



TO: Members of Council
FROM: Dianne Marshall, City Clerk's Office
DATE: December 17, 2013
SUBJECT: Information Packet

1. Call Ups

- A. Vacation of a 4,122 square foot water main easement located along the southern border of the property at 4474 Broadway (ADR2013-00209)
- B. Vacation of a 1,230 square foot portion of an existing seven-foot utility easement that bisects the property at 1560 Cress Court (ADR2013-00216)

2. Information Item

- A. Boulder's Energy Future Budget Update
- B. E-911 Fee Increase
- C. Hydroelectric Program Update

3. Boards and Commissions

- A. Parks and Recreation Board – August 8, 2013
- B. Parks and Recreation Board – September 23, 2013
- C. Parks and Recreation Board – October 28, 2013

4. Declarations

None



**INFORMATION PACKET
MEMORANDUM**

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director of Community Planning & Sustainability
Charles Ferro, Development Review Manager
Sloane Walbert, Planner I

Date: December 10, 2013

Subject: Call-Up Item: Vacation of a 4,122 square foot water main easement located along the southern border of the property at 4474 Broadway (ADR2013-00209).

EXECUTIVE SUMMARY:

The applicant requests vacation of an existing water main easement located along the southern border of the property at 4474 Broadway (refer to **Attachment D** for exact location). The easement was dedicated to the City of Boulder as a Grant of Easement, recorded May 22, 1986, for the “installation, construction, repair, maintenance and reconstruction of a water main and appurtenances thereto.” Since that time a multi-family residential development has been approved on the property and the water line previously located in the easement has been relocated to the public right-of-way on Violet Avenue.

The proposed vacation was approved by staff on November 22, 2013. There is one scheduled City Council meeting on December 17 within the 30 day call-up period.

CODE REQUIREMENTS:

Pursuant to the procedures for easement vacations set forth in subsection 8-6-10(b), B.R.C. 1981, the city manager has approved the vacation of a 4,122 square foot water main easement. The date of final staff approval of the easement vacation was November 22, 2013 (refer to **Attachment E, Notice of Disposition**). This vacation does not require approval through ordinance based on the following criteria:

- It has never been open to the public; and
- It has never carried regular vehicular or pedestrian traffic.

The vacation will be effective 30 days later on December 23, 2013 unless the approval is called up by City Council.

FISCAL IMPACTS:

None identified.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS:

- Economic: None identified.

- Environmental: None identified.

- Social: None identified.

BACKGROUND:

The subject property is located at the northeast corner of Broadway and Violet Avenue, in a Mixed Use 2 (MU-2) zone district (refer to **Attachment A**, *Vicinity Map*). A multi-family residential development was approved in late 2010. The Violet Crossing development will consist of 98 residential units in a total of 10 buildings. The property is encumbered by an approximately five-foot water main easement that runs along the southern border of the property (please refer to **Attachment B**, *Site Plan*). The subject easement was dedicated to accommodate a water main in 1986. However, four of the planned structures for Violet Crossing encroach into the easement. The water main previously located in the easement has been relocated into the public right-of-way on Violet Avenue. In addition, a new utility easement will be dedicated to accommodate dry utilities on the southern edge of the property. The housing development is under construction and there are currently no encroachments into the subject easement. Given that there is no public need for the easement for which it was intended, failure to vacate the requested portion of easement would cause hardship to the property owner by limiting the development potential of the property.

ANALYSIS:

Staff finds the proposed vacation of the 4,122 square foot water main easement consistent with the standard set forth in subsection (b) of section 8-6-10, “*Vacation of Public Easements*”, B.R.C. 1981. All agencies having an interest in the easement have indicated that no need exists, at present or in the future, for that portion of the easement to be vacated. Staff has determined that no public need exists for the portion of easement to be vacated due to the fact that a separate easement has been dedicated for public utilities on the property.

No vacation of a public easement shall be approved unless the approving agency finds that:

- ✓ 1. Change is not contrary to the public interest.
- ✓ 2. All agencies having a conceivable interest have indicated that no need exists, either in the present or conceivable future, for its original purpose or other public purpose.
- ✓ 3. Consistent with the Comprehensive Plan and Land Use Regulations.

- ✓ a. Failure to vacate the easement would cause a substantial hardship to the use of the property consistent with the Comprehensive Plan and Land Use Regulations; or
- The easement was dedicated in 1986 to accommodate the extension of a water main on the subject property (Rec. no. 760982). Since this time a multi-family development has been approved for the property and the water main has been relocated into public right-of-way. There is no public need for the easement to be vacated.*
- N/A b. Would provide a greater public benefit than retaining the property in its present status.

PUBLIC COMMENT AND PROCESS:

Notice of the vacation will be advertised in the Daily Camera within the 30 day call up period. Staff has received no written or verbal comments adverse to the vacation.

NEXT STEPS:

If the requested vacation is not called up by City Council then the Deed of Vacation (**Attachment C**) will be recorded. If the requested vacation is called up, and subsequently denied, the applicant will be limited to development on the property outside of the easement area.

ATTACHMENTS:

- Attachment A: Vicinity Map
Attachment B: Site Plan
Attachment C: Deed of Vacation
Attachment D: Exhibit A
Attachment E: Notice of Disposition





For Administrative Purposes Only
Address: 4474 Broadway
Case No. ADR2013-00209

DEED OF VACATION

The City of Boulder, Colorado, does hereby vacate and release to the present owner of the land, in a manner prescribed by Section 8-6-10(b), B.R.C. 1981, a water main easement previously dedicated to the City of Boulder and recorded in the records of the Boulder County Clerk and Recorder at Film 1409, Reception No. 760982 on the 22nd day of May, 1986, located at 4474 Broadway and as more particularly described as follows:

See Exhibit A attached hereto and incorporated herein by reference.

The above easement vacation and release of said easement at 4474 Broadway shall extend only to the portion and the type of easements specifically vacated. The within vacation is not to be construed as vacating any rights-of-way, easements or cross-easements lying within the description of the vacated portion of the easement.

Executed this _____ day of _____, 20__, by the City Manager after having received authorization from the City Council of the City of Boulder, Colorado.

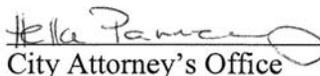
CITY OF BOULDER, COLORADO

By: _____
Jane S. Brautigam,
City Manager

Attest:

City Clerk

Approved as to form:



City Attorney's Office

12-2-2013
Date



EXHIBIT A

SHEET 1 OF 2

Engineers/Surveyors

DREXEL, BARRELL & CO.

NOVEMBER 20, 2013

Boulder
Colorado Springs
Steamboat Springs
Grand Junction

LEGAL DESCRIPTION

1800 38th Street
Boulder, CO 80301-2620
303.442.4338
303.442.4373 Fax

A PORTION OF THAT TRACT OF LAND DESCRIBED ON FILM 1409 AS RECEPTION NO. 760982 WITHIN LOT 1, VIOLET CROSSING SUBDIVISION, ACCORDING THE PLAT THEREOF RECORDED APRIL 24, 2013 UNDER RECEPTION NO. 3307020, LOCATED IN THE NW1/4 OF THE NW1/4 OF SECTION 18, T1N, R70W OF THE 6TH P.M., CITY OF BOULDER, COUNTY OF BOULDER, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 1, THENCE N00°09'00"W, 15.00 FEET ALONG THE WESTERLY LINE OF SAID LOT 1;

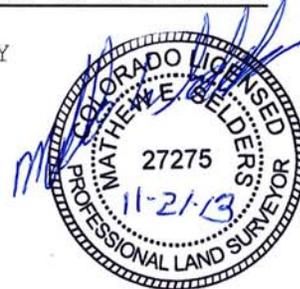
THENCE N89°34'26"E, 275.54 FEET TO A POINT ON THE WESTERLY LINE OF AN EXISTING UTILITY EASEMENT PER THE PLAT OF VIOLET CROSSING SUBDIVISION;

THENCE S05°11'50"W, 15.07 FEET ALONG SAID WESTERLY LINE OF AN EXISTING UTILITY EASEMENT TO A POINT ON THE SOUTHERLY LINE OF SAID LOT 1;

THENCE S89°34'26"W, 274.14 FEET ALONG SAID SOUTHERLY LINE OF LOT 1 TO THE TRUE POINT OF BEGINNING.

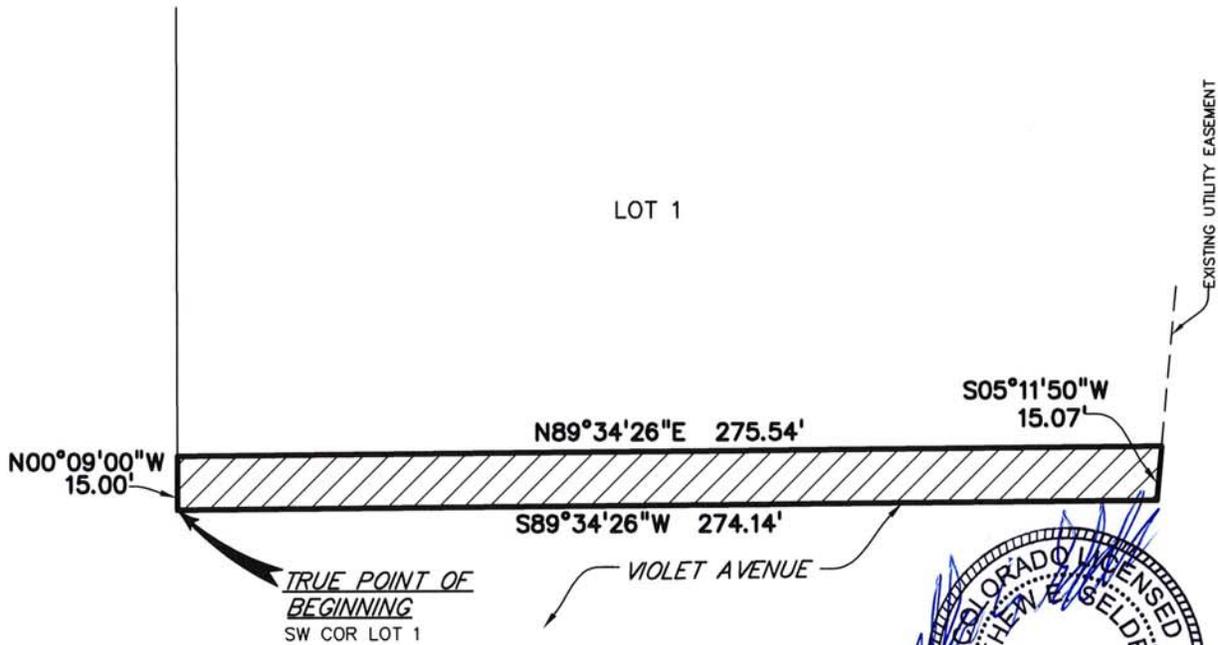
LEGAL DESCRIPTION PREPARED BY

MATHEW E. SELDERS
COLORADO LICENSE NO. 27275
1800 38TH STREET
BOULDER, CO 80301
303-442-4338



S:\S0419-8\Documents\Legals\Vacated Water Easement.doc

EXHIBIT A
SHEET 2 OF 2



PORTION OF WATER
EASEMENT TO BE VACATED
AREA = 4122 SQ. FT.



SCALE 1" = 50'

NOTE

THIS MAP IS NOT A LAND SURVEY PLAT OR AN IMPROVEMENT SURVEY PLAT. THE PURPOSE OF THIS MAP IS TO GRAPHICALLY SHOW THE LOCATION OF THE TRACT OF LAND DESCRIBED IN THE ACCOMPANYING LEGAL DESCRIPTION.

EXHIBIT MAP OF A PORTION OF THAT TRACT OF LAND DESCRIBED ON FILM 1409 AS RECEPTION NO. 760982 WITHIN LOT 1, VIOLET CROSSING SUBDIVISION, LOCATED IN THE NW1/4 OF THE NW1/4 OF SECTION 18, T1N, R70W OF THE 6TH P.M., CITY OF BOULDER, COUNTY OF BOULDER, STATE OF COLORADO.



IN ACCORDANCE WITH CRS 13-80-105;
NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

Drexel, Barrell & Co. Engineers/Surveyors
1800 38TH STREET BOULDER, COLORADO 80301 (303) 442-4338
COLORADO SPRINGS, COLORADO (719) 260-0887
GRAND JUNCTION, COLORADO (970) 257-1350
STEAMBOAT SPRINGS, COLORADO (970) 879-1523



Revisions - Date	Date	Drawn By	Job No.
	11-20-13	SDS	S0419-8
	Scale	Checked By	Drawing No.
	1" = 50'	MES	IN FOLDER

S:\50419-8\Drawings\Exhibits\04198ex12.dwg, 11/20/2013 1:27:38 PM



CITY OF BOULDER
Community Planning and Sustainability

1739 Broadway, Third Floor • P.O. Box 791, Boulder, CO 80306-0791
phone 303-441-1880 • fax 303-441-3241 • web www.bouldercolorado.gov

ADMINISTRATIVE REVIEW
NOTICE OF DISPOSITION

You are hereby advised that the following action was taken by the Planning Department:

DECISION: Approved
DATE: November 22, 2013
REQUEST TYPE: Vacation/Easement
ADDRESS: 4474 Broadway
APPLICANT: North Broadway Center LLC
CASE #: ADR2013-00209
LEGAL DESCRIPTION: Lot 1, Violet Crossing Subdivision, City of Boulder, County of Boulder, Colorado

DESCRIPTION: EASEMENT VACATION to vacate a 4,122 square foot water main easement located along the south property line at 4474 Broadway.

FINAL DECISION STANDARDS:

Approved as submitted. This application is approved per the criteria for Vacation of Public Easements as set forth in section 8-6-10, B.R.C. 1981. This approval does not constitute building permit approval.

This approval is limited to the vacation of a 4,122 square foot water main easement, previously dedicated to the City of Boulder and recorded in the records of the Boulder County Clerk and Recorder on Film 1409 at Reception No. 760982 on May 22, 1986.

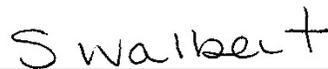
No public need exists for the easement to be vacated because the water main previously located in the easement has been relocated within the public right-of-way on Violet Avenue. The relocation of the water main was done in association with an approved site review for the Violet Crossing multi-family residential development.

INFORMATIONAL COMMENTS:

Pursuant to section 8-6-10(b), B.R.C. 1981, approval of an easement vacation "is not effective until thirty days after the date of its approval. Promptly after approving the vacation, the manager will forward to the city council a written report, including a legal description of vacated portion of the easement and the reasons for approval. The manager will publish notice of the proposed vacation once in a newspaper of general circulation in the City within thirty days after the vacation is approved. Upon receiving such report and at any time before the effective date of the vacation, the council may rescind the manager's approval and call up the vacation request for its consideration at a public hearing, which constitutes a revocation of the vacation."

This decision is final and may not be appealed. A new request may be considered only as a new application.

Approved By:



Sloane Walbert, Planning



INFORMATION PACKET MEMORANDUM

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director of Community Planning & Sustainability
Charles Ferro, Development Review Manager
Sloane Walbert, Planner I

Date: December 10, 2013

Subject: Call-Up Item: Vacation of a 1,230 square foot portion of an existing seven-foot utility easement that bisects the property at 1560 Cress Court (ADR2013-00216).

EXECUTIVE SUMMARY:

The applicant requests vacation of a 1,230 square foot portion of an existing seven-foot utility easement at 1560 Cress Court (refer to **Attachment D** for exact location) to accommodate a future addition to the existing home located on the property. The easement was originally dedicated on the original Warne Subdivision plat, recorded May 20, 1964. It appears the easement was reserved for future utility connections along the boundaries of the subdivision. However, there is no public need for the portion of utility easement to be vacated because all public utilities have been placed in public right-of-way on Cress Court and in the remaining portion of easement. The vacation will maintain a fourteen-foot utility easement straddling the property's north property line.

The proposed vacation was approved by staff on December 2, 2013. There is one scheduled City Council meeting on December 17 within the 30 day call-up period.

CODE REQUIREMENTS:

Pursuant to the procedures for easement vacations set forth in subsection 8-6-10(b), B.R.C. 1981, the city manager has approved the vacation of a 1,230 square foot portion of an existing seven-foot utility easement. The date of final staff approval of the easement vacation was December 2, 2013 (refer to **Attachment E, Notice of Disposition**). This vacation does not require approval through ordinance based on the following criteria:

- It has never been open to the public; and
- It has never carried regular vehicular or pedestrian traffic.

The vacation will be effective 30 days later on January 2, 2014 unless the approval is called up by City Council.

FISCAL IMPACTS:

None identified.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS:

- Economic: None identified.
- Environmental: None identified.
- Social: None identified.

BACKGROUND:

The subject property is a large 21,512 square foot lot located in the Residential - Estate (RE) zone district (refer to **Attachment A**, *Vicinity Map*). The property is encumbered by a seven-foot utility easement that bisects the property and runs along the northwest property line (please refer to **Attachment B**, Site Plan). The portion of utility easement to be vacated originally ran along the southern property line of Lot 8, at the boundary of the Warne Subdivision. However, the subject property was combined with unplatted land to the south since the initial subdivision and the easement currently bisects the property.

It appears the portion of easement to be vacated was reserved in 1964 for future utility connections along the boundaries of the subdivision. Presently water and sewer services are located in the public right-of-way in Cress Court and surrounding streets. A water meter pit is located in the subject easement along the north property line. There are no plans to extend water or sewer services through the subject easement. There are no public or private utilities located in the portion of easement to be vacated.

The subject easement currently limits the building envelope for the existing home and a portion of the driveway, a water feature, and a frame shed currently encroach into the easement. The property owner would like the option to expand the building footprint into the current easement area at some point in the future. Given that there is no public need for the easement for which it was intended, failure to vacate the requested portion of easement would cause hardship to the property owner by limiting the development potential of the property.

ANALYSIS:

Staff finds the proposed vacation of a 1,230 square foot portion of the existing seven-foot utility easement consistent with the standard set forth in subsection (b) of section 8-6-10, “*Vacation of Public Easements*”, B.R.C. 1981. Specifically, staff has determined that no public need exists for the portion of easement to be vacated due to the fact that all public utilities are located within the public-right-of way and existing private utilities will be located within the remaining portion of easement.

No vacation of a public easement shall be approved unless the approving agency finds that:

- 1. Change is not contrary to the public interest.

- ✓ 2. All agencies having a conceivable interest have indicated that no need exists, either in the present or conceivable future, for its original purpose or other public purpose.
- ✓ 3. Consistent with the Comprehensive Plan and Land Use Regulations.
- ✓ a. Failure to vacate the easement would cause a substantial hardship to the use of the property consistent with the Comprehensive Plan and Land Use Regulations; or
The applicant would like the option to expand the existing home at some point in the future. The utility easement reservation unnecessarily limits the building envelope to the west and south. The portion of easement to be vacated is not necessary because all utilities are accommodated in the remaining portion of easement. There is no public need for the easement.
- N/A b. Would provide a greater public benefit than retaining the property in its present status.

PUBLIC COMMENT AND PROCESS:

Notice of the vacation will be advertised in the Daily Camera within the 30 day call-up period. Staff has received no written or verbal comments adverse to the vacation.

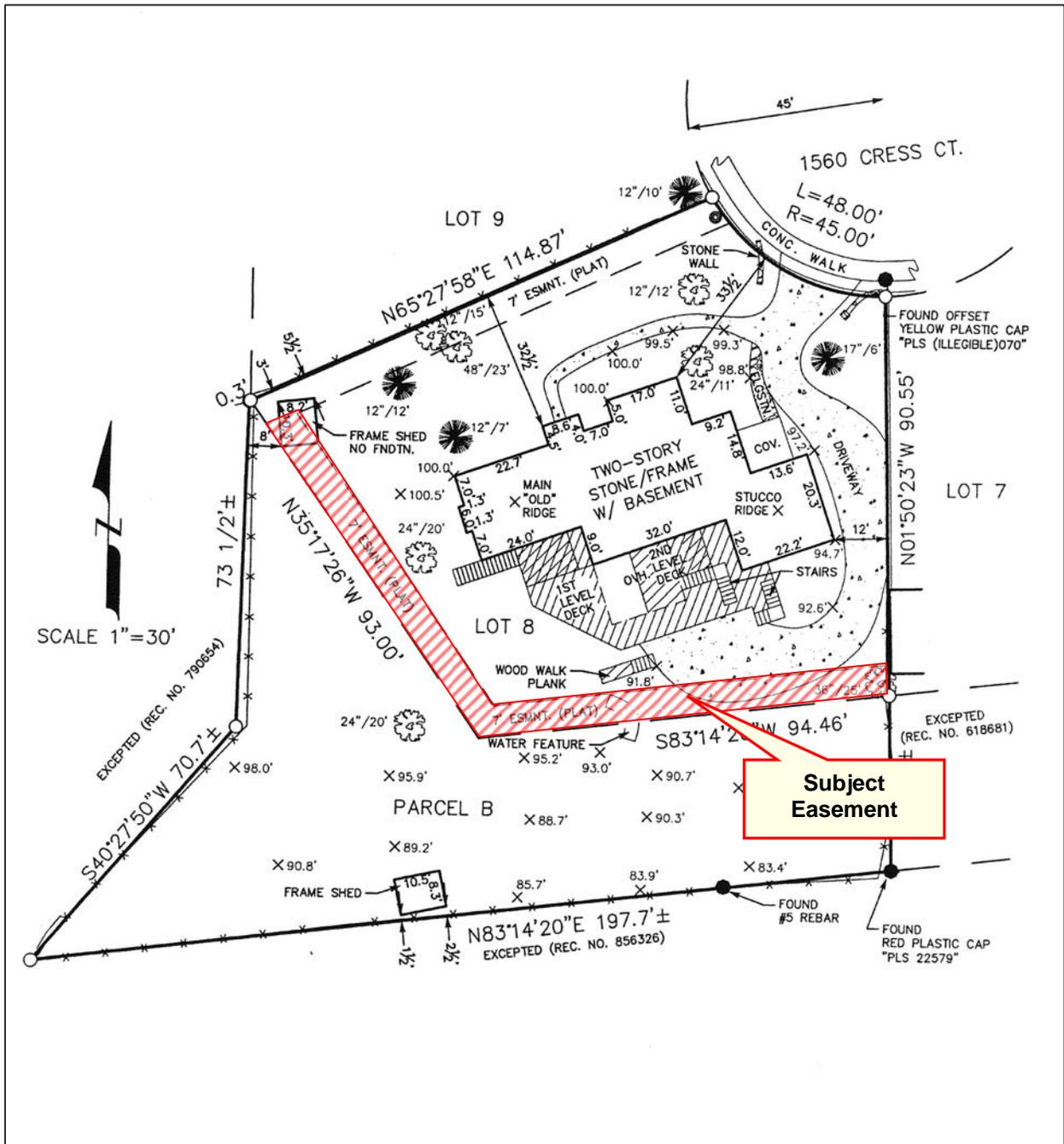
NEXT STEPS:

If the requested vacation is not called-up by City Council then the Deed of Vacation (**Attachment C**) will be recorded. If the requested vacation is called-up, and subsequently denied, the applicant will be limited to development on the property outside of the easement area.

ATTACHMENTS:

- Attachment A: Vicinity Map
- Attachment B: Site Plan
- Attachment C: Deed of Vacation
- Attachment D: Exhibit A
- Attachment E: Notice of Disposition





For Administrative Purposes Only
Address: 1560 Cress Ct.
Case No. ADR2013-00216

DEED OF VACATION

The City of Boulder, Colorado does hereby vacate and release to the present owners of the subservient land, in a manner prescribed by Section 8-6-10(b), B.R.C. 1981, the following portion of utility easement previously dedicated to the City of Boulder and recorded on the plat of Warne Subdivision in the records of the Boulder County Clerk and Recorder at Reception No. 90756402 on the 20th day of May, 1964, located at 1560 Cress Ct. and as more particularly described as follows:

See Exhibit A attached hereto and incorporated herein by reference.

The within easement vacation and release of said easement shall extend only to the portion and the type of easement specifically vacated. The within vacation is not to be construed as vacating any rights-of-way or easements or cross-easements lying within the description of the vacated portion of the easement.

Executed this _____ day of _____, 20__, by the City Manager after having received authorization from the City Council of the City of Boulder, Colorado.

CITY OF BOULDER, COLORADO

By: _____
Jane S. Brautigam,
City Manager

Attest:

City Clerk

Approved as to form:

Hilke Pannecour
City Attorney's Office

12-6-2013
Date

EXHIBIT "A"

LOCATED IN THE NORTHWEST QUARTER OF SECTION 19,
TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF BOULDER, STATE OF COLORADO

SHEET 1 OF 2

AN EASEMENT AS SHOWN ON THE PLAT OF WARNE SUBDIVISION, RECORDED AT RECEPTION NO. 756402, PLAN FILE R-1-1-37 IN THE RECORDS OF BOULDER COUNTY TO BE VACATED OVER AND ACROSS A PORTION OF LAND, LOCATED IN THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

CONSIDERING THE EAST LINE OF THAT PARCEL RECORDED AS RECEPTION NO. 1116325 TO BEAR S01°50'23"E, A DISTANCE OF 134.31 FEET BETWEEN A FOUND OFFSET YELLOW PLASTIC CAP "PLS (ILLEGIBLE)070" AND A FOUND RED PLASTIC CAP "PLS 22579", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT SAID OFFSET, THENCE S01°50'23"E ALONG THE EASTERLY LINE OF LOT 8, WARNE SUBDIVISION, A DISTANCE OF 94.41 FEET TO THE SOUTHEASTERLY CORNER OF SAID LOT 8 AND THE POINT OF BEGINNING;

THENCE S83°14'20"W ALONG THE SOUTHEASTERLY LINE OF SAID LOT 8, A DISTANCE OF 94.46 FEET;
THENCE N35°17'26"W ALONG THE SOUTHWESTERLY LINE OF SAID LOT 8, A DISTANCE OF 85.87 FEET;
THENCE N65°27'58"E, A DISTANCE OF 7.13 FEET;

THENCE S35°17'26"E PARALLEL TO SAID SOUTHWESTERLY LINE, A DISTANCE OF 80.38 FEET;
THENCE N83°14'20"E PARALLEL TO SAID SOUTHEASTERLY LINE, A DISTANCE OF 90.90 FEET TO A POINT ON SAID EASTERLY LINE OF LOT 8,

THENCE S01°50'23"E ALONG THE EAST LINE OF SAID LOT 8, A DISTANCE OF 7.03 FEET TO THE POINT OF BEGINNING.

SAID VACATED EASEMENT CONTAINING 1,230 SQ.FT. OR 0.03 ACRES, MORE OR LESS.

I, JOHN B. GUYTON, A LAND SURVEYOR LICENSED IN THE STATE OF COLORADO, DO HEREBY STATE FOR AND ON BEHALF OF FLATIRONS, INC., THAT THIS PARCEL DESCRIPTION AND ATTACHED EXHIBIT, BEING MADE A PART THEREOF, WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AT THE REQUEST OF THE CLIENT AND IS NOT INTENDED TO REPRESENT A MONUMENTED LAND SURVEY OR SUBDIVIDE LAND IN VIOLATION OF STATE STATUTE.

JOHN B. GUYTON
COLORADO P.L.S. #16406
CHAIRMAN/CEO, FLATIRONS,



FSI JOB NO. 13-61,858

JOB NUMBER: 13-61,858
DRAWN BY: W. BECKETT
DATE: NOVEMBER 1, 2013

THIS IS NOT A "LAND SURVEY PLAT" OR "IMPROVEMENT SURVEY PLAT" AND THIS EXHIBIT IS NOT INTENDED FOR PURPOSES OF TRANSFER OF TITLE OR SUBDIVISIONS OF LAND. RECORD INFORMATION SHOWN HEREON IS BASED ON INFORMATION PROVIDED BY CLIENT.

Flatirons, Inc.
Surveying, Engineering & Geomatics



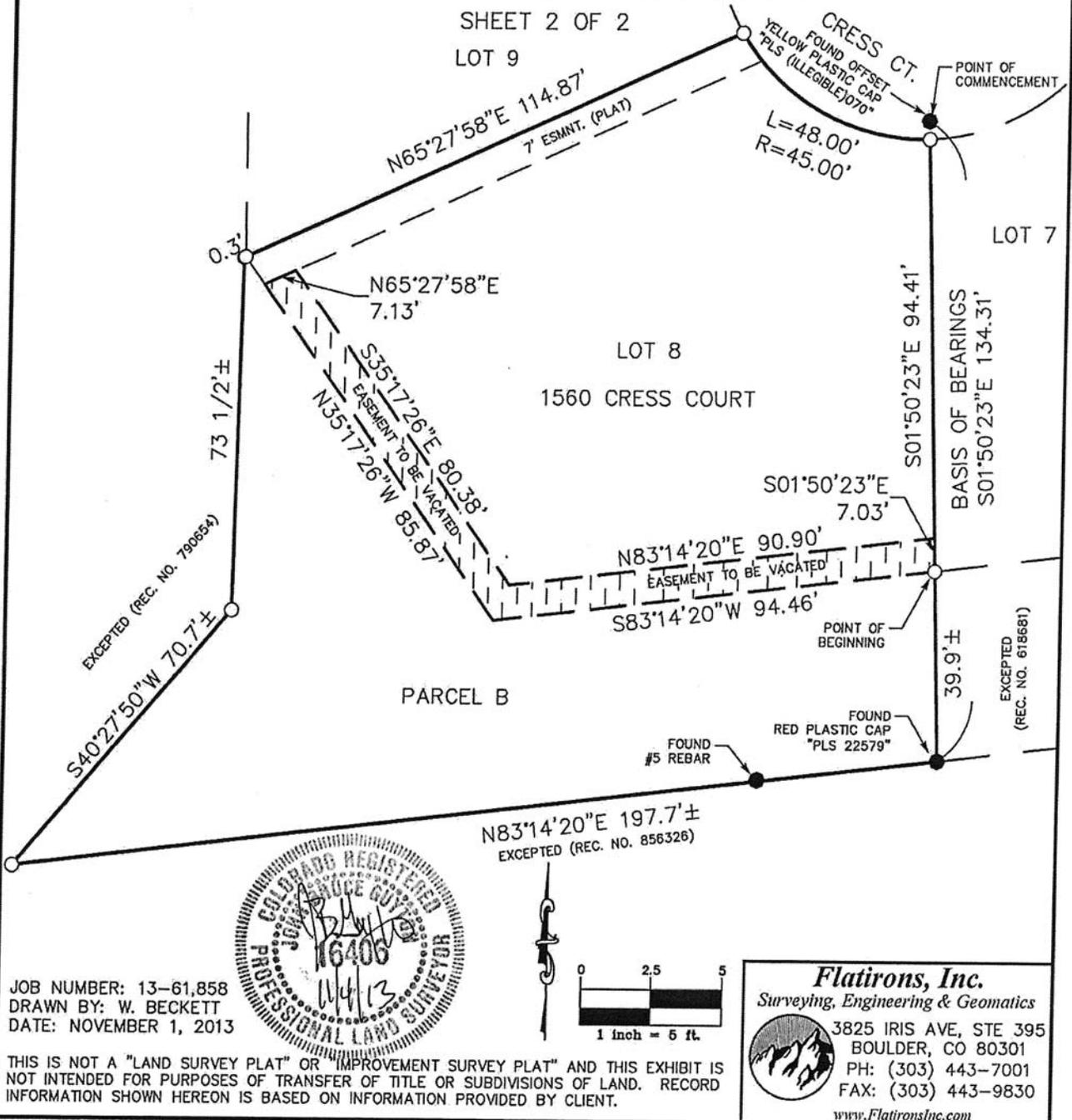
3825 IRIS AVE, STE 395
 BOULDER, CO 80301
 PH: (303) 443-7001
 FAX: (303) 443-9830
www.FlatironsInc.com

BY:SBENNINK FILE:61858-ESMT-VACATE.DWG DATE:11/4/2013 2:55 PM

EXHIBIT "A"

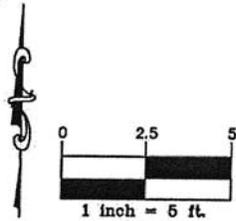
LOCATED IN THE NORTHWEST QUARTER OF SECTION 19,
TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF BOULDER, STATE OF COLORADO

SHEET 2 OF 2
LOT 9



BY:BBECKETT FILE:61858-ESMT-VACATE.DWG DATE:11/1/2013 2:53 PM

JOB NUMBER: 13-61,858
DRAWN BY: W. BECKETT
DATE: NOVEMBER 1, 2013



THIS IS NOT A "LAND SURVEY PLAT" OR "IMPROVEMENT SURVEY PLAT" AND THIS EXHIBIT IS NOT INTENDED FOR PURPOSES OF TRANSFER OF TITLE OR SUBDIVISIONS OF LAND. RECORD INFORMATION SHOWN HEREON IS BASED ON INFORMATION PROVIDED BY CLIENT.

Flatirons, Inc.
Surveying, Engineering & Geomatics
3825 IRIS AVE, STE 395
BOULDER, CO 80301
PH: (303) 443-7001
FAX: (303) 443-9830
www.FlatironsInc.com



CITY OF BOULDER
Community Planning and Sustainability

1739 Broadway, Third Floor • P.O. Box 791, Boulder, CO 80306-0791
phone 303-441-1880 • fax 303-441-3241 • web www.bouldercolorado.gov

ADMINISTRATIVE REVIEW
NOTICE OF DISPOSITION

You are hereby advised that the following action was taken by the Planning Department:

DECISION: Approved
DATE: December 2, 2013
REQUEST TYPE: Vacation/Easement
ADDRESS: 1560 Cress Ct.
APPLICANT: Carlo Persichetti, CPwest Design & Construction, Inc.
CASE #: ADR2013-00216
LEGAL DESCRIPTION: See Exhibit A

DESCRIPTION: EASEMENT VACATION to vacate a 1,230 square foot portion of a utility easement that bisects the property at 1560 Cress Ct.

FINAL DECISION STANDARDS:

Approved as submitted. This application is approved per the criteria for Vacation of Public Easements as set forth in section 8-6-10, B.R.C. 1981. This approval does not constitute building permit approval.

This approval is limited to the vacation of a 1,230 square-foot portion of an existing seven-foot utility easement, previously dedicated to the City of Boulder and recorded in the records of the Boulder County Clerk and Recorder in Plan File R-1-1-37 at Reception Number 756402 on the 20th day of May, 1964.

INFORMATIONAL COMMENTS:

Pursuant to section 8-6-10(b), B.R.C. 1981, approval of an easement vacation "is not effective until thirty days after the date of its approval. Promptly after approving the vacation, the manager will forward to the city council a written report, including a legal description of vacated portion of the easement and the reasons for approval. The manager will publish notice of the proposed vacation once in a newspaper of general circulation in the City within thirty days after the vacation is approved. Upon receiving such report and at any time before the effective date of the vacation, the council may rescind the manager's approval and call up the vacation request for its consideration at a public hearing, which constitutes a revocation of the vacation."

This decision is final and may not be appealed. A new request may be considered only as a new application.

Approved By:

Sloane Walbert, Planning

EXHIBIT A

LEGAL DESCRIPTION:
(PROVIDED BY FIDEILITY NATIONAL TITLE)

PARCEL A:

LOT 8, WARNE SUBDIVISION,
COUNTY OF BOULDER,
STATE OF COLORADO.

PARCEL B:

ALL THAT PORTION OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WEST LINE OF SECTION 19; WHENCE THE NORTHWEST CORNER OF SECTION 19, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M. BEARS NORTH 753.57 FEET; THENCE NORTH 62°02' EAST, 713.26 FEET; THENCE NORTH 73°01' EAST, 698.50 FEET; THENCE SOUTH 533.43 FEET; THENCE SOUTH 89°49' WEST, 1295.15 FEET TO THE PLACE OF BEGINNING; LESS THE AREA NOW OCCUPIED BY COUNTY ROAD,

EXCEPT THAT TRACT OF LAND AS CONVEYED BY OLIVER G. WARNE AND ETHEL WARNE TO W.F. MCQUIGG AND ALMA MCQUIGG BY INSTRUMENT RECORDED FEBRUARY 29, 1944 IN BOOK 740 AT PAGE 497 AND ALSO EXCEPT THAT TRACT OF LAND AS CONVEYED BY OLIVER G. WARNE AND ETHEL WARNE TO SHIRLEY F. BUCHANAN BY INSTRUMENT RECORDED AUGUST 9, 1965 ON FILM 541 UNDER RECEPTION NO. 790654 AND ALSO EXCEPT THAT TRACT OF LAND AS CONVEYED BY OLIVER G. WARNE AND ETHEL WARNE TO LEACH & ARNOLD CONSTRUCTION, INC. BY INSTRUMENT RECORDED AUGUST 29, 1967 ON FILM 612 UNDER RECEPTION NO. 856326 AND ALSO EXCEPT THAT TRACT OF LAND AS CONVEYED BY INTRAWEST BANK, TRUSTEE TO JULIA C. HYND BY INSTRUMENT RECORDED MAY 3, 1984 ON FILM 1301 UNDER RECEPTION NO. 618681 AND ALSO EXCEPT THAT TRACT OF LAND AS CONVEYED BY INTRAWEST BANK, TRUSTEE TO JACK W. LACY AND PATRICIA ANN LACY BY INSTRUMENT RECORDED MAY 3, 1984 ON FILM 1301 UNDER RECEPTION NO. 618682 AND ALSO EXCEPT WARNE SUBDIVISION AND ALSO EXCEPT MOSS ROCK RIDGE,
COUNTY OF BOULDER,
STATE OF COLORADO.



INFORMATION PACKET MEMORANDUM

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
Heather Bailey, Executive Director of Energy Strategy and Electric Utility Development

Date: December 17, 2013

Subject: Information Item: Boulder's Energy Future Budget Update

Budget Update

The municipalization exploration work plan represents a significant undertaking. In particular, the legal and technical work necessary to determine the final costs for potential acquisition of the local distribution system and launch of a municipal utility will be a considerable investment. Recognizing this, in 2011, city voters approved an increase to the Utility Occupation Tax in the amount of \$1.9 million a year. The use of this tax revenue has been allocated to the following categories:

- Legal services (condemnation and FERC Counsel)
- Consulting services related to possible municipalization and separation of Xcel Energy's (Xcel's) system (engineering and appraisal services)
- Salary and benefits (Executive Director of Energy Strategy and Electric Utility Development)
- Purchased services and supplies (office space and supplies)

Following the voter approval in November 2011, the city has focused its "energy future" work efforts on exploring municipalization. Work plan items completed since the last budget update to council include:

- In July, city staff presented to council the quantitative modeling and qualitative research results and an update on the partnership discussions with Xcel.
- In August, council authorized staff to: 1) continue discussions with Xcel in order to learn more about the potential products and services the company could

- provide; and, 2) proceed down a concurrent path toward acquiring the assets of Xcel and forming a locally owned utility.
- In November, Boulder voters supported moving forward with the project, but imposed an additional requirement that the cost of acquisition and any lump-sum payment for stranded costs cannot exceed \$214 million.
 - The city/Xcel partnership task force has developed two subcommittees to further develop and vet Xcel's proposed programs.
 - Colorado Public Utilities Commission (PUC) filings by Xcel have required attention by both legal and energy future staff, and it has become apparent that the city will need to dedicate resources to working with the PUC as it moves forward.
 - City staff, consultants, engineers, and the legal team have been working together to identify and value the electric assets needed to support a locally owned utility in preparation for negotiation and potential condemnation actions and acquisition.
 - City staff has issued a Request for Proposal (RFP) for consulting services to develop a detailed transition work plan.
 - City staff has continued to explore opportunities for enhancing energy services and reducing emissions without owning the poles and wires.
 - Staff formed two new working groups – solar and natural gas – to guide the city in these important policy areas and develop recommendations as the project moves forward.

2013 Budget

The 2013 total budget of \$3,251,935 is funded from the Utility Occupation Tax, a one-time general fund request of \$303,000 allocated to support high priority staffing needs for this project and \$1,048,935 prior year carryover from 2012. The carryover reflects savings from hiring the director mid-year in 2012 and a delay in spending for legal fees to negotiate the purchase of the system and engineering fees to assess and determine the technical capabilities of the system. Expenditures have been within the limitations of this budget.

The 2013 sources and uses for this effort are provided in the chart below. In the uses section, payments for expenditures as well as contract commitments and agreements are reflected through November 2013.

2013 Energy Strategy and Electric Utility Development Department Budget

2013 SOURCES:

Utility Occupation Tax	1,900,000
One-time General Fund	303,000
2012 Encumbrance Carryover (\$1.9M Utility Occupation Tax)	417,364
2012 Carryover (Environmental Reserve GF)	10,000
2012 Carryover (\$1.9M Utility Occupation Tax)	621,571
Total 2013 Sources	3,251,935

<u>2013 USES:</u>	<u>Budget</u>	<u>Contingency Allocation</u>	<u>Paid</u>	<u>Encumbered</u>	<u>Balance</u>
Personnel	663,000		581,387	81,613	0
Legal Services	1,400,067		690,650	531,054	178,363
Consulting Services	431,036	514,923	703,689	398,177	-155,907
Purchased Services & Supplies	126,261	116,648	179,670	63,239	0
2012 Carryover	631,571				
Total 2013 Uses	3,251,935		2,155,396	1,074,083	22,456

Other staff resources assigned to this effort have been allocated within existing budgets and are separate from the \$1.9 million Utility Occupation Tax revenue and \$303,000 one-time General Fund request. This is in alignment with the overall priority of this effort and existing roles, responsibilities and funding, as well as the approach historically taken with other significant and cross-departmental city projects. As a reminder, an organizational chart showing those assigned to this project and their areas of focus is included as **Attachment A**. A list of staff working on this effort, the percentage of time spent in 2013 on the project and associated budget allocation is provided in **Attachment B**.

2014 Budget

The approved budget for 2014 is \$2,312,000; \$1,957,000 is funded from the Utility Occupation Tax (\$1.9 million, plus a three percent tax increase approved by council on Oct. 25, 2013, pursuant to the original ordinance) and \$355,000 that is funded through one-time savings in the General Fund to support salaries and benefits for high priority staffing needs. It is anticipated that there will be additional funds carried over from legal and consulting purchase orders encumbered in 2013.

The work anticipated in 2014 will involve significant expenditures. In addition to the work plan items that have been anticipated since the start of this project, additional tasks have emerged and are likely to emerge as the legal and regulatory processes unfold. City

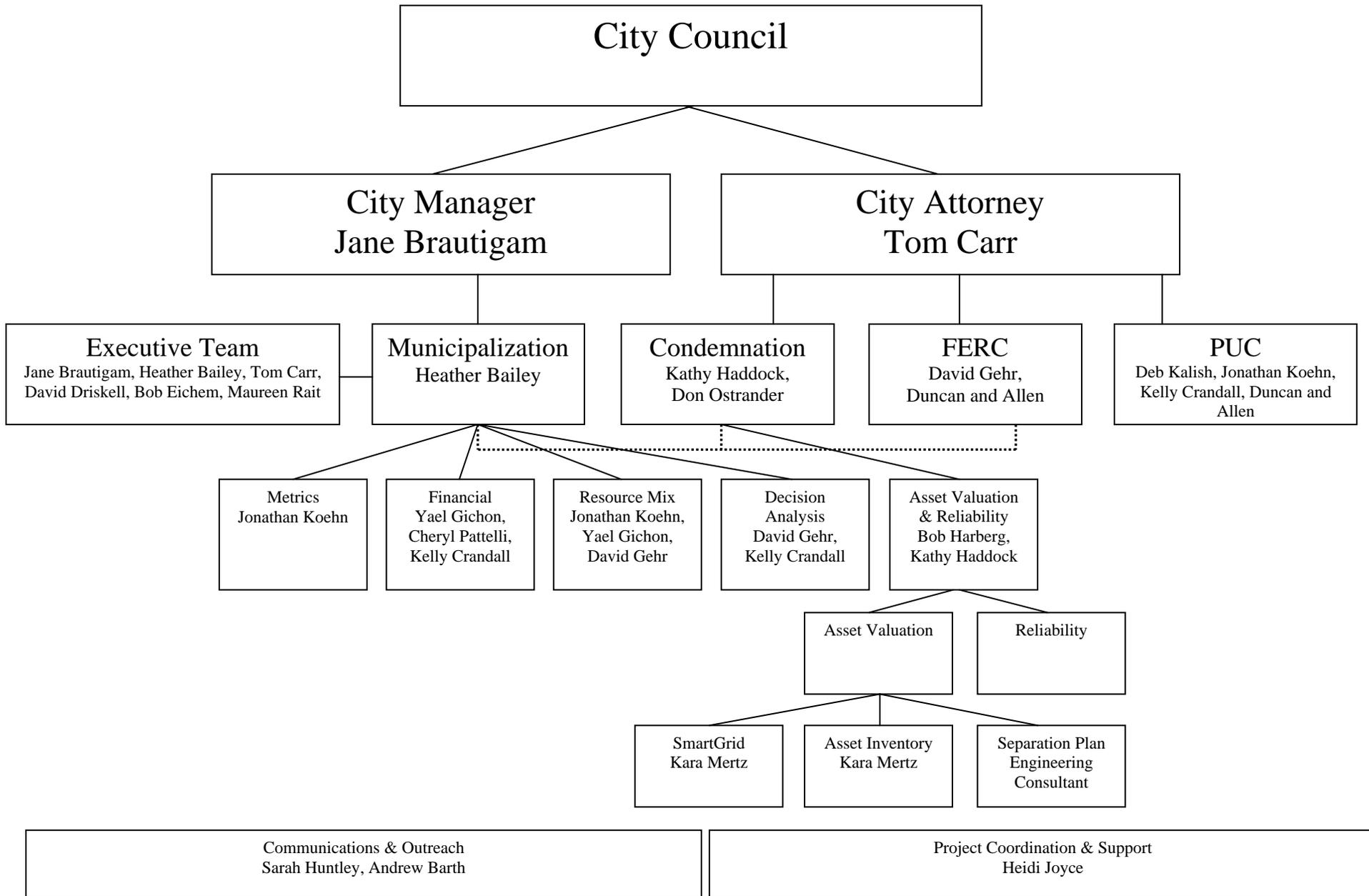
Council should anticipate the possibility that additional resources will be needed in 2014. Staff will bring these needs and proposals forward as they arise.

Attachments:

Attachment A: Organizational Chart

Attachment B: Staffing Resources

**ATTACHMENT A
Organizational Chart**



ATTACHMENT B

Boulder's Municipalization Exploration Project
 2013 Staffing Resources
 January - November, 2013

Executive Director	Source of Funding	% of Time
Heather Bailey	Utility Occupation Tax	100
\$303,407 Utility Occupation Tax		

Executive Team	Source of Funding	% of Time
Jane Brautigam	CMO Budget	7
Tom Carr	CAO Budget	12
David Driskell	CP&S Budget	5
Bob Eichem	Finance Budget	6
Maureen Rait	PW Budget	7
Patrick Von Keyserling	Communications Budget	2
\$75,335 Estimated Cost		

Project Team	Source of Funding	% of Time
Andrew Barth (Backfill)	General Fund (One-time GF Request)	100
Kelly Crandall	CP&S (CAP Budget)	91
David Gehr (Backfill)	CAO Budget	100
Yael Gichon	CP&S (CAP Budget)	99
Kathy Haddock	CAO Budget	58
Robert Harberg	PW Budget	19
Sarah Huntley	Communications Budget	29
Heidi Joyce	General Fund (One-time GF Request)	100
Deb Kalish	CAO Budget	30
Jonathan Koehn	CP&S Budget	80
Kara Mertz	CP&S (CAP Budget)	46
Cheryl Pattelli	Finance Budget	6
\$689,189 Estimated Cost		

Support	Source of Funding	% of Time
Wynne Adams	General Fund (One-time GF Request)	100, part-time hours
Tanya Ariowitsch	CP&S Budget	5
Brenda Dageforde	PW Budget	4
Joanna Domaglska	CP&S Budget	3
Brett Hill	CP&S Budget	2
Don Jensen	General Fund (One-time GF Request)	Temporary, hours vary
Ruth McHeyser	General Fund (One-time GF Request)	Temporary, hours vary
Sean Metrick	CP&S Budget	33
\$106,681 Estimated Cost		

Total:
\$303,407 Utility Occupation Tax
\$276,887 \$303K One-time GF Request
\$584,318 Other Funding Sources



INFORMATION PACKET MEMORANDUM

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
Mark R. Beckner, Boulder Police Chief, BRETSA Chairperson
Larry D. Donner, Boulder Fire Chief, BRETSA Vice Chair

Date: December 17, 2013

Subject: Information Item: Update on E-911 Fee Increase

EXECUTIVE SUMMARY

The City is a member of the Boulder Regional Emergency Telephone Service Authority (BRETSA). BRETSA, which is authorized to set fees for E-911 service, currently levies a surcharge of .50 per telephone number. If approved by the Public Utilities Commission (PUC), that fee for service will increase to .75 per telephone number effective July 1, 2014 in order to continue to pay for current and future infrastructure and maintenance needs. CRS 29-11-103 (3)(a) requires cities, counties, towns and special districts to annually establish a 9-1-1 surcharge for each calendar year. Since this level of increase exceeds what is allowed, (PUC) approval is required. The BRETSA board has applied for PUC approval and expects to receive approval in the coming weeks.

FISCAL IMPACT

If approved by the PUC, the rate increase would have no fiscal impact on the city. If the rate increase is not approved by the PUC, the city may have to budget for expenses currently paid through the E-911 service fee.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- Social: BRETSA, which is one of 58 Authorities in Colorado - covers 751 square miles and serves over 294,000 citizens. To provide countywide E9-1-1 services, BRETSA supports and works closely with four PSAPs commonly known as Communications or Dispatch Centers. These PSAPs are managed by the Longmont Department of Public Safety, the Boulder

County Sheriff's Office, the Boulder Police Department and the University of Colorado Police Department. On average, these PSAPs collectively process 655,000 calls annually. The value and importance of these PSAPs in providing public safety services was no more apparent than during the recent flood with all the emergency calls they handled, processed and dispatched.

BACKGROUND

The Boulder Regional Emergency Telephone Service Authority (BRETSA) was formed in 1987 through a countywide Intergovernmental Agreement (IGA). Utilizing the money collected through the 9-1-1 surcharge, BRETSA provides significant assistance in bringing Enhanced 9-1-1 (E9-1-1) telephone and dispatching services to Boulder County and the cities, towns and fire protection districts located in Boulder County. BRETSA is governed by Colorado Statutes, the IGA, and is managed through a Board. The board consists of four permanent members and one rotating member having a one year term. (See **Exhibit D**, Organizational Chart.) While BRETSA contracts out for needed services and support, as an emergency telephone service authority it has no employees.

Council does not need to approve the fee increase because the authority to set a fee is delegated to BRETSA in Section 3-1-4(a) B.R.C. 1981, which allows BRETSA to charge a fee equal to the maximum charge permitted pursuant to Section 29-11-102, C.R.S.

ANALYSIS

While the cost of responding to 9-1-1 calls is covered by the various emergency response agencies within the county and their respective budgets, BRETSA funds and maintains network and Public Safety Answering Point (PSAP) specific E9-1-1 mission critical systems and enterprise infrastructure. This networked system routes the 9-1-1 caller to the appropriate PSAP and provides extensive computer and software support to manage and process the call so the appropriate resources can be quickly and efficiently dispatched to the emergency. Currently, funding from BRETSA is primarily used to cover support and operating expenses for E9-1-1 telephone services, emergency notification systems (e.g., reverse 9-1-1), computer aided dispatch (CAD), digital loggers (phone/radio recorders), other capital/non-capital equipment and maintenance needs, network infrastructure to include inter-connecting the PSAPs (fiber, redundancy, backup support), technical training needs, and the maintenance of massive databases which directly support CAD: Geographic Information System (GIS), Master Street Address Guide (MSAG), and Automatic Location Information (ALI).

Since 1994, BRETSA's surcharge rate – currently the 3rd lowest in the state - has not been higher than .50 per month per telephone number. The average rate in Colorado is .86 and 19 Authorities have rates between \$1.00 and \$1.50. While BRETSA's level of funding has been adequate for 14 years and the request is to continue the current rate for the first half of 2014, increasing costs, additional critical needs, revenue vs. expense projections including the need to maintain a fund balance (reserves) to cover major purchases and unexpected expenses, and the need to offset inflation have resulted in BRETSA asking for a .25 per month increase in the rate. (See **Exhibit A**, .50 Revenue & Expense Graph, and **Exhibit B**, Value of .50 Graph.)

This small increase will allow BRETSA to support the PSAPs as follows:

- Continue to fund the standard annual operating expenses that BRETSA currently funds such as 9-1-1 telephone services, including E9-1-1 routing, Language Line (interpreter services), emergency notification services, etc.; CAD system & software; maintenance of CAD supporting databases & network infrastructure; vendor support; contracted services; standard equipment purchases; and training. As with most things, the costs to provide this support are increasing and based on current growth patterns, the future revenue stream is only expected to increase slightly. Without a rate increase, and given the critical need to fund the additional needs noted below, revenues will no longer fully support these ongoing and essential operating expenses as illustrated in **Exhibit A**, .50 Revenue and Expense Graph.
- Increase PSAP support by replacing obsolete radio consoles in 2014 at a cost of approximately \$2,900,000. For the Boulder PSAP, this means the replacement of its ten Motorola radio consoles used to maintain radio communications with field units. The current consoles are being discontinued in 2014 which will make support and finding replacement parts increasingly difficult and eventually impossible. The analog technology is out of date, can no longer support updates and needs to be replaced with IP based technology to ensure reliability and continued interoperability. Without the rate increase, this required cost would have to be covered by the City.
- Provide much needed on site technical support by providing funding to each PSAP to hire a dedicated, full time, systems specialist. Due to the advanced level of technology required to provide E9-1-1 telephone and dispatching services (hardware, software, infrastructure, network, etc.), the necessity to maintain and update these services and technology, and the critical need to be able to troubleshoot and fix problems and issues quickly, it has become apparent that each PSAP must have their own in-house technical support.

Without the additional funding, providing these specialists will not be possible, and the PSAPs would need to rely on what support their existing personnel can provide. This presents two problems. One, relying on current staff already strained supporting BRETSA technology solutions and their own existing internal operations (24/7/365). Two, it pulls staff away from other needed duties. This will also create a heavier reliance on outside vendors who rarely have immediate response times and may not have global knowledge of PSAP operations.

In addition to meeting these needs, BRETSA's reserves need to be maintained. **Exhibit A**, .50 Revenue and Expense Graph, shows BRETSA has been operating in the red for the most part since 2011. Reserves were used to not only make up differences when needed, but to purchase a much needed multi-million dollar CAD system in 2011 that came on line in 2012. Following the radio console purchase next year, BRETSA's reserves will be significantly reduced. Without a rate increase, the current reserves will become exhausted in early 2018. With a rate increase, the reserves will begin to rebuild. (See **Exhibit C**, .75 Revenue and Expense Graph. This graph, which illustrates reserves being depleted by 2024, is based on a full CAD replacement in 2023

and another radio console replacement in 2024. However, with changing technology it is difficult to accurately predict the needs and costs that far into the future.)

While sufficient reserves are needed to cover BRETSA asset replacement, they are also needed to deal with contingencies, e.g., emergency replacement of equipment unexpectedly failing, significant or catastrophic damage to a PSAP due to a natural or manmade disaster, preparing for the future of 9-1-1 services, etc. Another reason sufficient reserves are needed is that BRETSA cannot borrow money nor create debt service.

The minimal rate increase being requested will still be below the statewide average, and will provide the following benefits:

1. PSAPs will continue to keep up with technology needs to meet operational changes.
 - The level of E9-1-1 services to our communities can be sustained.
2. BRETSA will continue to support and enhance existing PSAP operations.
 - E9-1-1 costs will not be redirected to local agencies;
 - An immediate need for radio consoles costing \$2.9 million can be met and can be met without impacting local budgets; and
 - Existing enterprise E9-1-1 support & maintenance needs can be met and enhanced with dedicated technical support.
3. BRETSA will sustain a regionalized and collaborative approach
 - Economies of scale and efficiencies in procurements will continue; and
 - Existing system redundancies and backup of mission-critical applications will be maintained.

Without the surcharge increase, BRETSA will not be able to purchase the radio consoles that must be replaced nor provide the much needed in-house technical support for each PSAP. In addition, it will find itself in a position of negative revenue from 2014 forward with its reserves being reduced each year to cover the difference between revenue and operating expenses. BRETSA's ability to handle unforeseen contingencies would eventually become severely compromised.

NEXT STEPS

State law requires that surcharge rates exceeding .70 must be approved by the PUC. The application process has already begun and the PUC's approval is anticipated shortly.



INFORMATION PACKET MEMORANDUM

To: Mayor Appelbaum and City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
Maureen Rait, Executive Director of Public Works
Jeff Arthur, Director of Public Works for Utilities
Joe Taddeucci, Water Resources Manager
Kevin Clark, Utilities Engineering Project Manager
Jake Gesner, Hydroelectric Manager

Date: December 17, 2013

Subject: Information Item: Hydroelectric Program Update

EXECUTIVE SUMMARY:

Boulder began developing the hydroelectric power potential of its municipal water system in the 1980s. Between 1985 and 2004, the city built or acquired eight hydroelectric power plants with a current capacity of roughly 16 megawatts (MW). Currently, the city has four hydroelectric facilities on its raw water delivery system and four facilities on the treated water system. The city produces an average of approximately 45,000 megawatt hours (MWh) of hydroelectricity per year, which results in about \$2 million of annual revenue for the water utility. This revenue offsets capital and operating costs that would otherwise be borne by water utility customers through higher water rates.

Since the 1980s, it has been city policy to develop hydroelectric potential within the municipal water supply system where environmentally and economically feasible. Hydropower projects have been environmentally feasible since municipal water supply infrastructure is already in place. Economic feasibility has been defined as a hydroelectric facility's ability to pay for its construction, operation and maintenance costs over its lifetime. Seven of the city's facilities have met or are expected to meet this goal in less than 20 years, including Boulder Canyon Hydro (BCH), which underwent a major renovation in 2012 at a cost to the city of \$4.75 million.

While much of the municipal water system hydroelectric potential has been developed, staff continues to monitor potential hydroelectric development options within the system. Future projects may rely upon additions to the water supply infrastructure, operational adjustments, future power sales markets and advancements in hydroelectric generation technology.

This assessment of the hydro program's overall status is being presented to provide City Council with background information in advance of projects that will be submitted to council in the next several years as part of the Capital Improvement Program. An overview and update on the hydroelectric program was also presented to the Water Resources Advisory Board on July 15, 2013.

FISCAL IMPACT

The hydroelectric program generates an average \$2 million in annual revenue, which offsets water utility costs. Customers water rates would be higher without this revenue.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- **Economic:** It has been city policy that hydroelectric installations should be able to pay for associated construction, operation and maintenance costs over the assumed 50-year lifetime. The infrastructure therefore has a zero net cost in the long-term and generates revenue in excess of facility costs.
- **Environmental:** Hydroelectricity is clean, renewable energy. The city's program has developed the hydroelectric potential of the municipal water supply system, which would exist with or without the hydro facilities. Environmental disturbance associated with the hydro facilities themselves, usually limited to the power plant building and associated appurtenances, has been minimal. Since 1985, when the first hydro plant went into service, the city has generated more than 645,000 MWh of electricity, which has produced more than \$31 million in revenue and displaced the need to burn more than 300,000 tons of coal – the amount needed to produce an equivalent amount of electricity at a traditional coal-fired generation plant.
- **Social:** Development of the hydroelectric potential of the city's water supply system, where environmentally and economically feasible, is generally supported by the community as a means to increase renewable energy and reduce greenhouse gas emissions. The use of hydropower revenue to avoid or delay water rate increases benefits all water customers in the community. Average annual hydroelectric generation is sufficient to meet the annual needs of approximately 8,000 households.

BACKGROUND

Although Boulder first recognized the hydroelectric power potential of its water system as far back as 1906, serious consideration of this potential began in the early 1980s, and Boulder's first hydroelectric power plant was completed in 1985. Today, the city's water utility enterprise operates eight hydroelectric power plants within its raw and treated water supply systems. Four facilities - Silver Lake, Lakewood, Betasso and Boulder Canyon – are located on the raw water transmission system. The Orodell, Sunshine, Maxwell and Kohler hydro facilities are located on the treated water distribution system below the Betasso Water Treatment Facility. The eight facilities have a combined rated capacity of approximately 16 MW. The hydroelectric facility locations are shown on Attachment A and facility descriptions are given in Attachment B.

Hydropower generation is subordinate to water supply within the city's water utility. The city does not deplete its water supply reservoirs solely for hydropower generation. The one exception is BCH, which delivers water back to Boulder Creek using water from the city's

hydropower water rights. Much of the system's hydro generation results from high water demand and availability during the warmer summer months.

The city sells all hydroelectricity produced to electric utilities under the terms and conditions of power purchase agreements (PPAs). Seven of the eight existing PPAs are with the Public Service Company of Colorado (PSCo)¹ (a wholly owned subsidiary of Xcel Energy). These PPAs expire after a set term based on the date they went into effect.

The city operates all eight of its hydroelectric facilities under conduit exemptions from the Federal Energy Regulatory Commission (FERC)² licensing. Advantages of this type of exemption include issuance in perpetuity (i.e., no periodic costly relicensing process), no annual charges by FERC, and limited federal jurisdiction over project facilities (usually just the power plant itself).

ANALYSIS:

Recent Events

The city completed its Boulder Canyon Hydroelectric Modernization Project (Attachment C) in 2012 and resumed commercial operation on June 12, 2013. This effort replaced the one operable 10 MW turbine/generator with a state-of-the-art 5 MW unit. The modernization project also separated previously comingled city and PSCo facilities at BCH. In June 2013, the city and the Tri-State Generation and Transmission Association, Inc. entered into a new five-year PPA for BCH, with an estimated \$500,000 in annual revenue.

The city also completed the Betasso Area Pipelines Replacement Project in 2011, which had numerous benefits to the hydro program, including:

- reestablishing the Betasso Hydroelectric plant to its full 3.1 MW capacity;
- converting the old Betasso penstock into a new Orodell pipeline that supplies Orodell Hydro); and
- converting the original Orodell pipeline into a raw water discharge line to be used during hydroelectric operations tests.

Though not a completed project, the September 2013 flood is an important event relative to the city's hydro program. During the flood, seven of the eight³ hydro plants automatically tripped offline in response to disruptions in the electrical transmission and distribution system and temporarily ceased generation. The BCH power plant office flooded, but none of the generation equipment was damaged at any of the facilities. Generation at all of the city's hydro plants, except Orodell Hydro, resumed within a few weeks of the flood.

¹ In June 2013, the city entered into a new PPA for Boulder Canyon Hydro with Tri-State Generation and Transmission Association, Inc. This PPA is discussed further under "Analysis."

² The city has been issued a conduit exemption from licensing for BCH. The exemption will go into effect once the U.S. Forest Service issues a Special Use Permit authorizing occupancy of federal land for portions of the Barker Gravity Pipeline.

³ Orodell Hydro was already offline for maintenance prior to the flood.

Upcoming Projects

The hydropower maintenance plan provides for a thorough inspection of each facility every five years. Every 10 years, the units are disassembled for a full internal inspection and maintenance overhaul. Lakewood Hydro is the next facility scheduled for major maintenance in 2014.

Five of the existing PPAs will expire between 2015 and 2017. The city has the option to extend these agreements, most of which are for a 30-year term. Staff will research potential hydropower sales options, including city use of the power under a municipalization scenario, to make sure the city obtains the most favorable PPA terms in the future.

Long-range Planning

Much of the current environmentally and economically feasible hydro potential within the city's water system has been developed. However, potential opportunities remain for additional hydropower generation within the system, pending construction of other water supply infrastructure.

- *Carter Lake Pipeline Hydro* – This pipeline is considered the best long-term solution to increase the reliability of the city's Colorado-Big Thompson and Windy Gap water supplies. The pipeline would provide an opportunity to develop a new hydroelectric facility, and funding for construction of this facility is allocated in 2019 as part of the proposed 2014-2019 Capital Improvement Program (CIP). During budget discussions in recent years, City Council has indicated that the hydroelectric potential of the Carter Lake Pipeline is a favorable component of the overall pipeline project.
- *Hannah Barker Hydro* - The Barker Dam outlet gates and related facilities are more than 100 years old and in need of significant rehabilitation or replacement. Funding for final design and construction of these important outlet works modifications is currently proposed for 2017 and 2018 in the projected 2014-2019 CIP. The outlet facilities would provide an opportunity to develop a new, year-round hydroelectric facility, and funding for construction of this facility is also proposed for 2018.

Prior to proceeding with design and construction, both the Carter Lake Pipeline Hydro and the Barker outlet works and hydro projects will be subject to review as part of the annual budget process and other applicable project approval processes.

In addition to the Carter Lake Pipeline and Barker Hydro projects, other future potential power development projects include:

- adding hydroelectric equipment at 101 Pearl St., which currently only has a pressure-reducing valve; and
- replacing one of two pressure-reducing valves at Sunshine Hydro with a micro turbine/generator for use during winter, when pipeline flows are too low for the existing hydroelectric equipment.

While these potential projects are currently not economically feasible, they could be in the future depending on future power sales opportunities and/or technological advancements.

Current federal permitting requirements for small hydro projects are time-consuming and costly. New, streamlined regulations could significantly reduce permitting costs for the future development of city hydroelectric projects. The Hydropower Regulatory Efficiency Act (H.R. 267), signed by President Obama in August 2013, promotes the development of small hydropower and conduit projects and aims to shorten regulatory timeframes of low-impact hydropower projects.

Program Economics

The city’s policy is to develop hydropower within its water system where environmentally and economically feasible. Economic feasibility means the ability for a project to pay for itself within its lifespan (50 years is typically conservatively assumed for hydroelectric facilities), including construction, operation and maintenance³. Current midlife modeling (combining actual historical and estimated future information) of the city’s eight hydroelectric facilities over a 50-year lifecycle is provided in the following table.

Table 1 – City of Boulder Hydroelectric Program Economics Analysis Summary

Facility	Size (MW)	In Service Year	Benefit-Cost Ratio over 50 Year Project Life	Present Value of Net Revenue over Project Life*	Payback Period (Years)
Betasso	3.100	1987	2.9	\$19,785,000	7
Orodell	0.225	1987	0.6**	\$ (425,800)**	NA**
Sunshine	0.800	1987	1.8**	\$ 3,696,000**	13**
Kohler	0.150	1986	1.8	\$ 838,000	14
Maxwell	0.950	1985	1.7	\$ 591,000	15
Silver Lake	3.200	1998	1.7	\$ 9,318,000	14
Lakewood	3.400	2004	2.7	\$14,052,000	7
Boulder Canyon	5.000	2013	1.3	\$ 4,186,000	17
Total	15.970	-	-	\$51,449,000	-

*Present Value of Net Revenue = Net Present Value (NPV - economic term), which takes into account gross revenue and subtracts gross cost and brings the future value back to present day (2013 dollars used for analysis).

**Orodell Hydro can be considered along with Sunshine Hydro as one integrated system due to present city water supply operation and water system flow connectivity.

Six of eight hydro facilities have already paid for themselves. A seventh (BCH) is expected to pay for itself by 2030. The total net present value (NPV) for the city’s eight facilities is currently modeled at \$51.4 million over 50 years. The one exception within the system is Orodell Hydro, which does not have a positive NPV and has a benefit-cost ratio (BCR) less than 1.0 when considered as an independent facility. Due to water delivery operational changes,

³ Operations and maintenance costs include payroll expenses as well as materials, equipment and contractor costs for upkeep of the hydroelectric plants. While there is not a lot of variation in the annual hydro operating budget, the distribution of those funds among the eight facilities varies significantly from year to year, depending on maintenance priorities. From 2007 through 2012, operations and maintenance costs averaged about \$400,000 per year.

Orodell Hydro is not generating as much power as initially modeled. The original Orodell Hydro economic analysis assumed year-round operation, but the city currently generates at Sunshine Hydro during winter (with Orodell Hydro offline) because of favorable power generation terms and operational constraints on the downstream Orodell Pipeline system. Orodell Hydro and Sunshine Hydro, when viewed as a combined system, have a positive combined NPV of \$3.27 million over the 50 year expected equipment life.

NEXT STEPS:

Staff will continue to operate and maintain the existing hydroelectric units, address PPA renewals, and look for new opportunities to develop hydroelectric potential within the city's water supply system. Additional information will be presented as projects associated with the city's hydro system (new or enhancements to the existing system) come up for consideration during the capital improvement and budgeting process.

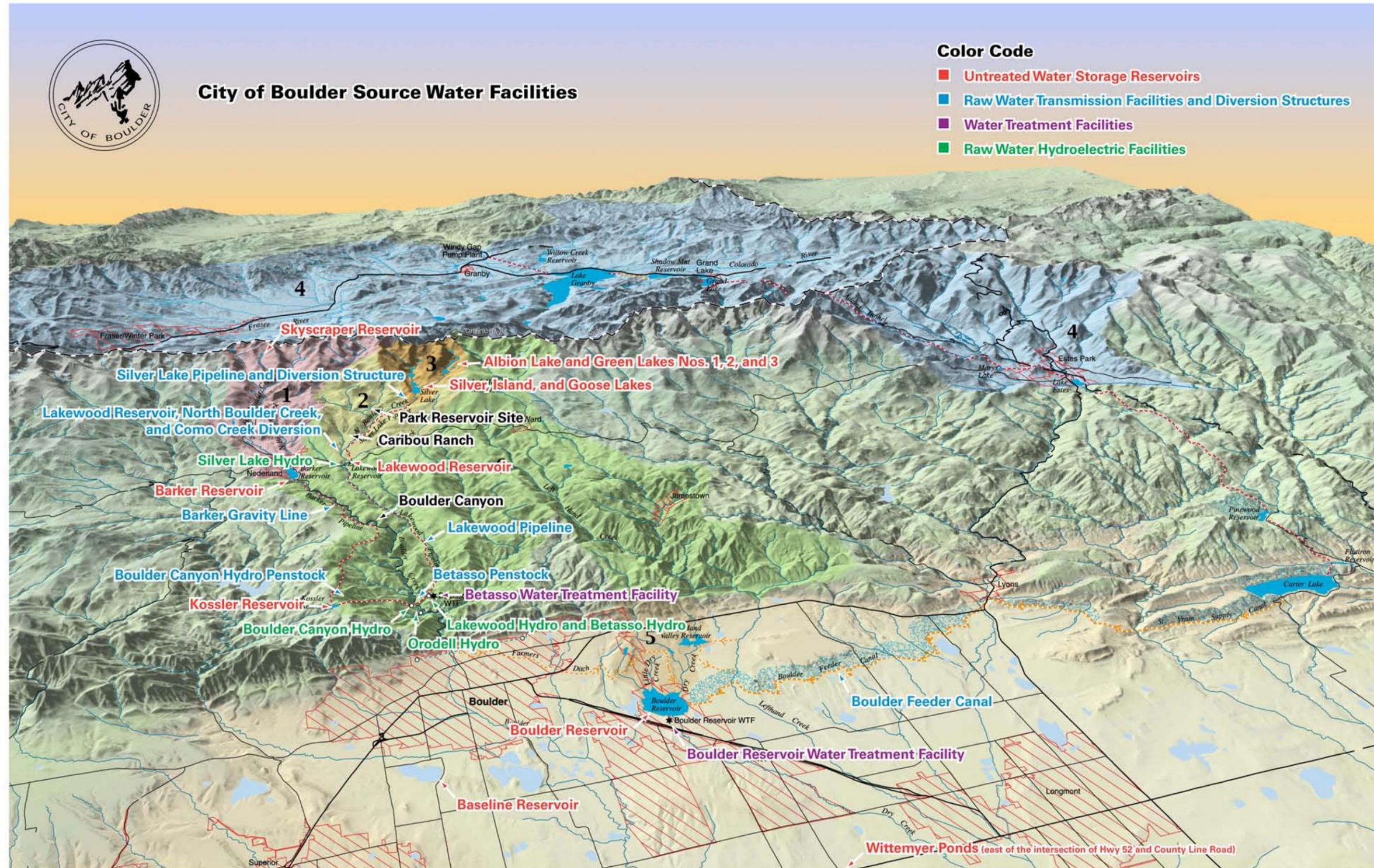
ATTACHMENTS:

Attachment A: City of Boulder Source Water Facilities

Attachment B: City of Boulder Hydroelectric Facility Summary

Attachment C: Boulder Canyon Hydroelectric Modernization Project Summary

Attachment A
CITY OF BOULDER SOURCE WATER FACILITIES



Attachment B

City of Boulder Hydroelectric Facility Summary

Name	Pressure Source	Head on U/S Side Turbine (ft)	Type of Turbine	2013 Nameplate Capacity (kW)	Generator Make	Commercial Operation Date	2011 Generation (kWh)	2011 Revenue	Construction Cost
Maxwell (Pump/Generator)	Treated Water (Zone 3)	200	Reaction (Francis)	95	General Electric	March 1985	576,000	\$25,400	\$344,000
Kohler (Pump/Generator)	Treated Water (Zone 3)	140 -240	Reaction (2 Francis)	150	Marathon XRI	November 1986	754,000	\$32,700	\$431,000
Orodel.	Treated Water (Orodel Pipeline)	413	Reaction (Francis)	225	Primeline	September 1987	390,000	\$13,000	\$406,000
Sunshine	Treated Water (Sunshine Pipeline)	750	Reaction (Francis)	800	Unimega-Hitachi	September 1986	3,845,000	\$165,700	\$1,790,000
Betasso	Raw water (Betasso Penstock)	1,094	Impulse (Pelton)	3,100	Kumming Elec	December 1987	18,398,000 (combined with Lakewood)	\$1,936,000 (includes Lakewood and Silver Lake)	\$3,200,000
Silver Lake	Raw water (Silver Lake Pipeline)	1,406	Impulse (Pelton)	3,200	Alconza	March 1998	14,779,000	See Betasso	\$7,224,000
Boulder Canyon	Raw water (Kossler/Barker)	1,847	Impulse (Pelton)	5,000	Hydudai-Ideal	Original August 1910 (COB Purchased March 2001) June 2013 after 5 MW replacement	11,525,000	\$290,000	\$5,900,000
Lakewood	Raw water (Lakewood Pipeline)	1,554	Impulse (Pelton)	3,400	Alconza	June 2004	Included with Betasso	See Betasso	\$3,431,000
Total							50,267,000	\$2,463,000	\$22,726,000

Since beginning operation through 2011 these hydros have displaced 305,000 tons of burning coal and generated 609,879,000 kilowatt hours. Total revenue through 2011 was approximately \$ 29,054,000.

ATTACHMENT C

SUMMARY OF THE BOULDER CANYON HYDROELECTRIC PROJECT MODERNIZATION

The Boulder Canyon Hydroelectric Project (BCH) was purchased by the City of Boulder, CO (the city) in 2001. Project facilities were originally constructed in 1910 and upgraded in the 1930s and 1940s. By 2009, the two 10 MW turbine/generators had reached or were nearing the end of their useful lives. One generator had grounded out and was beyond repair, reducing plant capacity to 10 MW. The remaining 10 MW unit was expected to fail at any time.

When the BCH power plant was originally constructed, a sizeable water supply was available for the sole purpose of hydroelectric power generation. Between 1950 and 2001, that water supply had gradually been converted to municipal water supply by the city. By 2001, the water available for hydroelectric power generation at BCH could not support even one 10 MW unit. Boulder lacked the financial resources to modernize the facilities, and Boulder anticipated that when the single, operational historical unit failed, the project would cease operation.

In 2009, the City of Boulder applied for and received a U.S. Department of Energy (DOE) grant for \$1.18 million toward a total estimated project cost of \$5.155 million to modernize BCH. The federal funding allowed Boulder to move forward with plant modifications that would ensure BCH would continue operation. Federal funding was made available through the American Recovery and Reinvestment Act (ARRA) of 2009.

Boulder determined that a single 5 MW turbine/generator would be the most appropriate capacity, given the reduced water supply to the plant. Average annual BCH generation with the old 10 MW unit had been about 8,500 MW-hr, whereas annual generation with a new, efficient turbine could average 11,000 to 12,000 MW-hr. The incremental change in annual generation represents a 30% increase in generation over pre-project conditions.

The old turbine/generator was a single nozzle Pelton turbine with a 5-to-1 flow turndown and a maximum turbine/generator efficiency of 82%. The new unit is a double nozzle Pelton turbine with a 10-to-1 flow turndown and a maximum turbine/generator efficiency of 88%. This alone represents a 6% increase in overall efficiency. The old turbine operated at low efficiencies due to age and non-optimal sizing of the turbine for the water flow available to the unit. It was shut down whenever water flow dropped to less than 4-5 cfs, and at that flow, efficiency was 55 to 60%. The new turbine will operate in the range of 70 to 88% efficiency through a large portion of the existing flow range and would only have to be shut down at flow rates less than 3.7 cfs. Efficiency is expected to increase by 15-30%, depending on flow.

In addition to the installation of new equipment, other goals for the project included:

- Increasing safety at Boulder Canyon Hydro
- Increasing protection of the Boulder Creek environment
- Modernizing and integrating control equipment into Boulder's municipal water supply system, and
- Preserving significant historical engineering information prior to power plant modernization.

From January 1, 2010 through December 31, 2012, combined consultant and contractor personnel hours paid for by both the city and the federal government have totaled approximately 40,000. This equates roughly to seven people working full time on the project from January 2010 through December 2012.

This project also involved considerable material expense (steel pipe, a variety of valves, electrical equipment, and the various components of the turbine and generator), which were not accounted for in terms of hours spent on the project. However, the material expense related to this project did help to create or preserve manufacturing/industrial jobs throughout the United States. As required by ARRA, the various components of the hydroelectric project were manufactured or substantially transformed in the U.S.

BCH is eligible for nomination to the National Register of Historic Places due in part to its unique engineering features and innovative construction techniques. Special efforts were directed toward documenting the (largely original) interior of the plant and installing new equipment without modifying the power plant exterior in order to preserve the historical significance of the facility. In addition, a significant portion of the historical equipment within the power plant was preserved in place.

The modernization project began with DOE grant award on January 1, 2010, and the project was completed on December 31, 2012. In addition to city engineering and hydroelectric staff, major project participants included AECOM (design/engineering) Canyon Industries (turbine/generator manufacture), Gracon Corporation (general construction contractor), Exponential Engineering Company (electrical engineering) and URS Corporation (historical documentation), as well as numerous other subcontractors and consultants.



CITY OF BOULDER
Boards and Commissions Minutes

NAME OF COMMISSION: Parks and Recreation Advisory Board
DATE OF MEETING: 8/26/13
NAME/EXTENSION OF PERSON PREPARING SUMMARY: Sally Dieterich
NAMES OF MEMBERS AND STAFF: MEMBERS: Rick Thayer, Mike Conroy, Myriah Conroy, Michelle Estrella, Kelly Wyatt, Mike Guzek, Marty Gorce STAFF: Kirk Kincannon, Jeff Dillon, Alice Guthrie, Sally Dieterich, Sarah DeSouza, Alison Rhodes, Jennifer Bray, Stacy Cole, Andrew MacLean
TYPE OF MEETING: Regular monthly business meeting
SUMMATION: Call to Order: 6:00 APPROVAL OF AGENDA: Approved FUTURE BOARD ITEMS AND TOURS: <ul style="list-style-type: none">• 9/17/13 city council meeting – Public hearing on Parks and Recreation department master plan acceptance• 9/23/13 PRAB meeting – E Bike policy pilot program• 9/23/13 PRAB meeting – Smoking ban discussion• 9/23/13 PRAB meeting – 2014 USA Cyclocross Nationals update• 9/23/13 PRAB meeting – Valmont City Park south planning process update CONSENT AGENDA: <u>A. Minutes</u> from July 22, 2013 were approved as written. <u>B. Informational Items:</u> The park development, Pottery lab RFP and 2013 department master plan updates were approved as written. ITEMS FOR ACTION: None ITEMS FOR DISCUSSION/INFORMATION: <u>A. North Boulder Park Art:</u> – Timeline update: <ul style="list-style-type: none">• Fund raising committee formed• Approval to move forward received• Staff redesigning North Boulder Park due to public utilities detected beneath public art site• Boulder Cycling Monument project will be within new public art policy guidelines• Establishment of art selection panel to review and provide recommendation• Arts Commission and PRAB will review• Decision to be provided by Boulder city manager MATTERS FROM THE DEPARTMENT: <u>A. No Smoking Ordinance – Parks/Civic Areas/Bike Paths/Bus Stops:</u> Council has asked the department to research drafting a no smoking ordinance to be presented to council by the 4 th quarter

2013. This item will return to PRAB in September.

B. Boulder Reservoir July 4, 2013 Event Report:

- Event successful with positive changes
- Attendance significantly less than 2012
- Numerous free programs provided
- Live music and DJ provided
- No impacts to Valhalla neighborhood
- Alcohol consumption limited to on-site beer garden
- Increased communication
- Lower revenues due to decreased attendance
- 2014 – Staff to evaluate continuing limiting alcohol, increasing family activities, staffing levels and fee options

C. PLAY Boulder Foundation Update: Proposal:

- Appoint five members
- PRAB members to be on foundation
- Form PRAB subcommittee

MATTERS FROM BOARD MEMBERS: None

ADJOURNMENT: 7:26 p.m.

Public comments: There were no public comments.

Next meeting: September 23, 2013 at Valmont Bike Park Platt farmhouse, Airport and Valmont Roads, Boulder, CO 80301



CITY OF BOULDER
Boards and Commissions Minutes

NAME OF COMMISSION: Parks and Recreation Advisory Board
DATE OF MEETING: 9/23/13
NAME/EXTENSION OF PERSON PREPARING SUMMARY: Sally Dieterich
NAMES OF MEMBERS AND STAFF: MEMBERS: Rick Thayer, Mike Conroy, Myriah Conroy, Michelle Estrella, Kelly Wyatt, Mike Guzek, Marty Gorce STAFF: Kirk Kincannon, Jeff Dillon, Alice Guthrie, Sally Dieterich
TYPE OF MEETING: Regular monthly business meeting
SUMMATION: Call to order: 6:06 p.m. APPROVAL OF AGENDA: Approved FUTURE BOARD ITEMS AND TOURS: <ul style="list-style-type: none">• 10/28/13 PRAB meeting – Pottery Lab RFP update• 10/28/13 PRAB meeting – Park development and recreation programs update• 10/28/13 PRAB meeting – Flood update/department impact CONSENT AGENDA: <ul style="list-style-type: none">A. Due to the 2013 Boulder flood, approval of minutes from August 26, 2013 was deferred to the October 28, 2013 PRAB meeting.B. Due to the 2013 Boulder flood, Informational Items were deferred to the October 28, 2013 meeting. ITEMS FOR ACTION: None ITEMS FOR DISCUSSION/INFORMATION: <ul style="list-style-type: none">A. <u>Flood update – Department Impact</u>: Dillon and Guthrie provided a power point presentation of the September 2013 Boulder flood, detailing damage to parks and recreation facilities. Updates will be included during future monthly meetings.B. <u>E Bike Policy</u>: At council’s request, Kincannon asked PRAB for input on the E Bike pilot program, which would allow electric assisted bicycles to operate on roads and bike paths, but not on multi-use paths and sidewalks. PRAB was generally in favor of the pilot program, having some reluctance with regard to the speed of e-bikes on bike paths. MATTERS FROM THE DEPARTMENT: None MATTERS FROM BOARD MEMBERS: None ADJOURNMENT: 7:26 p.m.
Public comments: There were no public comments.
Next meeting: October 28, 2013 at Valmont Bike Park Platt farmhouse, Airport and Valmont Roads, Boulder, CO 80301



CITY OF BOULDER
Boards and Commissions Minutes

NAME OF COMMISSION: Parks and Recreation Advisory Board
DATE OF MEETING: 10/28/13
NAME/EXTENSION OF PERSON PREPARING SUMMARY: Sally Dieterich
NAMES OF MEMBERS AND STAFF: MEMBERS: Rick Thayer, Mike Conroy, Myriah Conroy, Kelly Wyatt, Mike Guzek, Marty Gorce STAFF: Jeff Dillon, Alice Guthrie, Sally Dieterich, Jeff Haley, Kady Doelling, Jennifer Bray, Mike Eubank INVITED GUESTS: Matt Chasansky, Boulder Public Library Arts and Cultural Services Manager
TYPE OF MEETING: Regular monthly business meeting
SUMMATION: Call to Order: 6:03 p.m. APPROVAL OF AGENDA: Approved FUTURE BOARD ITEMS AND TOURS: <ul style="list-style-type: none">• 11/18/13 PRAB meeting – Pottery Lab RFP update and Chautauqua update• 1st quarter 2014 – Council public hearing on department master plan acceptance• Next 2-3 months – Parks & Recreation department fees discussion• PRAB study session will be scheduled to discuss CIP flood impacts and smoking ban follow up CONSENT AGENDA: <ul style="list-style-type: none">A. Minutes from 8/26/13 and 9/23/13 were approved as written.B. Informational items: The park development update was approved as written. ITEMS FOR ACTION: None ITEMS FOR DISCUSSION/INFORMATION: <ul style="list-style-type: none">A. <u>2014 Cyclocross Nationals</u>: Eubank provided an update on the upcoming 2014 Cyclocross Nationals to be held in Boulder in Jan. 2014.B. <u>Flood Art Project</u>: Chasansky spoke on the Flood Art Project as a response to the 2013 Boulder flood. The project will collaborate with BMoCA and local businesses. Four artists were chosen to design installations involving eco arts, sustainable and social practices and dealing with the community in artwork installation creation. The project will continue for one year.C. <u>Flood Recovery Update</u>: Haley and Doelling provided an update on Parks and Recreation department flood recovery, detailing the FEMA process:<ul style="list-style-type: none">• 9/14/13 – Declaration date• 12/6/13 – Damage identification (60 days)• 3/14/14 – Debris removal (6 months)• 3/14/14 – Emergency work (6 months)• 3/14/15 – Permanent work (18 months)D. <u>Valmont City Park – South Development</u>: Haley gave an update on the south development of Valmont City Park including the timeline:

- 11/13-1/14 – Data gathering
- 11/13 – 2/14 – Opportunities/constraints (data analysis, summary report, athletic fields study results, community survey results, needs analysis report)
- 3/14-5/14 – Concept alternatives development
- 5/14-7/14 – Recommended concept plan
- 8/14-10/14 – Final concept plan completion

E. Discussion on Smoking Ban in Urban Parks and Municipal Campus: Guthrie led a discussion on a smoking ban in urban parks and the municipal campus. Council asked PRAB for input on a potential ban. The general feeling from PRAB was not supportive.

MATTERS FROM THE DEPARTMENT: None

MATTERS FROM BOARD MEMBERS: None

ADJOURNMENT: 8:28 p.m.

PUBLIC COMMENTS: Peter Richards, resident, questioned the City of Boulder's participation in the Silver Sneakers program, as he views it to be a non-revenue producing program.

Next meeting: November 18, 2013 at the Iris Center, 3198 Broadway, Boulder, CO 80304.