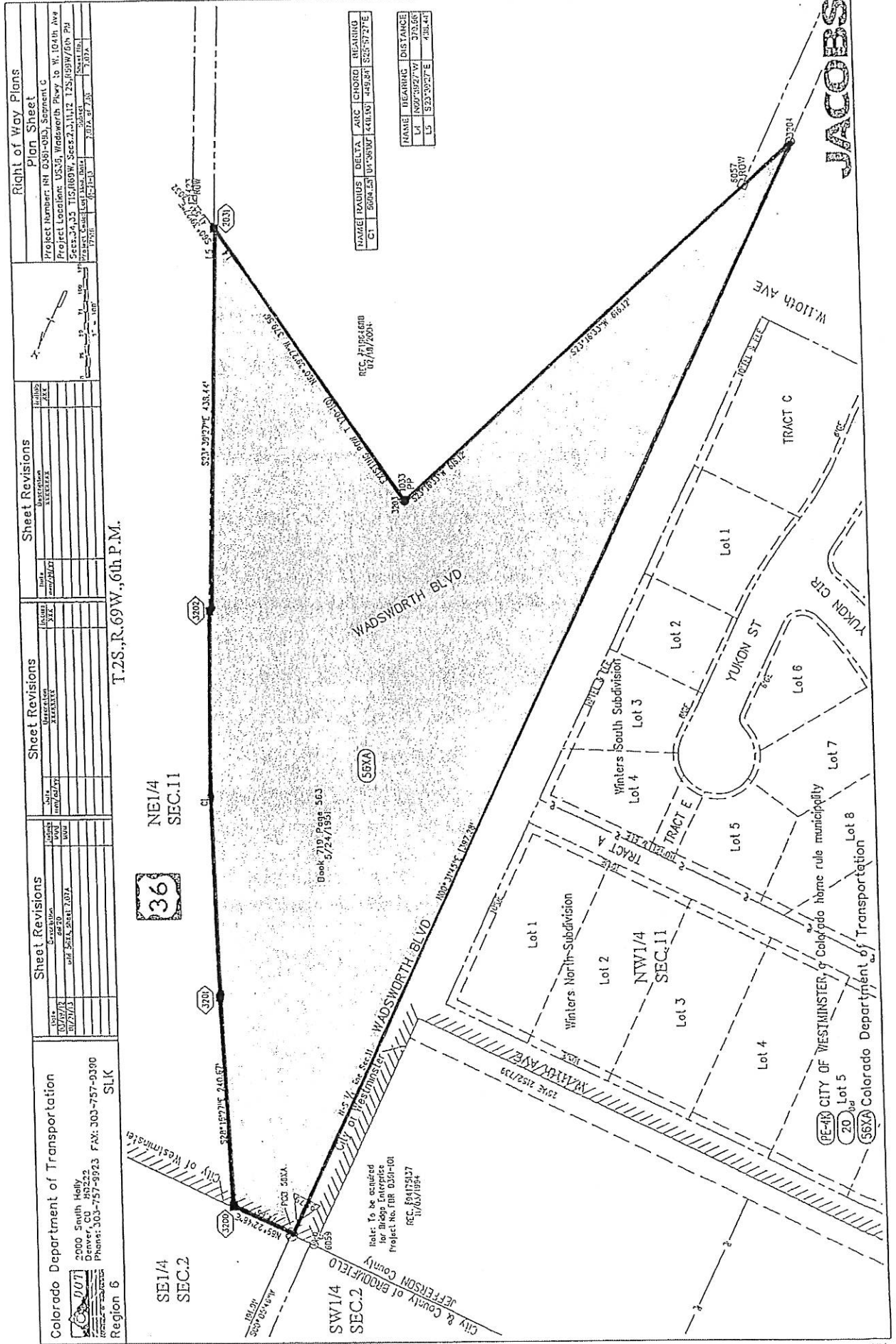
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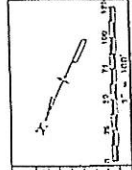
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 1/23/1995

Book: 1003, Page: 189
 7/20/1982

CITY of Westminster
 File: EC0356752
 Book: 571, Page: 551-552
 1/23/1995



Right of Way Plans
Plan Sheet
 Project Number: IN 0361-003, Segment C
 Project Location: US-36, Wadsworth Pkwy. to W. 104th Ave
 Sess. 3A, 35 T16, R69W, Sess. 2, 2, 11, 12 T2S, R69W, 6th PM
 Project Name: US-36
 Date: 04-12-10
 Scale: 1" = 100'



Sheet Revisions

NO.	DATE	DESCRIPTION

Sheet Revisions

NO.	DATE	DESCRIPTION

Sheet Revisions

NO.	DATE	DESCRIPTION

Colorado Department of Transportation
 2000 South Holly
 Denver, CO 80222
 Phone: 303-757-9923 FAX: 303-757-9390
 SLK

T.2S., R.69W., 6th P.M.

36

NE1/4
SEC.11

SW1/4
SEC.2

TABLE

NAME	RADIUS	DELTA	ARC CHORD	BEARING
CL	5000.00'	187.9630°	4481.80'	495.84°

TABLE

NAME	BEARING	DISTANCE
CL	187.9630°	5000.00'
LS	152.37027°E	438.41'

Book 719 Page 563
5/24/1931

56XA

JACOBS

CITY OF WESTMINSTER, Colorado home rule municipality
 Lot 5
 56XA Colorado Department of Transportation

Plans To be acquired
 for Bridge Enterprise
 Project No. BR 0301-101
 REC. 09/17/04
 11/03/1934

JACOBS

Right of Way Plans
Plan Sheet

Project Number: NEI 0361-093, Segment C
Project Location: US26, Wadsworth Pkwy to W. 102nd Ave
Sect. 34, 35 T1S, R69W, Sec. 2, 3, 11, 12 T2S, R69W/0th P41

DATE	BY	REVISION
12/16/10	01-71-13	1.00
01-27-13		2.00

DATE	BY	REVISION
01/24/13		3.00
01/24/13		4.00

DATE	BY	REVISION
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01/24/13		6.00

DATE	BY	REVISION
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01/24/13		8.00

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DATE	BY	REVISION
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01/24/13		14.00

DATE	BY	REVISION
01/24/13		15.00
01/24/13		16.00

DATE	BY	REVISION
01/24/13		17.00
01/24/13		18.00

NAME	RADIUS	CHORD	BEARING	DISTANCE
C1	5855.50'	167.303M'	270.00°	402.91'
C2	5855.50'	167.303M'	270.00°	402.91'

NAME	RADIUS	CHORD	BEARING	DISTANCE
C1	5855.50'	167.303M'	270.00°	402.91'
C2	5855.50'	167.303M'	270.00°	402.91'

NAME	RADIUS	CHORD	BEARING	DISTANCE
C1	5855.50'	167.303M'	270.00°	402.91'
C2	5855.50'	167.303M'	270.00°	402.91'

NAME	RADIUS	CHORD	BEARING	DISTANCE
C1	5855.50'	167.303M'	270.00°	402.91'
C2	5855.50'	167.303M'	270.00°	402.91'

Colorado Department of Transportation
2000 South Holly
Denver, CO 80225
Phone: 303-757-9923 FAX: 303-757-4390
SLIK

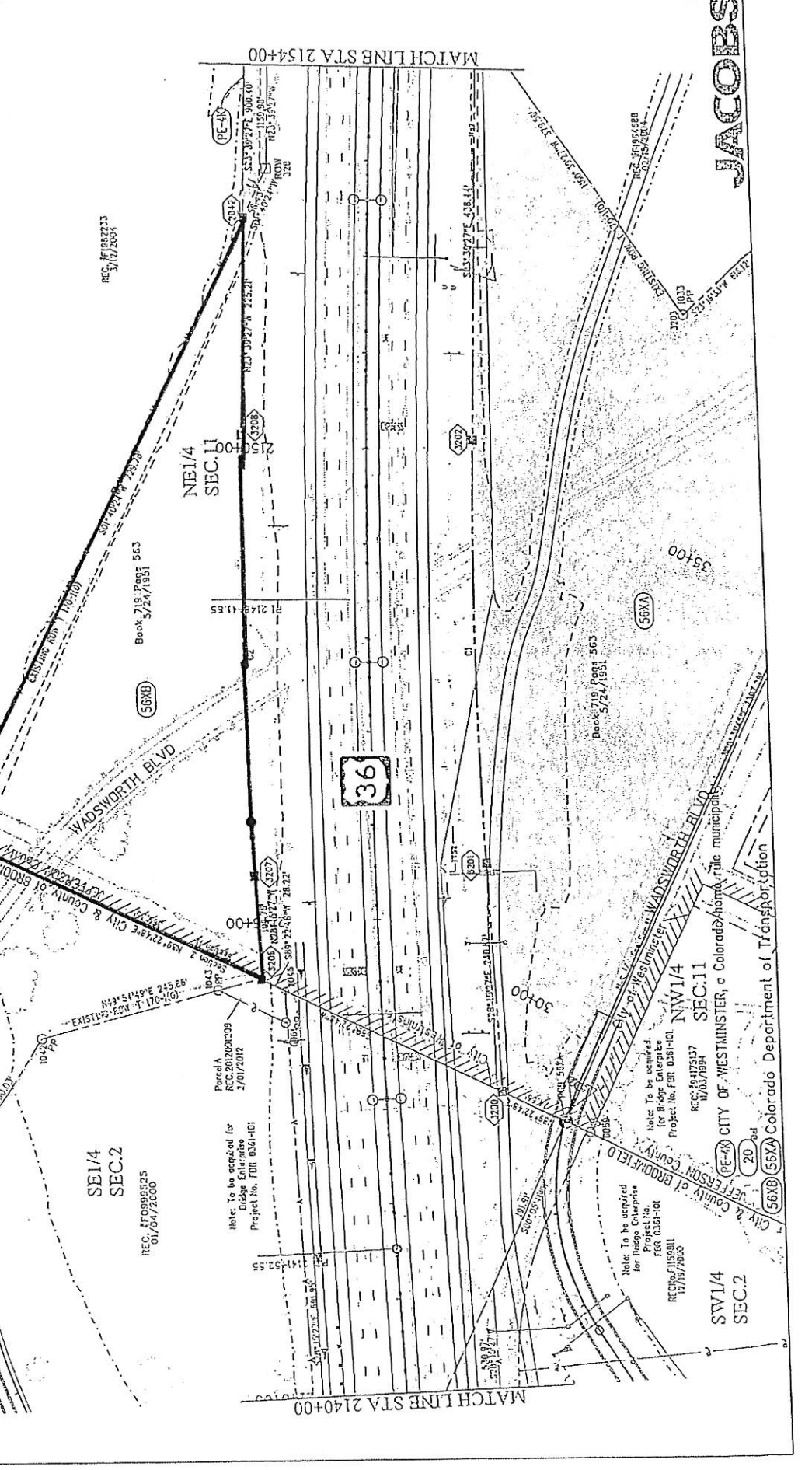
T.2S., R.69W., 6th P.M.

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01/24/2000

REC: F09095325
01/24/2000

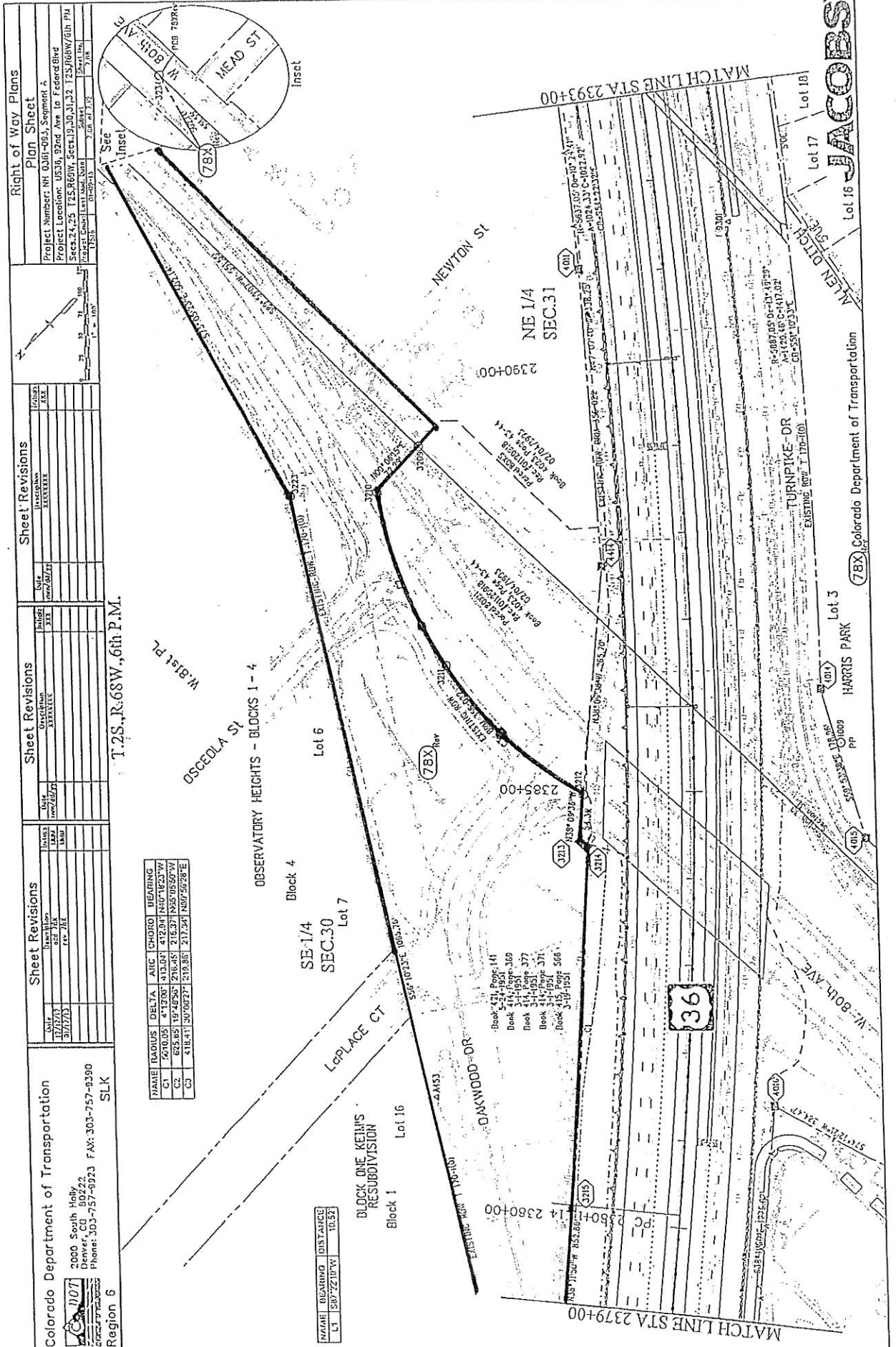


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REC: F09095325
01/24/2000

REC: F09095325
01/24/2000



Colorado Department of Transportation
 2000 South Holly
 Denver, CO 80222
 Phone: 303-757-9323 FAX: 303-757-9390
 Region 5
 SLK

NAME	RADIUS	DELTA	ANG	CHORD	BEARING
G1	5070.05	47.1707	413.04	472.04	N60°18'23"W
C2	625.85	19.4858	216.45	216.37	N85°05'59"W
C3	418.41	20°00'27"	218.86	217.34	S89°56'28"E

NAME	BEARING	DISTANCE
L1	S89°22'07"W	10.31

Right of Way Plans
 Plan Sheet
 Project Number: NH 0317-993, Segment 5
 Project Location: US30, 92nd Ave to Federal Blvd
 Secs. 24, 25 T2S-R6SW, Sects. 10, 31, 32 T2S-R6SW/6th 7th
 Project Owner: City and County of Denver
 Project Date: 10/20/03
 Scale: 1" = 100'

Sheet Revisions

DATE	BY	REVISION
10/20/03	SLK	ISSUE FOR PERMITS
10/20/03	SLK	ISSUE FOR PERMITS

Sheet Revisions

DATE	BY	REVISION
10/20/03	SLK	ISSUE FOR PERMITS
10/20/03	SLK	ISSUE FOR PERMITS

T.2S., R.6SW, 6th P.M.

JACOBS

Colorado Department of Transportation

HARRIS PARK

TURNPIKE-DR

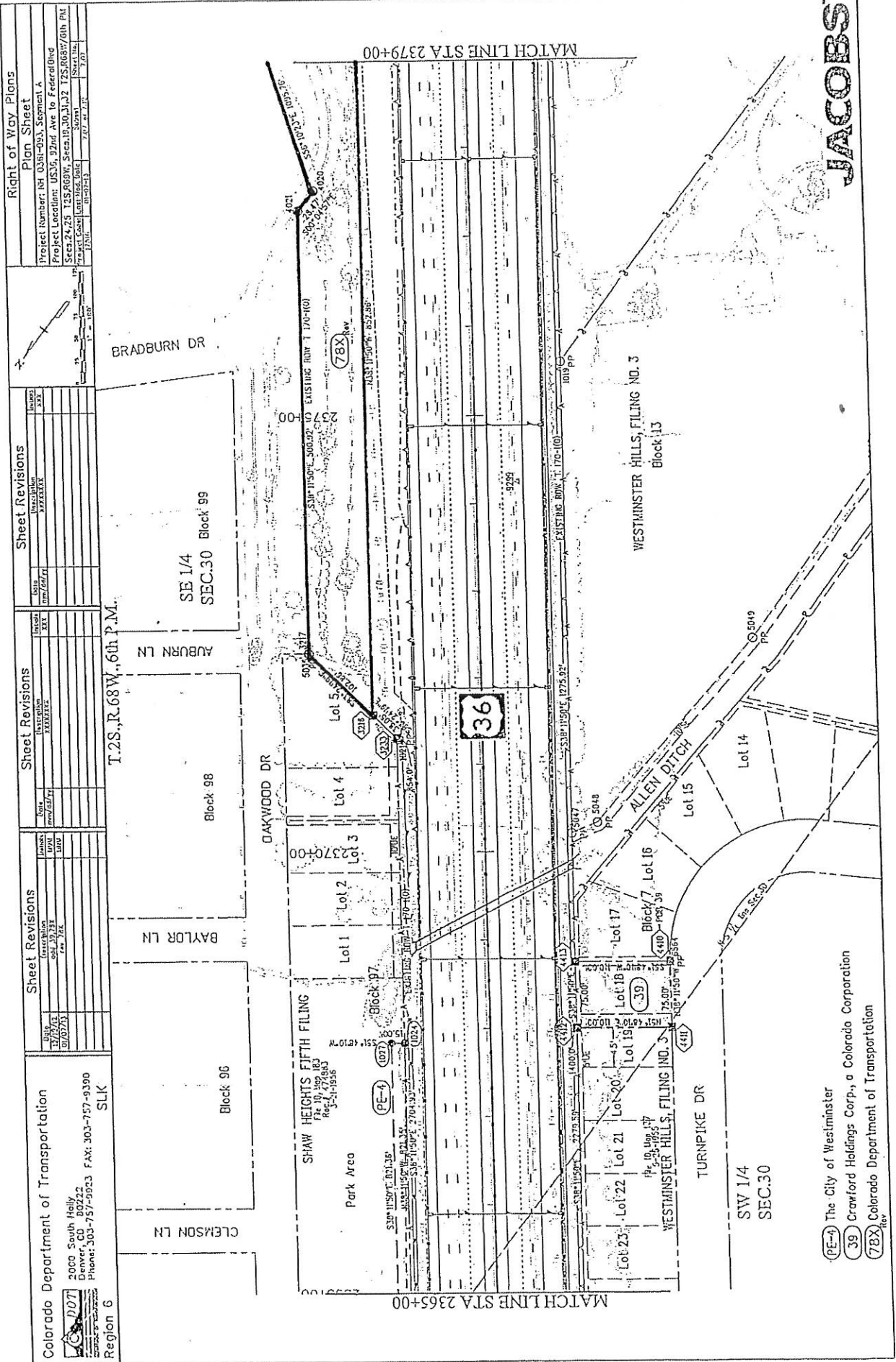
NE 1/4 SEC. 31

W. 80th Ave

W. 81st Pl

W. 82nd Ave

W. 83rd Ave



Right of Way Plans
Plan Sheet

Project Number: NH 0381-093, Segment A
Project Location: US 16, 87th Ave. to Federal One
Sheet: 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Sheet Revisions

NO.	DATE	BY	DESCRIPTION

Sheet Revisions

NO.	DATE	BY	DESCRIPTION

Sheet Revisions

NO.	DATE	BY	DESCRIPTION

Colorado Department of Transportation
2009 South Helly
Denver, CO 80222
Phone: 303-757-9923 FAX: 303-757-9190
SLIK

T.2S., R.68W., 6th P.M.
Block 96
Block 98
Block 99
SE 1/4
SEC.30

Block 97
Block 98
Block 99

Block 96
Block 98
Block 99

SHAW HEIGHTS FIFTH FILING
Park Area
CLEMSON LN
BAYLDR LN
AUBURN LN
BRADBURN DR
OAKWOOD DR
TURNPIKE DR
ALLEN DITCH
WESTMINSTER HILLS, FILING NO. 3
Block 13
SW 1/4
SEC.30
MATCH LINE STA 2365+00
MATCH LINE STA 2379+00



Staff Report

Information Only Staff Report
August 19, 2013



SUBJECT: Radio System Capital Improvement Project

PREPARED BY: Lee Birk, Chief of Police
Russ Bowers, Communications Administrator

Summary Statement

This is an information only Staff Report and no action is required by City Council. Staff wishes to brief City Council on the progress and status of the project to replace the City's radio system.

- The project is currently on schedule. Progress is being made on the radio transmission sites and the evaluation and selection of mobile and portable radios. Communications staff will be in Dallas, Texas the last week of August for a Factory Acceptance Test (FAT) to ensure that the equipment is operating in accordance with specifications prior to going live. The projected live testing is scheduled to begin in October of this year and the anticipated full operational date is mid-November 2013.
- The original proposal by the radio vendor envisioned a two radio transmission site model. However, as work progressed, it became apparent that to meet expected radio coverage needs and expectations a third site was needed. The vendor has absorbed the costs for the third site and the three sites are the Public Safety Center and Fire Stations 1 and 6. The Public Safety Center site is complete and work is underway at both Fire Station sites.
- City staff has been reviewing and analyzing the current radio inventory and needs, and evaluating and testing the proposed new P25 compatible radios. Staff is scheduled for the August 26, 2013 City Council meeting to obtain City Council direction and authorization on purchase of the new mobile (vehicle mounted) and portable (hand-held) radios. More information and detail will be provided at that time, however, staff will be recommending a total radio reduction of more than 100 radios citywide.
- Discussions and negotiations with the City of Arvada over dissolution of our current radio partnership are on-going, and positive and collaborative in nature. Both parties are committed to ensuring that both cities move forward without any interruptions in service or adverse impacts on either jurisdiction. The existing radio site at Eldorado Mountain will no longer be needed with the new system. Therefore, the City of Westminster has been removed from the Eldorado Radio Site Lease, effective January 1, 2014, pending the City of Arvada's City Council formal approval.

Background Information

The radio communication equipment currently being utilized by the City is 21 years old. The system serves both emergency and non-emergency radio users to include Police, Fire, EMS, Public Works and Utilities, Community Development, and Parks, Recreation and Libraries. The current radio system was manufacturer discontinued in 2010, which means that there is very limited technical support and a marked scarcity of parts. The original design of this aging system is essentially a one of a kind hybrid, making it a custom system. This has resulted in challenging and expensive service issues. Additional shortcomings of the existing system are insufficient radio coverage in certain areas of the City, as well as potential single points of failure.

In 2011, a capital improvement project was established to replace the aging radio system with a P25 Digital Interoperable Simulcast Radio System. This project will update the radio technology and will allow for enhanced safety for the community, interoperability with surrounding agencies, as well as reliable and dependable service and communications. In January 2013, Council authorized staff to pursue the purchase and installation of the Cassidian P25 digital inoperable simulcast radio system and related subscriber equipment to support the Citywide Radio System Replacement Project in the amount of \$2,383,975.

In 2012, Council authorized staff to pursue the Assistance to Firefighters Grant (AFG) and the Department of Homeland Security Regional Grant (DHS), to assist in funding of the radio project. In January 2013, the City was notified of receipt of an AFG grant award of \$144,604. In March 2013, the City was notified of receipt of a DHS grant award of \$276,500 for a total of \$421,104 for both grants. The City's total combined match funding for both grants is \$109,650 (\$36,150 for AFG and \$73,500 for DHS) and the funds are available in the Citywide Radio System Capital Improvement Project.

The new radio system will address two of City Council's Strategic Plan goals: Financial Sustainable City Government Providing Exceptional Services and Safe and Secure Community.

Respectfully submitted,

J. Brent McFall
City Manager