

Eva J. Henry - District #1 Charles "Chaz" Tedesco - District #2 Erik Hansen - District #3 Steve O'Dorisio – District #4 Jan Pawlowski – District #5

#### STUDY SESSION AGENDA TUESDAY September 22, 2015

STUDY SESSION WILL BEGIN APPROXIMATELY 15 MINUTES AFTER CONCLUSION OF PUBLIC HEARING.

ALL TIMES LISTED ON THIS AGENDA ARE SUBJECT TO CHANGE.

10:00 A.M. ATTENDEE(S): Todd Leopold

ITEM: Animal Shelter Assessment

11:30 A.M. ATTENDEE(S): Jeff Maxwell, Jeanne Shreve

ITEM: Gold Line/Northwest Rail IGA Amendment #2

12:30 A.M. ATTENDEE(S): Heather McDermott

ITEM: Volunteerism Initiative

1:00 P.M. ATTENDEE(S): Todd Leopold

ITEM: Administration Item Review / Commissioner

**Communications** 

1:30 P.M. ATTENDEE(S): Nancy Duncan

ITEM: 2016 Budget Preliminary Budget Update

2:30 P.M. ATTENDEE(S): Heidi Miller

ITEM: Executive Session pursuant to C.R.S. 24-6-402(4)(b)

and (e) for the purpose of receiving legal advice and

negotiations discussions regarding oil and gas

applications.



#### STUDY SESSION AGENDA ITEM

DATE:

9/22/15

SUBJECT:

Adams County Animal Shelter Operational Assessement

FROM:

Todd Leopold

**AGENCY/DEPARTMENT:** 

County Management

**ATTENDEES:** 

County Management

**PURPOSE OF ITEM:** 

The County enlisted the services of Foothills Animal Shelter to come into the Adams County Animal Shelter to do an operational assessement of the services and facility

of the Shelter.

STAFF RECOMMENDATION:

Review the recommendations from the Foothills Animal Shelter

Assessment team and identify areas of implementation where available.

#### **BACKGROUND:**

In June, 2015, the Board of County Commissioners supported the staff reccomendation to conduct an operational assessment of the Adams County Animal Shelter. The Foothills Animal Shelter in Golden, CO, has extensive experience in animal welfare and has underwent a number of transformational changes to their organization over the years. They also work with multiple jurisdictions, such as the county's shelter and we felt that they would be able to provide a objective review of our shelter and identify areas for operational improvements, as well as partnership opportunities with Foothills where appropriate.

#### AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

County Management

#### **ATTACHED DOCUMENTS:**

Powerpoint - Assessment Presentation

#### FISCAL IMPACT:

Either mark  $X \boxtimes$  if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):	
Cost center(s):	
Self-generated / dedicated revenues:	\$0
Annual operating costs:	\$
Annual net operating (cost) / income:	\$
Capital costs:	\$
Expenditure included in approved operating budget:	\$
Expenditure included in approved capital budget:	\$
New FTEs requested:	0

Financial impaact based upon recommendations implemented. TBD

Todd Leopold, County Manager

**APPROVAL SIGNATURES:** 

May Dunas Budget / Finance
Budget / Finance

APPROVAL OF FISCAL IMPACT:

Raymond H. Gonzales, Deputy County Manager

Ed Finger, Deputy County Manager

#### **Adams County Animal Shelter**

Organizational Assessment & Report

Provided by
Foothills Animal Shelter
September 2015

#### **Evolutionary Trends in Sheltering**



















## Community Organization

## com.mun.ity [kəˈmyoonitē]



- 1. a group of people living in the same place or having a particular characteristic in common
- a feeling of fellowship with others, as a result of sharing common attitudes, interests, and goals

#### or.gan.i.za.tion [ orgəni zāSHən ]

#### NOUN

- 1. an organized body of people with a particular **purpose**, especially a business, society, association, etc.
- 2. the action of organizing something 9/18/2015

#### Our Common Purpose

- Giving Shelter
  - Easing Pain
  - ReunitingFamily Members
- Protecting People and Pets
  - Preventing Homelessness
  - Saving Lives



## The Impact of New Building, Program Expansion, PR Growth in FAS Services

	<u>2009</u>	<u>2011</u>	<u>2014</u>	Growth 2011 to 2014
Animal Saving Rate	74%	<b>75</b> %	92%	
Intake*	9387	9,554	10,076	5%
Total Adoptions	3694	3,880	6,458	66%
Volunteer Hours	21,288	22,218	33,036	49%

<sup>\*</sup> Includes DOAs.

## ACAS & FAS Similarities

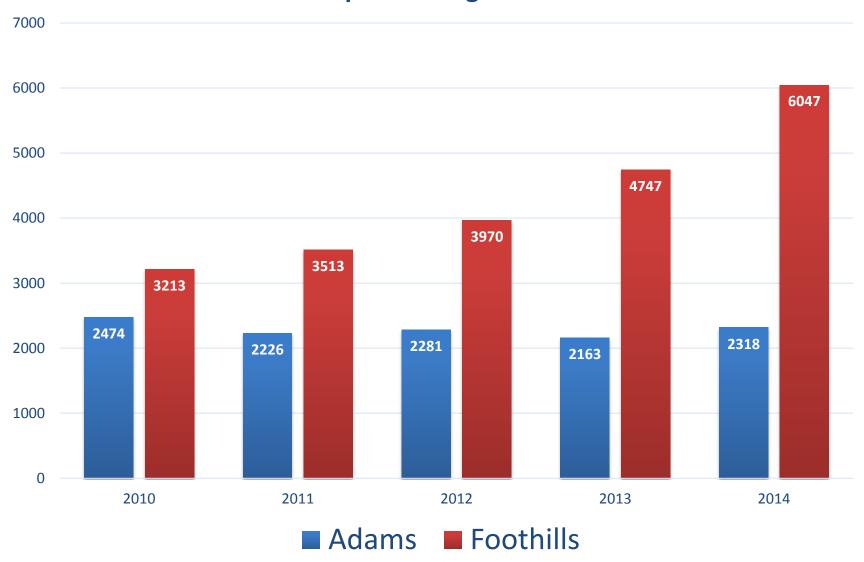
- We serve as our county's and municipalities' shelter
- We are "open admissions"
- We work with ACO's and therefore take in:
  - Abuse and neglect cases
  - –Mass impounds
  - Protective custody cases
  - -Cats, dogs, chickens, snakes, birds, rats, mice, guinea pigs, turtles, fish, rabbits, geckos, spiders, pigs, peacocks, ducks, goats, sheep ...
- We are our community's pet evacuation shelter
- Weadopt, reunite, spay/neuter, vaccinate, license



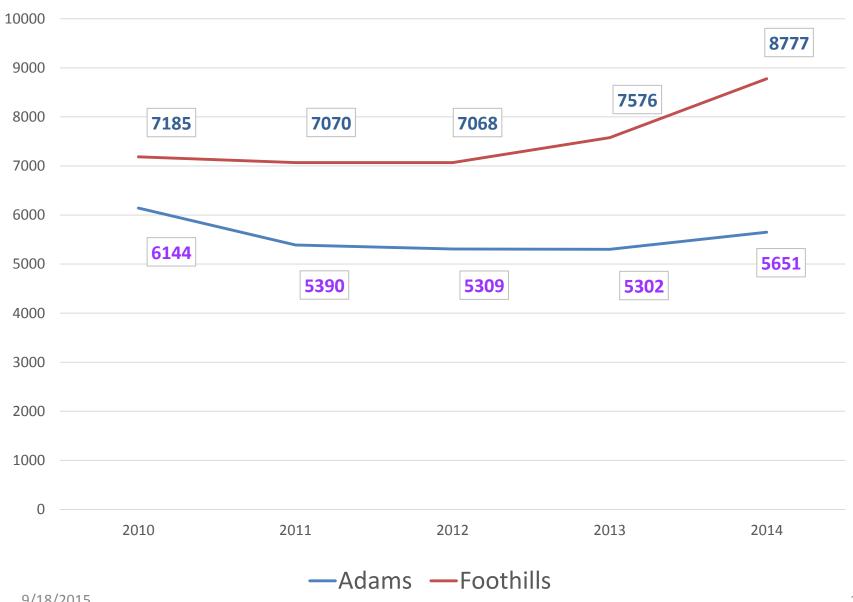
## Adams County Animal Services & Foothills Animal Shelter Differences

	ACAS	FAS
Business Structure	County gov't entity	<ul> <li>Quasi-governmental</li> <li>Operates under IGA</li> <li>Board of directors; reps of the 7 IGA partners</li> <li>Has 501c3 supporting/fundraising organization (Friends of)</li> </ul>
Primary Funding Sources	<ul><li>County general funds</li><li>Earned income</li><li>Municipal (usage) billing</li></ul>	<ul><li>Earned Income</li><li>Licensing</li><li>Assessments</li><li>Donations</li></ul>
Staffing	<ul> <li>Adams County employees</li> <li>Support services (IT, HR, Finance, Facilities, Fleet, Legal) provided by County staff/depts.</li> </ul>	<ul> <li>Shelter employees</li> <li>Support services provided by Shelter staff and contractors</li> </ul>

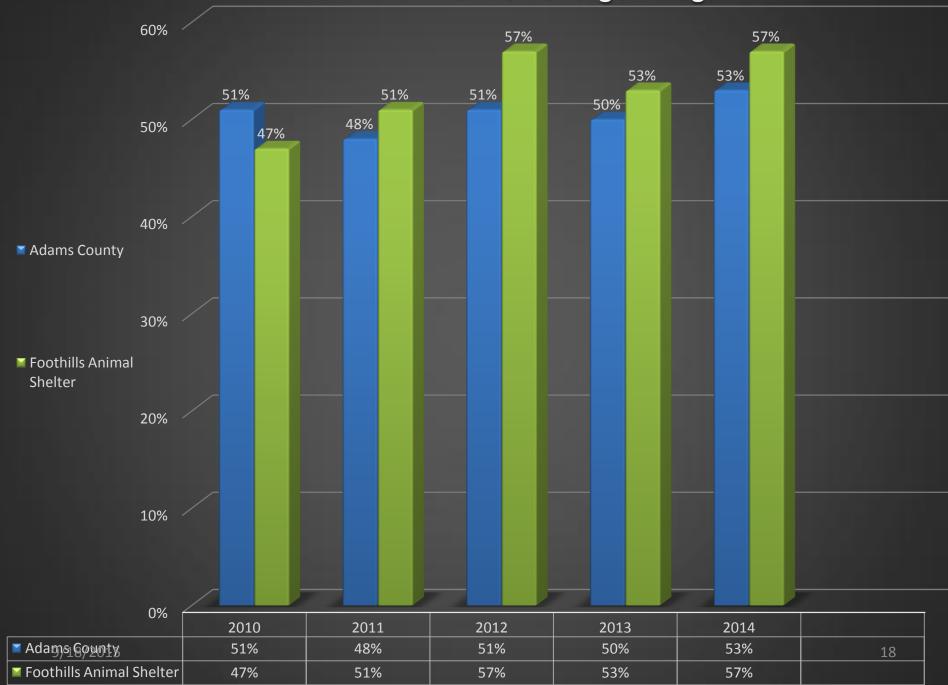
#### **Adoptions: Dog and Cat**



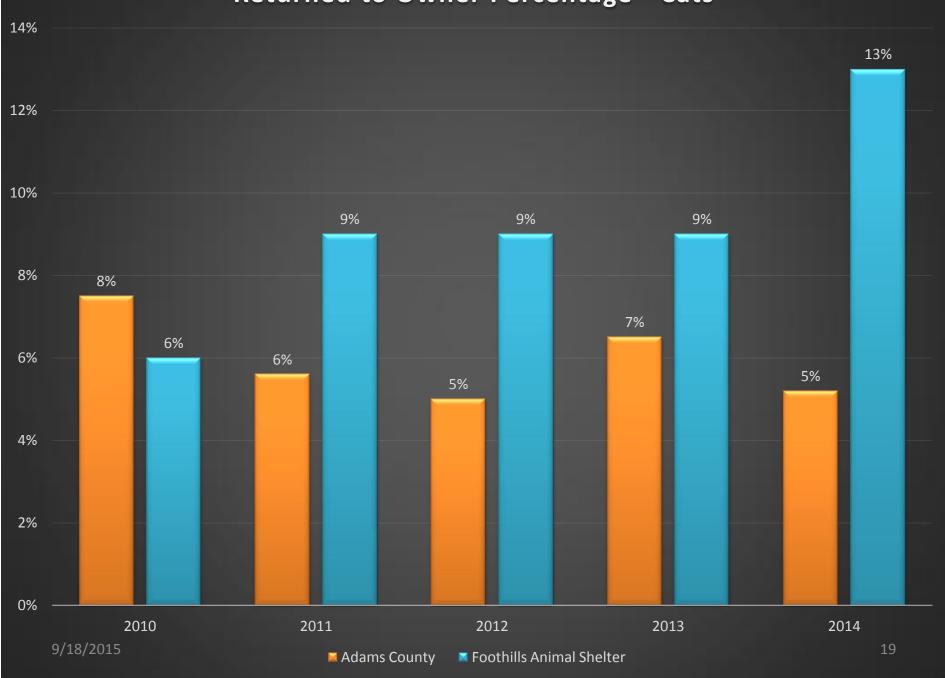
#### **INTAKE: Dogs & Cats**



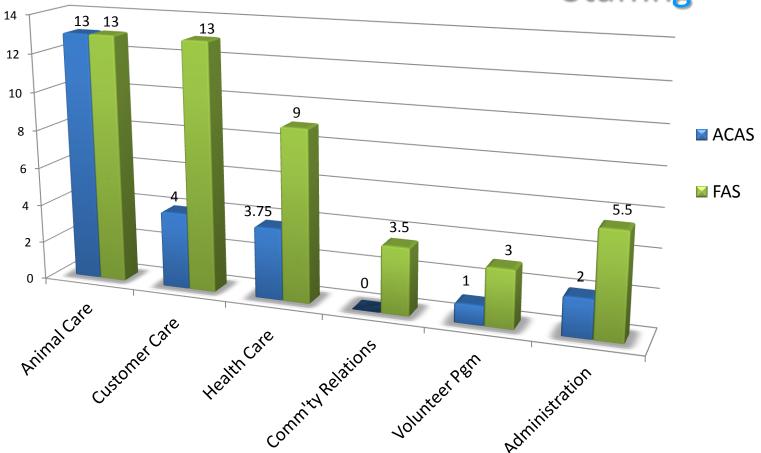




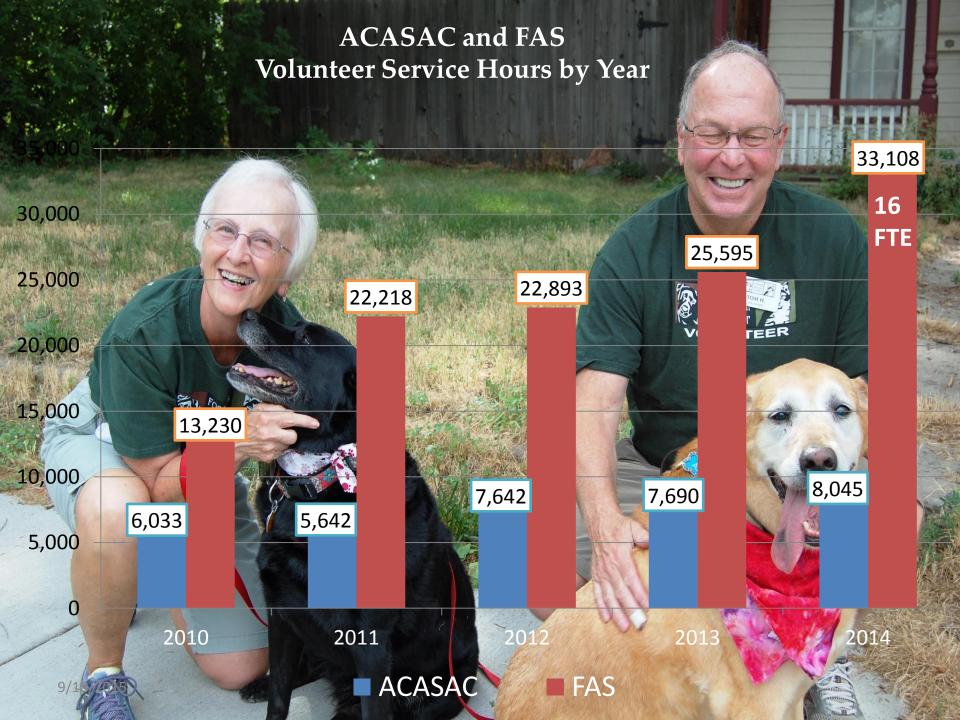
#### **Returned to Owner Percentage - Cats**



#### **Staffing**



Animal Care = Kennel Care, Behavior, Transfer, Rescue
Customer Care = Patron Services (in person and phone)
Health Care = Diagnostic, Surgical Services, Medical Care and Support, Foster
Community Relations = Marketing, Fund Raising, Media Relations, Outreach
Volunteer = Recruitment, Selection, Training, Placement, Support, Recognition
Administration = Executive, Finance, Licensing, Facilities





### Adams Volunteer Program

#### **Assets**

- Core group: dedicated and skilled
- Solid on-boarding process
- Core positions and training in place
- Useful volunteer management system

#### **Challenges**

- Small volunteer base, including foster parents
- Lacking dedicated Foster Coordinator staff position
- Limited volunteer positions
- Pro-volunteer culture needs cultivating
- Physical environment not conducive to attracting, retaining volunteers



#### **Volunteer Program Recommendations**

- Increase volunteer base, including foster volunteers
- Assess and develop <u>new volunteer positions</u>
- Create <u>year-round recognition</u> and appreciation plan
- Develop <u>leadership opportunities</u> (i.e.; mentors, trainers, leadership committee)
- Reinstitute regular communications
- Develop staff-coordinated <u>social media page</u>
- Offer on-going training/development (compassion fatigue)

#### **2015 Budget Comparison**

<u>INCOME</u>	<u>Adams</u>	<u>Foothills</u>	<u>TMAC YE 2010</u>
Earned Income	448,706	1,139,975	595,188
Govt (FAS = Licensing. TAMC= Assessments	300,000	798,210	493,987
Grants & Contributions	40,000	604,500	397,311
Other		500	10,121
Total Revenue	788,706	2,543,185	1,496,607
<u>EXPENSE</u>			
Salaries, Wages, Benefits, etc.	1,219,209	2,008,500	1,143,090
Additional Staff Costs	22,650	61,440	
Volunteer Program	0	12,500	
Professional Contract Services	10,000	61,692	103,786
Regulatory Fees & Professional Memberships	950	3,055	
Property Maintenance & Repairs	122,241	63,496	10,925
Utilities	85,450	108,134	69,319
Capital Improvements		15,000	
Animal Care	178,500	314,150	98,115
Shelter Admin & Operations	807,303	131,580	95,594
Marketing & Communications	9,050	10,350	22,600
Fundraising	0	100,000	0
Other (FAS = Licensing)	500	274,285	
Total Expenses	2,455,853	3,164,181	1,543,429
REVENUE OVER EXPENSE	-1,667,147	-620,996	-46,822
<u>USE OF FUND BALANCE</u>			
Adams Contribution/FAS Fund Balance Use	1,667,147	620,996	46,822

## The Shelter Network Metro Denver Animal Welfare Alliance Locations

http://www.mdawalliance.org/mdawa-agencies-that-offer-adoption-services



Warren Photogine GABRIEL FOUNDATION (BIRDS ONLY)

**HUMANE SOCIETY OF BOULDER VALLEY** 

**HUMANE SOCIETY OF THE SOUTH PLATTE VALLEY** 

**INTERMOUNTAIN HUMANE SOCIETY** 

#### **Communications & PR**

#### Recommendations

#### SHELTER WEBSITE

- user-friendly
- community-friendly
  - animal search

#### **PROMOTIONS**

PIO support – Media Relations adoption specials and other services

#### **PRESENCE**

high-visibility events in Adams

#### DONOR MANAGEMENT SYSTEM

Engage, Cultivate, Ask, Recognize, Appreciate

#### COMMUNITY RELATIONS MANAGER

New position

#### REBRANDING

Name. Look. Feel.

#### **Open to the Public**

	Adams	Aurora	Denver	Dumb Friends	Foothills
Sun.	10 – 4 (6)	CLOSED	11 – 5 (6)	10 – 5 (7)	10 – 6 (8)
Mon.	12 – 6	11 – 6	10:30 – 6:30	11 – 7	11 – 7
	(6)	(7)	(8)	(8)	(8)
Tues.	12 – 6	11 – 6	10:30 – 6:30	11 – 7	11 – 7
	(6)	(7)	(8)	(8)	(8)
Wed.	CLOSED	11 – 6 (7)	10:30 – 6:30 (8)	11 – 7 (8)	11 – 7 (8)
Thurs.	12 – 6	11 – 6	10:30 – 6:30	11 – 7	11– 7
	(6)	(7)	(8)	(8)	(8)
Fri.	12 – 6	11 – 6	10:30 – 6:30	11 – 7	11 – 7
	(6)	(7)	(8)	(8)	(8)
Sat.	10 – 5	10 – 4	11 – 5	10 – 5	10 – 6
	(7)	(6)	(6)	(7)	(8)
	37 hrs	41 hrs	52 hrs	54 hrs	56 hrs

# Facility 9/18/2015



#### **Pros**

- Adequate public parking
- Secure staff parking
- Exterior walls materials require limited maintenance
- Limited landscaping to maintain
- Large outdoor dog yards

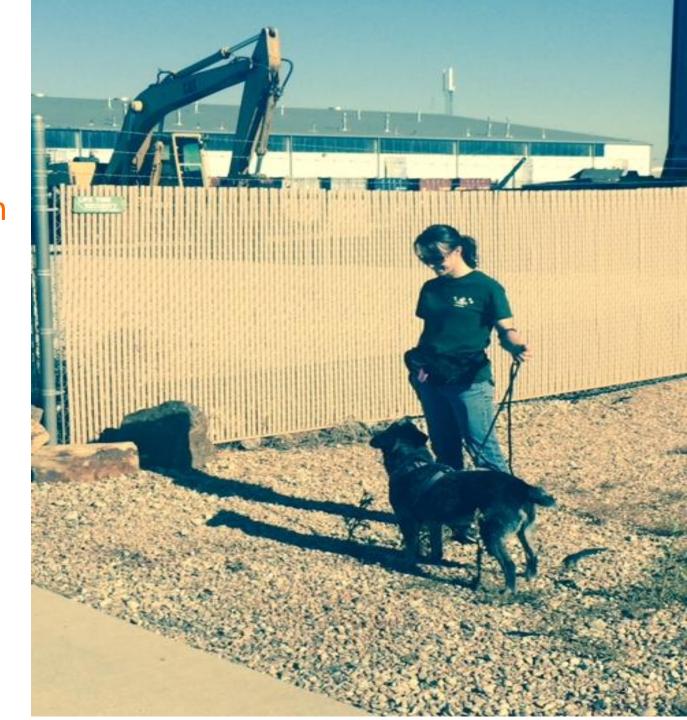
#### **Cons**

- Lack of street appeal
- Crematorium in public view
- Dirt parking lot
- Lack of shade in dog yards
- Low fencing between yards



#### Location <u>Pros</u>

- Distance from residential areas
- Room for expansion





# Location

Cons

Difficult to
Find and
Access

Lack of Visibility

**Breed Ban** 

**Noise** 

Safety





## Interior

### <u>Cons</u>

- Air circulation
  - Standard = 10 − 12 exchanges per hour.
- Noise
  - No noise abatement. Excess of allowable limits. Increased stress for animals & people.
- Open ceiling
  - Surfaces above 7 ft contributing to bacterial contamination and disease outbreaks
- Heating & Cooling systems
  - Uneven temps throughout building.
- Lighting
  - Below industry standards.
- Ambiance
  - Lack of visual appeal. Pound–like.
- Kennel Floors
  - Uneven, difficult to remove standing water.
- Physical Environment
  - \$\mathfrak{Physical environment not conducive to attracting, retaining volunteers.



# Interior (cont.)

### Lack of Health Care Space

- ☐ Single room serves as both surgery and healthcare.
- PACFA: "At any facility where surgical procedures occur, there must be a room whose purpose is exclusively for surgery."



### Animal Housing Design

- ☐ Dog kennels face each other: increased barking and stress
- Cats close to dogs: exposing cats to constant barking and increasing stress
- Outdated cat kennel design: allows cats to make contact with each other increasing stress and potential spread of disease
- Lack of adequate space for small mammals, birds, reptiles etc.
- ☐ Parvo kennels located in euthanasia room.
- ☐ Court-hold kennels have no access to outdoor space.
- ☐ Lack of roof in intake area provides opportunity for escapee cats.

9/18/2015

# **ACO Input:** Communication Intake and Processing Improvements Disease Prevention & Outbreak Protocols Notice of Changes in Policies, Services, Closures ACO Meetings Connect to ACAS Database/Records (Chameleon) Training

# **ACO Input: A New Shelter**

- "We are behind the times."
- Need a shelter designed to be a shelter not a dog pound: serving animals, ACO's and the public
- Location. Location. Location.
- Provide low cost spay/neuter services.
- Open 7 days. Accommodate working people.

9/18/2015

# Licensing



9/18/2015

# **Currently Requiring Licenses**

- ✓ Bennet
- ✓ Federal Heights
- ✓ Adams County (SINCE 19

-	ADOGALICENSE!
of the o	SPRINGFIELD, Vt. Registered No. 119 This Certifies, That 200 De Societte  owner or keeper of a Dog kept in this town, and described as follows:
Size	Mide ; age & week ; color Blown ;
has p	paid the sum of / DOLLAR and caused the said Dog to be reg-
LI	ed, numbered and described as above, and the same is hereby CENSED for one year from April 1st, 189 /
Date	d the 28 day of The J. D. 189 1  The L 2 accessed Town Clerk.
THE	DOG MUST WEAR AROUND ITS NECK A COLLAR DISTINCTLY MARKED WITH ITS OWNER'S NAME AND ITS REGISTERED NUMBER.

## **Licensing Projections: Adams County**

Jurisdiction	Adams County Housing Data (Total Housing Units)	OTHER County Housing Data (Weld/Arap Ctys) (Total Housing Units)	ESTIMATED DOG POPULATION	GOAL (20% of Est. Dog Pop)	Goal x \$20 Flat Fee
	<u> </u>	O into j	I OI OLATION	208 1 04)	1100100
Bennett	772	126	611	122	\$ 2,443
Commerce City	16,000	0	10,880	2,176	\$ 43,520
Federal Heights	4,891	0	3,326	665	\$ 13,304
Northglenn	14,263	11	9,706	1,941	\$ 38,825
Thornton	44,309	0	30,130	6,026	\$ 120,520
Unincorporated	31,448	0	21,385	4,277	\$ 85,539
JURISDICTION TOTALS	111,683	137	76,038	15,208	\$ 304,150

155500 11051105 NUMBERO
JEFFCO LICENSE NUMBERS
Estimated Dog Pop: 175,476
20% Compliance GOAL: 35,095
20% GOAL X \$20: \$701,900

#### FORMULAS:

Est. dog population: Household numbers x .425 (Est. Dog population) x 1.6 (number of dogs per household) = TOTAL

Goal: (Number of licenses need to reach 20% compliance rate). Est. Dog population x 20%

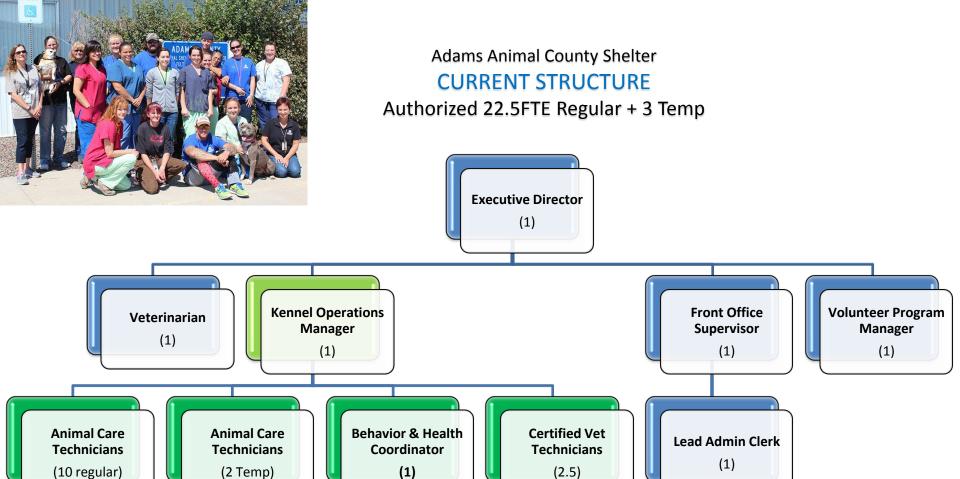
#### SOURCES:

43



# Licensing Recommendations

- ☐ Move to "lifetime" vs renewal tags.
- ☐ Track licensing data monthly.
- ☐ Implement cohesive licensing program across all entities that contract with ACAS.
  - Establish compliance goals for each entity based on est. dog pop.
  - Consider contracting for administration (PetData).
  - Update municipal and county ordinances to reflect licensing expectations.



Single Threaded Vertical Management Structure

9/18/2015

**Admin Clerks** 

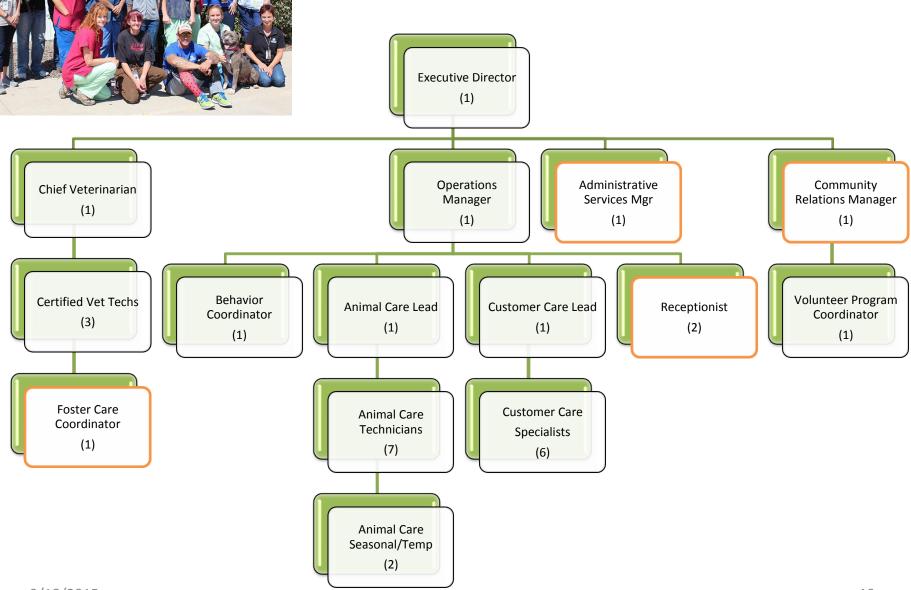
(3 Regular)

**Admin Clerks** 

(2 Temp)



### PROPOSED STRUCTURE (as gov't entity) Proposed 29 FTE + 2 Seasonal/Temp



9/18/2015

### **Toward Consolidation**

### Benefits

- Regional Approach
- Shared Overhead and Purchasing
- Regional Licensing
- Westminster & Arvada
- Replicated Floor Plan
- Broader Community
   Impact
- Complimentary
   Programs & Services

### Challenges

- Organizational Structure (Govt vs IGA)
- Board Composition (14 gov't entities)
- Financial Support
- Multiple Entities/
   Agencies Served (ACOs)
- Cultural Shift

9/18/2015

### Consolidation?

# <u>Recommendations</u>

- Toward Becoming a Community Organization
  - Staffing
    - Customer Service, Community Relations, Administrative Svc, Telephone Counselors/Receptionists, Foster Coordinator
  - Program Development: Foster, Adoption partners
  - Community Relations (and social marketing)
  - ACO engagement, communications, data share
- Facility: Location & Environment
- Implement & Enhance County-wide Licensing Program
- Formulate Multi-Jurisdictional/Regional Strategic Advisory Committee
- Consider Quasi-Gov't (IGA) Structure

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Mission: The Adams County Animal Shelter/Adoption Center is committed to advocating and promoting the cause of animal welfare within our community. We provide compassionate, humane care and shelter to each and every animal in our trust. We strive to find responsible and loving homes for all of our adoptable pets.

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<u>Vision</u>: The Adams County Animal Shelter/Adoption Center is dedicated to being a leader in the animal welfare community through continuing education, training, and partnerships. We



seek to educate and engage our patrons in the practices of responsible pet ownership. Through enforcement of state statutes and county ordinances, we serve and protect the pets and the people of Adams County.

9/18/2015



#### STUDY SESSION AGENDA ITEM

DATE: September 22, 2015

SUBJECT: Gold Line/Northwest Rail IGA Amendment #2

FROM: Jeanne M. Shreve

AGENCY/DEPARTMENT: County Manager's Office

ATTENDEES: Jeanne M. Shreve, Jeff Maxwell, Russ Nelson, John Wolken, Brad Boswell, Doug

Edelstein, Justin Blair

PURPOSE OF ITEM: Review IGA amendment

STAFF RECOMMENDATION: The Board consider scheduling for approval.

#### **BACKGROUND:**

The Board approved the original IGA with RTD for the Gold Line and Electrified Northwest Rail on May 11, 2011. The primary sections of the IGA included:

- 1. Local Agency Contributions (LAC)
- 2. Specific Design Criteria (the 'deal points')
- 3. Design Review
- 4. Streamlined Permitting Process (Non-land use)
- 5. Final Inspections and Acceptance
- 6. Amendments/Additional Maintenance Agreements

The second amendment to the IGA updates:

- 1. Specific exhibits (I.e., related to easements, plans for 'deal points', etc)
- 2. Local Agency Contribution
- 3. Specific Design Criteria ('deal points')

#### AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Transportation, Building Division and Finance

#### **ATTACHED DOCUMENTS:**

1. IGA amendment #2

#### **FISCAL IMPACT:**

Either mark  $X \square$  if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):25	William William
Cost center(s): 9295 Sub 9295 1301	
Self-generated / dedicated revenues:	\$
Annual operating costs:	\$
Annual net operating (cost) / income:	\$
Capital costs:	\$461,000
Expenditure included in approved operating budget:	\$
Expenditure included in approved capital budget:	\$1,898,278
New FTEs requested:	

The \$461,000 will require spending authority.

Ed Finger, Deputy County Manager

APPROVAL SIGNATURES:	APPROVAL OF FISCAL IMPACT:
Todd Leopold, County Manager	May Dum  Budget / Finance
Raymond H. Gonzales, Deputy County Manager	

THIS AMENDMENT NUMBER TWO TO THE GOLD LINE CORRIDOR/NORTHWEST ELECTRIFIED SEGMENT LOCAL AGENCY CONTRIBUTION INTERGOVERNMENTAL AGREEMENT (this *Amendment*) is dated as of August 28, 2015 and made:

#### **BETWEEN:**

- (1) **REGIONAL TRANSPORTATION DISTRICT**, a public body politic and corporate and political subdivision of the State of Colorado, organized and existing under the terms of the Regional Transportation District Act, Section 32-9-101 *et seq.*, Colorado Revised Statutes, as amended (*RTD*); and
- (2) Adams County, a county of the State of Colorado, organized pursuant to Article XIV, Section 18(2)(a) and Article XX of the Colorado Constitution and Section 29-1-201 et seq., Colorado Revised Statutes, as amended (*Adams County* or *County*).

RTD and Adams County are hereinafter sometimes referred to individually as a *Party* and collectively as the *Parties*.

#### WHEREAS:

- A. RTD and Adams County are party to the Gold Line Corridor and Northwest Electrified Segment Local Agency Contribution Intergovernmental Agreement ("Agreement" of "IGA") dated June 2, 2011.
- B. The Parties now wish to amend the IGA to reflect the continued work and advancement in refining the below elements of Sections 1, 5, 6, 7 and 8 (Exhibits), Local Agency Contributions (LAC), Transit System Elements, Specific Design Requirements and Betterments (respectively):
  - a. 1.3: Reference Exhibits
  - b. 1.4: Attached Exhibits
  - c. 5.1: County Property Intere
  - d. 5.4: Credit for Pecos Grade Separation Project
  - e. 5.6(b): Denver Regional Council of Governments ("DRCOG") Funds Designated for FasTracks
  - f. 6.1: Transit System Elements
  - g. 7.8(b): Future Clay Comm Trail
  - h. 7.8(f): Lowell Boulevard
  - i. 7.8(h): 64<sup>th</sup> Avenue Grade Separation
  - j. 7.12: Clear Creek Federal Station (West 60<sup>th</sup> Avenue Improvements per 7.3 Traffic Mitigation)
  - k. 7.14(a): Utah Junction Clay Street Outfall System

#### I. 7.14(d): Little Dry Creek Culverts at NWES

**NOW, THEREFORE**, in consideration of their mutual undertakings and agreements hereunder, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Amendment undertake and agree as follows:

#### 1. **DEFINITIONS AND INTERPRETATION**

Terms used but not defined herein shall have the respective meanings ascribed to such terms in the IGA, as amended hereby.

#### 2. **AMENDMENTS**

With effect on and after the date hereof, the IGA shall be amended as follows:

- (a) Section 1.4 (*Attached Exhibits*) is amended as follows:
  - I. Exhibit D-1 and D-2: incorporated as Attachment 1 are hereby replaced in this IGA amendment.
  - II. <u>Exhibit G</u>: Update to Local Agency Contribution, attached and completely replaces original Exhibit G herein as Attachment 2.
  - III. Exhibit J-1: Clay Street Outfall General Plan and Elevation and Clay Community Trail Plan sheet and Profile sheet, attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
  - IV. <u>Exhibit J-2</u>: Gold Line Bridge Typical Section attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
  - V. <u>Exhibit J-3:</u> Adams County Letter of Commitment to RTD for the Clay Community Outfall RTD Gold Line Crossing, dated July 1, 2014 attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
  - VI. <u>Exhibit J-4</u>: Clay Street Community Trail and Outfall System Access Easement No. 1 and Access Easement No. 2, attached and incorporated herein as Attachment 3, are hereby added to the list of Attached Exhibits.
  - VII. <u>Exhibit K</u>: Lowell Boulevard Crossing, attached and incorporated herein as Attachment 4, is hereby added to the list of Attached Exhibits.
  - VIII. Exhibit L-1 and L-2: West 60<sup>th</sup> Avenue Improvements and Federal Requirements, attached and incorporated herein as Attachment 5, is hereby added to the list of Attached Exhibits.
    - IX. <u>Exhibit M</u>: Clear Creek Federal Station Changes, attached and incorporated herein as Attachment 6, is hereby added to the list of Attached Exhibits.
    - X. <u>Exhibit N</u>: Clear Creek Federal Station Utility Matrix, attached and incorporated herein as Attachment 7, is hereby added to the list of Attached Exhibits.

- XI. <u>Exhibit O-1 and O-2</u>: County and Denver Transit Partners (DTP) Temporary Construction Easements, attached and incorporated herein as Attachment 8, are hereby added to the list of Attached Exhibits.
- XII. <u>Exhibit P</u>: ADCO/RTD/BNSF Culverts Ballast Wall, attached and incorporated herein as Attachment 9, is hereby added to the list of Attached Exhibits.
- XIII. <u>Exhibit Q:</u> Lowell Boulevard Permanent Easement, attached and incorporated herein as Attachment 10, is hereby added to the list of Attached Exhibits.
- XIV. <u>Exhibit Q-1</u>: Lowell Crossing Parcel attached and incorporated herein as Attachment 10, is hereby added to the list of Attached Exhibits.
- XV. <u>Exhibit R</u>: Right of Entry (ROE) Permit-Contractor attached and incorporated herein as Attachment 11, is hereby added to the list of Attached Exhibits.
- (b) Section 5.1 is hereby amended as follows:
  - I. Subparagraph a (*GL 7. Parcel ID-182508400001. West 60<sup>th</sup> Avenue street improvements*), is hereby deleted in its entirety and replaced with the word "Reserved". RTD agrees to provide a permanent easement for the right-of-way for the 60<sup>th</sup> Avenue Project prior to County advertising construction for the project. When permitted by FTA, RTD will convey this right-of-way to the County. Additionally, RTD shall convey the property rights for the channel parcel north of 60<sup>th</sup> Avenue.
  - II. Subparagraph b (*GL 7B. Parcel ID- 182508100038.* Clear Creek Federal Station storm sewer outfall) is hereby amended to read:
    - (A) Federal P&R Outfall: RTD will design and construct a drainage system from RTD's onsite water quality pond to include a junction structure in the future 60<sup>th</sup> Avenue right-of-way. The County will maintain the portion of the outfall from the junction structure in the West 60<sup>th</sup> Avenue right-of-way, located near the southern right-of-way line to the outfall in Clear Creek. The County will receive 50% LAC for the design and construction of the outfall. The County will design and construct the access to the curb return to the Clear Creek Federal Station consistent with the County's W. 60<sup>th</sup> Avenue project.
- (c) Section 5.4 is hereby eliminated and replaced with Exhibit G.
- (d) Section 5.6(b) is hereby eliminated and replaced with Exhibit G.
- (e) 6.1 Transit System Elements is hereby revised to read in its entirety:

Certain Project elements included in a Submittal are transit elements that are crucial to Commuter Rail Transit ("CRT") system operation, compliance with NEPA documentation, or and/or compliance with FTA or FRA requirements (collectively, "Transit System Elements"). County permitting requirements shall not apply to Transit System Elements constructed within the CRT track-way clearance envelope boundaries as depicted in Exhibit I in the first executed IGA between RTD and the

County or to certain Transit System Elements that are constructed outside the boundaries of the CRT track-way clearance envelope on RTD Project property with the exception of elements subject to the provisions of the County's water quality regulations or floodplain regulations. Transit System Elements include, without limitation, trackage, prefabricated traction power substations, prefabricated signal houses, prefabricated communications houses, noise and ballast walls, and station platforms and associated vertical circulation. It is specifically agreed the elevators at the stations would be subject to county inspection. Plans provided by RTD or the Concessionaire for Transit System Elements are for information purposes only, and are not subject to the County's review fees or processes; however, plans provided by RTD or the Concessionaire for roadway and drainage improvements, and erosion control are subject to the County's review and permitting processes.

(f) Section 7.8(b) (*Future Clay Community Trail*) is deleted and replaced with the following:

#### Section 7.8(b) Gold Line Bridge, Clay Community Trail and Clay Street Outfall:

- I. Responsibilities. RTD shall implement the Gold Line Bridge for the CRT in accordance with Exhibit J-2 and PUC Decision No. C13-1339 (Proceeding Number 13A-0956R) and build certain elements of the Clay Community Outfall/Trail (CC Betterment Project) per the Letter of Commitment for the Betterment package for the Clay Community Outfall Project - RTD Gold Line Crossing, dated July 1, 2014 and herein incorporated as Exhibit J-3, hereinafter referred to as the "Clay Betterment Project". At such a time in the future as the County decides to build the remaining improvements for the Clay Community Trail or Clay Street Outfall System under the Gold Line Bridge, the County shall construct the improvements materially in accordance with Exhibit J-1 and PUC Decision No. C13-1339 (Proceeding Number 13A-0956R). RTD shall construct overpass fencing protection on the Gold Line Bridge that meets the standards and requirements included in the Concession Agreement. The Parties shall coordinate the construction of the Gold Line Bridge with the future Clay Community Trail and Clay Street Outfall System. RTD shall, at no cost to the County, maintain the Gold Line Bridge, including overpass fencing protection, as required by and in accordance with applicable laws. The County shall, at no cost to RTD, maintain the Clay Street Outfall System and the Clay Community Trail, including, without limitation, the walls, trails, liners and all other items constructed by the County.
- II. Approvals and Permissions. Except as otherwise provided herein, RTD shall obtain the permissions necessary to implement the Gold Line Bridge and the Clay Betterment Project. The County shall obtain the permissions necessary to implement the Clay Community Trail and the Clay Street Outfall System. The County shall coordinate with CDOT to ensure that CDOT will not be adversely impacted by implementation of the Clay Community Trail and Clay Street Outfall System and, if necessary, obtain any necessary crossing permission. By opening day of the Gold Line corridor, RTD shall grant to the County a non-exclusive access easement, consistent with and subject to those prior rights granted to RTD, as shown in Exhibit J-4, parcel PE-5A (Rec. No. 2012000037580); and a non-exclusive permanent easement as shown in Exhibit J-4, parcel GL-5A REV2, for the Clay Street Community Trail and Outfall System improvements. Easement across GL-5A REV2 will provide permission to

implement the Clay Community Trail and the Clay Street Outfall System on, across, under, and along the RTD property.

- III. Cost Responsibility for the Gold Line Bridge. Of the cost to RTD to implement the Gold Line Bridge, \$599, PTD shall be responsible for \$138,000. The County shall pay to RTD \$4,000 as approved in the County's 2014 budget. The total County contribution includes the original \$75,000 agreed to in 7.8(b) of the IGA. In addition, the County shall pay RTD the cost of the Clay Betterment Project within 30 days after receipt of an invoice from RTD for said capital costs. The cost for environmental remediation within the Clay Betterment Project, which costs are in addition to the Clay Betterment Project, shall be paid within 30 days of RTD's invoicing of that cost, following completion of the remediation work.
- (g) Section 7.8(f). Lowell Boulevard:
  - I. Section 7.8(f) (Lowell Boulevard) is hereby deleted and replaced with the following:
  - II. **Existing Crossing Responsibilities.** RTD will, at no cost to the County, construct the Lowell Boulevard crossing of the CRT right of way in accordance with Public Utilities Commission (PUC) Decision C14-0334 in Proceeding 14A-0124R. In addition, RTD will include long railroad ties on the CRT tracks to support additional crossing panels to match the width of the future Lowell Boulevard cross-section, as shown in Exhibit K.
  - III. **Future Crossing Responsibilities.** The County has designed the Lowell Boulevard Widening Project ("Lowell Widening") and shall construct the Lowell Widening in accordance with Exhibit K and PUC Decision C15-0195R.
  - IV. Property. RTD shall grant a permanent easement for Lowell Boulevard improvements outside County's existing 60 foot right of way width where such improvements encroach onto RTD property in the form shown in Exhibit Q attached.
  - V. **Maintenance**. The County shall maintain the roadway surface of Lowell Boulevard, including, if applicable, any widened sections and any sidewalk/regional trail installed in accordance with the PUC Order. RTD shall maintain the CRT crossing elements and the pedestrian treatments in accordance with applicable PUC rules and in accordance with the Order.
- 3. Section 7.8(h). 64<sup>th</sup> Avenue Grade Separation

The 64th Avenue Grade Separation (bridge) is a BNSF requirement of the EAGLE P3 project. The Parties acknowledge the bridge imposes a unique circumstance to the EAGLE P3 project and subsequent burden on the County's long term infrastructure program. Once the warranty period has ceased per the executed IGA, the County shall assume maintenance responsibilities of the bridge and perform all inspections and preventative maintenance as required under its Bridge Program. The County will inform RTD at such a time in the future when replacement of the bridge is required, within two (2) years ahead of the anticipated construction, the Parties shall coordinate and endeavor to

determine a fair and equitable financial arrangement to reconstruct the bridge to current standards and operational needs at that time.

4. **Section 7.12 <u>Federal Station.</u>** (Clear Creek • Federal Station) is hereby revised to read in its entirety:

#### West 60<sup>th</sup> Avenue Improvements.

- **a. Plans**. The County shall procure the design, right-of-way and construction of the roadway, the necessary roadway drainage facility improvements to the West 60<sup>th</sup> Avenue corridor, and the traffic mitigations for the Clear Creek Federal Station area identified in Section 7.3 (*Traffic Mitigations*) in accordance with Exhibit L-1 (collectively, the *West 60<sup>th</sup> Avenue Improvements*) and within the property identified as "Adams County Conveyance 1- Rev2" on Exhibit D-1 (*AdCo 1-Rev2*). The County shall avoid impacts to the historic structure as shown on Exhibit D-1 and approved by FTA in a Categorical Exclusion. The County acknowledges and agrees that it will construct the Traffic Mitigations and that the County's implementation of the West 60<sup>th</sup> Avenue Improvements shall satisfy RTD's obligation to construct the Traffic Mitigations. The County shall obtain RTD's approval of any material change from Exhibit L-1 before implementing such changes. RTD will provide comments or a statement of no exceptions to any revised design plans within 30 days of submission.
- **b. ADCO Construction and Access.** The County and RTD shall enter into a temporary easement as substantially defined in the easement shown on Exhibit D-2 for the property identified as "Adams County Conveyance 1-Rev2" on Exhibit D-1 to allow the County to construct the West 60th Avenue Improvements prior to the property owned by RTD (Adams County Conveyance 1-Rev2) being conveyed to the County. Both parties shall adhere to the requirements defined in the temporary easement in Exhibit D-2.
- c. Federal Requirements. In the implementation of the West 60<sup>th</sup> Avenue Improvements, the County shall procure the construction of the work in accordance with FTA Circular 4220.1F. The County shall provide RTD the opportunity to review solicitations for the construction contracts and shall allow RTD to take part in the evaluation and selection of the prime construction contractor, including evaluation of the RFP by the County and proposals submitted by contractors. This Section 7.12 of the IGA is subject to those terms and conditions identified on Exhibit L-2. The County shall ensure Exhibit L-2 is incorporated into, and appended to, each applicable contract or subcontract entered into for the West 60<sup>th</sup> Avenue Improvements. The County shall ensure all certifications are obtained from the County's contractor before notice to proceed is issued. RTD shall be the oversight entity for Contractor compliance with the DBE Program described in the Exhibit. Contractor shall be responsible for all reporting and compliance specified therein.
- **d. Retainage and Bonds.** The County shall comply with CRS 24-91-101, *et seq.* and CRS 38-26-101, *et seq.* in the procurement, administration and closeout of applicable construction contracts awarded for the West 60<sup>th</sup> Avenue Improvements work. The County shall ensure that RTD is an obligee on all public works bonds obtained by the County's contractors for construction of the West 60<sup>th</sup> Avenue Improvements. The County shall forward to RTD executed copies of

such bonds and all contracts and subcontracts for construction, materials or otherwise that are entered into with respect to the West 60<sup>th</sup> Avenue Improvements.

- **e. Permits.** The County shall be solely responsible to obtain permits necessary to implement the West 60<sup>th</sup> Avenue Improvements, including CDOT approvals.
- **f. Reporting**. The County shall provide to RTD copies of all executed contracts and subcontracts not later than 30 days from execution thereof. If RTD or FTA should issue findings following an audit of this IGA or any such contracts for compliance with federal requirements, the County agrees to amend this IGA and to use best efforts to amend any such contracts in order to respond to the audit findings. The County shall provide to RTD a quarterly report consisting of a brief narrative about the current status of the project, specifically advising of any change in milestone dates from the previous reporting period, and advising of the status of achievement of the following milestones for its contract(s):
- (A) bid release;
- (B) construction contract award;
- (C) construction completion; and
- (D) Contract closeout.
- (E) Milestone completion date reports
- **g. Environmental Work.** The County shall perform, at no cost to RTD, the management, removal, signing manifests as generator, disposal or remediation (as applicable) of solid and hazardous materials encountered during construction of West 60th Avenue Improvements including but not limited to those on property that is or will be owned or controlled by the County, any property purchased by the County for the West 60<sup>th</sup> Avenue Improvements; Parcel AdCo 1-Rev2 legally described on Exhibit D-1; and those portions of the property upon which the current West 60<sup>th</sup> Avenue corridor roadway is currently installed, exclusive of Parcel PE7A, legally described on Exhibit D-1. Environmental Work performed by the County that is over and above the DRCOG funded portion of the project will be credited to the County as LAC.
- h. Utilities and Restoration. The County shall coordinate with RTD in the design and construction of the West 60<sup>th</sup> Avenue Improvements and the placement of utilities within West 60<sup>th</sup> Avenue that are necessary to serve Clear Creek Federal Station, including the Berkeley Water and Sanitation lines. RTD shall be responsible for installing or relocating utilities required exclusively to serve Clear Creek Federal Station. The County shall submit plans at the 100% design level to RTD for the purpose of verifying that RTD can access the necessary utilities. RTD will provide concurrence or objection within 14 days of receipt. Disputes will be resolved as provided in Section 16 of the Agreement. The County shall be responsible for all other utilities identified on Exhibit N. RTD shall not be responsible to remove the current West 60<sup>th</sup> Avenue corridor roadway nor restore the property upon which it is installed.
- i. Access and Schedule. The County shall ensure that the existing West 60<sup>th</sup> Avenue, or a reasonable alternative, is open and accessible from Federal

Boulevard or West 60th Avenue at all times during implementation of Clear Creek • Federal Station and the Federal Drainage Facilities. The West 60<sup>th</sup> Avenue Improvements shall be substantially completed no later than August 31, 2016. Should the West 60<sup>th</sup> Avenue Improvements not be completed by August 31, 2016 the County will ensure that the existing 60<sup>th</sup> Avenue will be available for access to the Federal Station on opening day of the Gold Line (anticipated October, 2016). If the County fails to implement the West 60<sup>th</sup> Avenue Improvements by August 31, 2016, RTD may elect to implement the Traffic Mitigations and draw down funds from the DRCOG funding in an amount sufficient to reimburse RTD for the costs. Installation of intersection control is contingent upon applicable warrants being met. If the applicable warrants are not met at the time of construction, the county will not be responsible for these improvements and RTD will not penalize the County by drawing down the DRCOG funds.

**j. West 60<sup>th</sup> Avenue Improvements Communications.** The County shall address communications to RTD with respect to Federal Requirements, Retainage and Bonds, Reporting, and invoicing EAGLE P3 Cost Engineer via Aconex. All other communications shall be addressed in accordance with Section 22 (*Notices*).

#### 5. Clear Creek • Federal Station.

- a. Design and Construction. RTD shall design and construct Clear Creek Federal Station, the commuter rail station and Park-n-Ride at Federal and West 60th Avenue, in accordance with the FEIS, as revised by the Clear Creek • Federal Station Changes approved by FTA pursuant to a Categorical Exclusion entitled "60<sup>th</sup>/Federal Roadway Realignment on the Gold Line Federal Station" (approved by FTA 8/8/2013) and in accordance with the requirements of the Concession Agreement, Exhibit M, and any remaining design requirements. The County specifically acknowledges and agrees that RTD will implement Clear Creek • Federal Station, including the water quality pond, as depicted on Exhibit M whether or not the County implements the West 60<sup>th</sup> Avenue Improvements. RTD shall perform the management, removal, disposal or remediation (as applicable) of solid and hazardous materials encountered on property that will be owned or controlled by RTD, including: property purchased by RTD for Clear Creek • Federal Station; Parcels GL6 and GL6A REV1, and PE8, each as depicted on Exhibit D-1; and Parcels PE7 and PE7A, each as legally described on Exhibit D-1.
- b. Water Quality Pond and Clear Creek Federal Station Outfall System. Upon the County's approval on supporting plans reports, and legal description for those portions of the Clear Creek Drainage Facilities (the Federal Drainage Facilities) that will be implemented on Parcels PE7, and PE7A, the County expressly agrees to allow RTD to construct a single water quality pond to connect to a storm outlet within PE7, PE7A, and PE8 (the Clear Creek Federal Station Outfall System) that drains to Clear Creek in lieu of the water quality and detention pond identified in the Federal Station IGA Plans, as allowed by Section 9-01-12 DETENTION in the County's Development Standards & Regulations. The County will be permitted to utilize the pond for drainage from ADCO Clear Creek floodplain project north of RTD Clear Creek Federal Station. RTD will

design and construct the Clear Creek Federal Station Outfall System which will include a junction structure (manhole) such that Adams County has access to maintain the system. Adams County will take on maintenance of the Clear Creek Federal Station Outfall System from RTD station from said junction structure (manhole) to Clear Creek. The County will be eligible for 50% local agency contribution (LAC) based on construction costs to install the outfall system from the station water quality pond to Clear Creek.

#### c. Right-of-Way Transactions.

- C1. RTD has acquired Parcels GL6, GL6A REV1, AdCo 1-Rev2, GL9A, GL9C, GL9D, and PE8, each as depicted on Exhibit D-1. RTD has complied with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (the *Uniform Act*) and its implementing regulations located at 49 C.F.R. Part 24 in acquiring property that is necessary to implement Clear Creek •Federal Station.
- C2. RTD shall convey to the County, at no cost, the AdCo 1-Rev2 property shown on Exhibit D-1 in order to implement the West 60<sup>th</sup> Avenue Improvements and necessary traffic mitigations referenced in Section 7.12(I) **Plans**.
- C3. RTD shall convey to the County, at no cost, the property north of AdCo 1-Rev2 property shown on Exhibit D-1 for County implementation of a water quality facility/pond for the roadway drainage to drain to Clear Creek Federal Station Outfall System to Clear Creek as referenced in Section 7.12(II) **Permits**. RTD shall also convey PE-8 to county for the outfall maintained by the county.

Conveyance of property north of AdCo 1-Rev2 and PE-8 are subject to terms and conditions t D and/or FTA approval.

RTD will provide, at no cost to the County, property that it owns (north of AdCo 1-Rev2 property shown on Exhibit D-1) for right of way required for West 60<sup>th</sup> Avenue capacity increases created by the **Clear Creek • Federal Station** and/or additional ingress and egress to **Clear Creek • Federal Station**.

- C4. Both properties shall be conveyed to the County within days of the passage of a resolution or other dedication by the County for use of the property as public right of way.
- C5. The County and RTD shall work together in the future to address future roadway widening plans by the County starting near the eastern Clear Creek Federal Station access to the eastern RTD property line. The County has proposed potential widening improvements along the southern edge of West 60<sup>th</sup> Avenue to facilitate a standard roadway section that does not impact the station water quality pond. This proposal shows additional right-of-way required up to approximately 7.5 feet on eastern property line. The County would be responsible for any modifications to RTD's infrastructure necessary for the right-of-way change and roadway improvements. RTD agrees to convey to the County, at no cost, the necessary right-of-way to facilitate the roadway widening improvements if the County demonstrates proper funding is in place for improvements prior to conveyance. Property will be conveyed subject to dedication of the same as public right of way.

- C6. The County shall acquire all other real property necessary to implement the West 60<sup>th</sup> Avenue Improvements. The County shall comply with the Uniform Act and its implementing regulations located at 49 C.F.R. Part 24 in acquiring property that is necessary to implement the West 60<sup>th</sup> Avenue Improvements and shall provide to RTD all documentation necessary for RTD to obtain FTA concurrence on the purchase of the real property. FTA concurrence must be obtained prior to acquiring real property for the West 60<sup>th</sup> Avenue Improvements.
- C7. RTD shall grant to the County, at no cost, a non-exclusive temporary construction easement in the form attached and incorporated herein as Exhibit O-1 (the *AdCo TCE*) pursuant to which the County shall have authority to enter upon Parcels GL6, GL6A REV1 and AdCo 1-Rev2 for purposes of constructing the West 60<sup>th</sup> Avenue Improvements. The AdCo TCE shall be subject at all times to the right of the Concessionaire to construct utilities necessary for Clear Creek Federal Station upon AdCo 1-Rev2 and to have access across Parcels GL6, GL6A REV 1 and AdCo 1-Rev2 from existing West 60<sup>th</sup> Avenue to the remaining portions of Parcels GL6, GL6A, PE7, PE7A and PE8. The AdCo TCE and the Concessionaire's access rights shall automatically terminate upon the effectiveness of the grant of Parcel AdCo 1-Rev2 to the County in accordance with the below Section 7.12(c)(v).
- C8. The county shall grant to RTD/DTP a non-exclusive temporary construction easement (if necessary) on County property surrounding parcels PE-7, PE-7A, and PE-8 to construct the Clear Creek Federal Station Outfall system. A non-exclusive temporary construction easement will be in the form attached and incorporated herein as Exhibit O-2 (the DTP TCE) pursuant to which, RTD/DTP shall have authority to enter upon said County property for the purpose of constructing the Clear Creek Federal Station Outfall system.
- C9. Any permanent easements granted for utilities over property dedicated to the County for right of way purposes shall become subordinate to the County's rights. As necessary, said permanent easements granted by RTD to utility companies shall contain a facsimile subject to necessary modifications for the name or appropriate designation of the grantee of the following provision:

Notwithstanding the above-referenced limitations. the **Parties** acknowledge that Grantor may be required to dedicate a portion or all of the property encumbered by the easement for use as County right-ofway. To the extent that such dedication occurs, the parties agree that the easement shall be vacated with respect to the portion of the property so dedicated as county right-of-way and District's easement rights hereunder shall immediately terminate with respect to such property. dedication, District's access and use rights with respect to such property shall be solely by virtue of its rights as a utility provider within the county right-of-way, to be administered under the provisions of the county's utility permit. Upon dedication of the property as county right-of-way, District agrees to be issued a no-fee utility permit by the county. District shall be responsible, at District's sole cost, to re-locate any of its infrastructure located within the County's right-of-way upon written notice by the County to commence such re-location.

C10. RTD and the County shall exchange property interests in one another's property in accordance with this Section 7.12(c)(vi).

#### d. Cost Responsibility for the West 60<sup>th</sup> Avenue Improvements

- D1. Allowable Costs for West 60th Avenue Improvements. The County shall follow the applicable cost principles circulars, currently in Title 2 of the Code of Federal Regulations, in determining whether project costs are allowable or unallowable. Title 2 C.F.R. part 225, also known as OMB Circular A-87, establishes principles and standards for determining costs applicable to grants, contracts, and other agreements with State and local governments and federally recognized Indian tribal governments. Title 2 C.F.R. part 230 also known as OMB Circular A-122 establishes cost principles for nonprofits. The County's costs must specifically relate to the purpose of the DRCOG funding and the latest approved project budget. The County may incur costs of both a direct and indirect nature. Direct costs are costs that can be identified specifically with a particular cost objective and may be charged directly to a grant, contracts, or to other programs. All direct costs, even for project administration activities, must be adequately supported with proper documentation. For example, all labor charges must be supported with Time, Equipment and Materials records. Indirect costs are costs incurred for a common or joint purpose benefiting more than one cost objective. Indirect costs must be supported by an approved cost allocation plan (CAP) and/or indirect cost rate proposal.
- D2. In response to the 2008 Resolution Number 20 of the Denver Regional Council of Government (DRCOG) which approved \$6.461 million of federal funding from its Transportation Improvement Program (TIP) to the Gold Line base project costs, together the City and County of Denver, RTD, Adams County, the City of Arvada, the City of Wheat Ridge and the Colorado Department of Transportation (collectively, the "Gold Line Partners") agreed to the Gold Line Partners' proposed base projects and the corresponding allocation of the approved funds.
- D3. This Amendment provides for the funding to The County of \$2,213,923 of Federal Highway Administration (FHWA) funds which were transferred by the FHWA to the Federal Transportation Administration (FTA) to be administered by DRCOG through RTD Grant CO 95 X017-01 for the County's improvements to West 60<sup>th</sup> Avenue Improvements. The County and RTD jointly agreed, along with the other Gold Line Partners, to the allocation of \$2,213,923 of those DRCOG TIP funds to The County for its performance of certain base improvements as part of the Gold/NWES corridor project, specifically improvements to West 60<sup>th</sup> Avenue.
- D4. The County shall submit invoices justifying costs incurred, and they will be reimbursed at a rate of 100%.
- D5. **Local Agency Contribution**. The County shall receive local agency credit towards the Gold Line for the \$2,213,923 of DRCOG Second Commitment In Principle (SCIP) funding pursuant to section 5.6(b) of the Agreement.

D6. The Denver Regional Council of Government (DRCOG) approved Federal funding from the SCIP to the North Metro project team, including the City and County of Denver, RTD, Adams County, the City of Commerce City, the City of Northglenn, City of Thornton and the Colorado Department of Transportation (collectively, the "The North Metro Line Partners"), agreed to the North Metro Line Partners' proposed projects and the corresponding allocation of the approved funds.

D7. The County and RTD jointly agreed, along with the other North Metro Line Partners, with the County's request to transfer funds intended for the benefit of the North Metro Corridor to the Gold Line Project; specifically the West 60<sup>th</sup> Avenue Improvements. This Amendment provides for the funding to The County of \$984,000 of FHWA funds which were transferred by the FHWA to FTA to be administered by DRCOG through RTD for the County's improvements to West 60<sup>th</sup> Avenue Improvements

D8. The County is to assist in the payment of actual eligible costs within the scope of this project equal to 20%. The County shall submit invoices justifying costs incurred, and they will be reimbursed at a rate of 80%. The County must justify \$1,230,000 in federally eligible project costs to receive the grant reimbursement of \$984,000.

D9. RTD agrees to drawdown the original Gold Line SCIP funds of \$2.2 million first, before drawing down the North Metro funds transferred to this project.

- **e. Invoicing**. The County shall pay all costs associated with elements other than design and shall construct the West 60<sup>th</sup> Avenue Improvements, including costs to acquire real property necessary for the project. The County shall provide invoices with supporting documentation demonstrating the amount of the County's payments to its construction contractors. Provided the County is not in breach of any obligation under this Section 7.12, all contractor certifications have been received, and no contractor is in violation of federal flow down requirement RTD shall pay, within 30 days of receipt of the invoice, the DRCOG funding to the County on the basis of actual allowable costs invoiced and paid by the County, for federally eligible elements of work in an amount not to exceed the DRCOG funding amount of \$2,213,923. The County's final invoice to RTD shall be for any outstanding retainage amounts due to the County's contractors in accordance with CRS 24-91-101, *et seq.*
- f. Disallowed Costs. The County agrees that reimbursement of any cost in accordance herewith does not constitute a final FTA decision about the whether or not the FTA will allow that cost and does not constitute a waiver of any violation by the County of the terms of the approved grant Agreement. If FTA determines that the County is not entitled to receive any part of the Federal funds requested, RTD will notify the County stating the reasons and RTD will deduct disallowed amounts from pending invoices or if all have been paid, the County will return any funds due to FTA, within 60 days from receipt of a written demand from RTD.
- g. Clear Creek Federal Station Costs. RTD shall be solely responsible for the costs of implementing the Clear Creek • Federal Station Changes, including costs to acquire real property for Clear Creek • Federal Station.

6. **Section 7.14(a)** (*Utah Junction – Clay Street Outfall System*) is hereby revised to read in its entirety:

RTD's obligation to incorporate the Clay Street Outfall System into the Project design shall be deemed satisfied by implementation of the Gold Line Bridge in accordance with Section 7.8(b) of this IGA.

#### 7. 7.14(d): Little Dry Creek Culverts at NWES

- 1. Adams County is the grantee of an easement from BNSF Railway Company (BNSF) for a drainage culvert accommodating Little Dry Creek. RTD will be utilizing the existing culvert to construct the CRT Transit System Elements adjacent to the BNSF track-way. RTD will relocate the BNSF track-way to the north on the existing culvert and build the CRT Transit Elements to the south with no required improvements to the culvert except modifications to the existing ballast wall located in the center of the culvert as shown on Exhibit P. RTD agrees to become the grantee of a separate easement for the south half of the existing culvert utilized by RTD. RTD and the County will seek BNSF consent to terminate the easement to the County for the southern half of the easement property utilized by the RTD CRT Transit System Elements and defined by the boundary fence between RTD and BNSF track-ways. RTD will seek a separate easement from BNSF for the construction and maintenance of the south half of the existing culvert utilized by RTD.
- 2. In the event the BNSF will not allow two easement agreements separating the Parties' respective ownership and maintenance responsibilities, RTD will pay for maintenance obligations associated with the portion within RTD's Right-of-Way. In satisfying RTD's maintenance obligations, RTD may perform or contract for performance of maintenance to the extent and under the terms permitted by the BNSF easement. It is the preference of the County that RTD satisfy its maintenance obligations jointly with the County by reimbursing the County for half the costs related to the maintenance of the structural elements of the reinforced concrete box structure. RTD shall also reimburse the County for half the cost of re-establishment of the existing drainage and pedestrian accommodations provided by the existing reinforced concrete box culvert if required for railroad or CRT operations or to maintain structural sufficiency as defined by AREMA standards. RTD shall only be responsible for the maintenance or any other obligations or expenses that maintain current railroad or CRT related operations. Utility relocation costs, required for shared culvert maintenance expenses established herein shall be jointly developed and mutually agreed-upon prior to committing or expending any funds by either Party. RTD and the County shall plan and coordinate all nonemergency, expenditures sufficiently in advance of such commitments to allow the Parties the opportunity to review, concur and budget for their half of such expenses. The Parties shall renegotiate these terms in good faith if the culvert is significantly modified by either Party.
- a. Section 8.4(a) (Lowell Boulevard Street widening) is hereby deleted in its entirety.

Section 22 (Notices) is hereby revised as follows:

The introductory paragraph in Section 22 (*Notices*) is revised to read:

Except as may be specifically required herein, all communications required by this IGA will be made in writing via Aconex to the project liaisons identified below (or their delegates). If Aconex is not available, communications may be provided in writing or via e-mail, U.S. First Class Post to the attentions of:

The County copy notice shall be sent to:

Jeanne M. Shreve, Transportation Coordinator 4430 South Adams County Parkway, 1st Floor, Suite W2000A Brighton, Colorado, 80601 Email: jshreve@adcogov.org Phone: (720) 523-6847

The RTD primary notice shall be sent to:

Greg Straight, Eagle Project Manager 1670 Broadway, Suite 2700 Denver. Colorado. 80202 Email: greg.straight@rtd-denver.com

Phone: (303) 299-6906

#### h. CONFLICT OF TERMS

In the event of any conflict between the terms or provisions of the IGA and this Amendment, the terms of this Amendment shall govern.

#### i. DOCUMENTS OTHERWISE UNCHANGED

Except as herein provided, the IGA shall remain unchanged and in full force and effect in accordance with its terms, and each reference to the IGA and words of similar import in the IGA. as amended hereby, shall be a reference to the IGA as amended hereby and as the same may be further amended, supplemented and otherwise modified and in effect from time to time.

#### **CAPTIONS**

The captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Amendment.

#### k. GOVERNING LAW

This Amendment shall be construed in accordance with, and this Amendment and all matters arising out of or relating in any way whatsoever to this Amendment (whether in contract, tort or otherwise) shall be governed by, the law of the State of Colorado.

#### I. EXECUTION IN COUNTERPARTS

This Amendment may be executed and delivered in counterparts (including by facsimile or email transmission), each of which will be deemed an original, but all of which when taken together shall constitute a single contract. This Amendment shall become effective when it shall have

been executed by each Party and when each Party shall have received counterparts hereof, which, when taken together, bear the signatures of the other Party hereto, and thereafter shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page to this Amendment (including by facsimile or e-mail) shall be effective as delivery of a manually executed counterpart of this Amendment.

#### m. BINDING EFFECT

This Amendment shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

#### n. SEVERABILITY

Any provision of this Amendment held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Amendment to be executed and delivered as of the date first above written.

#### **REGIONAL TRANSPORTATION DISTRICT**

Зу:	
	David Genova
Title:	Interim General Manager
4pprov	ed as to legal form for the Regional Transportation District:
Зу:	
Name:	Marla Lien
Title:	General Counsel

ADAMS CO	UNTY:		
By:			
	les (Chaz) Tedesco: rman	-	
<b>LEGAL REV</b> Approved as			
By: County A	Attorney		

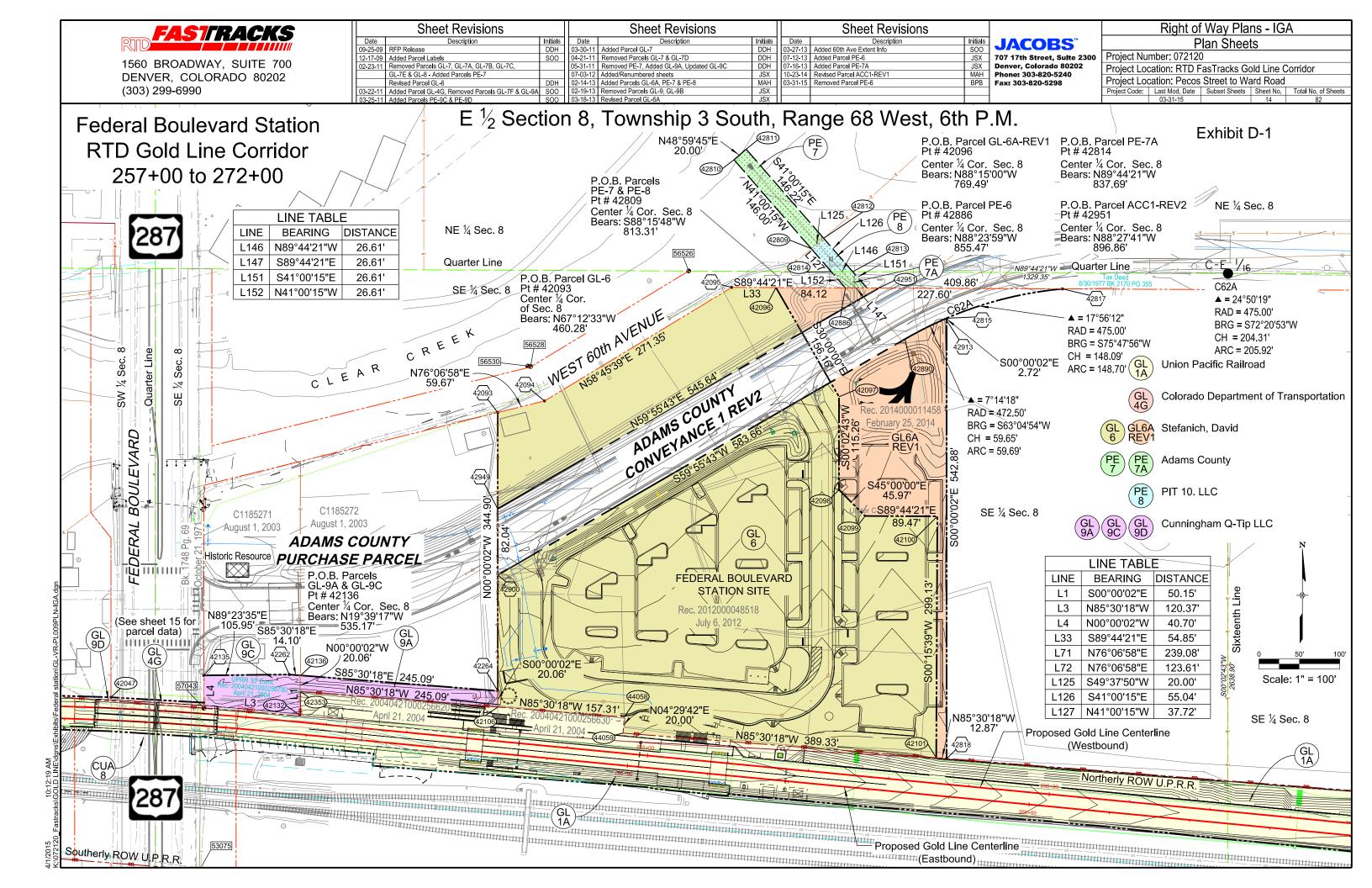
#### **ATTACHMENT 1**

#### Exhibit D-1 and D-2 to the IGA

#### Clear Creek ● Federal Station Right of Way and Temporary Roadway Easement

- 1) D-1: Clear Creek Federal Station Right of Way
- 2) D-2: Temporary Roadway Easement

[attached]



# EXHIBIT "A" PARCEL NO. ADAMS COUNTY CONVEYANCE 1-Rev 2 Date: November 6, 2014 DESCRIPTION

Parcel No. Adams County Conveyance 1-Rev2 of the RTD Gold Line Corridor Commuter Rail Project, being a portion of the tract of lands described at Reception No. 2012000048518, recorded July 6, 2012 and Reception No. 2014000011458 recorded February 25, 2014 in the Adams County Clerk and Recorder's Office, located in the Southeast Quarter of Section 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

COMMENCING at the Center Quarter Corner of said Section 8 (being a found 3-\frac{1}{2}" aluminum cap in range box stamped "CHARLES H RUSSELL T3S R68W C1/4 S8 1988 PLS 23519 ADAMS COUNTY"), WHENCE the Center East 1/16<sup>th</sup> Corner of said Section 8 (a found 3-\frac{1}{2}" aluminum cap stamped "J.R. ENG. E1/16 C-C SEC. 8 LS 13258") bears S89°44'21"E a distance of 1329.35 feet (basis of bearing – assumed);

THENCE S89°44'21"E, coincident with the North line of said West Half of the Southeast Ouarter of Section 8, a distance of 714.38 feet;

THENCE S00°15'39"W, a distance of 20.00 feet to the Southerly Right-of-Way line of West 60th Avenue, as described in Book 2170, Page 355, dated August 30, 1977 in said Office; THENCE S89°44'21"E, coincident with said Southerly Right-of-Way line, a distance of 182.26 feet to the POINT OF BEGINNING;

THENCE continuing S89°44'21"E, coincident with said Southerly Right-of-Way line, a distance of 227.60 feet to the Southerly line of said Reception No. 2014000011458, non-tangent with the following described curve;

THENCE, in part coincident with said Southerly line of Reception No. 2014000011458, along the arc of said non-tangent curve to the left, having a radius of 475.00 feet through a central angle of 24°50'19", with a chord of S72°20'53"W, a chord distance of 204.31 feet and an arc length of 205.92 feet;

THENCE S59°55'43"W, a distance of 583.66 feet to the Westerly line of said Reception No. 2012000048518;

THENCE N00°00'02"W, coincident with said Westerly line of Reception No. 2012000048518, a distance of 82.04 feet;

THENCE N59°55'43"E, a distance of 545.64 feet to the POINT OF BEGINNING.

Containing 45,724 square feet (1.050 Acres), more or less.

Prepared by

Kennett W. Carlson PES 24942

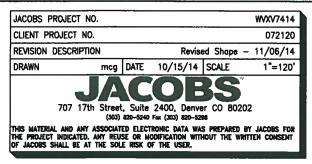
For and an behalf of Jacobs Engineering Group Inc.

707 17% Street #2400

Denver, 00 802024NO

303.820.5240

#### EXHIBIT "A" E 1/16 CENTER EAST 1/16 CORNER CENTER QUARTER CORNER FOUND 3-1/4" ALUMINIUM CAP FOUND 3-1/4" ALUMINIUM CAP IN RANGE BOX, MARKED AS SHOWN 1988 MARKED AS SHOWN SEC. 8 13258 BASIS OF BEARINGS (ASSUMED ) S89°44'21"E, 1329.35" NORTH LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER, SECTION 8, T3S, R68W, 6TH P.M. POINT OF BEGINNING 714.38' S89°44'21"E 227.60' 182.26 $\Delta = 24^{\circ}50'19''$ R = 475.00'L = 205.92'CH = S72°20'53"W 204.31 Rec. No. 2014000011458 **FEBRUARY** 25, 2014 Rec. No. C1185272 Rec. No. 2012000048518 JULY 06, 2012 Rec. No. 240' 120 SE 1/4, SEC 8 2013000035315 T3S, R68W, 6TH P.M. Rec. No. This exhibit does not represent 2011000085014 a monumented survey and is intended only to depict the attached property description. (ROW WIDTH VARIES) REC. NO. 2011000085014 Subject Parcel contains 45,724 sq ft or 1.050 ac $\pm$ /-



# SE1/4 Section 8, T3S, R68W, 6th P.M. Adams County, Colorado

The Adams County Conveyance 1 Rev 2
Gold Line Corridor Commuter Rail Project

REVISION: DRAWING NO. SHEET NO. 1 OF 1

# EXHIBIT "A" PERMANENT EASEMENT NO. PE-7 Date: January 31, 2013 DESCRIPTION

Parcel No. PE-7 of the RTD Gold Line Corridor Commuter Rail Project, being a portion of the tract of land described at Book 4180 at Page 407 recorded October 29, 1993 in the Adams County Clerk and Recorder's Office, located in the Northeast Quarter of Section 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

COMMENCING at the Center Quarter Corner of said Section 8 (a found 3-¼" aluminum cap in range box stamped "CHARLES H RUSSELL T3S R68W C1/4 S8 1988 PLS 23519 ADAMS COUNTY"), WHENCE the Center East 1/16<sup>th</sup> Corner of said Section 8 (a found 3-¼" aluminum cap stamped "J.R. ENG. E1/16 C-C SEC. 8 LS 13258") bears S89°44'21"E a distance of 1329.35 feet (basis of bearing – assumed); THENCE N88°15'48"E a distance of 813.31 feet to the southeasterly line of said tract of land, and the POINT OF BEGINNING;

THENCE N41°00'15"W a distance of 146.00 feet;

THENCE N48°59'45"E a distance of 20.00 feet:

THENCE \$41°00'15"E a distance of 146.22 feet;

THENCE S49°37'50"W coincident with said southeasterly line a distance of 20.00 feet to the POINT OF BEGINNING.

Containing 2,922 square feet, (0.067 Acres), more or less.

Prepared by:

Kenneth W. Carlson PLS 24942

For and on behalf of Jacobs Engineering Group Inc.

707 17th Street #24000

Denver, CO 80202

303.820.5240

# EXHIBIT "A" PERMANENT EASEMENT NO. PE-7A Date: July 16, 2013 <u>DESCRIPTION</u>

Parcel No. PE-7A of the RTD Gold Line Corridor Commuter Rail Project, being a portion of the tract of land described in the Adams County Tax Deed, in Book 2170 at Page 355 recorded August 30, 1977 in the Adams County Clerk and Recorder's Office, located in the Southeast Quarter of Section 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

COMMENCING at the Center Quarter Corner of said Section 8 (a found 3-¼" aluminum cap in range box stamped "CHARLES H RUSSELL T3S R68W C1/4 S8 1988 PLS 23519 ADAMS COUNTY"), WHENCE the Center East 1/16<sup>th</sup> Corner of said Section 8 (a found 3-¼" aluminum cap stamped "J.R. ENG. E1/16 C-C SEC. 8 LS 13258") bears S89°44'21"E a distance of 1329.35 feet (basis of bearing – assumed); THENCE S89°44'21"E coincident with the northerly line of said Southeast Quarter a distance of 837.69 feet to the POINT OF BEGINNING:

THENCE continuing S89°44'21"E coincident with said northerly line a distance of 26.61 feet:

THENCE S41°00'15"E a distance of 26.61 feet;

THENCE N89°44'21"W coincident with the southerly line of said Tax Deed a distance of 26.61 feet;

THENCE N41°00'15"W a distance of 26.61 feet to the POINT OF BEGINNING.

Containing 532 square feet, (0.012 Acres), more or less.

Prepared by:

Aaron D. Willis PLS 37064

For and on behalf of Jacobs En

707 17<sup>th</sup> Street #2400

Denver, CO 80202

303.820.5240

#### **EXHIBIT "A"** PERMANENT EASEMENT NO. PE-8 **Date: January 31, 2013 DESCRIPTION**

Parcel No. PE-8 of the RTD Gold Line Corridor Commuter Rail Project, being a portion of the tract of land described at Book 5449 at Page 470 recorded August 31, 1998 in the Adams County Clerk and Recorder's Office, located in the Northeast Quarter of Section 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

COMMENCING at the Center Quarter Corner of said Section 8 (a found 3-\(^4\)" aluminum cap in range box stamped "CHARLES H RUSSELL T3S R68W C1/4 S8 1988 PLS 23519 ADAMS COUNTY"), WHENCE the Center East 1/16<sup>th</sup> Corner of said Section 8 (a found 3-1/4" aluminum cap stamped "J.R. ENG. E1/16 C-C SEC. 8 LS 13258") bears S89°44'21"E a distance of 1329.35 feet (basis of bearing – assumed):

THENCE N88°15'48"E a distance of 813.31 feet to the northwesterly line of said tract of land, and the POINT OF BEGINNING;

THENCE N49°37'50"E coincident with said northwesterly line a distance of 20.00 feet; THENCE S41°00'15"E a distance of 55.04 feet:

THENCE N89°44'21"W coincident with the southerly line of the Southwest Quarter of said Northeast Quarter a distance of 26.61 feet;

THENCE N41°00'15"W a distance of 37.72 feet to the POINT OF BEGINNING.

Containing 928 square feet, (0.021 Acres), more or less.

Kenneth W. Carlson PLS

For and on behalf of Facebs Engineering Group Inc.

7070 2th Street #2400

Denver CO 8

Type: EAS Stan Martin, Adams County, CO

Exhibit D-2

## TEMPORARY EASEMENT FOR RIGHT-OF-WAY AREA (Gold Line Corridor/Federal Boulevard Station Parcels GL-6 and GL-6A)

#### WITNESSETH:

That for and in consideration of the sum of TEN DOLLARS (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Grantor has this day bargained and sold and by these presents does bargain and sell and convey and transfer and deliver unto the Grantee, and on behalf of the general public, a temporary easement, including the right but not the obligation to enter upon, over, through and across the lands described in <a href="Exhibit\_A">Exhibit\_A</a>, attached hereto and incorporated herein ("Easement Property"), at all times to construct, reconstruct, maintain, service, operate, use, and repair a roadway, traffic control devices, street lights, landscaping, utilities, sidewalks and any necessary appurtenances thereto ("Improvements"), together with the right but not the obligation to remove trees, bushes, undergrowth and other obstructions interfering with the location, operation, use, and maintenance of the Improvements and the Easement Property.

To have and hold such Easement on the Easement Property unto the Grantee, its successors and assigns, and on behalf of the general public until such time as the earlier to occur of (i) Grantee obtains fee title of the Easement Property; (ii) evidence satisfactory to the Adams County Director of Transportation ("Director") is submitted that the use of all or portions of the Easement Property is no longer needed; or (iii) all or portions of the Easement Property is/are dedicated to the County. The parties agree that all or portions of the Easement Property may be released separately from this Easement.

Grantor shall maintain the Improvements to normal County standards while the

Type: EAS Stan Martin, Adams County, CO

Improvements or any portion thereof are subject to this Easement, excluding therefrom the obligation to perform snow removal on the roadway.

Grantor reserves the right to use and occupy the Easement Property and Improvements, including without limitation, the right to construct, reconstruct, maintain, service, operate, use, and repair the Gold Line Corridor and Federal Boulevard Station project, including without limitation installation of utilities on across, over and within the Easement Property, granting of easements and other rights to utilities and granting rights to contractors and others so long as such rights terminate upon the earlier to occur of conveyance of title to, or dedication of, such portions of the Easement Property to the Grantee, to the extent that such activities do not impair the rights granted to Grantee herein.

Grantor is granting this right to use the Easement Property on an AS-IS, WHERE-IS, WITH ALL FAULTS, AND AT THE GRANTEE'S OWN RISK, without any warranty, express or implied, including without limitation, any warranty of merchantability, liability, fitness or fitness for a particular purpose, all such warranties being hereby expressly disclaimed by RTD. Notwithstanding the forgoing, the Grantor does hereby covenant with the Grantee that it has a good and lawful right to grant this Easement in the Easement Property and that any required consents have been obtained. Any holder of a lien on any portion of the Easement Property and any assignee or successor in interest of such lien holder, shall be subject to the terms and conditions of this Easement. Grantor further covenants and agrees that no building, structure, or other above or below ground obstruction that may interfere with the purposes for which this Easement is granted may be placed, erected, installed or permitted upon the Easement Property without the prior written approval of the Director. In the event the terms of this Easement are violated, such violation shall immediately be corrected by the violating party upon receipt of written notice from the other party.

Grantor further understands and agrees that with respect to the Easement Property and Improvements, all laws, ordinances, resolutions, and regulations pertaining to streets, sidewalks, and public places shall apply so that the public use of the Improvements and the Easement Property is consistent with the use and enjoyment of any dedicated public right-of-way.

The Grantor further grants to the Grantee the right of ingress to and egress over and across adjacent lands owned or controlled by Grantor by such route or routes as shall occasion the least practical damage and inconvenience to the Grantor, for the purpose of constructing, repairing, maintaining and operating the Improvements, if necessary.

Each and every term, condition, or covenant herein is subject to and shall be construed in accordance with the provisions of Colorado law, any applicable State or federal law, and Adams County ordinances, resolutions, and regulations, and Executive Orders enacted and/or promulgated pursuant thereto. Such applicable law, together with the standards and regulations of the County of Adams, as the same may be amended from time to time, is hereby expressly incorporated into this Easement as if fully set out herein by this reference. Venue for any action arising hereunder shall be in the Adams County District Court in the County of Adams, Colorado.

Grantee shall keep the Easement Property free from any liens or encumbrances arising out of any obligations incurred by or on behalf of Grantee.

All obligations of Grantee hereunder are subject to the prior appropriation of monies for such purposes by the Adams County Board of County Commissioners and paid into the Treasury. The provisions hereof shall inure to the benefit of and bind the successors and assigns of the respective parties hereto and all covenants herein shall apply to and run with the land.

The remainder of the page intentionally left blank.

IN WITNESS WHEREOF, the undersigned have executed this Easement as of the date first written above. **GRANTOR** REGIONAL TRANSPORTATION DISTRICT APPROVED AS TO LEGAL FORM: a political subdivision of the State of Colorado Assistant General Manager Associate General Counsel Capital Programs Department Date Signed: Date Signed: 4-16-15 STATE OF COLORADO COUNTY OF ADAMS DENVET) The foregoing instrument was acknowledged before me this IT the Regional Transportation District. Witness my hand and official seal. My commission expires:

GRANTEE: COUNTY OF ADAMS

Erica Hannah Deputy Clerk

Acceptance

ATTEST:

STAN MARTIN, CLERK

The Board of County Commissioners of the County of Adams, State of Colorado

Chairn

Approved as to form

County Attorney's Office

RECEPTION#: 2015000031714, 04/30/2015 at 03:08:20 PM, 5 OF 9, TD Pgs: 0 Doc Type:EAS Stan Martin, Adams County, CO

#### **EXHIBIT A**

**EASEMENT PROPERTY LEGAL DESCRIPTIONS** 

(Gold Line Corridor – Federal Boulevard Station)

## EXHIBIT "A" PARCEL NO. ADAMS COUNTY CONVEYANCE 1-Rev 2 Date: November 6, 2014 DESCRIPTION

Parcel No. Adams County Conveyance 1-Rev2 of the RTD Gold Line Corridor Commuter Rail Project, being a portion of the tract of lands described at Reception No. 2012000048518, recorded July 6, 2012 and Reception No. 2014000011458 recorded February 25, 2014 in the Adams County Clerk and Recorder's Office, located in the Southeast Quarter of Section 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

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THENCE S89°44'21"E, coincident with the North line of said West Half of the Southeast Ouarter of Section 8, a distance of 714.38 feet;

THENCE S00°15'39"W, a distance of 20.00 feet to the Southerly Right-of-Way line of West 60th Avenue, as described in Book 2170, Page 355, dated August 30, 1977 in said Office; THENCE S89°44'21"E, coincident with said Southerly Right-of-Way line, a distance of 182.26 feet to the POINT OF BEGINNING;

THENCE continuing S89°44'21"E, coincident with said Southerly Right-of-Way line, a distance of 227.60 feet to the Southerly line of said Reception No. 2014000011458, non-tangent with the following described curve;

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THENCE S59°55'43"W, a distance of 583.66 feet to the Westerly line of said Reception No. 2012000048518;

THENCE N00°00'02"W, coincident with said Westerly line of Reception No. 2012000048518, a distance of 82.04 feet:

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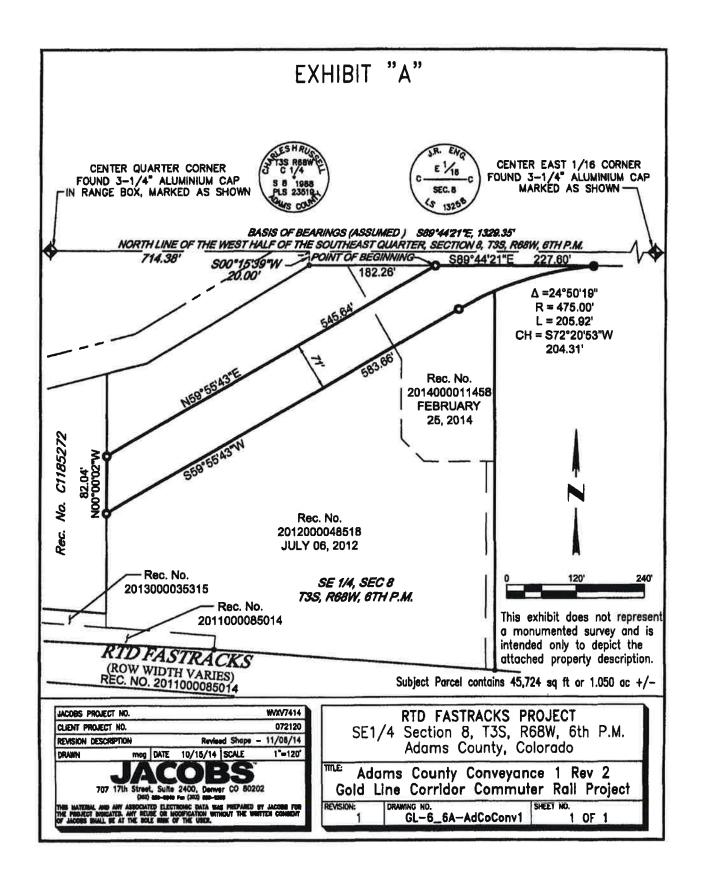
Containing 45,724 square feet (1.050 Acres), more or less.

Kennett W. Carlod PES 54842

For and an behalf of Jacobs Ingineering Group Inc.

707 1 % Street #2400 Denver, 00 300024NO

303.820.524



### BOARD OF COUNTY COMMISSIONERS FOR ADAMS COUNTY, STATE OF COLORADO

RESOLUTION ACCEPTING A TEMPORARY EASEMENT FOR RIGHT-OF-WAY FROM THE REGIONAL TRANSPORTATION DISTRICT (RTD) TO ADAMS COUNTY FOR CONSTRUCTION OF WEST 60<sup>TH</sup> AVENUE AT THE CLEAR CREEK FEDERAL STATION

#### Resolution 2015-193

WHEREAS, Adams County needs to construction West 60<sup>th</sup> Avenue from Federal Boulevard eastward across property owned by the Regional Transportation District (RTD) located in the Southeast Quarter of Section 8, Township 3 South, Range 68 West of the 6<sup>th</sup> Principal Meridian; and,

WHEREAS, due to Federal NewStarts funding for the Gold Line Project, RTD cannot dedicate any of its property acquired under the FasTracts project until the project is complete; and.

WHEREAS, RTD is willing to grant a Temporary Easement for Right-of-way Area to Adams County under the terms and conditions of said easement; and,

WHEREAS, the granting of said temporary easement to Adams County will allow the construction of West 60<sup>th</sup> Avenue within the said easement area as if it was dedicated right-of-way; and,

WHEREAS, the granting of said temporary easement to Adams County will also allow utilities to be constructed within the said easement area as if dedicated right-of-way and be under the general provisions of the County's utility permitting system through a limited RTD utility easement agreement.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners, County of Adams, State of Colorado, that the attached Temporary Construction Easement for Right-of-way Area, a copy of which is attached hereto and incorporated herein by this reference, be and hereby is accepted.

BE IT FURTHER RESOLVED by the Board of County Commissioners, County of Adams, State of Colorado, that the Chairman of the Board of County Commissioners is hereby authorized to execute said Temporary Easement for Right-of-way Area on behalf of Adams County as an acceptance thereto.

RECEPTION#: 2015000031714, 04/30/2015 at 03:08:20 PM, 9 OF 9, TD Pgs: 0 Doc Type:EAS Stan Martin, Adams County, CO

Upon motion duly made and seconded the foregoing resolution was adopted by the following vote:

Tedesco	Aye
O'Dorisio	Aye
Henry	Aye
Hansen	Aye
Pawlowski	Aye
	Commissioners

STATE OF COLORADO )
County of Adams )

I, <u>Stan Martin</u>, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing Order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Brighton, Colorado this 28<sup>th</sup> day of April, A.D. 2015.

County Clerk and ex-officio Clerk of the Board of County Commissioners

Stan Martin:



By:

E-Signed by Erica Hannah

VERIFY authenticity with e-Sign

Deputy

After recording, return to:

Nate Lucero County Attorney's Office 4430 South Adams County Parkway 1<sup>st</sup> Floor, Suite W2000A Brighton, CO 80601

#### **EXHIBIT A**

#### **EASEMENT PROPERTY LEGAL DESCRIPTIONS**

(Gold Line Corridor - Federal Boulevard Station)

# EXHIBIT "A" PARCEL NO. ADAMS COUNTY CONVEYANCE 1-Rev 2 Date: November 6, 2014 DESCRIPTION

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Containing 45,724 square feet (1.050 Acres), more or less.

Prepared by

Kennett W. Carlson PES 24942

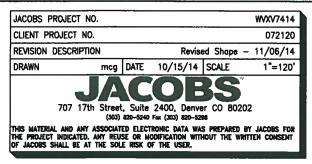
For and an behalf of Jacobs Engineering Group Inc.

707 17% Street #2400

Denver, 00 802024NO

303.820.5240

#### EXHIBIT "A" E 1/16 CENTER EAST 1/16 CORNER CENTER QUARTER CORNER FOUND 3-1/4" ALUMINIUM CAP FOUND 3-1/4" ALUMINIUM CAP IN RANGE BOX, MARKED AS SHOWN 1988 MARKED AS SHOWN SEC. 8 13258 BASIS OF BEARINGS (ASSUMED ) S89°44'21"E, 1329.35" NORTH LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER, SECTION 8, T3S, R68W, 6TH P.M. POINT OF BEGINNING 714.38' S89°44'21"E 227.60' 182.26 $\Delta = 24^{\circ}50'19''$ R = 475.00'L = 205.92'CH = S72°20'53"W 204.31 Rec. No. 2014000011458 **FEBRUARY** 25, 2014 Rec. No. C1185272 Rec. No. 2012000048518 JULY 06, 2012 Rec. No. 240' 120 SE 1/4, SEC 8 2013000035315 T3S, R68W, 6TH P.M. Rec. No. This exhibit does not represent 2011000085014 a monumented survey and is intended only to depict the attached property description. (ROW WIDTH VARIES) REC. NO. 2011000085014 Subject Parcel contains 45,724 sq ft or 1.050 ac $\pm$ /-



# SE1/4 Section 8, T3S, R68W, 6th P.M. Adams County, Colorado

The Adams County Conveyance 1 Rev 2
Gold Line Corridor Commuter Rail Project

REVISION: DRAWING NO. SHEET NO. 1 OF 1

#### ATTACHMENT 2

#### Exhibit G to the IGA

#### **Local Match Reconciliation**

[attached]

Exhibit G	
<b>Local Match</b>	Reconciliation

Gold Line Local Match Required	\$4,429,000
Gold Line Eligible Executed with Original IGA	Credit
Pecos Project- Proportionate share of the cost of Design	
	\$686,556
Pecos Project- Monies expended to connect 62nd Parkway to	\$794,791
Pecos mainline (bridge)	3794,791
Pecos Added value for removal of at-grade crossing etc. (crossing	\$950,000
protection savings)	\$950,000
62 <sup>nd</sup> Parkway: Proportionate share of cost of design, ROW and	\$1,241,722.73
construction	31,241,722.73
Subtotal	\$3,673,069.73
Gold Line Eligible Added since Original IGA	
Prairie Dog Relocation Permission	\$5,000
60 <sup>th</sup> Avenue (GL 2 <sup>nd</sup> 60 M)	\$2,213,923
60 <sup>th</sup> Avenue (additional funds)	\$600,077
Project construction cost estimate is \$3,060,000.	
Waive Traffic Impact Fee Federal Station	\$625,775
Waive Traffic Impact Fee Pecos Station	\$507,385
Subtotal	\$3,352,160
Total Eligible	\$7,025,229.73
Local Agency Match Met for Gold Line	
Northwest Electrified Segment Match Required	\$1,711,250
Northwest Rail Electrified Segment Eligible	Credit
22-inch Welded Steel Pipe under BNSF	\$1,080
Osage Crash Wall Compliant pier #2	\$20,668
Little Dry Creek Drainage Improvements	\$1,500,000
Staff review and coordination time	\$189,502
Total Eligible	\$1,711,250
Local Agency Match Met for Northwest Rail Electrified Segment	

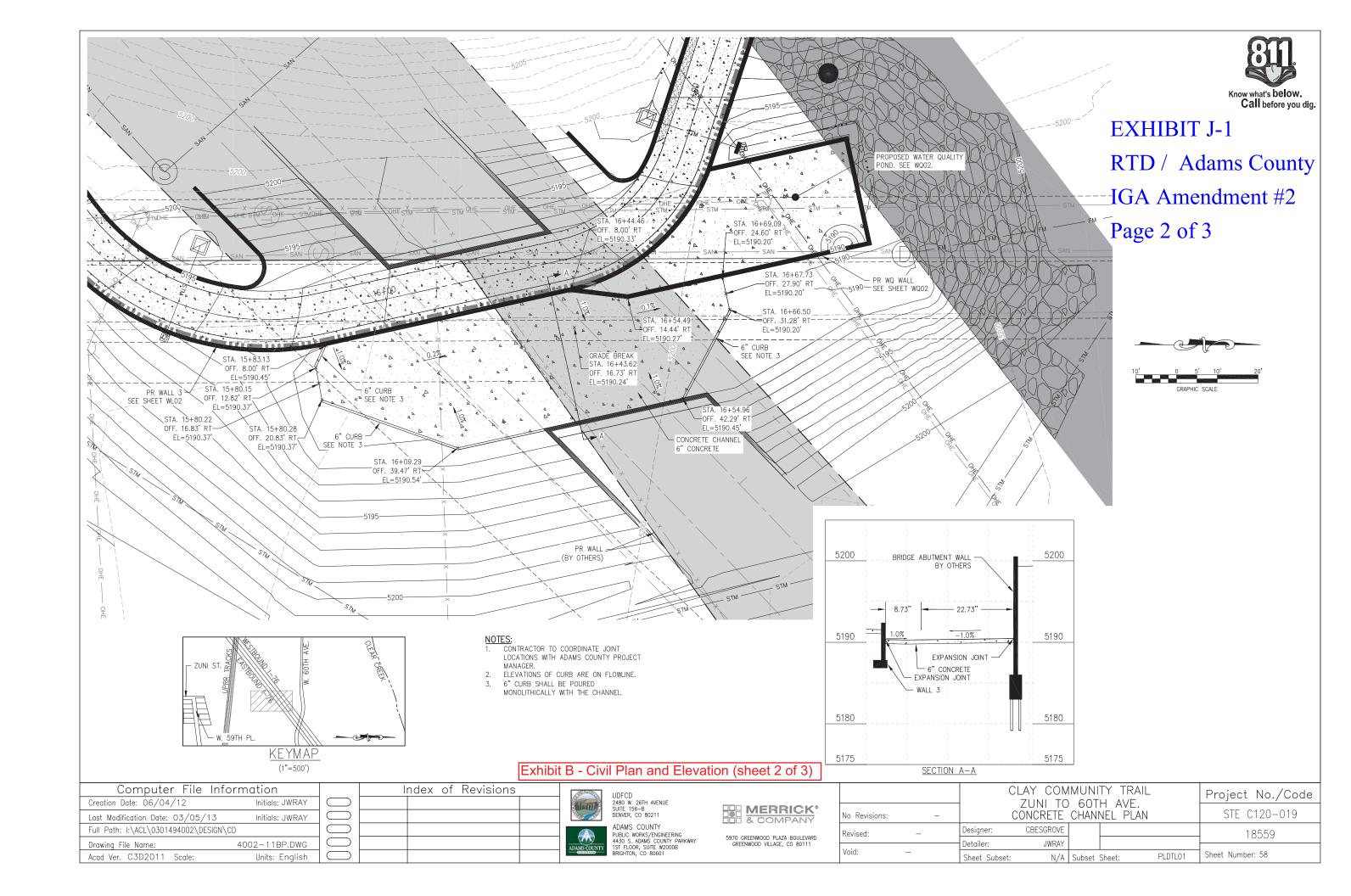
#### **ATTACHMENT 3**

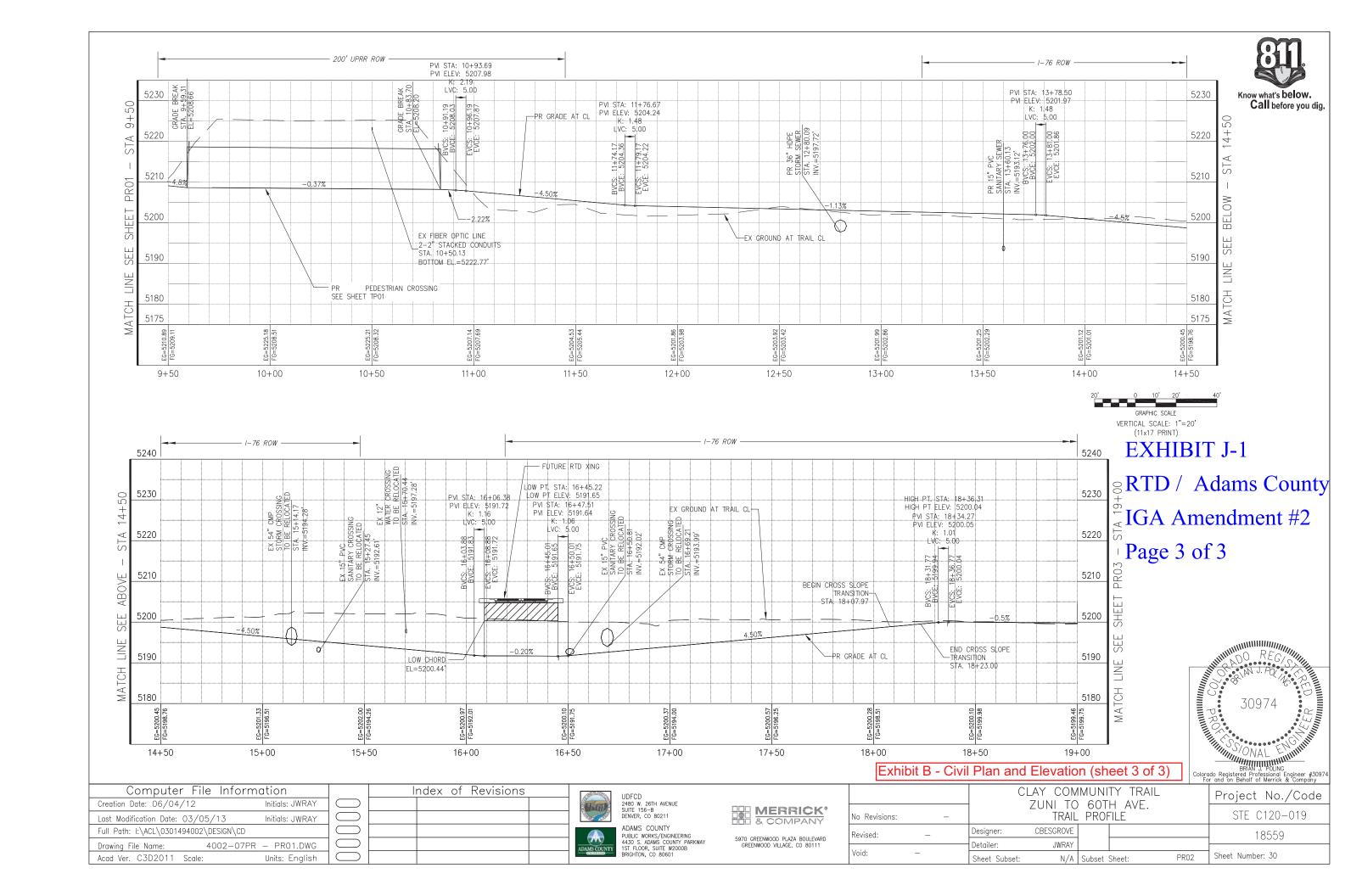
#### Exhibits J-1, J-2, J-3 and J-4 to the IGA

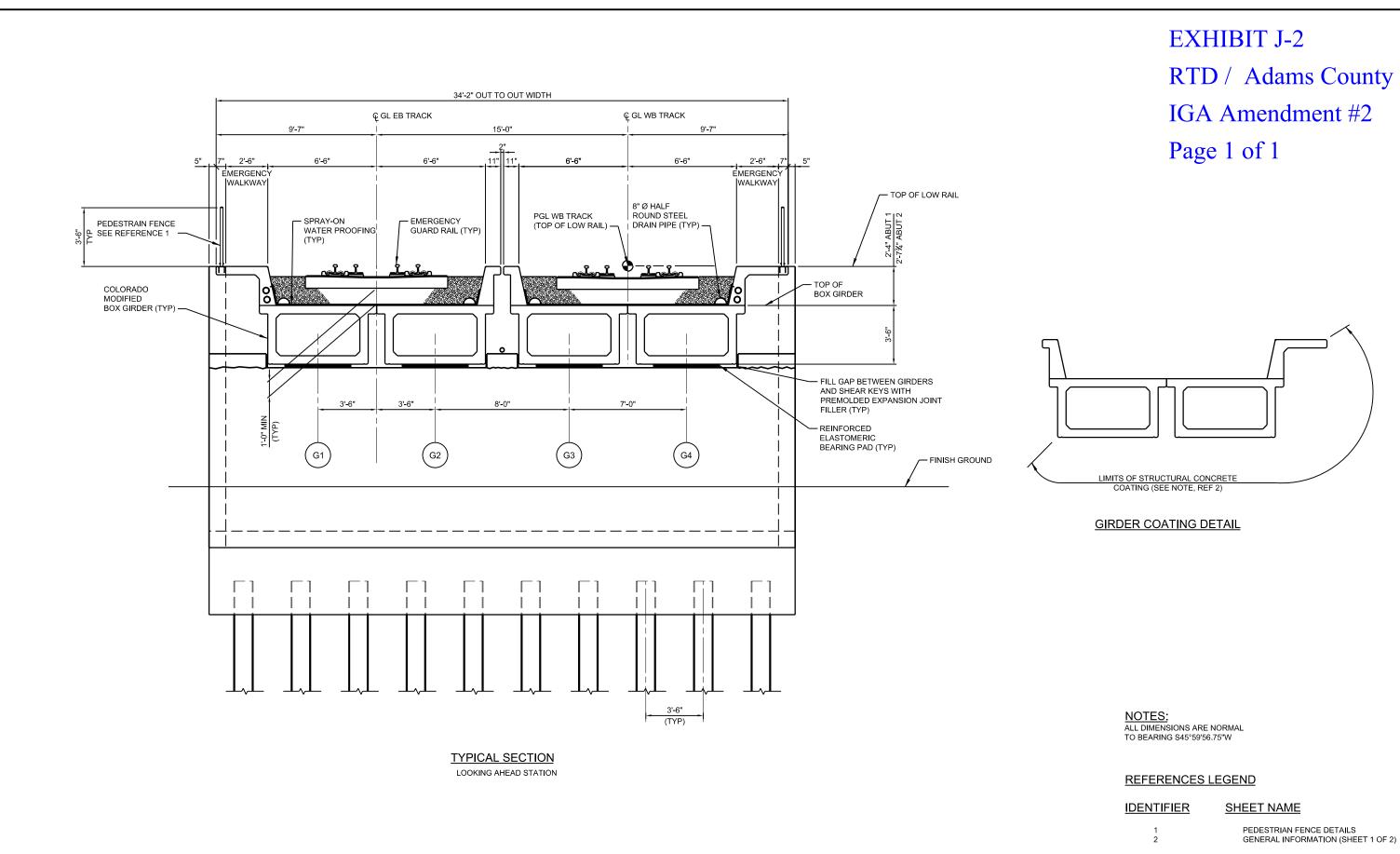
#### Clay Street Outfall, Gold Line Bridge, Letter of Commitment and Clay Easement

- 1) Exhibit J-1: Clay Street Outfall General Plan and Elevation and Clay Community Trail Plan sheet and Profile sheet, attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
- 2) Exhibit J-2: Gold Line Bridge Typical Section attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
- 3) Exhibit J-3: Adams County Letter of Commitment to RTD for the Clay Community Outfall RTD Gold Line Crossing, dated July 1, 2014 attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
- 4) Exhibit J-4: Clay Street Community Trail and Outfall System Access Easement No. 1 and Access Easement No. 2, attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.

[attached]







DATE: 04/26/13

DATE: 05/31/13

DESIGNED BY: MPV
DRAWN BY: AQ

O ISSUED FOR CONSTRUCTION, CDRL #7B-05.07A, REV 0 MV 05/31/13

NO. REVISIONS BY DATE

DESIGNED BY: MPV
DRAWN BY: AQ

DESIGNED BY: MPV
DRAWN BY: AQ

PARTICLE AND THE PROPERTY OF THE PROPERTY O

PRAWN BY: AQ DATE: 10/12/12

PRID FASTRACKS

PRID FASTRACKS

DATE: 10/12/12

FLUORIHDR

CHECKED BY: LLP





### GOLD LINE

CLAY STREET OUTFALL TYPICAL SECTIONS

SHEET REFERENCE NUMBER:

SB-304



Commissioners' Office
4430 South Adams County Parkway
5th Floor, Suite C5000A
Brighton, CO 80601-8204
PHONE 720.523.6100
FAX 720.523.6045
www.adcogov.org

July 1, 2014

Mr. Brian Middleton, Eagle Project Director RTD FasTracks 1670 Broadway, Suite 2700 Denver, CO 80202

Exhibit J-3

**Re:** Adams County, Colorado Letter of Commitment to RTD for the Clay Community Outfall– RTD Gold Line Crossing

Dear Mr. Middleton,

Pursuant to the terms of the Adams County and Regional Transportation District – Gold Line Corridor / Northwest Electrified Segment – Local Agency Contribution Intergovernmental Agreement, dated June 2, 2011 (IGA), we are hereby submitting this Letter of Commitment for the Betterment package for the Clay Community Outfall Project – RTD Gold Line Crossing.

Please accept this letter and the attached clarifications, indicating the County's commitment to fund this project in 2014.

If you have any questions, please do not hesitate to contact us.

Sincerely,

va Henry Charles "Chaz" Tedesco

Attachments:

RTD Proposed Change No. 55

Appendix 1 - Environmental Condition Clean-Up Report

Appendix 2a - RPC 055 - Pricing Summary

Appendix 2b - Environmental Only - Pricing Summary

#### **Clarifications for Clay Community Outfall Letter of Commitment**

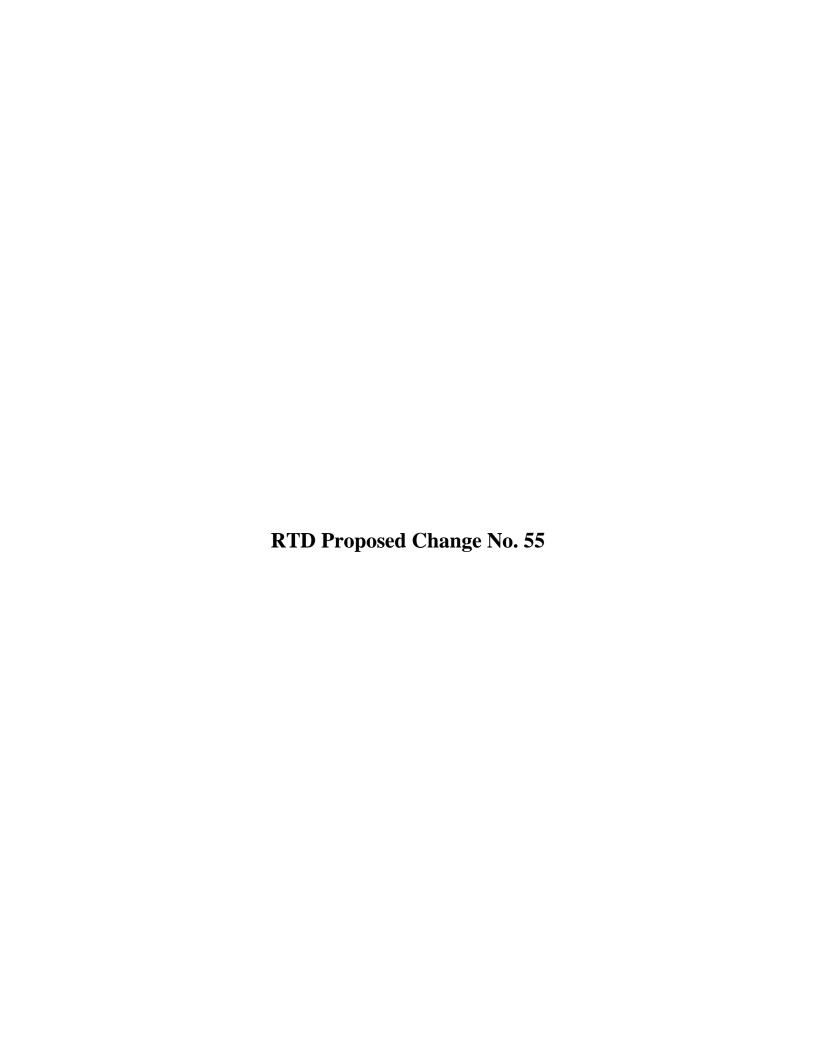
Adams County hereby confirms that DTP has accurately stated the scope of work requested by the County in the RTD Proposed Change (RPC) 055, including any scope items to be fulfilled by the County, with the following clarifications:

- 1. RTD, or its contractor, shall construct water line improvements depicted on: "Water Relocation Plans Clay Community Trail Zuni to 60<sup>th</sup> Avenue", (plans transmitted to RTD via Aconex on 6/23/14).
- 2. RTD, or its contractor, shall construct sanitary improvements depicted on: "Sanitary Relocation Plans Clay Community Outfall RTD Gold Line Crossing" (plans transmitted to RTD via Aconex on 6/23/14).
- 3. RTD, or its contractor, shall construct storm sewer improvements depicted on: "Clay Community Outfall RTD Gold Line Crossing Storm Sewer Plan & Profile" (plans transmitted to RTD via Aconex on 6/23/14).
- 4. The County will provide a revised design for the relocation of approximately 70 linear feet of 6 inch sanitary sewer service line, once reviewed and approved.
- 5. RTD, or its contractor, shall perform the required groundwater remediation under the remediation permit obtained for the Eagle Project by RTD, or its contractor.
- 6. RTD, or its contractor, shall perform the required solid waste removals according to the Eagle Project Voluntary Clean Up Plan and provide the necessary certifications indicating that the required landfill cap(s) were established and accepted by the Colorado Department of Health and Environment, Solid Waste Division.
- 7. RTD, or its contractor, shall perform the required erosion and sediment control per the "Gold Line CDPS Permit".
- 8. RTD, or its contractor, shall perform the required wetland mitigations and avoidances per the County's U.S. Army Corps of Engineers Nationwide Permit (NWP). The County's permit allows 0.056 ac of permanent wetland disturbance resulting from the Gold Line bridge construction. Temporary wetland disturbance, such as that needed to construct the utility improvements, must be re-established as shown on the Stormwater Management Plan included with the Plans. RTD, or its Contractor shall be responsible to the County for proper administration of the County's NWP.

The County will reimburse RTD for the cost of the work identified above and in RPC 055, including actual environmental remediation costs (current proposed costs for environmental are estimated only). The County further acknowledges that DTP may revise RPC 055 by June 27, 2014, indentifying revisions to the environmental remediation costs. Costs for the construction portion of the work will likely not increase.

The County proposes the terms of payment noted below:

- Payment to RTD for the capital costs described in RPC 055, being \$2,667,990, within 30 days after receipt of an invoice from RTD for said capital costs.
- Payment to RTD for the environmental remediation within 30 days after receipt of the final invoice for this work from RTD. The environmental remediation described in RPC 055 is estimated at \$1,302,741. An alternate method for treating the groundwater may be required, if additional constituents are encountered. The alternate treatment method would consist of a Coagulation Treatment System and is estimated at \$1,898,278. The County acknowledges and understands that the actual costs for the environmental remediation may exceed the proposed costs.





### Contract Data Requirements Submittal

Item	Contract Data	Contract Data Information
i	Date Prepared	6/2/14
ii	CDRL Identification Number	CDRL CA-105.062
iii	Agreement Title & Number	Eagle Project - Contract 18FH012
iv	Submitting Organization	Denver Transit Partners
V	Description	RTD Proposed Change No. 55, Clay Outfall Betterment Utility Relocation and Bridge Earthwork (TSI-314)
vi	Status	Rev 0 - Initial Submittal
vii	Category	NA
viii	Signature	Brett Marsolais Date Contract Administrator
		"Having checked this item of Contract Data, I hereby certify that it conforms to the requirements of the Concession Agreement in all respects, except as specifically indicated."



1. Scope – Details of the proposed implementation of Concessionaire Proposed Change, RTD Proposed Change or Relief Notice (CA Sections 36.1(c)(i) and (ii), 36.3(e)(i), and 38.2(c)(i) (each, as applicable))

#### Summary of the Work:

Design/Build: DTP is to provide all construction and environmental services necessary to relocate Adams County's utilities for the construction of the Regional Transportation District's (RTD) Commuter Rail Train (CRT) bridge over the Clay Street Outfall, see Aconex Document GOLD-RTD-CFL-PSL-000014. These utilities include the following:

- 12" Water
- 15" Sanitary Sewer
- Sanitary Sewer Service from the Disner Property
- 54" Storm Drain

These utilities will be installed in accordance with the *Clay Community Outfall, RTD Gold Line Crossing* plan set and Adams County Gold Line Betterment Request as detailed in Aconex Document GOLD-RTD-CFL-PSL-000014.

DTP will also provide all dewatering, excavation, and structural backfill for the CRT Clay Community Outfall Bridge. After completion of the substructure, DTP will backfill between abutments to just below the bottom of girders.

Operations and Maintenance: There are no impacts/changes to the Operations and Maintenance scope due to this MoR. DTP will not be responsible for the maintenance of any of these utilities.

#### Scope Assumptions and Conditions:

The scope of work described in Section 1 of this Change Summary and the Price provided in Section 2 and Schedule Impacts described in Section 3 are contingent upon the following Assumptions and Conditions:

- All Environmental Costs are estimates only. Actual costs for material disposal, hazardous material encountered, employee protection, employee training, and water treatment will be compensated at the actual cost through the Eagle Project Environmental Condition process.
- Adams County will pay for any tapping / connection fees for the water and sewer lines.



- Adams County will provide revised final designs of the 54" storm drain and 15" sanitary sewer line relocation plans that are consistent with the alignment shown in Exhibit A of Aconex Document GOLD-RTD-CFL-PSL-000014 by no later than June 27, 2014.
- DTP is not responsible for the costs of any third party inspection fees including Adams County, Denver Water, Berkley Water and Sanitation, or Department of Public Health and Environment. All charges will be forwarded to Adams County.

#### Reference Documents:

<u>Aconex Transmittal RTD-TRN-020911 - RTD Proposed Change No. 55 - GL - Clay</u> <u>Community Outfall Betterment Utility Relocation (AdCo)</u>

<u>Aconex Communication AdCO-INFML-000169 - Clay Outfall - Reduced Scope</u> Plans

Aconex Transmittal DTP-OFLTR-000396 - Clay Community Outfall and Trail

### 2. Pricing Summary – Additional Costs (CA Sections 36.1(c)(iii), 36.3(e)(ii) and 36.3(e)(iii), 38.2(c)(ii) (each, as applicable))

This Change Report includes a fixed price of \$2,667,990 for all Incurred Costs for design and construction services during the Design/Build Period and an aggregate fixed price, in 2010 Dollars, of \$0 for all costs for operations and maintenance services during the Operating Period, as further detailed in Appendix 2a. These fixed prices include all Incurred Costs associated with this RPC. The fixed price is based upon the Work identified in Section 1 above.

Additionally DTP has provided an estimate of \$1,302,741 for all environmental conditions associated with this change. This price is an estimate only, and actual incurred environmental costs will be compiled for final payment in accordance with CA Section 13. This estimate is shown as Appendix 2b.

The design and construction Incurred Costs will be incorporated into the Construction Payments, the WBS Pricing Form, the Schedule of Values, and the Revised Baseline Schedule during the first monthly update following the execution of the applicable MoR and Earned Value will be recorded as appropriate.



Incorporation of Incurred Costs into the Construction Payments and/or Service Payments, as applicable, does not infringe upon the Bond Proceeds raised to generally fund the Eagle Project. DTP has no obligation to fund this change.

DTP confirms that the Incurred Costs defined in Appendix 2 reflect any projected increases or decreases in the cost of operation; maintains the Equity IRR; reflects any required changes to the Designated Credit Agreements; and reflects any change to the risk profile of the Eagle Project.

3. Schedule – Time Impacts (CA Sections 36.1(c)(iii), 36.3(e)(iv), 38.2(c)(iii) (each, as applicable))

DTP can manage schedule impacts caused by this change if NTP is granted by June 27, 2014 and an MoR is executed by June 30, 2014.

4. Permits (CA Sections 36.1(c)(iii), 36.3(e)(v), 38.2(c)(ii) (each, as applicable))

All permits have been or will be obtained by Adams County

5. Impact to Obligations of the Concessionaire (CA Sections 36.1(c)(iii), 36.3(e)(vi), 38.2(c)(iii) (each, as applicable))

The Design/Build Contract will be amended to reflect the change in obligations under the Project Agreements resulting from this Change.

6. Subcontractors ((CA Sections 36.1(c)(iii) and 36.3(e)(vii) (each, as applicable))

DTP will utilize subcontractors during the execution of this change. These include at a minimum Denver Transit Constructors

7. Impacts on the Availability Ratio or Performance Deductions (CA Sections 36.1(c)(iii), 36.3(e)(viii), 38.2(c)(iv) (each, as applicable))

There will be no long-term increase or decrease in the Availability Ratio or Performance Deductions.

8. Further Effects or Benefits (CA Sections 36.1(c)(iii), 36.3(e)(ix), 38.2(c)(ii) (each, as applicable))



There are no further impacts resulting from this change.

9. Impact on DBE/SBE Goals (CA Sections 36.1(c)(iii), 36.3(e)(x) (each, as applicable))

Achievement of the DBE/SBE Goals set forth in the Concession Agreement will not be impacted by this change.



Appendix 1 – CDRL CA-041.093 – Environmental Condition Clean Up Report Clay Outfall

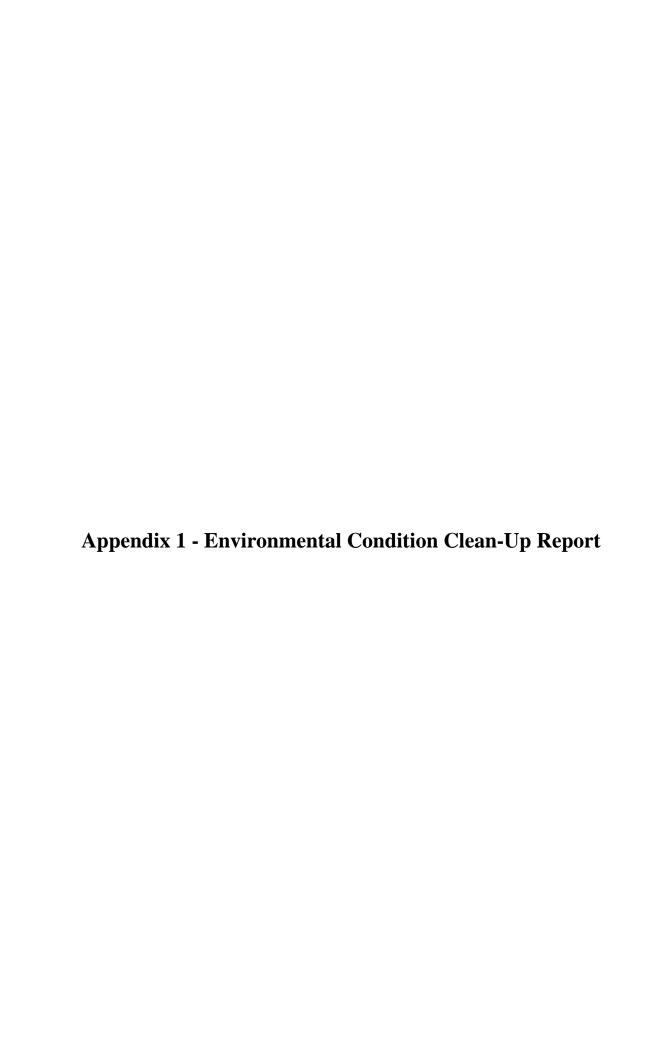
Appendix 2a – Pricing Summary

Appendix 2b – Environmental Pricing Summary

Appendix 3 – Revised Table 3 Base Annual Service Payments (per CA Amendment No.

2) (as applicable for Service Payments) N/A

Appendix 4 - Schedule Fragnet (cost loaded schedule to be submitted upon agreement of fixed price)





### Eagle Project Contract No. 18FH012

## ENVIRONMENTAL CONDITION CLEAN-UP REPORT

For

### **Clay Street Bridge Contaminated Soil and Water**

Rev. 0
Date of Submittal: June 06, 2014

#### **Submitting Organization:**

Concessionaire: Denver Transit Partners (DTP)
Subcontractors: Denver Transit Constructors (DTC)

### CDRL #CA-041.093

Status: Submitted Category: In Progress Design

	The state of the s
onmental Condition Clean-up Report CA-041.093 – Clay Street Bridge aminated Soil and Water	06/06/2014

Signature:

Tom Warner

Having checked this item of Contract Data, I hereby certify that it conforms to the requirements of the Concession Agreement in all respects, except as specifically indicated.



#### A. ENVIRONMENTAL CONDITION

This Environmental Condition Notice (CDRL CA-041.093) is regarding contaminated soil and groundwater within the proposed Clay Street Bridge construction area for the Gold Line in Adams County, Colorado.

In accordance with the Voluntary Cleanup Program – Materials Management Plan, Denver Transit Partners (DTP) determined that groundwater sampling was necessary since the area was not permitted under the Colorado Department of Public Health and Environment (CDPHE) General Construction Dewatering Permit.

The analytical results from the groundwater sample collected indicate concentrations above the CDPHE - Water Quality Control Commission – Regulation No. 31 – The Basic Standards and Methodologies for Surface Water and Regulation No. 38 – Classifications and Numeric Standards for Clear Creek, and Regulation No. 41 – The Basic Standards for Ground Water. A summary of the constituents exceeding the CDPHE regulatory requirements is provided in the attached Construction Dewatering Plan – Clay Community Trail.

#### **B. REMEDIATION**

Water remediation and off-site disposal of soil is determined to be the most cost effective approach. The estimated costs are based on the proposed soil and water volumes and disposal rates for the duration of the period necessary to relocate Adams County's utilities for the construction of the Regional Transportation District's (RTD) Commuter Rail Train (CRT) bridge over the Clay Street Outfall.

#### **On-Site Groundwater Treatment System**

Remediation on-site would require a treatment system including chemical precipitation process to reduce the metals concentrations, filter media for specific metal reduction, and activated carbon to remove the elevated organic compounds above the groundwater and surface water standards. The treatment system was estimated at an operating cost of approximately \$98,000/month (incl. mobilization and media). The estimated duration of the dewatering period is 4 months. The discharged groundwater must be routinely sampled and documented as required in the Remediation Permit.

DTP is proposing to re-sample the local groundwater due to the missing information in the Clay Community Trail Construction Dewatering Plan and associated CDPHE permit. Additional sampling may eliminate excessive treatment for standards mandated by CDPHE due to lack of information provided in the dewatering permit application. If excessive treatment is not eliminated, additional costs may be incurred for an electric coagulation treatment system for several additional heavy metals. A determination will be made for this treatment system at the time results are received from the preconstruction test wells, alternate pricing including this system are provided below.

#### Off-Site Disposal of Non Hazardous Contaminated Soil



Over excavation of the impacted soils in the Bridge Excavation, Sanitary Sewer, Storm Drain and Waterline area is the necessary method of complete remediation. The removal would include excavation of the impacted soils and hauling to a qualified landfill disposal site.

#### **Asbestos in Soils Monitoring**

The Clay Street Bridge project area is within a historic landfill area that could potential contain asbestos-containing material (ACM) due to the presence of demolition debris within the municipal solid waste (MSW). Excavations in the area have discovered the presence of ACM within the MSW. Based on the high potential for encountering ACM, a Certified Asbestos Building Inspector (CABI) will monitor the cuttings/spoils from the bore. The CABI will be present during the generation of spoils with the presence of MSW. DTP will perform the work in accordance with the RTD Asbestos-Contaminated Soil Standard Operating Procedure in lieu of the Adams County documents.

#### C. SCHEDULE

DTP can manage schedule impacts caused by this change if NTP is granted by June 27, 2014 and a MoR is executed by June 30, 2014.

#### D. REGULATORY FRAMEWORK

The associated regulatory requirements for the proposed action are provided below.

- Code of Colorado Regulation: 5 CCR 1002-31
- Code of Colorado Regulation: 5 CCR 1002-38
- Code of Colorado Regulation: 5 CCR 1002-41
- US Environmental Protection Agency 40 CFR Part 61 Subpart M
- Occupation Safety and Health Administration 29 CFR 1926.1101
- Occupation Safety and Health Administration 29 CFR 1910.1001
- Colorado Department of Public Health and Environment Regulation 8
- Code of Colorado Regulation 6 CCR 1007-2
- RTD Asbestos-Contaminated Soils Management SOP

#### E. SUBCONTRACTORS

DTP will utilize BarkerCorp for the on-site water remediation treatment system. DTP has a unit rate contract with Earth Services and Abatement (ESA), Inc. to load, haul and dispose of Non Hazardous Contaminated Soil. This CDRL CA-041.093 utilizes ESA's rates for loading, hauling and disposing of Non Hazardous Contaminated Soil. Kleinfelder will prepare the necessary documentation for the Remediation Permit requirements and provide appropriate oversight.

#### F. ESTIMATED COSTS

The summary for estimated cost to mitigate this environmental condition is shown in the attachments. The total estimated cost is:



Total	\$ 1,302,741
Fixed Fee	\$ 131,623
Direct Cost Total	\$ 1,171,118

#### **Alternate Pricing with Coagulation Treatment System**

Total	\$ 1,898,278
Fixed Fee	\$ 191,735
Direct Cost Total	\$ 1,706,543

#### CDRL CA-041.093: Clay Street Bridge Contaminated Soil and Water

#### **Capital Costs**

Direct Cost Total =
Fixed Fee =
Total =

			Cost		Mark-up	Total
Concessionaire	DTP -	Grand Total	\$ 1,241,305	\$	61,436	\$ 1,302,741
		DTP direct	\$ -	\$	-	\$ -
		Project subcontractors	\$ 1,228,715	\$	61,436	\$ 1,290,151
		Project Contractors direct	\$ 5,805	\$	-	\$ 5,805
		Project Contractors mark ups on	\$ 6,785	\$	-	\$ 6,785
			Cost		Mark-up	Total
Project Contractor	DTS		\$ 1,234,244	\$	7,061	\$ 1,241,305
		DTS direct (10% Mark-up)	\$ -	\$	-	\$ -
		Ltr of Credit (5% Mark-up)	\$ 5,529	\$	276	\$ 5,805
		Subtotal of DTS Directs	\$ 5,529	\$	276	\$ 5,805
		DTC direct (5% Mark-up)	\$ 135,701	\$	6,785	\$ 142,486
		DTC Subs (0% Mark-up)	\$ 1,093,014	\$	-	\$ 1,093,014
			 Cost		Mark-up	 Total
Subcontractor to Project Contractor	DTC		\$ 1,165,589	\$	63,126	1,228,715
		DTC direct (10% Mark-up)	\$ 1,327	\$	133	\$ 1,460
		DTC conting(10% Mark-up)	\$ 109,447	\$	10,945	\$ 120,392
		DTC Bond (0% Mark-up)	\$ 13,849		-	\$ 13,849
		Subtotal of DTC Directs	 124,623	\$	11,078	\$ 135,701
		Sub costs (5% Mark-up)	\$ 1,040,966	\$	52,048	\$ 1,093,014
			Cost		Mark-up	Total
Sub-subcontractor	Subcon		\$ 1,040,966	\$	-	\$ 1,040,966
		Sub's - Lump Sum Price	\$ 1,040,966	\$0	override	\$ 1,040,966

1,171,118

131,623

1,302,741

#### **DTP - Cost Details**

Description	Units	Qty	Unit rate	Amount	Mark-up	Total
DTS Direct Costs						
					10% Mark-up	Total
	SUBT	OTAL "DTP dir	rect (10% Mark-up)"	\$ -	\$ -	\$ -

#### **DTS - Cost Details**

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTS Direct Costs							
Letter of Credit Annual Fees (6% of DTC Total Price)(1.5% x 5yrs)	%	7.5%	\$	73,722.90	\$ 5,529		
						5% Mark-up	Total
	SUB	TOTAL "DTS d	lirect	t (5% Mark-up)"	\$ 5,529	\$ 276	\$ 5,805

#### **DTC - Cost Details**

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
Tom Warner - Professional Labor	HR	10	\$	104.40	\$ 1,044	\$ -	\$ 1,044
Tom Warner - Pickup Truck	HR	10	\$	26.96	\$ 270	\$ 13	\$ 283
Survey Crew	HR		\$	340.20	\$ -		
Light Plants	HR		\$	14.90	\$ -		
Oiler / Fuel - Light Plants	HR		\$	105.36	\$ -		,
				Subtotal	\$ 1,327		
						10% Mark-up	Total
	SUBT	OTAL "DTC d	irect	(10% Mark-up)"	\$ 1,327	\$ 133	\$ 1,460

3,555 4,526 9,640 1,667 1,938 4 30	\$ \$ \$	26.95 26.95 26.95 26.95 11.13 98,000.00	\$ \$ \$ \$ \$ \$	95,807 121,976 259,798 44,926 21,570			
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4,526 9,640 1,667 1,938 4	\$ \$ \$ \$	26.95 26.95 26.95 11.13	\$ \$ \$	121,976 259,798 44,926 21,570			
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#### Total - DTC Directs, Subs, & Mark-ups \$ 1,094,474

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Contingency							
Contingency	%	10%	\$	1,094,474.08	\$ 109,447		
						10% Mark-up	Total
SUB	TOTAL "I	DTC - Continge	ncy"	' (5% Mark-up)"	\$ 109,447	\$ 10,945	\$ 120,392

#### Total - DTC Directs, Subs, Mark-ups, & Contingency \$ 1,214,866

Description	Units	Qty		Unit rate	Amount	Mark-up	Γotal
DTC - Bonds							
Bond (Direct Cost + Subs + Mark-ups)	%	1.14%	\$	1,214,866.08	\$ 13,849		
						0% Mark-up	Total
	SUB	TOTAL "DTC o	lirect	t (0% Mark-up)"	\$ 13,849	\$ -	\$ 13,849

DTC GRAND TOTAL PRICE \$ 1,228,715

## CDRL CA-041.093: Clay Street Bridge Contaminated Soil and Water - Alternate with Coagulation Treatment System Capital Costs

 Direct Cost Total =
 \$ 1,706,543

 Fixed Fee =
 \$ 191,735

 Total =
 \$ 1,898,278

			Cost		Mark-up	Total
Concessionaire	DTP - 0	Grand Total	\$ 1,808,756	\$	89,522	\$ 1,898,278
		DTP direct	\$ -	\$	-	\$ -
		Project subcontractors	\$ 1,790,442	\$	89,522	\$ 1,879,964
		Project Contractors direct	\$ 8,460	\$	-	\$ 8,460
		Project Contractors mark ups on	\$ 9,854	\$	-	\$ 9,854
			Cost		Mark-up	Total
Project Contractor	DTS		\$ 1,798,499	\$	10,257	\$ 1,808,756
		DTS direct (10% Mark-up)	\$ -	\$	-	\$ -
		Ltr of Credit (5% Mark-up)	\$ 8,057	\$	403	\$ 8,460
		Subtotal of DTS Directs	\$ 8,057	\$	403	\$ 8,460
		DTC direct (5% Mark-up)	\$ 197,072	\$	9,854	\$ 206,926
		DTC Subs (0% Mark-up)	\$ 1,593,370	\$	-	\$ 1,593,370
			Cost		Mark-up	Total
Subcontractor to Project Contractor	DTC		\$ 1,698,486	\$	91,956	\$ 1,790,442
		DTC direct (10% Mark-up)	\$ 1,327	\$	133	\$ 1,460
		DTC conting(10% Mark-up)	\$ 159,483	\$	15,948	\$ 175,431
		DTC Bond (0% Mark-up)	\$ 20,181	\$	-	\$ 20,181
		Subtotal of DTC Directs	 180,991	\$	16,081	\$ 197,072
		Sub costs (5% Mark-up)	\$ 1,517,495	\$	75,875	\$ 1,593,370
			Cost		Mark-up	Total
Sub-subcontractor	Subcont	ractors	\$ 1,517,495	\$	-	\$ 1,517,495
		Sub's - Lump Sum Price	\$ 1,517,495	\$0	override	\$ 1,517,495

#### **DTP - Cost Details**

Description	Units	Qty	Unit rate	Amount	Mark-up	Total
DTS Direct Costs						
					10% Mark-up	Total
	SUBT	OTAL "DTP di	rect (10% Mark-up)"	\$ -	\$ -	\$ -

#### **DTS - Cost Details**

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTS Direct Costs							
Letter of Credit Annual Fees (6% of DTC Total Price)(1.5% x 5yrs)	%	7.5%	\$	107,426.49	\$ 8,057		
						5% Mark-up	Total
	SUB	TOTAL "DTS d	irect	: (5% Mark-up)"	\$ 8,057	\$ 403	\$ 8,460

#### **DTC - Cost Details**

Description	Units	Qty		Unit rate	Amount	Mark-up	Total	
Tom Warner - Professional Labor	HR	10	\$	104.40	\$ 1,044	\$ -	\$	1,044
Tom Warner - Pickup Truck	HR	10	\$	26.96	\$ 270	\$ 13	\$	283
Survey Crew	HR		\$	340.20	\$ -			
Light Plants	HR		\$	14.90	\$ -			
Oiler / Fuel - Light Plants	HR		\$	105.36	\$ -			
				Subtotal	\$ 1,327			
						10% Mark-up		Total
	SUBT	OTAL "DTC d	lirect	(10% Mark-up)"	\$ 1,327	\$ 133	\$	1,460

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Subcontractors							
Solid Waste Disposal - (Bridge Excavation)							
Non Asbestos - (Environmental CDRL 41)	TN	3,555	\$	26.95	\$ 95,807		
Solid Waste Disposal (SS Line)							
Non Asbestos - (Environmental CDRL 41)	TN	4,526	\$	26.95	\$ 121,976		
Solid Waste Disposal (Water Line)							
Non Asbestos - (Environmental CDRL 41)	TN	9,640	\$	26.95	\$ 259,798		
Solid Waste Disposal (Storm Drain)							
Non Asbestos - (Environmental CDRL 41)	TN	1,667	\$	26.95	\$ 44,926		
Potential Asbestos Soil (20%) Difference)	TN	1,938	\$	11.13	\$ 21,570		
Water Treatment w/ Coagulation Treatment	Month	4	\$	217,132.13	\$ 868,528.50		
Cleanout / Monitorring for Treatment Filter (4 weeks)	Days	30	\$	500.00	\$ 15,000		
Permit Application and Prep.	LS	1	\$	5,000.00	\$ 5,000		
Asbestos Sampling / Monitorring	LS	1	\$	55,073.00	\$ 55,073		
Dewatering Sampling	LS	1	\$	29,816.00	\$ 29,816		
	•					5% Mark-up	Tota
SUB	TOTAL "D	TC Subcontra	ctors	(5% Mark-up)"	\$ 1,517,495	\$ 75,875	\$ 1,593,370

Total - DTC Directs, Subs, & Mark-ups \$ 1,594,830

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Contingency							
Contingency	%	10%	\$	1,594,829.58	\$ 159,483		
						10% Mark-up	Total
SUB	TOTAL "I	DTC - Continge	ncy"	' (5% Mark-up)"	\$ 159,483	\$ 15,948	\$ 175,431

Total - DTC Directs, Subs, Mark-ups, & Contingency \$ 1,770,261

Description	Units		Unit rate	Amount	Mark-up		Total				
DTC - Bonds											
Bond (Direct Cost + Subs + Mark-ups)	%	1.14%	\$	1,770,260.58	\$	20,181					
								0% Mark-up		Total	
	SUBTOTAL "DTC direct (0% Mark-up)" \$ 20,181										

DTC GRAND TOTAL PRICE \$ 1,790,442



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## CONSTRUCTION DEWATERING PLAN CLAY COMMUNITY TRAIL ZUNI TO 60<sup>TH</sup> AVENUE ADAMS COUNTY, COLORADO

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#### **FIGURES**

Figure 1 – Location of Monitoring Wells

Figure 2 – SH-1 Drilling Log

Figure 3 – SH-2 Drilling Log

Figure 4 – SH-3 Drilling Log

Figure 5 – Conceptual Dewatering Well Layout

#### **TABLES**

Table 1 – Summary of Groundwater and Surface Water Analyses

Appendix A – Slug Test Data

Appendix B – Discharge Permit

#### 1.0 INTRODUCTION

This Construction Dewatering Plan (CDP) has been developed to only provide information and guidance to the contractor for dewatering, discharge treatment, and discharge monitoring in accordance with the existing Construction Dewatering - Remedial Activities Discharge Permit issued by the Colorado Department of Public Health and Environment, Water Quality Control Division. Separate and stand - alone project plans have been developed for Materials Management, Asbestos Management, and Quality Assurance/Quality Control.

#### 1.1 Background

Kumar & Associates (K+A) was contracted by Adams County, Colorado (the Contractor) through Merrick & Company to prepare this Construction Dewatering Plan (CDP).

K+A also prepared the following relevant reports:

- Modified Phase I Environmental Site Assessment (MESA) and Limited Subsurface Investigation (LSI), Utah Junction – Clay Street Outfall, I-76 and West 60<sup>th</sup> Avenue, Adams County, Colorado, dated June 20, 2011 (K+A Project #10-1-257A)
- Sampling and Analysis of Ground Water, Surface Water, and Sediment, Clay Street Outfall, Adams County, Colorado, dated November 1, 2011 (K+A Project #11-1-257C)
- Sampling and Analysis of Clear Creek Surface Water, Clay Street Outfall, Adams County, Colorado, dated November 29, 2011 (K+A Project #11-1-257C)
- Methane Investigation, Clay Street Outfall / Trail Project, I-76 and West 60<sup>th</sup> Avenue, Adams County, Colorado, dated April 25, 2012 (K+A Project #11-1-257D)
- Landfill Waste Characterization, Clay Community Trail, Zuni to Clear Creek, Adams County, Colorado, dated August 21, 2012 (K+A Project #11-1-257D)

The MESA identified the presence of an inactive historic landfill (60<sup>th</sup> and Alcott Landfill) on the property. The MESA also identified concentrations of benzene and metals above the Colorado Basic Standards for Ground Water (Regulation No. 41) in the ground water at the subject site. Low concentrations of oil and grease were also identified in the ground water at the site.

The Sampling and Analysis of Ground Water, Surface Water, and Sediment report identified concentrations of metals in surface water exceeding surface water standards and concentrations of arsenic in pond sediments exceeding Colorado Soil Evaluation Values. Oil and grease concentrations were also detected in the sediment samples. The report also identified ground water samples with concentrations of semi-volatile organic compounds

(SVOCs) and manganese exceeding groundwater standards. Oil and grease concentrations were also detected in ground water.

The Methane Investigation identified elevated methane gas levels at one sampling point at the site. Methane gas and other landfill gases from the historical landfill may present a potential explosion hazard and potential worker health and safety concern.

The Landfill Waste Characterization report concluded that all six bulk waste samples collected from the site are non-hazardous and can be disposed of as solid waste.

#### 1.2 Purpose

The project consists of the construction of a drainage channel section under the future RTD Gold Line crossing and approximately 1,165 linear feet of a new multi-use recreational trail between 60<sup>th</sup> Avenue and the existing Clear Creek Trail. The project generally consists of the following elements:

- Drainage channel section at proposed RTD Gold Line Crossing
- Pedestrian Trail from 60<sup>th</sup> Avenue north to Clear Creek
- Pedestrian bridge across Clear Creek
- Trail lighting

Notable work activities include:

- Utility relocation coordination
- Landfill excavation
- Earthwork for drainage channel section below RTD Gold Line
- Retaining walls
- Concrete work including retaining walls and pedestrian bridge supports
- Relocated storm sewer, waterline and sanitary pipes
- Inlets and manholes
- Geomembrane liner installation at future drainage channel alignment

This CDP identifies the groundwater conditions within the project area which are likely to contain contaminants at concentrations requiring treatment prior to discharge, the procedures which are recommended to be implemented by the Contractor to dewater any required project areas and to treat the water prior to discharge.

#### 2.0 GROUNDWATER CONDITIONS

The project site is located within the Clear Creek alluvial valley. Historically the alluvial sands and gravels were mined within the project area. Subsequently, the gravel pits were used for disposal of municipal solid waste and fly ash stabilized/solidified liquid wastes. Currently, these wastes exist beneath most of the trail alignment.

Previous studies performed for the project have identified groundwater ranging from 3 to 10 feet below the existing ground surface along the proposed trail alignment. Groundwater quality analyses have resulted in findings of metals and organic compounds exceeding Colorado Surface Water and Groundwater standards.

Ground water requiring management will likely be generated during construction activities. Because ground water is contaminated, the Contractor shall make all attempts to avoid encountering groundwater during construction.

#### 2.1 Groundwater Quantity

Three monitoring wells were installed on July 27, 2012 along the proposed trail alignment to evaluate the groundwater depth and hydraulic conductivity of the subsurface materials. The locations of the three monitoring wells (SH-1, SH-2 and SH-3) are shown on Figure 1. Boring logs and monitoring well completion diagrams are provided on Figures 2 through 4. Subsurface materials encountered included 0.3 to 0.5 feet of slightly organic clayey topsoil underlain by 2.0 to 3.5 feet of silty, sandy clay (landfill cover). Underlying the cover material solid waste was encountered to the total depth drilled (19 feet). The solid waste was composed of wood, metals, plastic, glass, and paper materials. Groundwater levels ranged from 2.68 to 5.26 feet below ground surface.

Two-inch diameter PVC monitoring wells were installed in each of the three borings. Each well was screened from 4 to 19 feet below ground surface. The screened interval was backfilled with 10/20 screened silica sand. Wells were sealed at the ground surface with a minimum of 1 foot of hydrated bentonite. Subsequent to completion each monitoring well was developed by surging and bailing a minimum of five casing volumes of water from the well.

In-situ hydraulic conductivity testing (slug tests) was performed in each well on July 30, 2012. Slug testing involved displacing the water within the well screen by rapidly introducing a PVC cylinder sealed and filled with sand (slug) into the well. The slug was 5 feet in length and 1-inch in diameter. A rise in the water level within the well results from the slug insertion. The rate of drop or recovery of the water level to its initial or static elevation is recorded by a digital pressure transducer and datalogger. This data is then used to calculate the hydraulic conductivity of the materials opposite the screened interval of the well.

Once the water level has reached or nearly reached its static elevation the slug is rapidly removed from the well causing a corresponding rapid decrease in the water level. The rate of recovery is again recorded with the transducer and datalogger. The data was analyzed in

accordance with the procedures described by Bouwer and Rice using the United States Geological Survey computation speadsheets provided in USGS Open File Report 02-197.

Five slug tests performed in the three wells provided valid hydraulic conductivity data. Slug test data output sheets are provided in Appendix A.

The tests that had consistent input resulted in hydraulic conductivity values ranging from 3.8 to 77 feet per day  $(1.3x10^{-3} \text{ to } 2.7x10^{-2} \text{ cm/sec})$ .

<u>Well</u>	Hydraulic Conductivity
SH-1	3.8 ft/d (1.3x10 <sup>-3</sup> cm/sec)
SH-2 Test 1	18 ft/d (6.4x10 <sup>-3</sup> cm/sec)
SH-2 Test 2	35 ft/d (1.2x10 <sup>-2</sup> cm/sec)
SH-3 Test 1	77 ft/d (2.7x10 <sup>-2</sup> cm/sec)
SH-3 Test 2	65 ft/d (2.3x10 <sup>-2</sup> cm/sec)

The average hydraulic conductivity for all valid tests was 40 ft/d or 1.4x10<sup>-2</sup> cm/sec.

#### RTD Gold Line Underpass

An evaluation of potential dewatering flows during construction of the portion of the drainage ditch extending beneath the planned alignment of the Gold Line was performed. Our evaluation was based on the following assumptions:

- Pre-construction groundwater elevation of 5195 feet
- Water table aguifer with a bedrock elevation of 5170 feet
- Landfill waste hydraulic conductivity values ranging from 1.3x10<sup>-3</sup> to 2.7x10<sup>-2</sup> cm/s
- Extent of dewatered excavation 135' by 100'; 15' drawdown

Dewatering rates were estimated using the Darcy flow equation based on the assumed area of excavation, the required drawdown, and the estimated average hydraulic conductivity. In addition, flow rates were estimated using methods for calculating radial flow for an equivalent single source and line flow toward a two-sided finite trench. These methods yielded steady-state dewatering rates of 250 to 500 gpm.

The estimated dewatering rates are based on limited data. Dewatering rates are anticipated to vary depending on the size and depth of the open excavation. Higher dewatering rates should be anticipated for an excavation larger and deeper than that assumed herein, or if a higher groundwater elevation is present at the time of construction.

The duration of the project dewatering will depend on the time required to draw the groundwater down to the elevation required for construction, and on the time required to excavate to planned subgrade, install and cover the liner, and construct and backfill associated structures and retaining walls. We anticipate initial drawdown may take about 1 to 2 weeks at 500 gpm. During this time groundwater level monitoring should be documented to ensure adequate dewatering will be accomplished in time form the deeper excavations. While the duration of sustained dewatering will depend on the Contractor's schedule, we estimate that dewatering may be required for up to 7 months.

#### Pedestrian Bridge at Clear Creek

Groundwater will likely be encountered at the abutment excavations for the pedestrian bridge crossing at Clear Creek. These excavations are limited in extent and will extend to approximately 2 to 3 feet below the anticipated groundwater level. Dewatering flows at the abutment excavations are estimated to be on the order of approximately 50 to 100 gpm.

#### **Utility Relocation**

Underground utilities including storm sewer, sanitary sewer and water will require relocation. Trenches excavated for the utilities below the groundwater elevation will require dewatering. It is assumed that trench sections limited in length will be excavated that produce flow rates on the order 100 to 200 gpm which will be pumped by sump pumping.

#### 2.2 Groundwater Quality

Groundwater samples were previously collected at the site from 4 test pits and 3 up-gradient monitoring wells. The results of the analyses along with the results of surface water analyses are summarized on Table 1. As shown on Table 1, several metals including aluminum, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, vanadium, and zinc exceeded Colorado groundwater or surface water standards. In addition low concentrations of volatile and semi-volatile compounds were also detected, several of which exceeded Colorado groundwater standards.

#### 2.3 Discharge Permit

Adams County applied for a permit to discharge groundwater generated during construction activities in January 2012. The Colorado Water Quality Control Division issued a Certification under the Colorado Discharge Permit System for "Remediation Activities Discharging to Surface Water" on June 18, 2012 (Permit Number COG315000; Certification Number COG315255). A copy of the permit and effluent limits are provided in Appendix B. The permit will be transferred to the selected contractor who will then be responsible for all permit requirements.

#### 3.0 DEWATERING

Dewatering of the excavation area will require sufficient pumping capacity to lower the groundwater table below the bottom of the required excavation. K+A excavated test pits and collected water samples that were transmitted to Siemens Corporation for analysis to determine

the type and extent of treatment that would be necessary in order to discharge the pumped groundwater into Clear Creek, located north of the project site. The Colorado Department of Public Health Environment has established the Preliminary Effluent Limits (PELs) that must be met in order to discharge the pumped groundwater into Clear Creek.

#### 3.1 Conceptual Pumping System

The contractor is responsible for the selection of the most cost-effective dewatering system that can provide an estimated sustained pumping rate of 500 gpm. Typical systems for this type of excavation could include sump pumping, well points, pumping wells or any other method, or combination of methods that achieve the desired results.

For example, a conceptual pumping and well system would include a number of wells set around the perimeter of the proposed excavation. With the proposed excavation as shown on Figure 5 there would be an estimated 10 groundwater wells equally spaced around the excavation. Well casings would be installed and extended into the claystone bedrock approximately 1-2 feet. The groundwater wells would each have a capacity of approximately 50 gpm in order to provide the estimated 500 gpm to drawdown the groundwater level. The wells would be installed approximately 50 feet apart along sides of the proposed excavation.

The maximum initial pumping rate of 500 gpm may be required in order to lower the level of the groundwater table. Once the groundwater table has been sufficiently lowered below the depth of the proposed excavation the required rate of dewatering pumping is anticipated to be lower as it reaches a steady state and a constant level is maintained.

Dewatering may also be required at the Clear Creek pedestrian bridge and utility trenches. These excavations are anticipated be limited in size and are estimated to produce relatively low quantities of groundwater that should be easily handled by temporary sump pumping.

#### 3.2 Conceptual Treatment System

Treatment of the discharge from the dewatering activities is the responsibility of the Contractor. A Certification to Discharge under CDPS General Permit COG315000 has been obtained by Adams County. The discharge limits are included in the Certification to Discharge included as Appendix B of this report. In developing a treatment protocol for the dewatered groundwater, samples were collected from 5 separate test pits on-site, combined into two composite samples, and then delivered to Rain for Rent to determine the filterability of the groundwater. Rain for Rent worked with Siemens and performed a filterability bench test. The table below shows the average of the contaminant remaining after filtration:

Table - Summary of Bag Filtration Bench Test

Parameter	В	ag Filter	Pore Si	ze
	11 um	5 um	1 um	0.45
				um
Aluminum (ug/L)	440	600	460	460
Arsenic (ug/L)	2	1.5	1.5	1
Barium (ug/L)	185	185	185	185
Berylium (ug/L)	<50	<50	<50	<50
Cadmium (ug/L)	<1	<1	<1	<1
Chromium (ug/L)	4.5	4.5	4.5	3
Iron (ug/L)	200	199	110	110
Lead (ug/L)	BDL	BDL	BDL	BDL
Manganese (ug/L)	430	430	420	420
Zinc (ug/L)	24.5	24.5	21.5	20

The collected samples showed a high filterability result with only a few contaminants remaining after the 0.45 um filtration. In the table above, highlighted parameters are the contaminants that did not meet the permitted discharge limit using filtration technology alone. In addition to the bag filter test summarized above, Siemens water technology group was contacted to test an ion exchange method to further reduce the contaminants to permitted levels.

Samples were submitted to Siemens for ion exchange testing, in particular looking for removal of the arsenic, beryllium, and cadmium. Siemens used two ion exchange technologies (SCU 50BV, and ASG 50BV) and the results are averaged and summarized for the two composite samples in the table below:

Table – Summary of Ion Exchange Bench Results

Parameter	SCU 50BV	ASG 50BV
	DUDV	DUDV
Arsenic (ug/L)	0.13	0.12
Berylium (ug/L)	< 0.051	
Cadmium (ug/L)	0.19	

The table above shows that the concentrations of beryllium and cadmium were both reduced below the permitted discharge limits. Arsenic was not able to get below the 0.02 ug/L as permitted. Discussion with the Colorado Department of Public Health and Environment's, Nathan Moore in the permitting section, indicated that due to the laboratory practical quantitation limit the permitted limit for arsenic is actually 1.0 ug/L (see Part I.E.3 of the General Permit). As indicated in the tables above, bag filtration was able to reduce the arsenic concentration to 1.0 ug/L and the ion exchange was able to reduce the concentration below 1.0 ug/L.

The recommendation is that mechanical filtration be utilized in order to remove the particulate matter from the groundwater and then the filtered water would be sent through ion exchange vessels to remove additional dissolved contaminants within the water. The treatment process

would be designed to handle the estimated 500 gallons per minute of discharge from the groundwater collection wells. Dewatering wells will be connected to header piping that will convey pumped groundwater to the treatment system. The treatment system should have a number of weir tanks required to handle the expected pumping rate from the dewatering wells. The weir tanks will provide time for the heavy sediment to settle out of the water column.

Settled water will then be pumped through a series of bag filters in order to remove the fine particulate matter. The filtered water will then be delivered to ion exchange vessels where the ion exchange media will remove dissolved component of the contaminants, in particular arsenic. The treated water will finally be sent through activated carbon vessels for final polishing prior to being discharged into the storm sewer system and ultimately to Clear Creek.

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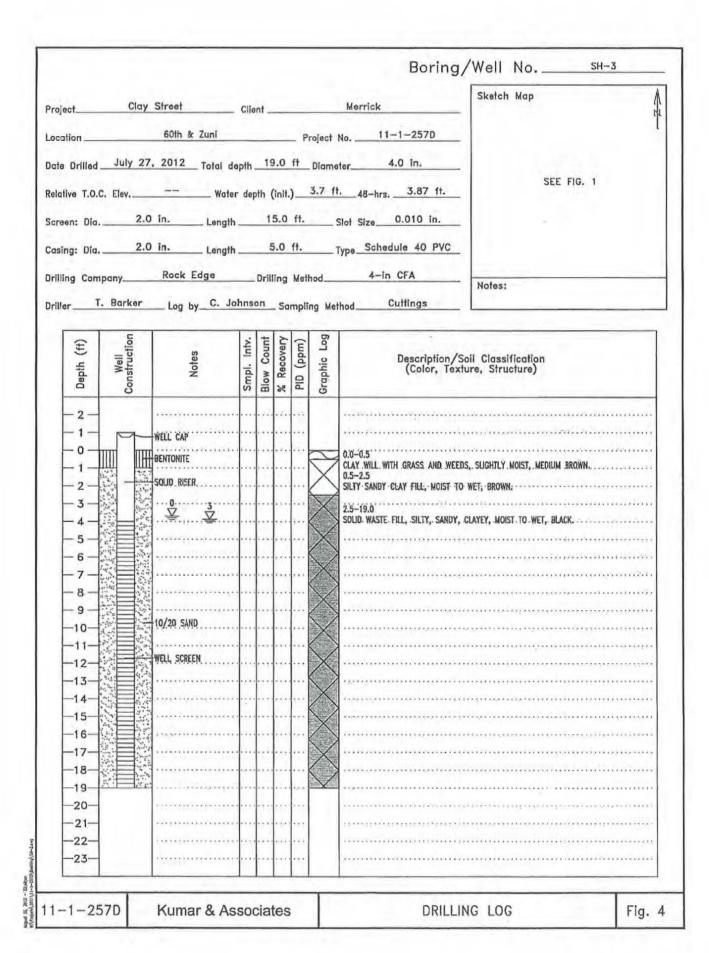


December 31, 2013 - 11

Boring/Well No.\_ SH-1 Sketch Map Merrick Clay Street Project. \_ Client . 60th & Zuni Location. \_ Project No. July 27, 2012 Total depth 19.0 ft Diameter SEE FIG. 1 \_\_\_ Water depth (init.) 7.2 ft. 48-hrs. 15.0 ft. 0.010 in. Screen: Dia. \_ Length . \_ Slot Size. Type Schedule 40 PVC 2.0 in. 5.0 ft. Casing: Dia. Rock Edge 4-in CFA Drilling Method. Drilling Company\_ Notes: T. Barker Cuttings Log by C. Johnson Sampling Method % Recovery Smpl. Intv. PID (ppm) Notes Description/Soil Classification (Color, Texture, Structure) Blow - 2 -BENTONITE - 2 -SILTY, SANDY CLAY FILL, MOIST, BROWN. . 3 - 9 -13 -15 -19--20--21--22-Kumar & Associates DRILLING LOG Fig. 2

- 42.45pm

										Merrick Sketch Map
Location _		-	×-	60th & Zuni				_ P	roject	No11-1-257D
Date Drille	d	luly	27,	2012 Total de	epth	19	0.0	ft	Diam	ster4.0 în
Relative T.C	.c. E	lev		Water	r dep	oth (	init.	)_	3.2 f	t. 48-hrs. 2.68 ff. SEE FIG. 1
										Slot Size0.010 in.
Casing: Di	a. —	_	2.0	In. Length	_		5.0	ff.		Type Schedule 40 PVC
Orilling Co	mpan	у	_	Rock Edge		Dril	ling	Met	hod	4-in CFA Notes:
Driller	т. в	arke	r	Log byC. Jo	hns	on	_ Sa	mpli	ng Me	thod Cuttings
(±)		ion			Infv.	tut	ary.	2	Log	
		Construction		Notes	l. In	Count	Recovery	(mdd)		Description/Soil Classification (Cotor, Texture, Structure)
Depth		Sons		Ż	Smpl.	Blow	% R	PID	Graphic	(color, residies, structure)
- 2 -				# 4 S E 100 E 10 E 10 E 10 E 10 E 10 E 10 E						
-1-		N 4		د د د د د د د د د د د د د د د د د د د						
-0-	1			WELL CAP						0.0-0.5
<u> </u>			шч	BENTONITE		1 = 1			V	CLAY FILL WITH GRASS AND WEEDS, ORGANIC, SLIGHTLY MOIST, MEDIUM BROWN.
-2-				SOLID RISER 3			2.2(4)			0.5-4.0 Silty, Sandy Clay fill, moist to wet, brown.
-3-						1 = =			X	
-4-							***			4.0-19.0
- 5 - - 6 -	1					* * *	***		$\wedge$	SOLID WASTE-FILL-SILTY, SANDY, CLAYEY, MOIST TO WET, BLACK.
	4.7			FILLIAN TRACETOR	W 1.750				$\times$	
-8-	1112									
<u> </u>	1								$\wedge$	Lerendan material commentaria contraction de contra
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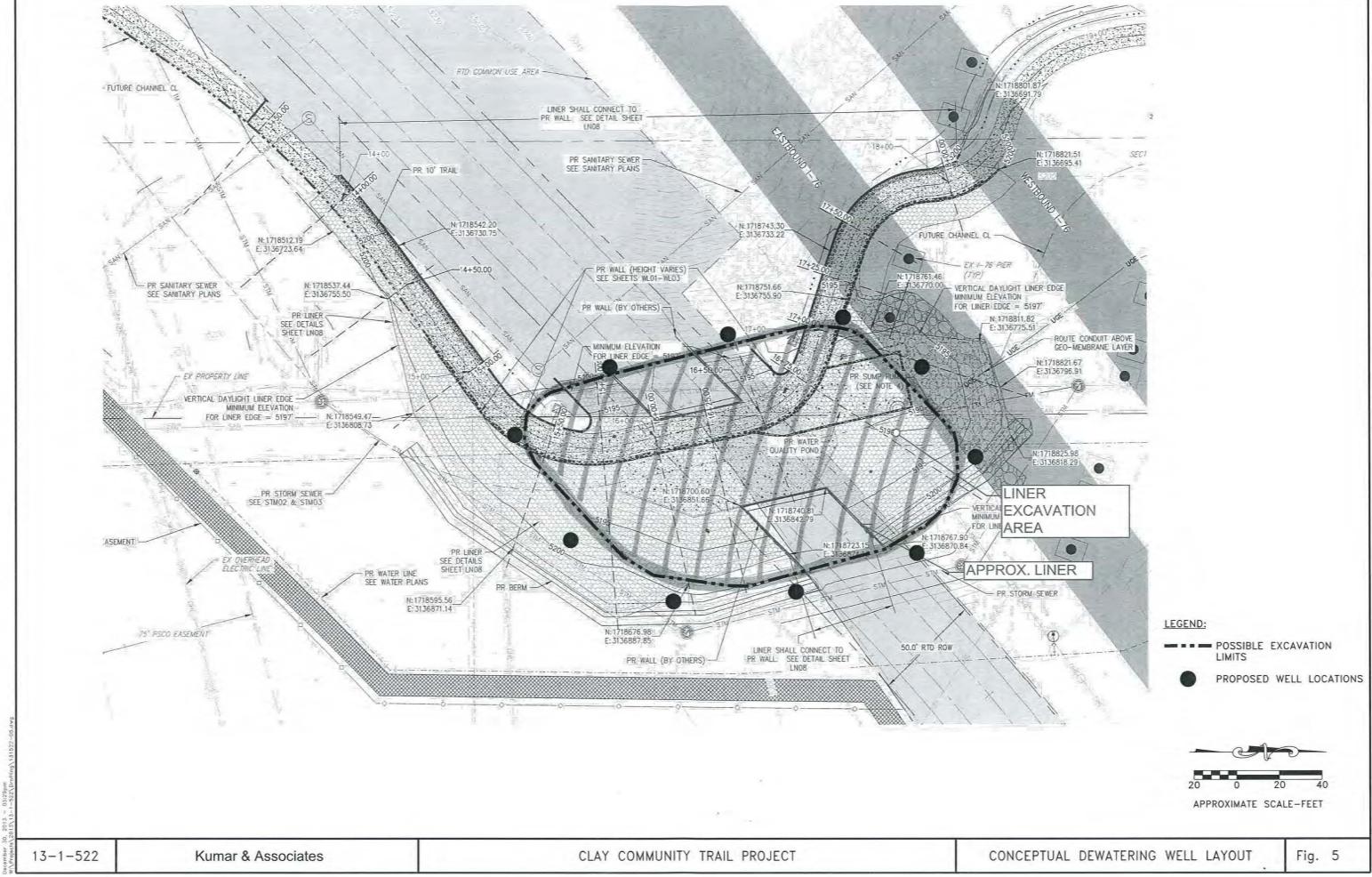


TABLE 1 SUMMARY OF GROUND WATER AND SURFACE WATER ANALYSES

				Ground	Water									Surf	ace Water					
Analyte	TP-2W	TP-5W	TP-6W	TP-7W	MW-1	MW-2	MW-3	GW Standard <sup>1</sup>	W1-1	W1-2	W2-1	W2-2	W3-1	W3-2	W4-1	W4-2	W5-1	W5-2	Clear Creek	SW Standard
Total Aluminum	19,100	255,000	7,860	301,000	977	1,450	14,100	5,000	614	53	50	52	50	46	2.870	815	658	1,550	291	87
Dissolved Aluminum	6,690	4,230	1,740	5,870	192	* ND	ND	5.000	106	30	23	29	24	30	810	235	180	513	ND	87
Total Arsenic	ND	6	230	7	6.21	1.7	3.87	10	6	ND	ND	ND	ND	ND	7	5	7	10	ND	0.02
Dissolved Arsenic	ND	ND	230	7	2.74	1.82	5.09	10	5	ND	ND	ND	ND	ND	6	5	7	8	ND	0.02
Total Barium	881	6,690	284	5,730	50.1	222	600	2.000	357	100	255	99	74	88	157	106	119	175	63.2	1,000
Dissolved Barium	347	913	237	1,170	40.6	199	229	2,000	297	85	232	86	71	85	119	93	118	129	52.5	1,000
Total Beryllium	ND	8	ND	13	0.0535	0.0476	0.172	4	'ND	ND	ND	ND	· ND	ND	ND	ND	ND	ND	ND	4
Dissolved Beryllium	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4						
Total Boron	9,760	1,860	322	1.250	101	106	66.2	NS	2.658	2,050	2,320	1.930	1,870	1.810	57	56	63	66	59.3	750
Dissolved Boron	9,130	1,230	256	1.040	136	152	61.9	NS	2.230	1,430	1,570	1,410	1,410	1,450	54	48	54	49	55.7	750
Total Cadmium	ND	97	9	657	0.0879	0.109	1.69	5	ND	ND	ND	ND	ND	5						
Dissolved Cadmium	ND	ND	ND	ND	0.027	0.0692	1.45	5	ND	ND	ND	ND	ND	5						
Total Chromium	14	682	22	849	ND	ND	14.5	100	ND	4	ND	4	4	5	9	5	5	7	ND	50
Dissolved Chromium	6	10	ND	17	ND	ND	0.9	100 «	ND	ND	ND	ND	ND	ND	4	4	5	ND	ND	50
Total Cobalt	ND	187	ND	219	3.54	3	20.1	50	ND	ND	1.210	ND	ND	ND	ND	ND	ND	ND	1.14	l NS
Dissolved Cobalt	ND	ND	ND	ND	2.19	2.09	4.7	50	ND	ND	831	ND	ND	ND	ND	ND	ND	ND	ND	l NS
Total Copper	25	2.450	295	4.510	2.47	3.65	342	200	6	ND	ND	ND	ND	ND	22	6	10	28	3.2	200
Dissolved Copper	5	ND	220	ND	8.34	28.4	188	200	5	ND	ND	ND	ND	ND	13	ND	5	16	1.92	200
Total Iron	5,700	718,000	31,500	1,250,000	1,120	1,230	17,000	300	3,650	443	1,650	515	297	284	7.890	2.540	2.570	5,230	389	1,000
Dissolved Iron	1,660	40,100	19,900	75.000	47.5	ND	15	300	1,960	261	1,120	109	137	104	1.840	827	603	1.570		300
Total Lead	9	9,990	619	5,110	2	1.61	6.86	50	7	ND	ND	ND	ND	ND	33	8	11	39	1.65	50
Dissolved Lead	ND	200	512	53	0.695	0.933	0.327	50	4	ND	ND	ND	ND	ND	20	5	7	28	I ND	50
Total Manganese	97	8.700	2,140	10,200	2.060	3.940	7,480	50	3,120	120	1.860	189	406	104	707	813	3,060	3,720		. 50
Dissolved Manganese	140	1.200	2.020	1.350	1,380	2.920	5.530	50	2,850	84	1.440	86	336	81	606	715	2,990	3.080		-50
Total Nickel	21	627	26	681	5.79	5.5	11.9	100	7	ND	6	ND	ND	ND	11	7	9	11	1.39	100
Dissolved Nickel	13	28	16	27	6.62	6.11	12.2	100	6	ND	4	ND	ND	ND	7	6	7	8	1.36	100
Total Thallium	8	ND	ND	ND	0.0467	ND	0.0438	2	ND	ND	ND	ND	ND	0.24						
Dissolved Thallium	ND	ND	ND	ND	0.142	ND	0.0449	2	ND	ND	ND	ND	ND ND	0.24						
Total Vanadium	ND	481	ND	596	ND.	ND	24.3	100	ND	ND	ND	ND	ND	ND	7	ND	ND	ND	ND	l NS
Dissolved Vanadium	ND	ND	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	NS.
Total Zinc	36	16,600	973	13.700	16.4	28.7	1.130	2 000	50	18	42	23	20	15	98	35	42	105	44.3	2.000
Dissolved Zinc	208	915	879	711	2.18	5.83	33.8	2,000	39	13	32	22	17	13	61	25	35	67	26.4	2,000
Benzene	ND	ND	ND -	6.6	ND	ND	NA.	5	ND	ND	ND	ND	ND	22						
Benzo(a)anthracene	ND	ND	ND	ND	1.38	0.156	NA	0.0048	ND	ND	ND	ND	ND	0.0038						
Benzo(a)pyrene	ND	ND	ND	ND	ND	0.0872	NA	0.0048	ND-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0038
Benzo(b)fluoranthene	ND	ND	ND	ND	1.24	0.17	NA	0.0048	ND	ND	ND	ND	ND.	ND	ND	ND	ND	ND	ND	0.0038
Benzo(k)fluoranthene	ND	ND	ND	ND .	0.0973	0.0269	NA	0.0048	ND	ND	ND	ND	ND	0.0038						
Bis (2-ethylhexyt) phthalate	ND	30.1	ND	22	0.56	ND	NA	2.5	ND	ND	ND	ND	I ND	NS						
Chrysene	ND	ND	ND	ND	0.113	0.0477	NA	0.0048	ND	ND	ND	ND	ND	ND	I ND	ND	ND	ND	ND ND	0.0038
Indeno(1,2,3-c,d)pyrene	ND	ND	ND	ND	1.24	0.14	NA	0.0048	ND	ND	ND	I ND	ND	0.0038						

<sup>1.</sup> Ground water standard based on state or federal MCL, MCL-equivalent calculation, or agricultural standard
2. Surface water standard based on the lowest standard amongrecreational, aquatic life, agriculture, domestic water supply, water + fish, and fish ingestion categories listed in Tables I through III, Regulation No. 31, The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31)

ND - Analyte not detected at or above the method reporting limit

NA - Not Analyzed

NS - No Standard Developed

Bold Red type indicates standard exceeded

All units in micrograms per liter (ug/L)

# APPENDIX A SLUG TEST DATA

## WELL ID: SH 1, Test 1, Slug - out

	INPUT	Local ID: Clay Street Date: 7/30/2012
Construction:	IIVI OI	Time: 0:00
Casing dia. (d <sub>c</sub> )	2 Inch	
Annulus dia. (d <sub>w</sub> )	4 Inch	
Screen Length (L)	15 Feet	↓ → d <sub>a</sub>
Depths to:		тоѕ
water level (DTW)	5.4 Feet	DTB TENT
top of screen (TOS) Base of Aquifer (DTB)	4 Feet 40 Feet	
Annular Fill:		d <sub>w</sub>
across screen above screen		Adjust slope of line to estimate K
Aquifer Material	Silt, Loess	1.00 Adjust slope of line to estimate K
C	OMPUTED	
L <sub>wetted</sub>	13.6 Feet	_
D =	34.6 Feet	0
H =	13.6 Feet	
L/r <sub>w</sub> =	81.60	
Yo-DISPLACEMENT =	2.57 Feet	
y <sub>0-SLUG</sub> =	2.81 Feet	2
From look-up table usin	g L/r <sub>w</sub>	3/1/20
Partial penetrate A = B =	4.023 0.666	
In(Re/rw) = Re =	2.953 3.19 Feet	
Slope =	0.025471 log <sub>10</sub> /sec	
t <sub>90%</sub> recovery =	39 sec	
Input is consistent.		
K =	3.8 Feet/Day	0.10
		00:00 02:53 05:46 08:38 11:31 TIME, Minute: Second

REMARKS:	Bouwer and Rice analysis of slug test, WRR 1976
1	

## WELL ID: SH 2, Test 1, Slug - out

		Local ID: Clay Street
	INPUT	Date: 7/30/2012
		Time: 0:00
Casing dia. (d <sub>c</sub> ) Annulus dia. (d <sub>w</sub> )	2 Inch	
	4 Inch	$\psi \rightarrow   \leftarrow d_n$
Screen Length (L)	15 Feet	1 DTW 1
Depths to:		тоѕ
water level (DTW)	1.6 Feet	
top of screen (TOS)	2.6 Feet	
Base of Aquifer (DTB)	40 Feet	
Annular Fill:		d <sub>w</sub>
across screen (	Coarse Sand	Base of Aquifer
above screen I		Addison of the second of
Aquifor Motorial	Fine Sand	Adjust slope of line to estimate K
Aquifer Material I	Tille Sallu	ad I
CC	OMPUTED	Y I
L <sub>wetted</sub>	15 Feet	2
D =	38.4 Feet	
H =	16 Feet	
L/r <sub>w</sub> =	90.00	
Yo-DISPLACEMENT =	2.34 Feet	
y <sub>o-slug</sub> =	2.81 Feet	s
From look-up table using	g L/r <sub>w</sub>	λίγο
Partial penetrate A =	4.234	- P
B =	0.707	b l
In(Re/rw) =	3.063	
Re =	3.56 Feet	
1.15		9
Slope =	0.126893 log <sub>10</sub> /sec	
t <sub>90%</sub> recovery =	8 sec	
nput is consistent.		
K =	18 Feet/Day	0.10
		00:00 01:26 02:53 04:19 05:46
		TIME, Minute:Second
		Paymen and Rica analysis of alive test WDD 46
REMARKS:		Bouwer and Rice analysis of slug test, WRR 19

## WELL ID: SH2, TEST 2, SLUG-OUT

		Local ID: Clay Street
	INPUT	Date: 7/30/2012
Construction:	111.01	Time: 0:00
Casing dia. (d <sub>c</sub> )	2 Inch	1
Annulus dia. (d <sub>w</sub> )	4 Inch	
Screen Length (L)	15 Feet	$\begin{array}{c c} & & & & \\ & & & & \\ \hline & & & & \\ \hline & & & &$
Doutho to:		↑ TOS
Depths to: water level (DTW)	2.68 Feet	
		DTB T T T T T T T T T T T T T T T T T T
top of screen (TOS) Base of Aquifer (DTB)	4 Feet 40 Feet	
Annular Fill:		d <sub>w</sub>
across screen I		Base of Aquifer
above screen I	Bentonite	Adjust slope of line to estimate K
Aguifer Material 9	Sand and Gravel Mixes	1.00 O
riganoi Material C	Cana and Craver Wines	
CC	OMPUTED	
L <sub>wetted</sub>	15 Feet	- 1
D =	37.32 Feet	
H =	16.32 Feet	
L/r <sub>w</sub> =	90.00	
Yo-DISPLACEMENT =	3.30 Feet	
y <sub>0-SLUG</sub> =	2.81 Feet	(a)
From look-up table using		S. OODOO
Partial penetrate A =	4.234	- Company
B =	0.707	- STANDARD CONTROL OF THE STAN
In(Re/rw) =	3.077	THE PROPERTY OF THE PARTY OF TH
Re =	3.62 Feet	1
	0.244165 log <sub>10</sub> /sec	
t <sub>90%</sub> recovery =	4 sec	
nput is consistent.		
K =	35 Feet/Day	7 000
.,,		00:00 00:04 00:09 00:13 00:17 00:22 00:26
		TIME, Minute:Second
		2.24.3123.01230
REMARKS:		Bouwer and Rice analysis of slug test, WRR 1
YEMAKKS.		

### WELL ID: SH3, test 2, SLUG-OUT

			Local ID: Clay Street
	INPUT	7	Date: 7/30/2012 Time: 0:00
Construction: Casing dia. (d <sub>c</sub> )	2 Inch	1	Time. 0.00
Annulus dia. (d <sub>w</sub> )	4 Inch		
		-	
Screen Length (L)	15 Feet		DTW A
Depths to:			тоѕ
water level (DTW)	3.9 Feet	1	
top of screen (TOS)	4 Feet		
Base of Aquifer (DTB)	40 Feet	_	
Annular Fill:			d <sub>w</sub>
across screen I	Medium Sand	1	Base of Aquifer
above screen I			Adjust slope of line to estimate K
	Sand and Gravel Mixes  OMPUTED	1.00	
L <sub>wetted</sub>	15 Feet		P
D=	36.1 Feet		
H=	15.1 Feet		
L/r <sub>w</sub> =	90.00	2.	
Yo-DISPLACEMENT =	1.68 Feet		
y <sub>o-slug</sub> =	1.95 Feet	° ×	1
From look-up table using	1.5	yíyo	
Partial penetrate A = B =	4.234 0.707		•
In(Re/rw) =	3.039		
Re =	3.48 Feet		
	0.549272 log <sub>10</sub> /sec		
t <sub>90%</sub> recovery =	2 sec	2	
nput is consistent.			
K =	77 Feet/Day	0.10	
		00:00	00:04 00:09 00:13 TIME, Minute:Second
		Bouy	ver and Rice analysis of slug test, WRR 19
REMARKS:		Dour	

## WELL ID: SH3, test 4, SLUG-OUT Local ID: Clay Street

	INPUT	Local ID: Clay Street
Construction:	INFUI	Date: 7/30/2012 Time: 0:00
Casing dia. (d <sub>c</sub> )	2 Inch	1
Annulus dia. (d <sub>w</sub> )	4 Inch	
Screen Length (L)	15 Feet	↓ → d <sub>n</sub>
Depths to:		↑ TOS
water level (DTW)	3.9 Feet	
top of screen (TOS)	4 Feet	DTE T T T
Base of Aquifer (DTB)	40 Feet	d <sub>w</sub>
Annular Fill:		V V
across screen		Base of Aquifer
above screen I	bentonite	Adjust slope of line to estimate K
Aquifer Material :	Sand and Gravel Mixes	1.00
CC	OMPUTED	0
L <sub>wetted</sub>	15 Feet	- 0
D=	36.1 Feet	
H=	15.1 Feet	\
L/r <sub>w</sub> =	90.00	
Yo-DISPLACEMENT =	2.55 Feet	0
y <sub>0-SLUG</sub> =	2.81 Feet	. 0
From look-up table using	g L/r <sub>w</sub> .	*yx
Partial penetrate A =	4.234	- \
B =	0.707	
In(Re/rw) =	3.039	0
Re =	3.48 Feet	
Slone =	0.462912 log <sub>10</sub> /sec	\
t <sub>90%</sub> recovery =	2 sec	6
nput is consistent.		
K =	65 Feet/Day	0.10
		00:00 00:01 00:02 00:03 00:03
		TIME, Minute:Second
REMARKS:		Parameteral Disa scalarie of the test W/DD 403
		Bouwer and Rice analysis of slug test, WRR 197

## APPENDIX B DISCHARGE PERMIT

## STATE OF COLORADO

John W. Hickenlooper, Governor Christopher E. Urbina, MD, MPH Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Denver, Colorado 80246-1530 Phone (303) 692-2000 Located in Glendale, Colorado Laboratory Services Division 8100 Lowry Blvd, Denver, Colorado 80230-6928 (303) 692-3090

http://www.cdphe.state.co.us

June 18, 2012

W R (Skip) Fischer, Chairman of the Board Adams County 4430 S Adams County Pkwy # 5-C5000A Brighton, CO 80601

RE: Certification, Colorado Discharge Permit System – Remediation Activities Discharging to Surface Water Permit Number COG315000 Certification Number: COG315255

Dear Mr. Fischer;

Enclosed please find a copy of the permit certification, which was issued under the Colorado Water Quality Control Act. Please read the enclosed permit and certification.

The Water Quality Control Division (the Division) has reviewed the application submitted for the Clay Street Outfall facility and determined that it qualifies for coverage under the CDPS General Permit for Remediation Activities Discharging to Surface Water (the permit).

#### Discharge Specific Information

The discharge is to Clear Creek within Segment 15 of the Clear Creek Sub-basin, South Platte River Basin, found in the Classifications and Numeric Standards for the South Platte River Basin (Regulation No. 38) (COSPCL15). Segment 15 is Reviewable, and is classified for the following beneficial uses: Aquatic Life, Class 1 Warm; Recreation Class E; Water Supply; and Agriculture.

#### Antidegradation Review

The discharge is expected to last approximately one year and therefore is considered short-term. Since short-term discharges are considered a temporary impact, they are exempt from the AD review.

#### **Basis for Site Specific Parameters**

The Division has completed a Reasonable Potential (RP) analysis for the discharge to determine the need for effluent limitations for pollutants that have a reasonable potential to cause or contribute to an exceedance of water quality standards. Data provided with the application for the following wells were reviewed, TP-2W, TP-5W, TP-6W, TP-7W, MW-1, MW-2, and MW-3. All wells are located in the vicinity of the proposed construction project.

Segment 15 of the Clear Creek Sub-basin, South Platte River Basin is on the 303(d) list as impaired for E. Coli (May-October), Manganese (Dissolved), Aquatic Life, and Organic Sediment. E.Coli and Manganese have the potential to be in the dewatering discharge. As such sampling and reporting for E. Coli is required during the months of May through October. Sampling and compliance with the Dissolved Manganese limitation is required based on data supplied with the application and is further discussed below. Although segment 15 is listed as impaired for Aquatic Life and Organic Sediment, additional sampling and monitoring based on these impairments is not required.

Sampling and monitoring for Oil and Grease is required on a weekly basis regardless if a sheen is present or not. This deviates from the general permit requirements which require sampling and monitoring only if a sheen is present. This site specific requirement is based on analytical data submitted with the permit application that indicates Oil and Grease concentrations at 34.4 mg/L and 57.0 mg/L compared to the effluent limitations of 10 mg/l.

A qualitative RP analysis was conducted for Aluminum as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Aluminum were as high as 14, 100 ug/L, 19,100 ug/L, 255,000 ug/l and 301,000 ug/l, compared to the



Colorado Department of Public Health and Environment effluent limitations of 1,134 ug/l (chronic) and 7,943 ug/l (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Arsenic as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Arsenic were as high as 7 ug/L and 230 ug/l, compared to the effluent limitation for Total Recoverable Arsenic of 0.02 ug/L (chronic). Sample results for Dissolved Arsenic were as high as 7 ug/L and 230 ug/l, compared to the effluent limitation for Potentially Dissolved Arsenic of 340 ug/L (acute). Sample results report concentrations of Dissolved Arsenic at more than one-half the numeric effluent limitation therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Barium as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Barium were as high as 5,730 ug/L and 6,690 ug/L, compared to the effluent limitation for Total Recoverable Barium of 400 ug/L (chronic) and 1,000 ug/L (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Beryllium as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Beryllium were as high as 8 ug/L and 13 ug/L, compared to the effluent limitation for Total Recoverable Beryllium of 4.0 ug/L. Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Cadmium as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Cadmium were as high as 97 ug/L and 657 ug/L, compared to the effluent limitation for Total Recoverable Cadmium of 5.0 ug/L (acute). Sample results for Dissolved Cadmium were as high as 1.45 ug/L and 0.0692 ug/L, compared to the effluent limitation for Potentially Dissolved Cadmium of 0.67 ug/L (chronic) and 4.7 ug/L (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Chromium as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Chromium were as high as 682 ug/L and 849 ug/L, compared to the Total Chromium (sum of Hexavalent and Trivalent) effluent limitations of 50 ug/L (acute). Sample results for Dissolved Chromium were as high as 10 ug/L and 17 ug/L, compared to the Hexavalent Chromium effluent limitations of 11 ug/L (chronic) and 16 ug/L (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Iron as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Iron were as high as 17,000 ug/L, 31,500 ug/L, 718,000 ug/L and 1,250,000 ug/L, compared to the Total Recoverable Iron effluent limitation of 1,000 ug/L (chronic). Sample results for Dissolved Iron were as high as 19,900 ug/L, 40,100 ug/L and 75,000 ug/L, compared to the Dissolved Iron limitation of 300 ug/L. Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Lead as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Lead were as high as 5,110 ug/L and 9,990 ug/L, compared to the Total Recoverable Lead effluent limitation of 50 ug/L (acute). Sample results for Dissolved Lead were as high as 200 ug/L and 512 ug/L, compared to the Potentially Dissolved Lead effluent limitations of 4.9 ug/L (chronic) and 125 ug/L (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Manganese as there was not enough data to conduct a quantitative RP analysis. Sample results for Dissolved Manganese were as high as 1,350 ug/L, 2,020 ug/L, 2,920 ug/L and 5,530 ug/L, compared to the effluent limitations for Dissolved Manganese of 255 ug/L (chronic) and Potentially Dissolved Manganese of 3,665 ug/L (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Zinc as there was not enough data to conduct a quantitative RP analysis. Sample results for Total Zinc were as high as 13,700 ug/L and 16,600 ug/L, compared to the effluent limitations for Total Recoverable Zinc of 2,000 ug/L (chronic). Sample results for Dissolved Zinc were as high as 711 ug/L, 879 ug/L, and 915 ug/L, compared to the effluent limitations for Potentially Dissolved Zinc of 330 ug/L (chronic) and 380 ug/L (acute). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Benzene as there was not enough data to conduct a quantitative RP analysis. Sample results for Benzene were as high as 3.2 ug/L and 6.6 ug/L, compared to the effluent limitations of 2.2 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Benzo (a) anthracene as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 0.156 ug/L and 1.38 ug/L, compared to the effluent limitations of 0.0038 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Benzo (b) fluorenthene as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 0.17 ug/L and 1.24 ug/L, compared to the effluent limitations of 0.0038 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Benzo (k) fluoranthene as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 0.0269 ug/L and 0.0973 ug/L, compared to the effluent limitations of 0.0038 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Benzo (a) pyrene as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 0.0872 ug/L, compared to the effluent limitations of 0.0038 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Ethylhexl phthalate (BIS-2) also known as DEHP as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 22 ug/L and 30.1 ug/L, compared to the effluent limitations of 1.2 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Chrysene as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 0.0477 ug/L and 0.113 ug/L, compared to the effluent limitations of 0.0038 ug/L (chronic). Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

A qualitative RP analysis was conducted for Indeno(1,2,3-cd)pyrene as there was not enough data to conduct a quantitative RP analysis. Sample results were as high as 0.14 ug/L and 1.24 ug/L, compared to the effluent limitations of 0.0038 ug/L. Therefore, a qualitative determination of RP has been made and limitations will be added and imposed upon the effective date of the permit.

Consistent with the Remediation Activities general permit, a RP determination was made and chronic Whole Effluent Toxicity (WET) testing is required and imposed upon the effective date of the permit based on the number of toxic pollutants in the source water that therefore have an increase potential for synergistic effects.

#### **Effluent Limitations**

- Effluent limitations for Organic Compounds came directly from the table "Basic Standards for Organic Chemicals" of <u>The Basic Standards and Methodologies for Surface Water</u> (Regulation 31). The effluent limitations selected are based on the designated beneficial uses of the receiving stream.
- The effluent limitations for Total Recoverable Iron, and Total Recoverable and Potentially Dissolved Arsenic, were taken
  directly from <u>The Classifications and Standards for the South Platte River Basin</u> (Regulation 38), with results shown in the
  enclosed permit certification.
- The effluent limitations for Total Recoverable Barium, Hexavalent Chromium, Total Chromium, Total Recoverable Lead, Total
  Recoverable Beryllium, Total Recoverable Cadmium, and Total Recoverable Zinc were taken directly from the table "Metal
  Parameters" of The Basic Standards and Methodologies for Surface Water (Regulation 31). The effluent limitations selected
  are based on the designated beneficial uses of the receiving stream.
- The water supply Dissolved Iron standard is listed in Regulation 38 as 'WS'. Regulation 38 states that the less restrictive limitation for the water supply Iron standard is either: existing quality as of January 1, 2000 or 300 μg/l. The Division used data obtained from Gage Station 34, downstream of the potential discharge from this facility and found that in-stream mean values of Dissolved Iron to be 142 μg/L. Therefore, the 300 μg/l limitation is less restrictive and therefore was applied with results shown in the enclosed permit certification.

- The water supply Dissolved Manganese standard is listed in Regulation No. 38 as 'WS'. Regulation No. 38 states that the less restrictive limitation for the water supply Dissolved Manganese standard is either: existing quality as of January 1, 2000 or 50 µg/l. The Division used data obtained from Gage Station 34, downstream of the potential discharge from this facility and found that in-stream mean values of Dissolved Manganese to be 255 µg/L. Therefore, the existing quality as of January 1, 2000, was found to be less restrictive, and was applied with results shown in the enclosed permit certification.
- Standards for Total Recoverable Aluminum, Potentially Dissolved Cadmium, Potentially Dissolved Lead, Potentially Dissolved Manganese (acute), and Potentially Dissolved Zinc are shown in the regulations as Table Value Standards (TVS), and these must be derived from equations that depend on the receiving stream hardness or species of fish present. The Division used data obtained from Gage Station 34, just downstream of the potential discharge from this facility and found the mean instream hardness value to be 185 mg/l. The acute and chronic limitations for the above mentioned parameters are provided in the enclosed permit certification.

#### Source of Contamination

The construction project is in close proximity to Broderick Investment and Koppers Denver both known sources of groundwater contamination.

#### Treatment

According the an attachment to the permit application, the proposed treatment system will consist of particle removal such as a sediment trap followed by filtration in order to reduce the entrained particle size to a range that would be acceptable for ion-exchange treatment. The ion exchange portion of the treatment would likely consist of heavy exchange vessels up front followed by polishing vessels to get the treated water to within the acceptable effluent limits. Other than ion-exchange resins no other chemicals will be used.

In accordance with Part I.C.4.A.iv of the permit, the Remediation Activities Management Plan (Plan) must be kept current to reflect the description of all current pollutant control practices.

#### Ensure Numeric Effluent Limits Can Be Met

In accordance with Part I.C.2 of the permit, prior to the commencement of any discharge, an initial batch representative of the effluent from each permitted outfall must be sent through the treatment system. The effluent from the treatment must be sampled using composite method for all parameters listed in the permit certification with a numeric limitation. All effluent must be contained until analyses have confirmed that all numeric effluent limitations have been met. If the results of the initial sampling exceed any numeric effluent limitation, additional treatment shall be completed and additional sampling must be collected, post-treatment, to confirm compliance with the limitations. Additional sampling and treatment shall be repeated, and all water shall be collected and retained, until monitoring results for the treated effluent verify compliance with the numeric effluent limitations identified in the permit certification. Monitoring may be conducted and samples collected to meet the requirements of this section prior to certification under the general permit. This requirement will not be imposed for WET testing or for parameters where report only is required.

#### **General Information**

- Permit Action Fees: The Annual Fee for this certification is \$1,840.00 [Category 7, Subcategory 8 Oil and gas cleanup/ground
  water remediation per CRS 25-8-502] and is invoiced every July. Do Not Pay This Now. The initial invoice will be <u>prorated</u> and
  sent to the legal contact shortly.
- Changes to the Certification: Any changes that need to be made to the certification page changes in outfalls, monitoring
  requirements, etc., must be submitted using the "Permit and Certification Modification form" available on our website:
  coloradowaterpermits.com, and signed by the legal contact.
- Discharge Monitoring Reports (DMRs): DMR forms will be mailed out within the next month. Reports must be submitted
  monthly as long as the certification is in effect. The permittee shall provide the Division with any additional monitoring data
  on the permitted discharge collected for entities other than the Division. If forms have not been received, please contact the
  Division at 303-692-3517.

The Division now has the ability to allow facilities to submit their DMRs electronically. For more information, please call the NetDMR team at 303-691-4046 or CDPHE.WQNetDMRHelp@state.co.us

Sampling Requirements: Sampling shall occur at a point after treatment, or after the implementation of any Best
Management Practices (BMPs). If BMPs or treatment are not implemented, sampling shall occur where the discharge leaves
control of the permittee, and prior to entering the receiving stream or prior to discharge to land. Samples must be
representative of what is entering the receiving stream.

- Termination requirements: This certification to discharge is effective long term. For termination of permit coverage, the
  permittee must initiate this by sending the "CDPS Permits and Authorization Termination Form." This form is also available
  on our web site and must be signed by the legal contact.
- Groundwater Contamination: If additional sources of groundwater contamination are encountered, then the permittee is to comply with Part I.C.6 of the permit, Practices for Discharges in Exceedance of Applicable Water Quality Standards.
- Analytical and Sampling Methods for Monitoring: The permittee shall install, calibrate, use and maintain monitoring
  methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed
  by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part
  136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part
  136.

See Part I.E.3 of the permit for information on the Analytical and Sampling Methods for Monitoring, including specific information on PQLs and reporting requirements. A listing of the PQLs for organic parameters can be found in the Division's Practical Quantitation Limitation Guidance Document, July 2008. This document can be found on the Division's website at <a href="http://www.cdphe.state.co.us/wg/PermitsUnit/policyguidancefactsheets/policyandguidance/PQLGuidance.pdf">http://www.cdphe.state.co.us/wg/PermitsUnit/policyguidancefactsheets/policyandguidance/PQLGuidance.pdf</a>

Certification Records Information: The following information is what the Division records show for this certification.
 For any changes to Contacts – Legal, Local, Billing, or DMR – a "Notice of Change of Contacts form" must be submitted to the Division. This form is also available on our web site and must be signed by the legal contact.

Facility: Clay Street Outfall

Adams County

Industrial Activities Storm Drain Expansion, Excavation, Grading Culverts

SIC Code: 1799

Legal Contact Receives all legal documentation, pertaining to the permit certification. [including invoice; is contacted for any questions relating to the facility; and receives DMRs.]

W R (Skip) Fischer, Chairman of the Board

Phone number: 720-523-6100

Adams County

Email: commissioners@adcogov.org

4430 S Adams County Pkwy # 5-C5000A

Brighton, CO 80601

Autor and Carlo

Facility Contact Contacted for general inquiries regarding the facility

Phone number: 720-523-6875 Email: rnelson@adcogov.org

Russell T. Nelson, Engr Mgr

**DMR Contact** 

Donald R Ganser, Sr PM Kumar & Associates Inc

2300 S Lipan St

Denver CO 80223

Phone number:303-888-9078 Email: dganser@kumarusa.com

If you have any other questions please contact me at 303-692-3217.

Sincerely,

Nicole Rolfe, Permit Writer

Permit File

Micole Verle

WATER QUALITY CONTROL DIVISION

Enclosures: Certification page; General Permit

xc: Regional Council of Government Adams County, Local County Health Department D.E., Technical Services Unit, WQCD



## CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG315000 REMEDIATION ACTIVITIES DISCHARGING TO SURFACE WATERS

Certification Number: COG315255

#### This Certification to Discharge specifically authorizes:

Adams County to discharge from the facility identified as

Clay Street Outfall to: Clear Creek

Facility Located at:

60 Ave & Zuni St, Adams County, uninc, CO 80221

Facility Latitude and Longitude:

Latitude 39.8055, Longitude -105.01555

Outfall 001A

Treated effluent will discharge north of W. 60th Avenue to Clear Creek. The

discharge is estimated at 100 GPM.

#### 1. Permit Limitations and Monitoring Requirements apply to Outfall 001A as outlined in the Part I.B.2 of the Permit

Parameter	Discharge Limitations Maximum Concentrations			Monitoring	100	
	Units	30-Day Average	7-Day Average	Daily Max.	Frequency	Sample Type
		Applic	able to all Disc	narges		
pH, (Minimum-Maximum) 00400	s.u.	NA	NA	6.5-9.0	Weekly	In-situ
Total Suspended Solids, 00530	mg/l	30	45	NA	Weekly	Grab
Flow, - 50050	MGD	Report	NA	Report	Continuous	Recorder
Oil and Grease Visual 84066		NA	NA	NA	Weekly	Visual
		Site	Specific Param	eters		
Oil and Grease <sup>1</sup> , 03582	mg/l	NA	NA	10	Weekly	Grab
Aluminum (Total Recoverable), 01104	ug/L	1,134	NA	7,943	Weekly	Grab
Arsenic (Total recoverable) , 00978	ug/I	0.02	NA	NA	Weekly	Grab
Arsenic (Potentially Dissolved), 01309	ug/L	NA	NA	340	Weekly	Grab
Barium (Total Recoverable) , 01009	ug/l	400	NA.	1000	Weekly	Grab
Beryllium (Total Recoverable), 00998	ug/l	4.0	NA	NA	Weekly	Grab
Cadmium, (Potentially Dissolved) 01313	ug/L	0.67	NA	4.7	Weekly	Grab
Cadmium, (Total Recoverable), 01113	ug/L	NA	NA	5.0	Weekly	Grab
Hexavalent Chromium, (Dissolved) 01220	ug/L	11	NA	16	Weekly	Grab
Chromium (Total) <sup>2</sup> 01034	ug/L	ŊA	NA	50	Weekly	Grab
Iron (Total Recoverable), 00980	ug/l	1,000	NA	Report	Weekly	Grab
Iron (Dissolved), 01046	ug/l	300	NA	Report	Weekly	Grab
Lead (Potentially Dissolved), 01318	ug/L	4.9	NA	125	Weekly	Grab

<sup>\*</sup>All discharges must comply with the lawful requirements of federal agencies municipalities, counties, drainage districts and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.

			Discharge Lir Maximum Con	nitations centrations	Monitoring	1000
Parameter	Units	30-Day Average	7-Day Average	Daily Max.	Frequency	Sample Type
		Site Speci	fic Parameters	continued		
ead (Total Recoverable), 01114	ug/L	NA	NA	50	Weekly	Grab
Manganese (Dissolved), 21056	ug/L	255	NA	NA	Weekly	Grab
Manganese (Potentially Dissolved), 01319	ug/L	NA	NA	3,665	Weekly	Grab
Zinc (Potentially Dissolved), 01303	ug/I	330	NA	380	Weekly	Grab
Zinc (Total Recoverable), D1094	ug/I	2,000	NA	NA	Weekly	Grab
E.Coli <sup>3</sup> , May through October 51040	Per 100 ml	Report	NA	NA	Weekly	Grab
Benzene, 34030	ug/I	2.2	NA	5,300	Weekly	Grab
Benzo(a)anthracene, 34526	ug/l	0.0038	NA	Report	Weekly	Grab
Benzo(b)fluorenthene, 51423	ug/l	0.0038	NA	Report	Weekly	Grab
Benzo(k)fluoranthene, 34242	ug/I	0.0038	NA	Report	Weekly	Grab
Benzo(a)pyrene, 34247	ug/l	0.0038	NA	Report	Weekly	Grab
Ethylhexyl phthalate (BIS-2) (DEHP), 39100	ug/l	1.2	NA	NA	Weekly	Grab
Chrysene, 34320	ug/I	0.0038	NA	Report	Weekly	Grab
ndeno(1,2,3-cd)pyrene, 34403	ug/l	0.0038	NA	Report	Weekly	Grab
Whole Effluent Toxicity (WET), chronic Static Renewal 7 Day Chronic Pimephales promelas				NOEC or IC25 > 100% (daily min)	Quarterly	3 Composites/Test
Static Renewal 7 Day Chronic Ceriodaphnia dubia	u v			NOEC or IC25 > 100% (daily min)	Quarterly	3 Composites/Test

2. Influent Screening Requirements Apply to Internal Outfall 300I as Outlined in Part I.B.3 of the Permit

Parameter	Parameter		Discharge Li Eximum Con		Monitoring	
Parameter:	Units	30-Day Average	7-Day Average	Daily Max.	Frequency	Sample Type
Base, Neutral, Acids (BNAs) Screen 76030	ug/l	Report*	NA NA	Report*	Quarterly	Grab
Volatile Organic Compounds (VOC) Screen 01275	ug/l	Report*	NA	Report*	Quarterly	Grab
Metals Screen 78240	mg/l	Report*	NA	Report*	Quarterly	Grab

<sup>\*</sup>Results for each individual parameter from the screenings do not need to be submitted on the DMRs. Submit copies of the results of the lab analyses for each BNA, VOC, and Metals influent screen.

I Sampling for Oil and Grease is required on a weekly basis regardless if a sheen is visible or not.

The sum of Hexavalent and Trivalent Chromium cannot exceed 50 ug/l of Total Chromium.

See the 'geometric mean' definition in the general permit for information on how to calculate the E.Coli geometric mean.

#### 3. Chemical Usage

In accordance with the Remediation Activities general permit, the addition of any chemicals in the treatment process or waste stream will require notification to and approval from the Division prior to use and subsequent discharge. According to supplemental information provided with the application, no chemicals, other than ion-exchange resins, will be added to the source water or at any point during the treatment process.

Certification is issued 6/18/2012

Effective 6/18/2012

General Permit Expired: 09/30/2016

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Signed,

Nathan Moore

Construction, MS4, & Pretreatment Unit Manager

Water Quality Control Division

Appendix 2a - RPC 055 - Pricing Summary

# **Capital Costs**

# RPC 055 - Ex., Dewatering and Backfill, Sewer and Water at Clay Bridge

	_		Cost	Mark-up	Total
Concessionaire	DTP - Grand Total	\$	3,668,064	\$ 247,731	\$ 3,970,731
			Cost	Mark-up	Total
Envii	ronmental Estimate (Separate Estimate Sheet)	\$	1,121,727	\$ 126,078	\$ 1,302,741
			Cost	Mark-up	Total
Concessionaire	DTP	\$	2,546,337	\$ 121,653	\$ 2,667,990
	DTP direct	\$	2,562	\$ 128	\$ 2,690
	Project subcontractors	\$	2,430,507	\$ 121,525	\$ 2,552,032
	Project Contractors direct	\$	10,069	\$ -	\$ 10,069
	Project Contractors mark ups on immediate subcontractors	\$	103,199	\$ -	\$ 103,199
			Cost	Mark-up	Total
Project Contractor	DTS	\$	2,440,080	\$ 103,695	\$ 2,543,775
	DTS direct (10% Mark-up)	\$	346	\$ 35	\$ 381
	Ltr of Credit (5% Mark-up)	\$	9,227	\$ 461	\$ 9,688
	Subtotal of DTS Direct	s \$	9,573	\$ 496	\$ 10,069
	DTC direct (5% Mark-up)	\$	2,063,979	\$ 103,199	\$ 2,167,178

		DTC Subs (0% Mark-up)	\$ 366,528	\$ -	\$ 366,528
			Cost	Mark-up	Total
Subcontractor to Project Contractor	DTC		\$ 2,227,909	\$ 202,598	\$ 2,430,507
		DTC direct (10% Mark-up)	\$ 1,524,486	\$ 152,449	\$ 1,676,935
		DTC conting (10% Mark-up)	\$ 326,954	\$ 32,695	\$ 359,649
		DTC Bond (0% Mark-up)	\$ 27,395	\$ -	\$ 27,395
		Subtotal of DTC Directs	\$ 1,878,835	\$ 185,144	\$ 2,063,979

			Cost	Mark-u	р		Total
<b>Sub-subcontractor</b>	Subcontractors	\$	349,074	\$	-	\$	349,074
	Suh's - Lumn Sum Drica	¢	3/10/07/	\$0 override		¢	3/19 07/

349,074 \$

17,454 \$

366,528

Sub costs (5% Mark-up)

## **DTP - Cost Details**

Description	Units	Qty		Unit rate		Amount	Mark-up	Total
DTP Direct Costs								
LTA Review Costs	HRS	8	\$	320.30	\$	2,562		
							5% Mark-up	Total
	SUB	OTAL "DT	P direct	(5% Mark-up)"	Ś	2,562	\$ 128	\$ 2,690

## **DTS - Cost Details**

DIS - Cost Details								
Description	Units	Qty		Unit rate		Amount	Mark-up	Total
DTS Direct Costs								
Letter of Credit Annual Fees (6% of DTC Total	%	6.09/	۲	145 920 42	۲	0.750		
Price)(1.5% x 4 yrs)	70	6.0%	Ş	145,830.42	\$	8,750		
Legal Fees	HR	2	\$	238.37	\$	477		
							5% Mark-up	Total
	SUI	BTOTAL "DTS	direc	t (5% Mark-up)"	\$	9,227	\$ 461	\$ 9,688
DTS Additional Staff								
DTS - Additional Staffing	LS	1	\$	346.18	\$	346		
	•	•	•		•		10% Mark-up	Total
	SUB.	TOTAL "DTS d	irect	(10% Mark-up)"	\$	346	\$ 35	\$ 381

# DTC - Cost Details Description

Description	Units	Qty		Unit rate	Α	mount	Mark-up	lotal
Clay Bridge Excavation Backfill								
Wetland Deliniation/SWPPP BMPs	LS	1	\$	20,992.00	\$	20,992		
Maintain SWPPP BMP	MO	4	\$	3,719.00	\$	14,876		
Construct Access / Haul Road (Abutments)	LS	1	\$	3,941.00	\$	3,941		
Горsoil Remove & Stockpile	CY	120	\$	5.47	\$	656		
Горsoil Replacement	CY	60	\$	6.36	\$	382		
Total Excavation	CY	4,780						
Excavation Clean Material (Abutments)	CY	2,805	\$	14.38	\$	40,336		
Excavation Solid Waste (see Subcontract)	CY	1975						
Structural Backfill	CY	1,608	\$	25.00	\$	40,200		
Utilities (Water / Serwer / Storm)								
nstall Access Road (sewer)	LS	1	\$	28,150.00	\$	28,150		
Remove Access Road	LS	1	\$	25,000.00	\$	25,000		
				-				
Clear and Grub	Acre	1.5	\$	7,372.00	\$	11,058		
Sewer Furnish and Install	LS	1	\$	461,228.00	\$	461,228		
-76 Slope Paving	LS	1	\$	14,000.00	\$	14,000		
Sewer Service	LS	1	\$	20,000.00	\$	20,000		
Waterline F&I	LS	1	\$	285,819.56	\$	285,820		
Potholing	Day	4	\$	1,694.00	\$	6,776		
				<u>.</u>				
Install Storm 54" Storm	LS	1	\$	96,600.00	\$	96,600		
Install Manholes	Each	4	\$	17,500.00	\$	70,000		
Surface Dewater	Month	1	\$	35,000.00	\$	35,000		
Remove Exisiting Sanitary Sewer	LF	426	\$	12.50	\$	5,325		
Remove Waterline	LF	370	\$	12.50	\$	4,625		
Electric for Pumps / Treatment generators)	Month	4	\$	14,043.00	\$	56,172		
-uel	Day	120	\$	1,536.00	\$	184,320		
Dewater Subcontractor Support	LS	1	\$	29,000.00	\$	29,000		
					\$	-		
Site Restoration	LS	1	\$	45,000.00	\$	45,000		
					\$	-		
					\$	-		
			•	Subtotal	\$	1,499,457		
DTC - Additional Staff								
DTC - Additional Staffing	LS	1	\$	7,034.00	\$	7,034		
	·			Subtotal	\$	7,034		
DTC - Survey								
Survey Party	LS	1	\$	17,994.54	\$	17,995		
				Cubtatal	<u> </u>	17.005		1

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Subcontractors							
Kleinfelder - Construction Inspection and Testing	LS	1	\$	72,104.31	\$ 72,104		
Dewatering Subcontractor (Wells)	LS	1	\$	236,970.00	\$ 236,970		
Traffic Control on 60th	LS	1	\$	10,000.00	\$ 10,000		
HMAC Replacement	LS	1	\$	15,000.00	\$ 15,000		
F/HDR Global Design Services	LS	1	\$	15,000.00	\$ 15,000		
						5% Mark-up	Total
SUI	BTOTAL "I	DTC Subcontr	actors	(5% Mark-up)"	\$ 349,074	\$ 17,454	\$ 366,528

					•	•	
				Total - DTC Direc	ts, Subs, & Mark-ups	\$	2,043,463
Description	Units	Qty	Unit rate	Amount	Mark-up		Total
DTC - Contingency							
Contingency	%	16%	\$ 2,043,463.00	\$ 326,954			
					10% Mark-up		Total
	SUBTOTAL	"DTC - Contin	gency" (10% Mark-up)"	\$ 326,954	\$ 32,695	\$	359,649
			Total - DTC I	Directs, Subs, Mark	c-ups, & Contingency	\$	2,403,112

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Bonds							
Bond (Direct Cost + Subs + Mark-ups)	%	1.14%	\$	2,403,112.00	\$ 27,395		
						0% Mark-up	Total
	SUB	TOTAL "DTC	direct	t (0% Mark-up)"	\$ 27,395	\$ -	\$ 27,395

DTC GRAND TOTAL PRICE \$ 2,430,507

17,995

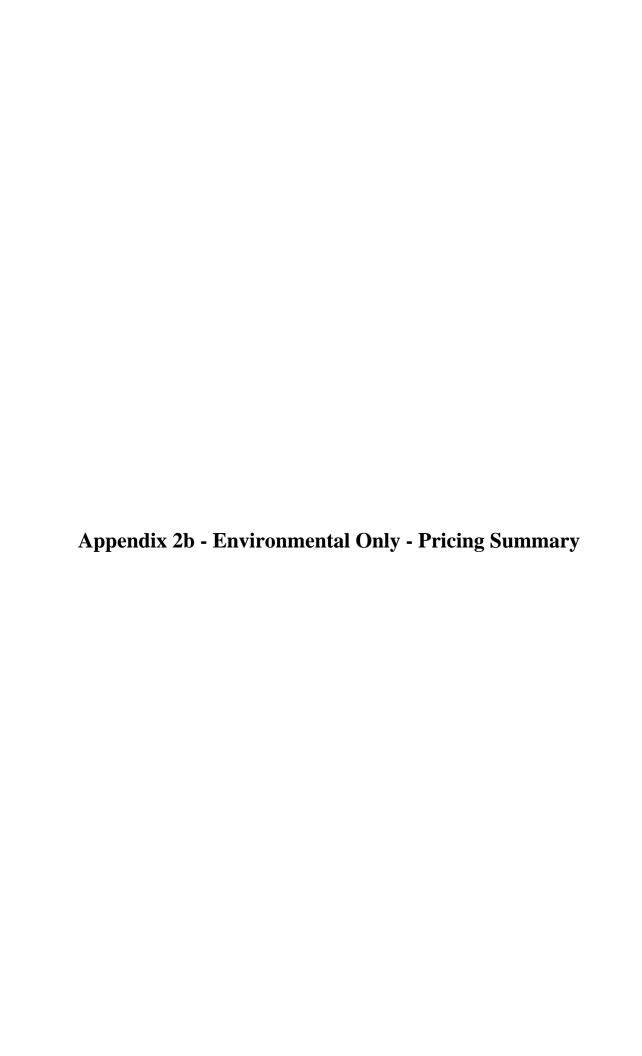
10% Mark-up

**152,449 \$ 1,676,935** 

Total

Subtotal \$

**SUBTOTAL** "DTC direct (10% Mark-up)" \$ 1,524,486 \$



# **Clay Bridge Environmental**

# **Capital Costs**

 Direct Cost Total =
 \$ 1,171,118

 Fixed Fee =
 \$ 131,623

 Total =
 \$ 1,302,741

			Cost	wark-up	Total
Concessionaire	DTP - Grand Total	\$	1,241,305	\$ 61,436	\$ 1,302,741
	DTP direct	\$	-	\$ -	\$ -
	Project subcontractors	\$	1,228,715	\$ 61,436	\$ 1,290,151
	Project Contractors direct	\$	5,805	\$ -	\$ 5,805
	Project Contractors mark ups o	n \$	6,785	\$ -	\$ 6,785

			Cost	Mark-up	Total
Project Contractor	DTS		\$ 1,234,244	\$ 7,061	\$ 1,241,305
		DTS direct (10% Mark-up)	\$ -	\$ -	\$ -
		Ltr of Credit (5% Mark-up)	\$ 5,529	\$ 276	\$ 5,805
		Subtotal of DTS Directs	\$ 5,529	\$ 276	\$ 5,805
		DTC direct (5% Mark-up)	\$ 135,701	\$ 6,785	\$ 142,486
		DTC Subs (0% Mark-up)	\$ 1,093,014	\$ -	\$ 1,093,014

		Cost	Mark-up	Total
Subcontractor to Project Contractor	DTC	\$ 1,165,589	\$ 63,126	\$ 1,228,715
	DTC direct (10% Mark-up)	\$ 1,327	\$ 133	\$ 1,460
	DTC conting(10% Mark-up)	\$ 109,447	\$ 10,945	\$ 120,392
	DTC Bond (0% Mark-up)	\$ 13,849	\$ -	\$ 13,849
	Subtotal of DTC Directs	\$ 124,623	\$ 11,078	\$ 135,701
	Sub costs (5% Mark-up)	\$ 1,040,966	\$ 52,048	\$ 1,093,014

		Cost	Mark-up	)	Total
Sub-subcontractor	Subcontractors	\$ 1,040,966	\$	-	\$ 1,040,966
	Sub's - Lump Sum Price	\$ 1.040.966	\$0 override		\$ 1,040,966

## **DTP - Cost Details**

Description	Units	Qty	Unit rate	Amount	Mark-up	Total
DTS Direct Costs						
	•		•	•	10% Mark-up	Total
	SUBTO <sup>*</sup>	TAL "DTP dire	ect (10% Mark-up)"	\$ -	\$ -	\$ -

## **DTS - Cost Details**

Description	Units	Qty	Unit rate	Amount	Mark-up	Total
DTS Direct Costs						
Letter of Credit Annual Fees (6% of DTC Total Price)(1.5% x 5yrs)	%	7.5%	\$ 73,722.90	\$ 5,529		
					5% Mark-up	Total
	SUBT	OTAL "DTS dir	ect (5% Mark-up)"	\$ 5,529	\$ 276	\$ 5,805

## **DTC - Cost Details**

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
Tom Warner - Professional Labor	HR	10	\$	104.40	\$ 1,044	\$ -	\$ 1,044
Tom Warner - Pickup Truck	HR	10	\$	26.96	\$ 270	\$ 13	\$ 283
Survey Crew	HR		\$	340.20	\$ -		
Light Plants	HR		\$	14.90	\$ -		
Oiler / Fuel - Light Plants	HR		\$	105.36	\$ -		
				Subtotal	\$ 1,327		
						10% Mark-up	Total
	SUBTO	TAL "DTC dire	ct (	10% Mark-up)"	\$ 1,327	\$ 133	\$ 1,460

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Subcontractors							
							,
Solid Waste Disposal - (Bridge Excavation)							
Non Asbestos - (Environmental CDRL 41)	TN	3,555	\$	26.95	\$ 95,807		
Solid Waste Disposal (SS Line)							
Non Asbestos - (Environmental CDRL 41)	TN	4,526	\$	26.95	\$ 121,976		
Solid Waste Disposal (Water Line)							
Non Asbestos - (Environmental CDRL 41)	TN	9,640	\$	26.95	\$ 259,798		
Solid Waste Disposal (Storm Drain)							
Non Asbestos - (Environmental CDRL 41)	TN	1,667	\$	26.95	\$ 44,926		
Potential Asbestos Soil (20%) Difference)	TN	1,938	\$	11.13	\$ 21,570		
Water Treatment (Env CDRL 41) -	Month	4	\$	98,000.00	\$ 392,000		
Cleanout / Monitorring for Treatment Filter (4 weeks)	Days	30	\$	500.00	\$ 15,000		
Permit Application and Prep.	LS	1	\$	5,000.00	\$ 5,000		
Asbestos Sampling / Monitorring	LS	1	\$	55,073.00	\$ 55,073		
Dewatering Sampling	LS	1	\$	29,816.00	\$ 29,816		
			+				
						5% Mark-up	Tota
SUBT	OTAL "DTO	C Subcontract	tors (5	% Mark-up)"	\$ 1,040,966	\$ 52,048	\$ 1,093,014

Total - DTC Directs, Subs, & Mark-ups \$ 1,094,474

Description	Units	Qty	Unit rate	Amount	Mark-up	Total
DTC - Contingency						
Contingency	%	10%	\$ 1,094,474.08	\$ 109,447		
					10% Mark-up	Total
SUBT	\$ 10,945	\$ 120,392				

Total - DTC Directs, Subs, Mark-ups, & Contingency \$ 1,214,866

Description	Units	Qty		Unit rate	Amount	Mark-up	Total
DTC - Bonds							
Bond (Direct Cost + Subs + Mark-ups)	%	1.14%	\$	1,214,866.08	\$ 13,849		
						0% Mark-up	Total
	SUBTO	TAL "DTC di	rect (0	0% Mark-up)"	\$ 13,849	\$ -	\$ 13,849

DTC GRAND TOTAL PRICE \$ 1,228,715

# WATER RELOCATION PLANS

# Know what's below. Call before you dig.

SHEET

4-5

PROPOSED CONCRETE TRAIL

PROPOSED STORM MANHOLE

PROPOSED FIRE HYDRANT &

PROPOSED BORE

ST

(<del>\*</del>)

PROPOSED WATER LINE

PROPOSED BLOWOFF

WATER VALVE

PROPOSED SIGN

PR FUTURE LIGHT RAIL

# CLAY COMMUNITY TRAIL - ZUNI TO 60TH AVENUE ADAMS COUNTY FEDERAL AID PROJECT NO. STE C120-019

VICINITY MAP

NOT TO SCALE

LOCATED IN SECTION 8, T3S, R68W, 6TH P.M.,

COUNTY OF ADAMS, STATE OF COLORADO.

FISHER DITCH

#### UTILITY CONTACTS

ADAMS COUNTY DEPARTMENT OF PUBLIC WORKS 4430 S. ADAMS COUNTY PKWY. BRIGHTON, CO 80601 RUSSELL T. NELSON - (720) 523-6966 ERIC WEIS - (720) 523-6828

2480 W. 26TH AVE., SUITE 156-B DENVER, CO 80211 DAVE J. SKUODAS - (303) 455-6277

VERIZON/MCI 2400 NÓRTH GLENVILLE DR. RICHARDSON, TX 75082 ERIK BAKER - (903) 357-3282

XCEL ENERGY - ELECTRIC 5460 WEST 60TH AVE. DENVER, CO 80223 RON WHITLOW - (303) 425-3890

XCEL ENERGY - ELECTRIC 550 15TH ST., SUITE 700 DENVER, CO 80202-4256 JIM CRAIG - (303) 507-3311

XCEL ENERGY - TRANSMISSION 550 15TH ST., SUITE 700 DENVER, CO 80202-4256 WILLIAM BRAASCH - (303)-571-7082

XCEL ENERGY - GAS 1123 WEST 3RD AVENUE DENVER. CO 80223 MICHELLE MCKNIGHT - (303) 571-3358

DIVISION OF WATER RESOURCES 2030 EAST 68TH AVE. DENVER, CO 80229 GENE BRIENZA - (303) 882-9188

BERKELEY WATER & SANITATION 4455 WEST 58TH AVE., SUITE A ARVADA, CO 80002 SHARON WHITEHAIR - (303) 477-1914

BERKELEY WATER & SANITATION DISTRICT

C/O MARTIN/MARTIN INC. 12499 WEST COLFAX AVENUE LAKEWOOD, CO 80215 BILL WILLIS - (303) 726-8520

SOUTHWEST ADAMS COUNTY FIRE RESCUE 3365 WEST 65TH AVE. DENVER, CO 80221 GARY FLETCHER - (303) 429-3597

LEVEL(3) COMMUNICATIONS 1025 ELDORADO BLVD. BROOMFIELD, CO 80021 RICK MILLER - (303) 551-3881

CENTURYLINK 5325 ZUNI ST, ROOM 728 DENVER, CO 80221 JODIE LEONARD - 303-451-2379

COMCAST CABLE 8490 UMATILLA ST. FEDERAL HEIGHTS, CO 80260 GLEN NELSON - (720) 281-8488

UNION PACIFIC RAILROAD 1400 WEST 52ND AVE. DENVER CO 80221 KELLY ABARAY - (303) 405-5039

HORIZONTAL CONTROL:
ADAMS COUNTY GIS SURVEY OF SECTION
CORNERS. STATE PLANE COORDINATES, CENTRAL ZONE. (NAD 83/92)

BENCHMARK NOTE: THE BENCHMARK FOR THIS SITE IS FROM ADAMS COUNTY GIS SURVEY. 3 1/4" ALUM. CAP LS16406 IN RANGE BOX AT THE SOUTHEAST CORNER OF SECTION 8, T3S, R68W. THE PUBLISHED ELEVATION OF THIS MONUMENT BEING 5271.60 U.S. FEET (NAVD 1988). E 3136691.14

### ABBREVIATIONS LIST

EX	EXISTING
PR	PROPOSED
ROW	RIGHT OF WAY
MH	MANHOLE
LF	LINEAR FEET
N	NORTHING
Ε	EASTING
R	RIGHT
L	LEFT
FG	FINISHED GRADE
FL	FLOW LINE
CL	CENTERLINE
STA	STATION
NTS	NOT TO SCALE

FH FIRE HYDRANT		
WATER QUANTITY ESTIMA	TE	
PIPE 12" PVC (C905) PIPE FUSIBLE 12" PVC (C905) PIPE 22" STEEL CASING PIPE 6" DUCTILE IRON PIPE		357 275 245 10
VALVES 12" GATE VALVE 6" GATE VALVE	EA EA	5 1
FITTINGS 12"X12" TEE W/ KB 12"X6" TEE W/ KB 12"-45" BEND W/ KB 12"-22.5' BEND W/ KB 12" PLUG	EA EA EA EA	2 1 2 2 1
BLOWOFFS 2" BLOWOFF IN MANHOLE	EA	1
ASSEMBLIES FIRE HYDRANT ASSEMBLY	ΕA	1

EXISTING SANITARY SEWER MANHOLE

EXISTING STORM SEWER MANHOLE

EXISTING TELECOMMUNICATIONS BOX

EXISTING WATER VALVE &

PROPOSED MAJOR CONTOUR

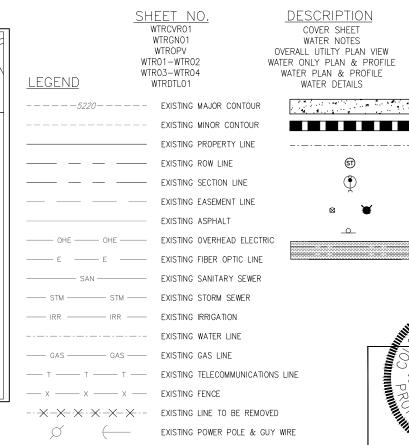
PROPOSED MINOR CONTOUR

PROPOSED EASEMENT LINE

PROPOSED STORM SEWER

**EXISTING TREE** 

PROPOSED FENCE



(s)

(ST)

-5220-

30974

BRIAN J. POLING Colorado Registered Professional Engineer #30974 For and on Behalf of Merrick & Company

To be completed by Denver Water

Denver Water's review of these plans relates only to Denver Water requirements, and does not include a full analysis oft soil conditions, support or load factors, or any other matters. Any modification of these plans must be resubmitted to Denver Water for review prior to construction. The Professional Engineer, Contractors, and Owners designing and constructing this proposed water distribution system shall be solely responsible for the adequacy of the design, installation, and materials utilized in this water locations system for any specific site locations.

Date	I.D.	No.
Contract No.	Мар	No.
	_	

DENVER WATER DATE: PROPOSED WALL BILL WILLIS DISTRICT ENGINEER FOR BERKELEY WATER AND SANITATION DISTRICT Computer File Information Sheet Revisions CLAY COMMUNITY OUTFALL Project No./Code Creation Date: 06/04/2012 Initials: JWRAY RTD GOLD LINE CROSSING COVER SHEET Last Modification Date: 9/03/13 Initials: JWRAY No Revisions: CBESGROVE | Structure Full Path I:\ACL\0301494002\DESIGN\CD l Desianer: Revised: JWRAY Numbers <u>Drawing File</u> Name: 4002-01CVR.dwg Detailer: Void: N/A | Subset Sheets: WTRCVR01 Sheet Number 1 Scale: NA Acad Ver. C3D2011 Units: English Sheet Subset:

## MERRICK\* HIT & COMPAN

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2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211



ADAMS COUNTY PUBLIC WORKS/ENGINEERING 4430 S. ADAMS COUNTY PARKWAY 1ST FLOOR SUITE W2000B

WATER QUANTITY ESTIMA	TE	
PIPE 12" PVC (C905) PIPE FUSIBLE 12" PVC (C905) PIPE 22" STEEL CASING PIPE 6" DUCTILE IRON PIPE	LF LF LF LF	357 275 245 10
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BLOWOFFS 2" BLOWOFF IN MANHOLE	EA	1

1 - 70

FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO DENVER WATER STANDARDS. THE NUMBER AND LOCATIONS(S) OF FIRE HYDRANT(S) AND FIRE FLOW AS SHOWN ON THIS WATER MAIN INSTALLATION IS CORRECT AS SPECIFIED BY THE SOUTHWEST ADAMS COUNTY FIRE RESCUE

SIGNATURE OF FIRE CHIEF OF DESIGNATED REPRESENTATIVE

GPM FIRE FLOW DATE SIGNED

SIGNATURES

**PROJECT** 

LOCATION

52ND AVE

REVIEWED BY:

#### GENERAL NOTES

#### MAIN EXTENSION NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH DENVER WATER'S ENGINEERING STANDARDS MATERIALS SPECIFICATIONS, AND DRAWINGS. ALL MAIN INSTALLATIONS/SYSTEM MODIFICATIONS WILL BE APPROVED
- AND INSPECTED BY DENVER WATER.

  CONTRACTORS SHALL MAINTAIN A COPY OF THE CURRENT ENGINEERING STANDARDS ON—SITE AT ALL TIMES DURING CONSTRUCTION. SEE THE CHART BELOW FOR A QUICK REFERENCE TO THE FREQUENTLY USED MATERIAL SPECIFICATIONS.

#### MATERIAL SPECIFICATION QUICK REFERENCES:

MATERIAL SPECIFICATION	DESCRIPTION
MS 01	DI PIPE
MS 02	PVC PIPE
MS 03	FITTINGS
MS 4, MS 5	VALVES
MS8	TAPPING VALVES
MS9	TAPPING SLEEVES
MS12	VALVE BOXES (RECYCLED WATER SYSTEM VALVE BOXES SHALL BE FITED WITH TRANSOULAR COVERS CAST WITH THE WORDS "DENVER WATER RECYCLES" AND SHALL BE COATED WITH A FUSION BONDED EPOXY COATING,
11017	PANTONE 2577U IN COLOR.)
MS13	DRY BARREL FIRE HYDRANTS
MS23	BRASS AND BRONZE GOODS
MS29	RESTRAINT DEVICE

- 3. TRACER WIRE, 12 GAUGE, SHALL BE INSTALLED ON ALL NON-METALLIC WATER MAINS.
  4. FOR ALL PIPE INSTALLATIONS, THE DEPTH OF COVER OVER THE PIPE, MEASURED FROM OFFICIAL STREET GRADE TO THE TOP OF THE PIPE, SHALL BE A MINIMUM OF 4-1/2 FEET AND SHALL BE KNOWN AS THE COVER OVER THE PIPE. IF DIFFICULTIES ARISE WHEN CROSSING INTERFERENCE, AND WHERE SPECIFICALLY APPROVED BY DENVER WATER, DEVIATIONS FROM 4-1/2 FEET OF COVER WILL BE PERMITTED. THE COVER OVER THE PIPE SHALL BE A
- MINIMUM OF 4-1/2 FEET AND A MAXIMUM OF 10 FEET. REFER TO STANDARD DRAWING SHEET 16.

  ANY CHANGES IN ALIGNMENT AND GRADE SHALL BE AUTHORIZED BY DENVER WATER AND SHELL BE ACCOMPLISHED BY THE INSTALLATION OF ADDITIONAL FITTINGS. THE DEFLECTION OF JOINTS IS PERMITTED ONLY WHEN INSTALLING PIPE ON HORIZONTAL OR VERTICAL CURVES.
- THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES AND FIRE HYDRANTS TO THE FINAL FINISHED GRADE.
  ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM
  THRUST WITH MECHANICAL RESTRAINT AND CONCRETE THRUST BLOCKS IN ACCORDANCE WITH DENVER WATER'S
- ENGINEERING STANDARD DRAWINGS SHEET 28 AND 32.

  ALL VALVES ARE TO BE LOCATED ON PROPERTY LINE EXTENSIONS. EXCEPT FOR TAPPING TEES WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER VALVE LOCATIONS MAY BE REQUIRED AS SHOWN
- WHEN IT IS NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSINGS, A MINIMUM CLEARANCE OF 1.5 FEET SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE PIPES.
- THE CONTRACTOR SHALL HAVE ONE SIGNED COPY OF THE APPROVED WATER PLANS IN HIS/HER POSSESSION AT
- ALL TIMES.

  11. ONLY ONE POINT OF CONNECTION WILL BE ALLOWED UNTIL THE TESTING OF THE NEW INSTALLATIONS IS COMPLETE.

  12. NEWLY INSTALLED WATER MAINS AND FIRELINES SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH DENVER
- WATER ENGINEERING STANDARDS, SECTION 8.25.

  PRIOR TO THE INSTALLATION OF WATER MAINS, ROAD CONSTRUCTION MUST HAVE PROGRESSED TO AT LEAST THE SUB-GRADE STATE. SUB-GRADE IS DEFINED AS AN ELEVATION OF NO MORE THAN 7 INCHES BELOW THE FINISHED
- 14. THE CONTRACTOR IS RESPONSIBLE FOR:
- A NOTIFYING CUSTOMERS WHO MAY BE AFFECTED BY A WATER QUITAGE DURING CONSTRUCTION
- B. OBTAINING, AT THE CONTRACTOR'S EXPENSE, APPLICABLE LICENSES, PERMITS, BONDS, ETC. THAT ARE REQUIRED FOR THE MAIN INSTALLATION/SYSTEM MODIFICATION.
- C. CONTACT DENVER WATER'S CONSTRUCTION ENGINEERING PERSONNEL FOR THE PRE-CONSTRUCTION MEETING AND INSPECTION, 303-628-6038, AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. IN THE EVEN OF AN EMERGENCY IN DENVER OR IN A TOTAL SERVICE AREA AFTER WORKING HOURS, CALL DENVER WATER'S WESTSIDE DISPATCHER: 303-628-6390. IN A MASTER METER DISTRICT, PLEASE CONTACT THE REPRESENTATIVE OF THE DISTRICT IN WHICH THE PROJECT IS TAKING PLACE.

  D. PAYING ALL ADDITIONAL CHARGES FOR INSPECTION OUTSIDE NORMAL WORK HOURS.

NOTE: BE ADVISED THAT ON OCCASION VALVES IN OUR SYSTEM MAY BE INOPERABLE. ON SUCH OCCASIONS IT MAY BECOME NECESSARY TO BACK UP AN ADDITIONAL BLOCK FOR THE SHIT OUT. IF THAT OCCURS, MAKE ADDITIONAL NOTIFICATIONS TO CUSTOMERS WITH THE MANDATORY 24 HOURS ADVANCE NOTICE. WHEN VALVE MAINTENANCE IS REQUIRED, A DELAY OF SEVERAL DAYS SHOULD BE EXPECTED.

#### TAP & METER NOTES (FOR DENVER, TOTAL SERVICE, AND READ & BILL AREAS ONLY. IN MASTER METER DISTRICTS, PLEASE REFER TO THE SPECIFICATION FOR THAT DISTRICT)

- BEFORE ANY TAPS ARE MADE FROM MAINS, APPLICATION(S) FOR THE TAPS MUST BE RECEIVED AND APPROVED BY THE DISTRIBUTOR AND BY DENVER WATER.

  DENVER WATER WILL MAKE ALL TAPS THAT ARE 2 INCHES AND SMALLER
- . SERVICE LINE PRVs ARE REQUIRED WHEN AREA PRESSURE EXCEEDS 80 PSI.
- A. THE CONTRACTOR SHALL HOLD AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH THE METER INSPECTOR FOR ALL TAPS, SERVICE LINES, AND METERS LARGER THAN ONE INCH, AND FOR PROJECTS INVOLVING MORE THAN ONE TAP AND SERVICE. TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE CALL 303-628-6145.
- B. A COPY OF THESE PLANS WITH DENVER WATER'S APPROVAL STICKER MUST BE PRESENT ON-SITE AT THE TIME THE TAP BEING MADE AND AT THE TIME THE METER IS INSPECTED OR INSTALLED.

  C. PRIOR TO THE TAP BEING MADE. THE CURB VALVE, METER YOKE, AND METER PIT/VAULT SHALL BE IN
- PRIOR TO THE TAP BEING WALE, THE CORD VALUE, MELET TORE, AND METER FITY VALCE STALLE BY PLACE. THE CONTRACTOR WILL HAVE 3 ADDITIONAL WORKING DAYS TO COMPLETE THE INSTALLATION OF SERVICE LINE. DENVER WATER METER INSPECTIONS WILL MOBILIZE TO THE PREMISE 3 WORKING DAYS AFTER THE TAP IS MADE TO CONDUCT THE METER INSPECTION.
- D. A SOIL AMENDMENT INSPECTION WILL BE REQUIRED PRIOR TO THE COMPLETION OF THE CERTIFICATE OF CUPANCY. CONTACT CONSERVATION AT 303-628-6670 FOR INFORMATION AND TO SCHEDULE A SOIL AMENDMENT INSPECTION.
- F METERS CANNOT BE SET OR INSPECTED OR SERVICES ACTIVATED LINTIL THE REQUIREMENTS FOR BACKFLOW PREVENTION HAVE BEEN COMPLETED. CONTACT THE BACKFLOW PREVENTION PROGRAM PERSONNEL AT 303-628-5940 FOR FURTHER INFORMATION.
- F. ALLOW AT LEAST 3 WORKING DAYS ADVANCE NOTICE WHEN SCHEDULING TAPS. TO SCHEDULE A TAP CALL 303-628-6701; FOR QUESTIONS RELATED TO A METER INSPECTION CALL 303-628-6145. SERVICE
- ACTIVATION WILL TAKE PLACE WHEN THE SERVICE AND METER SETTING PASS INSPECTION.
  G. ALL METER AND AUTOMATIC METER READING DEVICE LOCATIONS SHALL BE APPROVED BY A DENVER WATER METER INSPECTOR, EXCEPT IN MASTER METER DISTRIBUTOR DISTRICTS.
- H. METER PITS AND VAULTS MUST BE SET FLUSH WITH THE FINAL GRADE OF THE LANDSCAPE, INCLUDING PROPER DEPTH OF SOIL AMENDMENT. IF FINAL GRADING HAS NOT BEEN COMPLETED AT THE TIME OF METER INSPECTION, THE OWNER WILL BE REQUIRED TO RAISE OF LOWER THE METER PIT/VAULT WHEN FINAL GRADE IS ESTABLISHED. ADJUSTMENT OF THE PIT MAY REQUIRE ADJUSTMENT OF THE METER

- SETTING WITHIN THE DIT
- METER SETTING, VALVES, AND SERVICE LINES FROM THE MAIN TO THE BACKFLOW PREVENTER ASSEMBLY, IF PRESENT, OR TO 5 FEET AFTER THE METER VAULT, MUST MEET ALL APPLICABLE ENGINEERING STANDARDS IN EFFECT AT THE TIME OF ACTIVATION. IF NECESSARY TO COMPLY WITH CURRENT STANDARDS, MODIFICATIONS MAY BE REQUIRED FROM THE DETAILS ON THESE PLANS.

  NO PRESENT OF FUTURE FENCES OR WALLS ARE PERMITTED BETWEEN THE RIGHT OF WAY (ROW) OF
- EASEMENT AND THE METER SETTING. THERE SHALL BE NO PERMANENT OBSTRUCTIONS WITHIN 5 FEET OF THE OUTSIDE WALL OF THE METER PIT OR VAULT.
- K. TAP RELOCATION (FROM WHAT IS SHOWN ON THESE PLANS) MAY BE NECESSARY TO AVOID PAYED AREAS OR OTHER OBSTRUCTIONS THAT ARE NOT SHOWN ON THE PLANS. DEVIATIONS FROM THESE PLANS AND STANDARDS MUST BE APPROVED PRIOR TO CONSTRUCTION.

  L. INSIDE THE CITY OF DENVER AND IN TOTAL SERVICE AND READ & BILL DISTRIBUTOR DISTRICTS, METERS
- MUST BE FURNISHED WITH AUTOMATIC METER READING (AMR) DEVICES AS SPECIFIED BY DENVER WATER. THE AMR DEVICES WILL BE INSTALLED BY DENVER WATER AT THE TIME OF SERVICE ACTIVATION.
- M. METER PITS AND VAULTS SHALL HAVE APPROPRIATE LIDS BASED ON THE LOCATION AND THE APPLICATION. CONTACT METER INSPECTION AT 303-628-6145 TO DETERMINE THE CORRECT LID CONFIGURATION.

  N. THE CONTRACTOR SHALL PROVIDE A REMOTE AMR DEVICE MOUNTING BOX WHEN REQUIRED. INSTALL A
- DOUBLE-GANG 4x4 ELECTRICAL JUNCTION BOX; MOUNT AS DIRECTED 7 FEET ABOVE GRADE. INSTALL BELDEN #9451 CABLE IN 3/4-INCH OR LARGER CONDUIT FROM THE METER TO THE MOUNTING BOX. TWO BOXES AND TWO CABLES ARE REQUIRED FOR COMPOUND METERS.
- O. INSIDE THE CITY OF DENVER, ALL MULTI-FAMILY DWELLINGS WITH A SINGLE TAP, SERVICE LINE. AND METER ARE REQUIRED TO SUB-METER EACH INDIVIDUAL UNIT (SEC 401.3.2 OF DENVER MODIFICATIONS TO THE INTERNATIONAL PLUMBING CODE, ORDINANCE NUMBER 576, SERIES OF 2004). CALL THE CITY AND COUNTY OF DENVER PLUMBING INSPECTOR FOR INFORMATION AT 720-865-2625.

  P. INSIDE THE CITY OF DENVER, ALL SERVICE LINES MUST BE INSTALLED TO AVOID EXISTING OR PROPOSED
- STREET TREES. CONTACT THE CITY AND COUNTY OF DENVER'S FORESTER AT 720-913-0647 FOR
- Q. EXISTING SERVICES MUST BE METERED AT ALL TIMES UNTIL THE TAP HAS BEEN CUT AT THE MAIN AND WITNESSED BY DENVER WATER.

#### CROSS-CONNECTION CONTROL REQUIREMENTS:

THE LICENSEES LISTED BELOW SHALL BE IN CONFORMANCE WITH DENVER WATER'S ENGINEERING STANDARDS, CHAPTER 5.05, CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION. BACKFLOW PREVENTION ASSEMBLIES ARE REQUIRED TO BE INSTALLED ON THE FOLLOWING WATER SERVICE LINES:

- COMMERCIAL PROPERTIES: REAL ESTATE ZONED FOR BUSINESSES AND/OR INDUSTRIAL USE THAT CONSIST OF SIX OR MORE UNITS WITH A DOMESTIC, FIRELINE, OR DEDICATED WATER IRRIGATION SERVICE TAP (DEFINED AS SUCH FOR CROSS-CONNECTION PURPOSES)
- DOMESTIC DEDICATED IRRIGATION FIRELINE AND OR RECYCLED WATER SERVICE LINES MULTI-FAIMLY RESIDENTIAL: A DWELLING WITH TWO TO FIVE UNITS WITH A DOMESTIC, FIRELINE, AND/OR DEDICATED WATER SERVICE TAP (DEFINED AS SUCH FOR CROSS—CONNECTION PURPOSES).

  • PREMISES OVER THREE STORES, GREATER THAN 30 FEET, FIRE PROTECTION SYSTEM, COMMON BOILER,
  - AUXILIARY WATER, SWIMMING POOL AND IRRIGATION SYSTEMS.
- SINGLE FAMILY RESIDENTS: A SINGLE UNIT DWELLING (DEFINED AS SUCH FOR CROSS-CONNECTION PURPOSES)
   DUAL WATER SUPPLY AGREEMENT.
  - A. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE A MODEL MANUFACTURED IN COMPLIANCE WITH AWWA C510 AND C511 AND SHALL HAVE MET THE SPECIFICATIONS BY THE UNIVERSITY OF CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH:

FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH SCHOOL OF ENGINEERING MC-2531 UNIVERSITY OF SOUTHERN CALIFORNIA P.O. BOX 77902 LAS ANGELES, CA 90007 FOUNDATION OFFICE: (866) 545-6340 HTTP: //WWW.USC.EDU/DEPT/FCCCHR/

- B. THE LICENSEE IS REQUIRED TO HAVE A CERTIFIED AMERICAN BACKFLOW PREVENTION ASSOCIATION (ABPA) OR AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) TESTER INSPECT AND TEST THE EXISTING AND/OR NEWLY INSTALLED CONTAINMENT BACKFLOW PREVENTION ASSEMBLIES ON THE DEDICATED WATER SERVICE LINES (DOMESTIC, DEDICATED IRRIGATION, FIRELINE, AND RECYCLED) UPON INSTALLATION AND ANNUALLY THEREAFTER.
- INSTALLATION AND ANNOALLY INTEREPTER.

  THE ABPA OR ASSE CERTIFIED BACKFLOW TESTER IS RESPONSIBLE TO MEET THE REQUIREMENTS LISTED IN THE ENGINEERING STANDARDS, CHAPTER 5.05.

  IF THE ABPA OR ASSE CERTIFIED BACKFLOW TESTER IS TESTING A BACKFLOW PREVENTION ASSEMBLY
- INSTALLED ON A RECYCLED WATER SERVICE LINE, THE TESTER IS REQUIRED TO HAVE A DEDICATED RECYCLED WATER TEST GAUGE.

  D. WITHIN 48 HOURS OF DENVER WATER SETTING THE METER AND TURNING ON THE WATER SERVICE, THE
- ABPA OR ASSE CERTIFIED BACKFLOW TESTER IS REQUIRED TO SUBMITTED THE CONTAINMENT BACKFLOW ASSEMBLY TEST REPORT(S) TO THE CROSS-CONNECTION CONTROL OFFICE:

PHONE: 303-628-5669 303-794-8325

CROSSCONNECTIONCONTROL@DENVERWATER.ORG MAILING ADDRESS: DENVER WATER ATTN: CROSS-CONNECTION CONTROL

6100 W QUINCY AVE

- E. THERE SHALL BE NO UNPROTECTED TAKEOFFS FROM THE SERVICE LINE AHEAD OF ANY METER OR AHEAD OF A BACKFLOW PREVENTION ASSEMBLY LOCATED AT THE POINT OF DELIVERY TO THE CUSTOMER'S WATER SYSTEM.
- F NO BRANCH LINES OR TAPS ARE ALLOWED ON DEDICATED COMMERCIAL IRRIGATION WATER SERVICES LINE OR RECYCLED WATER SERVICE LINES FOR DOMESTIC (POTABLE) USE (E.G., DRINKING FOUNTAINS, WATER PLAY FEATURES, SWIMMING POOL, RESTROOM FACILITIES, ECT.):
- BETWEEN THE IRRIGATION TAP AND THE METER.
  BETWEEN THE METER AND THE BACKFLOW PREVENTION ASSEMBLY
- DOWNSTREAM FROM THE BACKFLOW PREVENTION ASSEMBLY.
- 4. COMMERCIAL IRRIGATION WATER SERVICE LINE TAPS:
- COMPLY WITH THE CROSS-CONNECTION CONTROL REQUIREMENTS LISTED ABOVE (A-F)
- REQUIRE AN APPROVED USC FCCCHR REDUCED PRESSURE PRINCIPLE (RP) BACKFLOW PREVENTION ASSEMBLY TO BE INSTALLED 5 FEET DOWNSTREAM FROM THE METER PIT AS AN ABOVE GROUND INSTALLATION BEFORE ANY CONNECTIONS. REFER TO THE MANUFACTURER'S INSTALLATION
  INSTRUCTIONS FOR HEIGHT AND ORIENTATION REQUIREMENTS.

  — IF THE BACKFLOW PREVENTION ASSEMBLY CANNOT BE INSTALLED 5 FEET DOWNSTREAM FROM
  - THE METER PIT, INCLUDE A VARIANCE LETTER JUSTIFYING THE NEED FOR RELOCATION

RECYCLED WATER SERVICE LINE TAPS

- BACKFLOW PREVENTION ASSEMBLIES ARE REQUIRED TO BE INSTALLED ON COMMERCIAL RECYCLED WATER LINE
- IF CHEMICAL INJECTION IS USED DOWNSTREAM FROM THE METER.
- IF PUMPS ARE USED DOWNSTREAM FROM THE METER.

  IF THE EXISTING OR PROPOSED SYSTEM POSES A RISK TO THE INTEGRITY OF HT RECYCLED WATER SYSTEM
  - COMPLY WITH THE CROSS-CONNECTION CONTROL REQUIREMENTS LISTED ABOVE (A-F) REQUIRE AN APPROVED USC FCCHR REDUCED PRESSURE PRINCIPLE (RP) BACKFLOW PREVENTION ASSEMBLY TO BE INSTALLED 5 FEET DOWNSTREAM FROM THE METER PIT AS AN ABOVE GROUND INSTALLATION BEFORE ANY CONNECTIONS. REFER TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR HEIGHT AND ORIENTATION REQUIREMENTS
  - IF THE BACKFLOW PREVENTION ASSEMBLY CANNOT BE INSTALLED 5 FEET DOWNSTREAM FROM THE METER PIT, INCLUDE A VARIANCE LETTER JUSTIFYING THE NEED FOR RELOCATION.
- BACKFLOW PREVENTION ASSEMBLIES INSTALLED ON RECYCLED WATER SERVICE LINES SHALL BE IDENTIFIED AS "RECYCLED WATER".
- 6 RECYCLED OR RAW WATER (DITCH WATER POND WELL ECT.) USED FOR IRRIGATION ON THE PREMISES: COMPLY WITH THE CROSS-CONNECTION CONTROL REQUIREMENTS LISTED ABOVE (A-F).
  - REQUIRES AN APPROVED USC ECCCHR BACKFLOW PREVENTION ASSEMBLY (CONTAINMENT) TO BE INSTALLED 5 FEET DOWNSTREAM FROM THE METER PIT ON ANY POTABLE WATER SERVICE LINE.
    - THE BACKFLOW ASSEMBLY TYPE IS DETERMINED BY THE 'DEGREE OF HAZARD' DOWNSTREAM FROM THE METER; REFER TO DENVER WATER'S ENGINEERING STANDARDS, 1.06, DEGREE OF HAZARD, OR CONTACT CROSS-CONNECTION CONTROL AT 303-628-5940
- 7. IT IS AT THE SOLE DISCRETION OF DENVER WATER'S CROSS-CONNECTION CONTROL SECTION TO APPROVE A VARIANCE REQUEST RELATED TO A PROPOSED BACKFLOW PREVENTION ASSEMBLY INSTALLATION.

#### HEALTH NOTES/WATER QUALITY:

- THE COLORADO DEPARTMENT OF PUBLIC HEALTH & ENVIRONMENT (CDPHE) REGULATES ASBESTOS ACTIVITIES THROUGH THE AIR POLLUTION CONTROL DIVISION (APCD) AND THE SOLID WASTE AND MATERIALS MANAGEMENT DIVISION (SWMMD) WHEN SOIL CONTAMINATION IS INVOLVED. DENVER WATER WILL REQUIRE CONTRACTORS AND DEVELOPERS TO FOLLOW THE PROCEDURES BELOW WHEN CEMENT ASBESTOS PIPE IS
  - THE PIPE MUST BE REMOVED FROM THE EXCAVATION FOR PROPER DISPOSAL
  - THE CONTRACTOR/DEVELOPER WILL MANAGE THE PIPE IN ACCORDANCE WITH THE FOLLOWING REGULATIONS:
- REGULATIONS:

   COLORADO AIR REGULATIONS NO 8 CONTROL OF HAZARDOUS AIR POLLUTANTS

   OSHA 29 CFR 1910.1001 GENERAL INDUSTRY STANDARDS ASBESTOS

   OSHE 29 CFR 1926.1101 CONSTRUCTION STANDARDS ASBESTOS

  IF LARGE AMOUNTS OF CEMENT ASBESTOS PIPE ARE ANTICIPATED TO BE REMOVED, THE MATERIAL

  MUST BE MANAGED BY AN APPROPRIATE ASBESTOS ABATEMENT CONTRACTOR (160 SQUARE FEET OR 260 LINEAR FEET WILL REQUIRE A PERMIT).
  NOTE: CEMENT ASBESTOS PIPE IS CONSIDERED A NON-FRIABLE ASBESTOS MATERIAL, DEFINED AS CONTAINING

MORE THAN 1% ASBESTOS BY WEIGHT, AND CANNOT BE CRUMBLED, PULVERIZED, OR REDUCED TO POWDER BY THEREFORE, A RELEASE OF ASBESTOS FIBERS IS NOT LIKELY DURING NORMAL USE AND

- 2. DENVER WATER PERSONNEL ARE NOT RESPONSIBLE FOR WORK SITE SAFETY OF THE COMPLIACNE/ENFORCEMENT OF SAFETY REGULATIONS AND STANDARDS ESTABLISHED BY OTHER AGENCIES. ALL SAFETY COMPLIANCE/ENFORCEMENT AT THE WORK SITE SHALL BE THE CONTRACTOR'S SOLE
- 3. THE WATER QUALITY CONTROL DIVISION OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) REQUIRES ALL WATER LINE CONTRACTORS TO POSSESES A CURRENT DISCHARGE PERMIT FOR DISCHARGES OF CHLORINATED AND PROCESS WATER ASSOCIATED WITH THE INSTALLATION OF NEW MAINS OR CONDUITS. CONTACT CDPHE WATER QUALITY CONTROL DIVISION A 303-692-3539 FOR INFORMATION ON OBTAINING THE REQUIRED PERMIT.
- INFORMATION ON OBTAINING THE REQUIRED PERMIT.
  CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED IN ACCORDANCE
  WITH DENVER WATER'S ENGINEERING STANDARDS, SECTION 8.24. THE LINES SHALL BE CHLORINATED IN
  ACCORDANCE WITH AWWA C-651, "DISINFECTION WATER MAINS." THE PREFERRED METHODS IS TO USE
  SUFFICIENT CHLORINE TABLETS TO PRODUCE A 25 mg/l SOLUTION. TABLETS SHOULD BE ATTACHED TO THE
  TOP OF THE PIPE WITH AN APPROVED ADHESIVE CERTIFIED TO NSF STANDARD 61, PRIOR TO PIPE
  INSTALLATION IN THE TRENCH. CHLORINATION OF 16 INCH AND LARGER PIPE REQUIRED A CHLORINE SLURRY.
  THE CHLORINATION OF ANY FINISHED PIPELINE SHALL BE COMPLETED PRIOR TO HYDROSTATIC TESTING.

- 1. IRRIGATION OF MEDIANS AND OTHER PUBLIC LANDSCAPED AREAS LESS THAN 25 FEET IN WIDTH MUST BE DONE IN ACCORDANCE WITH DENVER WATER OPERATING RULE 14.02.3. (CALL DW CONSERVATION SECTION AT 303-628-6343 FOR INFORMATION REGARDING IRRIGATION SYSTEMS.)
  - FOR STRIPS OF LAND LESS THAN 6 FEFT IN WIDTH SPRAY IRRIGATION SHALL BE PROHIBITED.
  - FOR STRIPS OF LAND LESS THAN O FEET IN WIDTH SPACE TRANSATION STALL BE PROHIBITED.

    FOR STRIPS OF LAND BETWEEN 6 FEET AND 15 FEET IN WIDTH ONLY LOW FLOW IRRIGATION, OR

    SPRAY IRRIGATION USING LOW—ANGLE SPRAY NOZZLES DESIGNED FOR THE SPECIFIC WIDTH TO BE PREVENT LOW HEAD DRAINAGE.

    FOR STRIPS OF LAND MORE THAN 15 FEET IN WIDTH — ONLY GEAR—DRIVEN ROTORS WITH LOW ANGLE
  - NOZZIES MAY BE USED TO IRRIGATE TURE AREAS. PLANTING BEDS MAY BE IRRIGATED WITH LOW-FLOW OR SPRAY IRRIGATION. ALL SPRAY HEADS MUST BE PRESSURE REDUCING AND DESIGNED TO PREVENT LOW HEAD DRAINAGE.
- IRRIGATION SERVICE LINES REQUIRE AN APPROVED UNIVERSITY OF SOUTHER CALIFORNIA (USC) REDUCED PRESSURE PRINCIPLE (RP) BACKFLOW PREVENTION ASSEMBLY (CONTAINMENT) TO BE INSTALLED 5 FEET DOWNSTREAM FROM THE METER PIT AS AN ABOVE GROUND INSTALLATION BEFORE ANY CONNECTIONS. REFER TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR HEIGHT AND ORIENTATION REQUIREMENTS IF RECYCLED OR RAW WATER (DITCH WATER, POND, WELL, ECT.) IS USED FOR IRRIGATION ON THE PREMISES,
- AN APPROVED UNIVERSITY OF SOUTHER CALIFORNIA (UCS) BACKFLOW PREVENTION ASSEMBLY (CONTAINMENT) SHALL BE INSTALLED 5 FEET DOWNSTREAM FROM THE METER PIT ON ANY POTABLE WATER SERVICE LINE. THE BACKFLOW ASSEMBLY TYPE IS DETERMINED BY THE DEGREE OF HAZARD DOWNSTREAM FROM THE METER (RP-HIGH HAZARD INSTALLED ABOVE GROUND OR DC-LOW HAZARD INSTALLED BELOW GROUND - 60 INCH DIAMETER MANHOLE). FOR ADDITIONAL INFORMATION, PLEASE REFERENCE DENVER WATER ENGINEER STANDARDS, 6.11, OR CONTACT CROSS—CONNECTION CONTROL AT 303—628—5940.

  4. A SOIL AMENDMENT WILL BE REQUIRED ON EVERY PROPERTY REQUIRING NEW WATER SERVICE.

DISCLAIMER: DENVER WATER STANDARD OPERATING PROCEDURES REPRESENT RECOMMENDED PRACTICES THAT SHOULD BE APPLICABLE TO MOST SITUATIONS ENCOUNTERED. THESE PROCEDURES SHOULD BE FOLLOWED TO EXTENT APPLICABLE; HOWEVER, THEY BY NO MEANS REPRESENT THE ONLY METHOD TO PERFORM THE TASKS THEY DESCRIBE. IT IS UNDERSTOOD THAT FIELD CONDITIONS, EMERGENCIES, AND OTHER CIRCUMSTANCE MAY REQUIRE DEVIATION FROM STANDARD OPERATING PROCEDURES



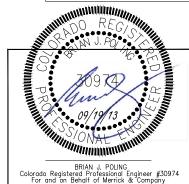
#### To be completed by Denver Water

Denver Woter's review of these plans relates only to Denver Woter requirements, and does not include a full analysis of: soil conditions, support or load factors, or any other matters. Any modification of these plans must be resubmitted to Denver Water for review prior to construction. The Professional Engineer, Contractors, and Owners designing and constructing this proposed water distribution system shall be solely responsible for the adequacy of the design institution. for the adequacy of the design, installation and materials utilized in this wate distribution system for any specific site

Tood tion.	
Date	I.D. No.
Contract No.	Map No.



Sales Administrator



Computer File Information Index of Revisions Creation Date: 01/10/12 Initials: JWRAY Initials: MCRESTO Last Modification Date: 01/13/14 Full Path: I:\ACL\0301494002\DESIGN\CD 4002-01CVR.DWG Drawing File Name: Acad Ver. C3D2013 Scale: ----Units: English



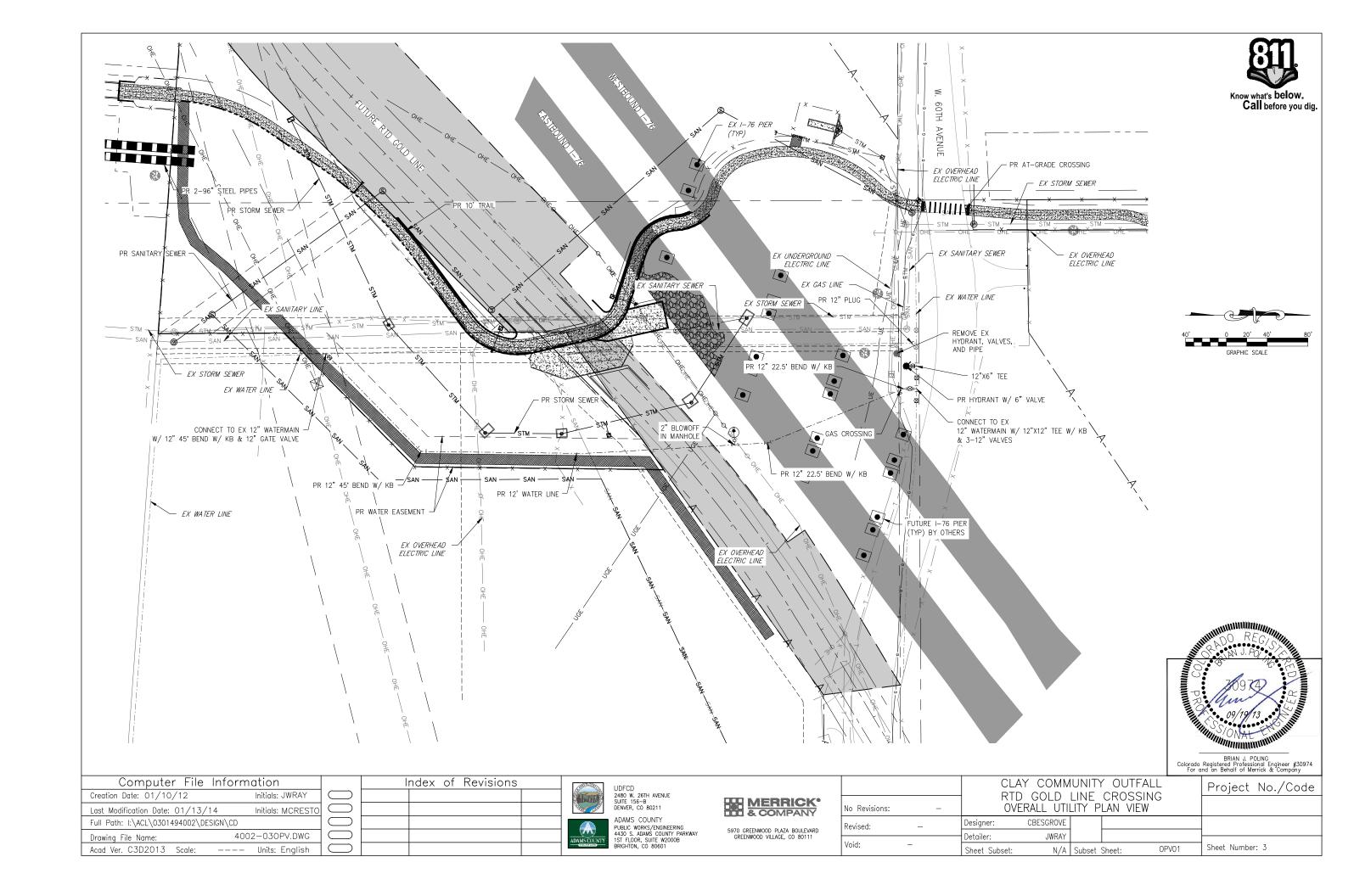
2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211

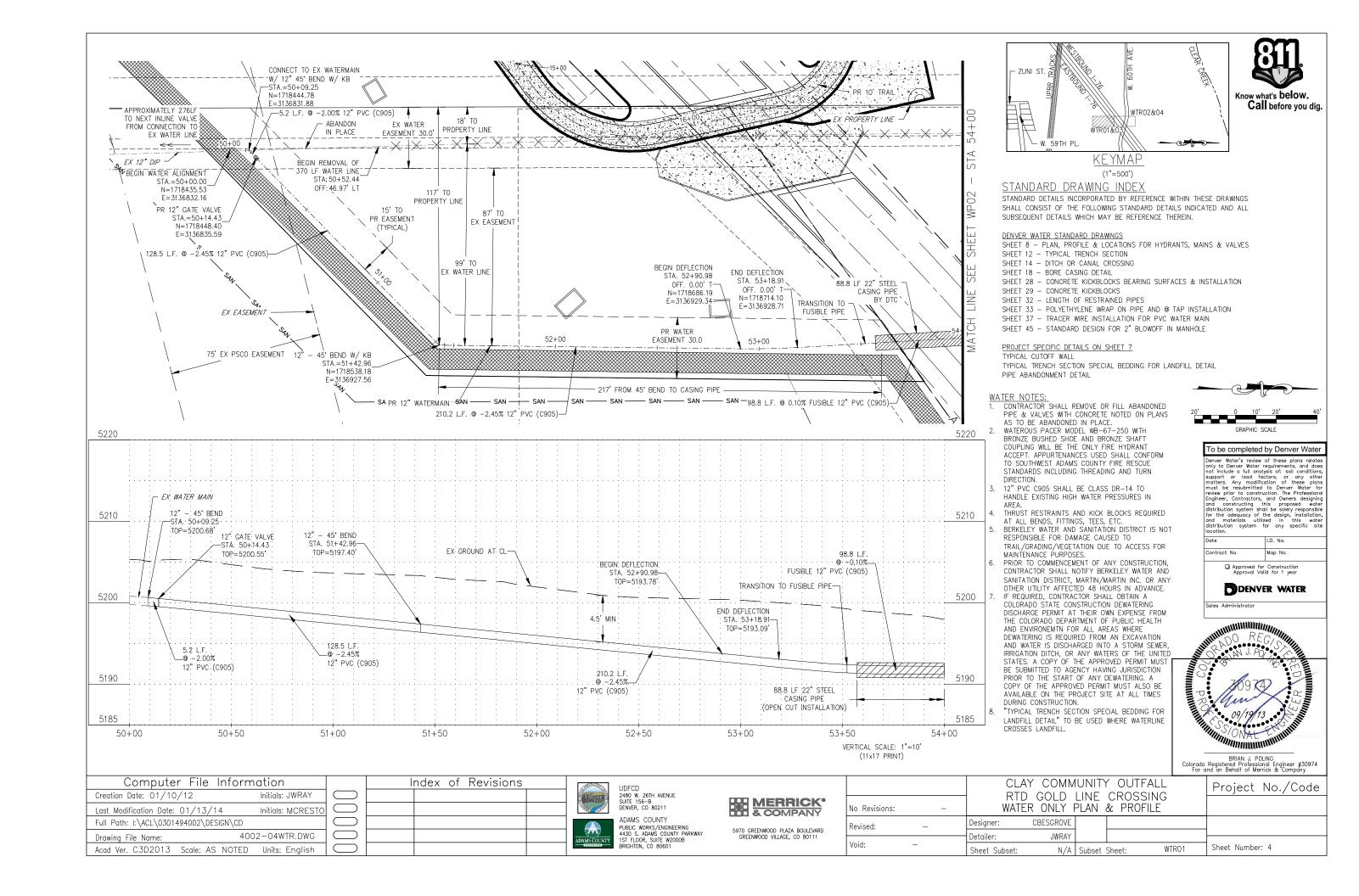
ADAMS COUNTY PUBLIC WORKS/ENGINEERING 4430 S. ADAMS COUNTY PARKWAY 1ST FLOOR, SUITE W2000B

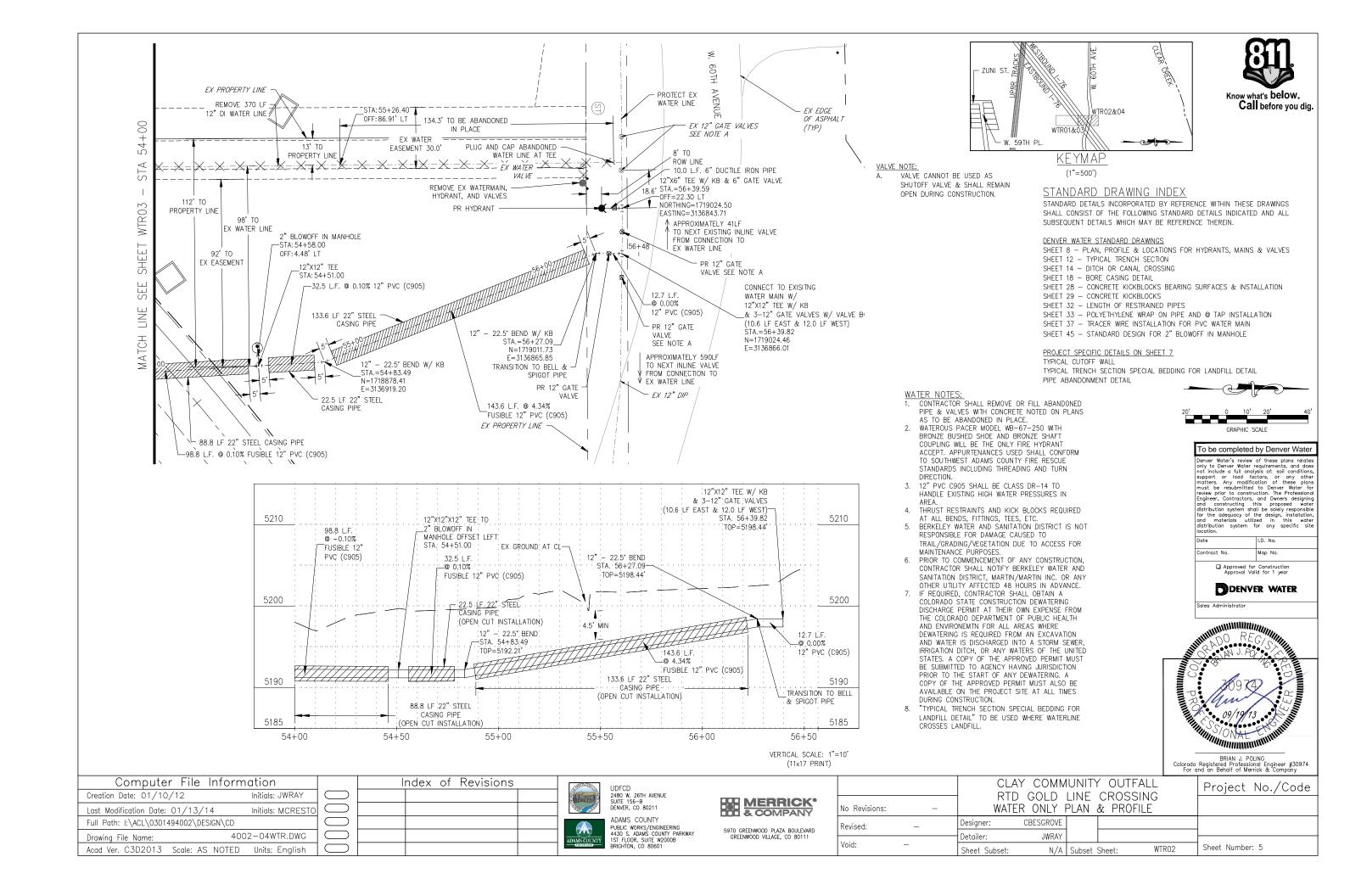


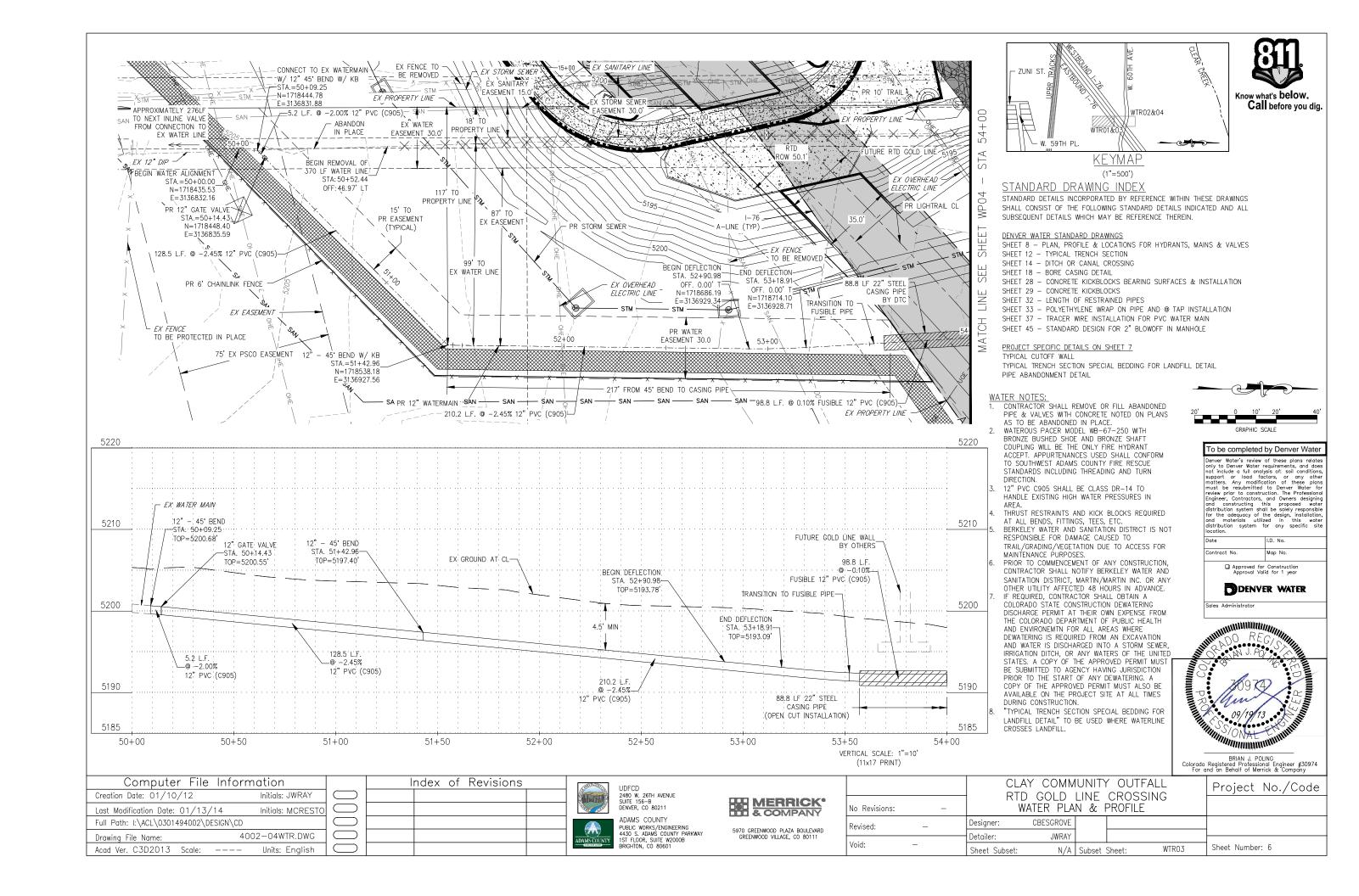
5970 GREENWOOD PLAZA BOULEVARD GREENWOOD VILLAGE, CO 8011

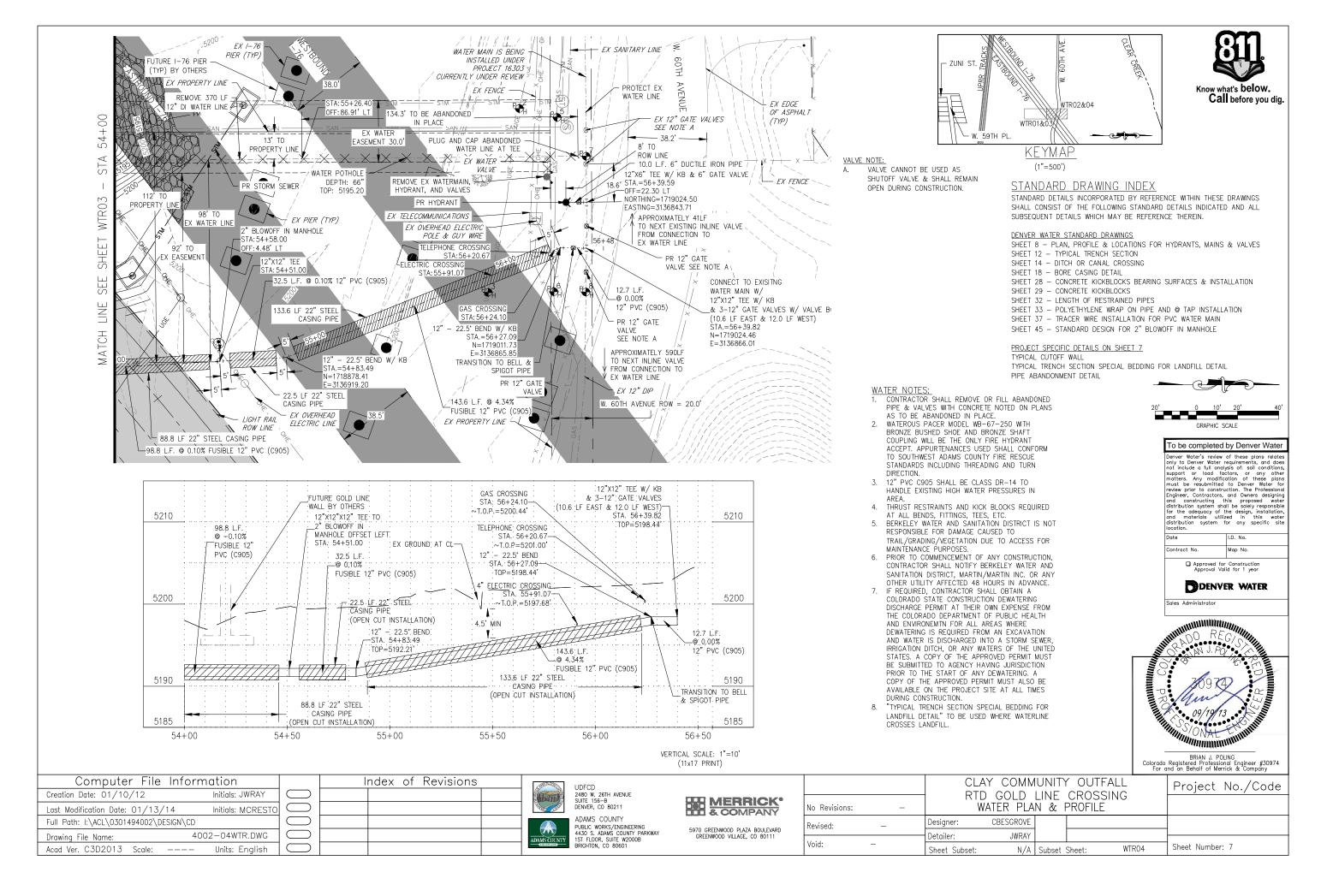
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		Detailer:	JWRAY				
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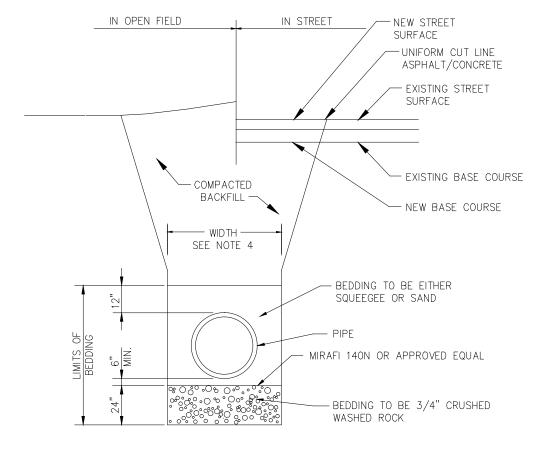












#### TYPICAL TRENCH SECTION

- MINIMUM COVER TO BE 4.5' BELOW OFFICIAL STREET GRADE.

  TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMAN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
- 3. PIPE SHALL BE BEDDED FROM 18" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
- 4. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF
- 5. COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 18" UNDER AND 12" OVER PIPE WILL REQUIRE 90% S.P.D. OR 70% RELATIVE. TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 95% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90%
- TAPPING SADDLES REQUIRED IN AREAS WHERE THIS BEDDING SECTION IS USED.

  WHENEVER TRENCHING OCCURS, THE TRENCH SHALL BE FILLED IN BY THE END OF THE DAY OR ELSE A BMP, SUCH AS AN EROSION LOG, SHALL BE PLACED ON THE DOWNSTREAM SIDE OF THE SPOILS TO PREVENT THE TRANSPORT OF THE

SPECIAL BEDDING FOR LANDFILL DETAIL

N.T.S

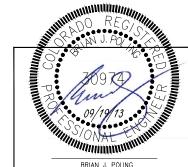
#### To be completed by Denver Water

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	Date	I.D. No.
Ī	Contract No.	Map No.

☐ Approved for Construction Approval Valid for 1 year





BRIAN J. POLING Colorado Registered Professional Engineer #30974 For and on Behalf of Merrick & Company

Computer File Infor	mation		ndex of	Revisions	
Creation Date: 01/10/12	Initials: JWRAY				
Last Modification Date: 01/13/14	Initials: MCRESTO				
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2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211



ADAMS COUNTY PUBLIC WORKS/ENGINEERING
4430 S. ADAMS COUNTY PARKWAY
1ST FLOOR, SUITE W2000B
PRICUTON CO. 20001



5970 GREENWOOD PLAZA BOULE GREENWOOD VILLAGE, CO 801	

No Revisions:	_	· · ·	Y COMM GOLD WATER	Project No./Code			
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		Detailer:	JWRAY				
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# SANITARY RELOCATION PLANS

# CLAY COMMUNITY OUTFALL RTD GOLD LINE CROSSING

### UTILITY CONTACTS

ADAMS COUNTY DEPARTMENT
OF TRANSPORTATION
4430 S. ADAMS COUNTY PKWY.
BRIGHTON, CO 80601
RUSSELL T. NELSON - (720) 523-6966
ERIC WEIS - (720) 523-6828

UDFCD 2480 W. 26TH AVE., SUITE 156-B DENVER, CO 80211 DAVE J. SKUODAS - (303) 455-6277

VERIZON/MCI 2400 NORTH GLENVILLE DR. RICHARDSON, TX 75082 ERIK BAKER – (903) 357–3282

XCEL ENERGY - ELECTRIC 5460 WEST 60TH AVE. DENVER, CO 80223 RON WHITLOW - (303) 425-3890

XCEL ENERGY - ELECTRIC 550 15TH ST., SUITE 700 DENVER, CO 80202-4256 JIM CRAIG - (303) 507-3311

XCEL ENERGY - TRANSMISSION 550 15TH ST., SUITE 700 DENVER, CO 80202-4256 WILLIAM BRAASCH - (303)-571-7082

XCEL ENERGY - GAS 1123 WEST 3RD AVENUE DENVER, CO 80223 MICHELLE MCKNIGHT - (303) 571-3358

DIVISION OF WATER RESOURCES 2030 EAST 68TH AVE. DENVER, CO 80229 GENE BRIENZA - (303) 882-9188

BERKELEY WATER & SANITATION DISTRICT 4455 WEST 58TH AVE., SUITE A ARVADA, CO 80002

SHARON WHITEHAIR - (303) 477-1914

BERKELEY WATER & SANITATION DISTRICT C/O MARTIN/MARTIN INC. 12499 WEST COLFAX AVENUE LAKEWOOD, CO 80215 BILL WILLIS - (303) 726-8520

SOUTHWEST ADAMS COUNTY FIRE RESCUE 3365 WEST 65TH AVE. DENVER, CO 80221 GARY FLETCHER - (303) 429-3597

LEVEL(3) COMMUNICATIONS 1025 ELDORADO BLVD. BROOMFIELD, CO 80021 RICK MILLER - (303) 551-3881

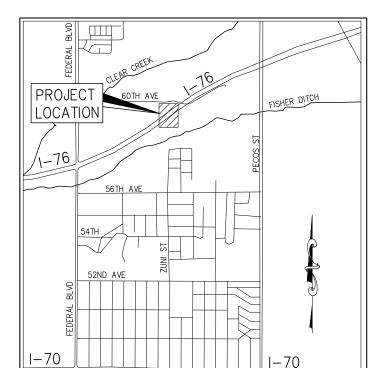
CENTURYLINK 5325 ZUNI ST, ROOM 728 DENVER, CO 80221 JODIE LEONARD - 303-451-2379

COMCAST CABLE 8490 UMATILLA ST. FEDERAL HEIGHTS, CO 80260 GLEN NELSON - (720) 281-8488

UNION PACIFIC RAILROAD 1400 WEST 52ND AVE. DENVER, CO 80221 KELLY ABARAY - (303) 405-5039

HORIZONTAL CONTROL:
ADAMS COUNTY GIS SURVEY OF SECTION
CORNERS. STATE PLANE COORDINATES,
CENTRAL ZONE. (NAD 83/92)

BENCHMARK NOTE:
THE BENCHMARK FOR THIS SITE IS FROM
ADAMS COUNTY GIS SURVEY. 3 1/4" ALUM.
CAP LS16406 IN RANGE BOX AT THE
SOUTHEAST CORNER OF SECTION 8, T3S, R68W.
THE PUBLISHED ELEVATION OF THIS MONUMENT
BEING 5271.60 U.S. FEET (NAVD 1988).
N 1716386.21
F 3136691.14



VICINITY MAP

## SHEET NO. INDEX OF SHEETS SHEET

3-4

5-7

30974

SANCVR01 TITLE SHEET
SANGN01 SANITARY NOTES & LEGEND
SANPP01-SAN02 SANITARY PLAN & PROFILE
SANDTL01-SANDTL03 SANITARY DETAILS

#### ABBREVIATIONS LIST

EL ELEVATION
INV
INVERT
EX EXISTING
PR PROPOSED
ROW RIGHT OF WAY
MH MANHOLE
LF LINEAR FEET
N NORTHING
E EASTING
R RIGHT
L LEFT
FG FINISHED GRADE
CL CENTERLINE
STA STATION
NTS NOT TO SCALE

SANITARY QUANTITY ESTIMATE		
PIPE		
6" PVC PIPE	LF	850
15" PVC PIPE	LF	958
28" STEEL CASING PIPE (OPEN CUT)	LF	536
MANHOLES		
4' MANHOLE	EA	6
6' MANHOLE	EA	1
CLEANOUTS		
6" CLEANOUT	EA	1



5970 Greenwood Plaza Boulevard Greenwood Village, Colorado 80111 Phone: (303) 751-0741 Fax: (303) 751-2581



2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211



ADAMS COUNTY
PUBLIC WORKS/ENGINEERING
4430 S. ADAMS COUNTY PARKWAY
1ST FLOOR SUITE W2000B



Call before you dig.										BRIAN J. POLING Colorado Registered Professional Engineer #30974 For and on Behalf of Merrick & Company		
Computer	File Inform	nation			Sheet	Revisions	3		CLAY COMI	MUNITY OUTFALL		Project No./Code
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#### BERKELEY NOTES

- SERVICE IN EXISTING BERKELEY WATER AND SANITARY MAINS MUST BE MAINTAINED AT AII TIMES.

  CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED AS CONSTRUCTED DRAWINGS OF INSTALLATION. INCLUDING ACCURATE DISTANCES OF MAIN LINES, DEPTHS, FITTINGS, AND LOCATIONS OF VALVES, BENDS AND WATER HYDRANTS.
- CONTRACTOR/OWNER SHALL SUBMIT CERTIFIED AS CONSTRUCTED DRAWINGS TO BERKELEY WATER AND SANITATION DISTRICT IN ACAD FORMAT 2008.
- DEWATERING, INCLUDING ALL PERMITTING IS CONTRACTOR'S RESPONSIBILITY.
  PIPE SHALL BE RESTRAINED FULL LENGTH. THRUST BLOCK RESTRAINTS SHALL BE PLACED AT ALL BENDS AND DEAD ENDS IN ADDITION TO JOINT RESTRAINT PER DETAILS AND SPECIFICATIONS.

#### GENERAL NOTES FOR EROSION & SEDIMENT CONTROL

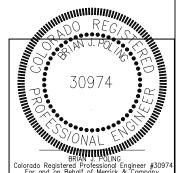
- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AII SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR, ACCUMULATE IN, THE FLOWLINES, STORM DRAINAGE APPURTENANCES, AND PUBLIC RIGHTS OF WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER.
  2. CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND AII OTHER POLLUTANTS FROM ENTERING THE STORM SEWER
- SYSTEM DURING ALL EXCAVATION, TRENCHING, OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS
- THE CONTRACTOR SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS
- 4. THE USE OF REBAR TO ANCHOR BEST MANAGEMENT PRACTICES IS PROHIBITED.
- APPROVED EROSION AND SEDIMENT CONTROL 'BEST MANAGEMENT PRACTICES' SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT.
- THE CONTRACTOR SHALL PROTECT All STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS ARE OCCURRING. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS OR AS NEEDED THROUGHOUT THE WORK
- 7. PAVED ROADWAYS WHICH ARE ADJACENT TO CONSTRUCTION SITES MUST BE SWEPT AS NEEDED WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ONTO THEM.

#### SEWER NOTES:

- 1. THE METRO WASTEWATER RECLAMATION DISTRICT STANDARD CONSTRUCTION SPECIFICATIONS AND DRAWINGS SHALL BE THE MINIMUM REQUIREMENTS.
- PIPE AND FITTINGS: POLYVINYL CHLORIDE (PVC) 4"-15", ASTM D3034, TYPE PSM, SDR 35: 18"- 27", ASTM F679, WALL THICKNESS T -1; PUSH ON JOINTS AND MOLDED RUBBER GASKETS. MAXIMUM HORIZONTAL DEFLECTION, AFTER INSTALLATION AND BACKFILLING, SHALL NOT EXCEED 5% OF THE PIPE DIAMETER
- EACH SECTION OF SEWER PIPE SHALL BE TELEVISED, TAPED AND SUBMITTED TO ENGINEER TO REVIEW
- THE CONTRACTOR IS RESPONSIBLE FOR 24 HOUR NOTIFICATION OF ALL CUSTOMERS POSSIBLY AFFECTED BY OUTAGE OF SEWER SERVICE DURING CONSTRUCTION.
- 5. CONTRACTOR SHALL MAINTAIN A DRY TRENCH TO INSURE INTEGRITY OF TRENCH BOTTOM. IF TRENCH BOTTOM BECOMES WET AND, IN THE OPINION OF THE ENGINEER, IS NOT ADEQUATE TO SUPPORT THE PIPE, THE CONTRACTOR SHALL PLACE 1 1/2" WASHED RIVER ROCK AT NO ADDED EXPENSE TO THE OWNER OR ENGINEER ADDITIONALLY, CONTRACTOR IS SOLELY RESPONSIBLE FOR THE USE OF ADEQUATE BACKFILL TO MEET COMPACTION AND MOISTURE CONTENT SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED CERTIFIED AS-BUILTS FROM A REGISTERED PROFESSIONAL LAND SURVEYOR AND VIDEOTAPE OF ALL SEWER LINE INSTALLATIONS, INCLUDING ACCURATE DISTANCES OF MAIN LINES, DEPTHS, FITTINGS, MANHOLES AND LOCATIONS OF SEWER SERVICES.
- EASEMENTS SHALL INCLUDE ALL APPLICABLE TITLE AND AGREEMENT INFORMATION WITHIN THE PUBLIC SERVICE R.O.W.

#### ---- FXISTING MAJOR CONTOUR ---- EXISTING MINOR CONTOUR EXISTING PROPERTY LINE EXISTING ROW LINE SECTION LINE EXISTING EASEMENT LINE EXISTING ASPHALT ——— OHE ——— FXISTING OVERHEAD FLECTRIC —— UGE —— UGE —— EXISTING UNDERGROUND ELECTRIC — E — E — EXISTING FIBER OPTIC LINE ----- SAN ------- EXISTING SANITARY SEWER ----- STM ----- STM ---- EXISTING STORM SEWER ----- EXISTING WATER LINE —— GAS ——— GAS —— EXISTING GAS LINE ---- T ----- T ---- EXISTING TELECOMMUNICATIONS LINE — x — x — x — FXISTING FENCE ---X--X--X--X--X--X--X--- EXISTING LINE TO BE ABANDON IN PLACE EXISTING POWER POLE & GUY WIRE (S)EXISTING SANITARY SEWER MANHOLE EXISTING STORM SEWER MANHOLE (ST) EXISTING WATER VALVE & FIRE HYDRANT EXISTING TELECOMMUNICATIONS BOX EXISTING TREE EX WETLANDS BOUNDARY --5220-----PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR PROPOSED EASEMENT LINE PROPOSED TEMPORARY CONSTRUCTION EASEMENT PROPOSED PROPERTY LINE PROPOSED PIPE EDGE DRAIN PROPOSED FENCES - STM - PROPOSED STORM SEWER — sтм — PROPOSED WALL PROPOSED CONCRETE TRAIL PROPOSED BORE ----- PROPOSED WATER LINE (ST) PROPOSED STORM MANHOLE PROPOSED STORM INLET & OUTLET STRUCTURES PROPOSED SANITARY MANHOLE PROPOSED BLOWOFF PROPOSED WATER VALVE & FIRE HYDRANT RTD R.O.W.

LEGEND



Know what's **below.** 

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2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211

ADAMS COUNTY TRANSPORTATION/ENGINEERING
4430 S. ADAMS COUNTY PARKWAY
1ST FLOOR, SUITE W2000B
BRIGHTON, CO 80601

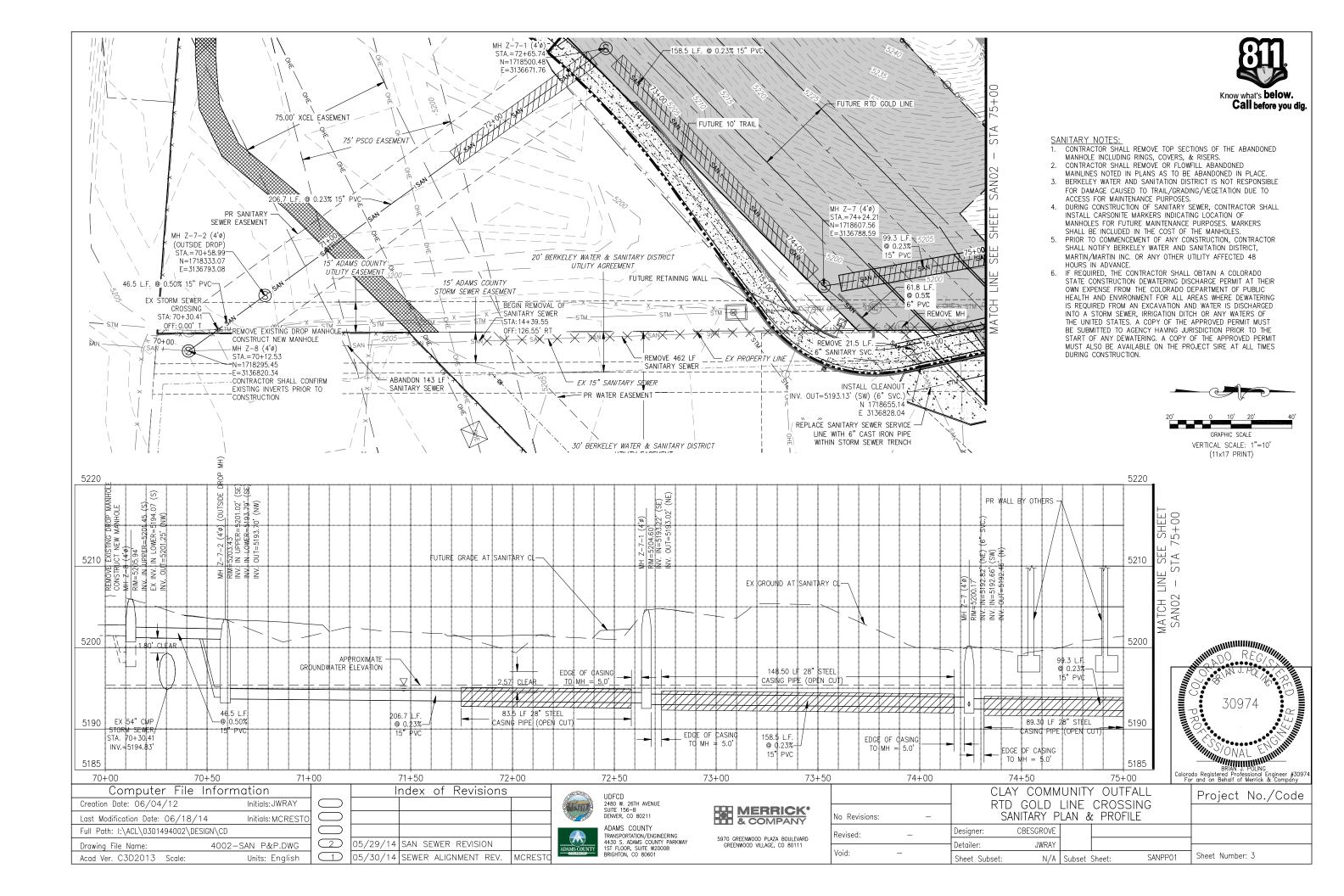


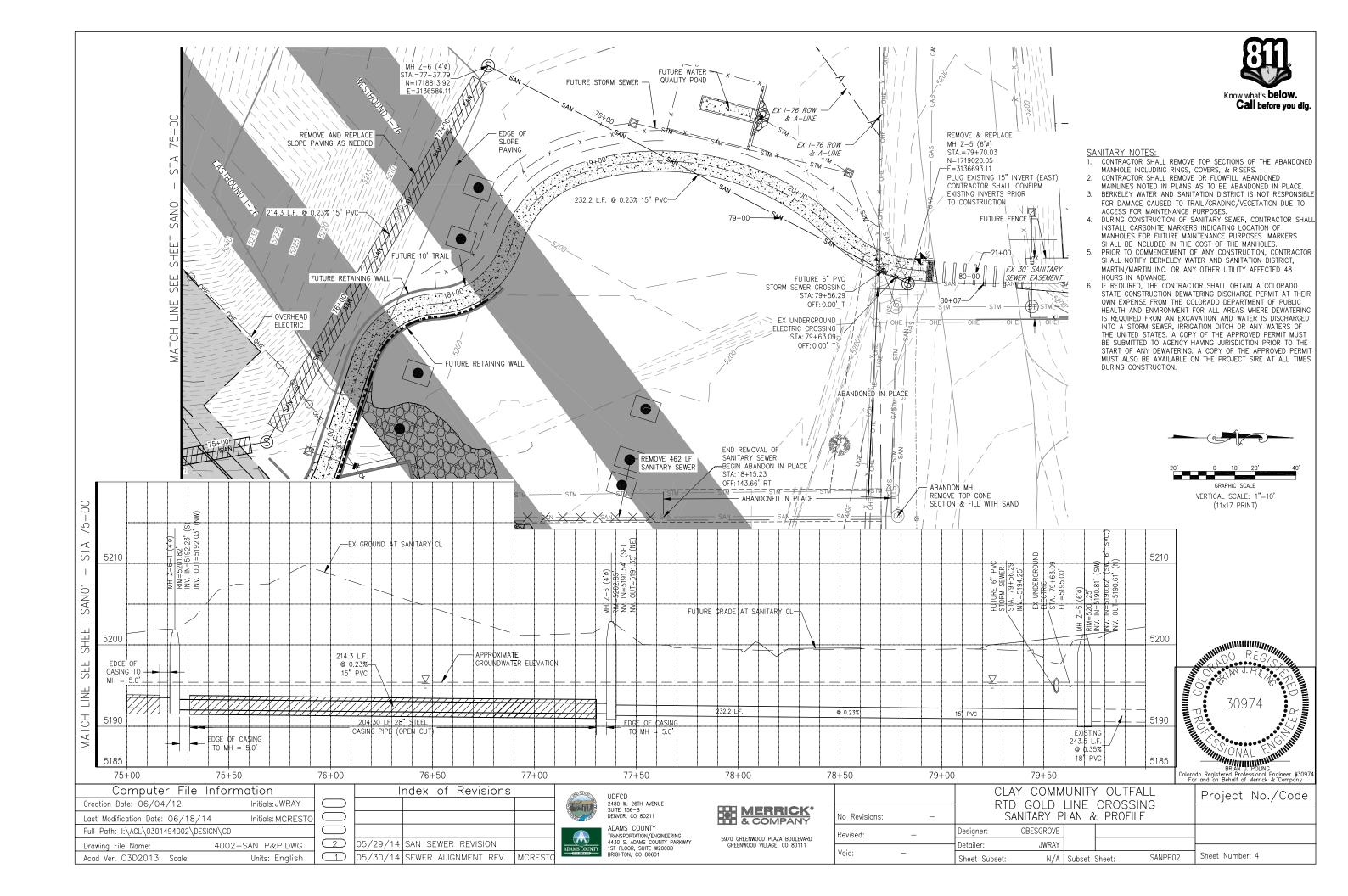
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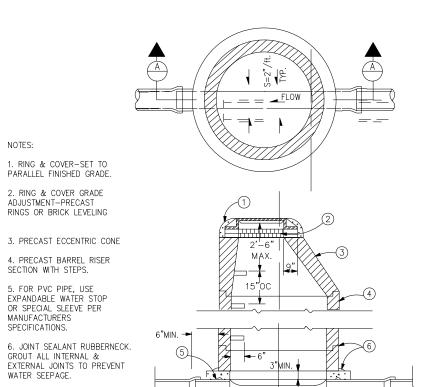
RTD COMMON USE AREA FUTURE WATER QUALITY POND

100-YR WATER SURFACE ELEVATION









10" MIN.

SECTION A

STANDARD MANHOLE

NOTES:

2. RING & COVER GRADE ADJUSTMENT-PRECAST

SECTION WITH STEPS.

SPECIFICATIONS.

WATER SEEPAGE.

GROUT ALL INTERNAL &

7. BASES CAST IN PLACE

W/H20 LOADING AS APPROVED

BY THE DISTRICT/JURISDICTION.

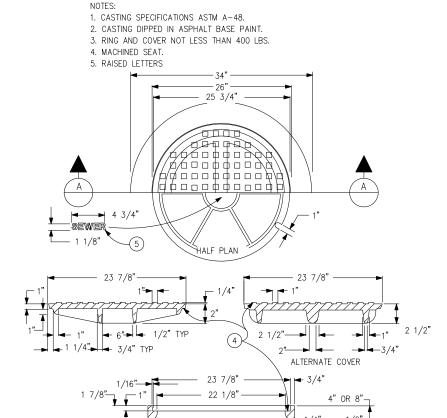
8. MINIMUM 95% COMPACTION ON

SUBGRADE SHALL BE ACHIEVED

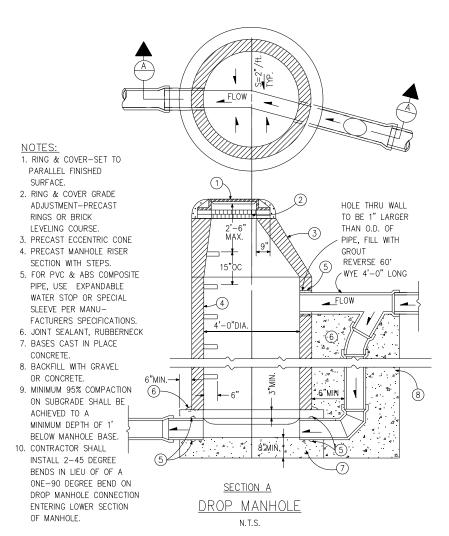
TO A MINIMUM DEPTH OF 1'

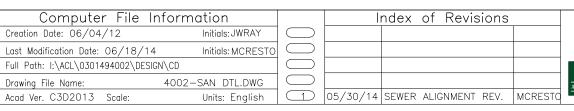
BELOW MANHOLE BASE.

CONCRETE OR PRECAST



7/8" SECTION A-A CAST IRON 24" MANHOLE, RING AND COVER \*LID SHALL BE SET 1/4-INCH BELOW FINAL ASPHALT GRADE







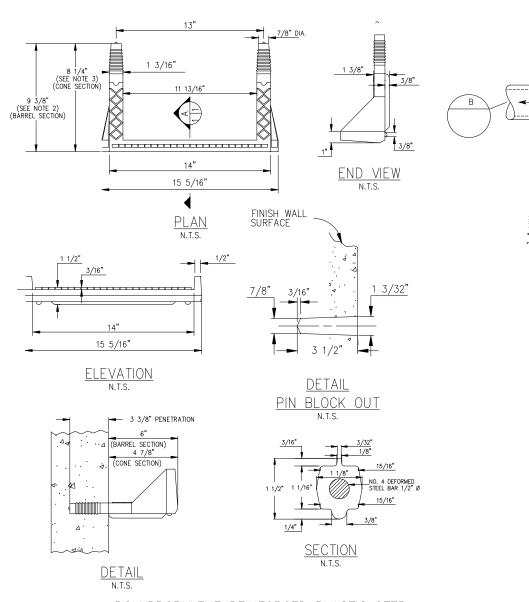
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4430 S. ADAMS COUNTY PARKWAY
1ST FLOOR, SUITE W2000B
BRIGHTON, CO 80601



5/8"\_

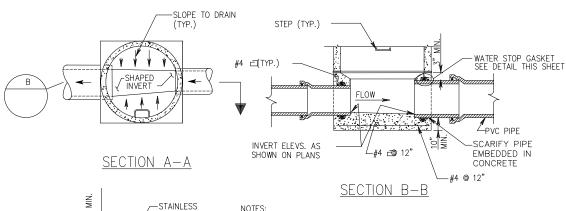
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Revised:	_	Designer:	CBESGROVE				
		Detailer:	JWRAY				
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#### POLYPROPYLENE REINFORCED PLASTIC STEP

NOTES:
1. ASTM SPECIFICATIONS:

- ASTM A-615 GRADE 60 (STEEL REBAR). ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
- SHALL HAVE A 9 3/8 INCH LEG AND SHALL PROJECT FROM THE WALL 6 INCHES.
- 2. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8 1/4 INCH LEG AND SHALL PROJECT
- FROM THE WALL 4 7/8 INCHES.
- ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3 3/8 INCHES.
- STEPS SHALL BE INSTALLED BY THE "PRESS FIT" METHOD UTILIZING, A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S 2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED
- INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
- PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. W.M.D. INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER
- 7. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.



STEEL CLAMP

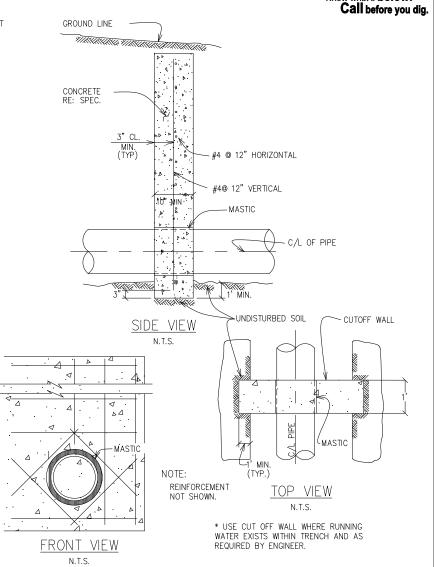
1 ½ MIN.

WATER STOP GASKET DETAIL 1. RUBBER FOR GASKETS SHALL BE NEOPRENE OR SIMILAR SYNTHETIC RUBBER.

2. FLEXIBLE SEALING COMPOUND SHALL BE K.T. SNYDER "RAM—NEK" OR EQUAL.

3. STEPS SHALL BE EXTRUDED ALUMINUM OR PLASTIC— COVERED STEEL. ACCEPTABLE STEPS ARE AS FOLLOWS: ALUMINUM—ALCOA CO. NO. 12653B POLYPROPYLENE—M.A. INDUSTRIES NO. PS2—PF H. BOWEN CO. BOWCO NO. 93813 RUBBER-DELTA PIPE PRODUCTS WEDG-LOK WL-11

PVC PIPE DETAILS N.T.S.



Know what's below.

TYPICAL CUTOFF WALL

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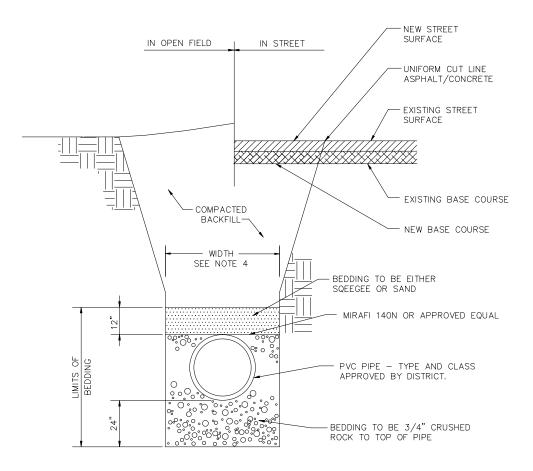
2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211

ADAMS COUNTY TRANSPORTATION/ENGINEERING
4430 S. ADAMS COUNTY PARKWAY
1ST FLOOR, SUITE W2000B
BRIGHTON, CO 80601



5970 GREENWOOD PLAZA BOULEVARD GREENWOOD VILLAGE, CO 80111

			Y COMM				Project No./Code
No Revisions:	_	KIL	RTD GOLD LINE CROSSING SANITARY DETAILS				
Revised:	_	Designer:	CBESGROVE				
		Detailer:	JWRAY				
Void:	_	Sheet Subset:	N/A	Subset	Sheet:	SANDTL02	Sheet Number: 6

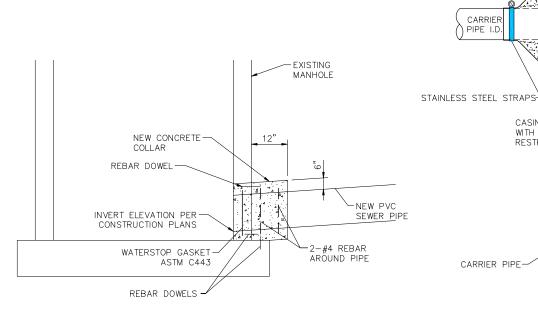


#### TYPICAL TRENCH SECTION

- 1. MINIMUM COVER TO BE 4.5' BELOW OFFICIAL STREET GRADE.
- 2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMAN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.

  3. PIPE SHALL BE BEDDED FROM 18" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
- 4. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE.
- 5. COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 18" UNDER AND 12" OVER PIPE WILL REQUIRE 90% S.P.D OR 70% RELATIVE. TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 95% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90% S.P.D.

SPECIAL BEDDING DETAIL N.T.S.



1. USE CONCRETE BONDING AGENT

PROPOSED TIE-IN PIPE.

EXISTING PRECAST CONCRETE.

2. CORE DIAMETER IN EXIST. MH TO BE ONE PIPE-SIZE LARGER THAN

BETWEEN NEW CONCRETE AND THE

CASING SPACER

RESTRAINT SYSTEM -

WITH JOINT

3. RESHAPE INVERTS & BENCHES USING CONCRETE TO ACHIEVE PROPER FLOW THROUGH MANHOLE.

-VOID BETWEEN SPACER & CASE VARIES STEEL CASING PIPE -CASING SPACER CARRIER PIPE

CARRIER PIPE

FILL VOID

1/8" RUBBER END SEAL

CARRIER

PIPE I.D

WITH SAND-

#### NOTES:

1. CASING SPACERS SHOULD BE INSTALLED EVERY 10' PER MANUFACTURER'S REQUIREMENTS.

Know what's below. Call before you dig.

-CASING SPACER

-STEEL CASING PIPE

2. PROVIDE UNIFLANGE RESTRAINED CASING SPACERS 1300 & 1390 OR EQUAL.

CARRIER PIPE	CASING PIPE					
NOMINAL Ø	MIN OD	MIN WALL THICKNESS				
4"	12"	0.25"				
6"	16"	0.3125"				
8"	18"	0.3125"				
12"	22"	0.375"				
16"	28"	0.500"				
20"	32"	0.500"				
	1					

RESTRAINED CASING PIPE N.T.S.

-1/2" GROUT OVER

COURSE AT EACH

END OF CASING.

FOUR INCH BRICK

PIPE CASING DETAIL

SLED DETAIL

#### CONNECTION TO EXISTING MANHOLE N.T.S.

NOTES:

Computer File Information	Index of Revisions
Creation Date: 06/04/12 Initials:JWRAY	
Last Modification Date: 06/18/14 Initials: MCRESTO	
Full Path: I:\ACL\0301494002\DESIGN\CD	
Drawing File Name: 4002—SAN DTL.DWG	
Acad Ver. C3D2013 Scale: Units: English	05/30/14 SEWER ALIGNMENT REV. MCRESTO



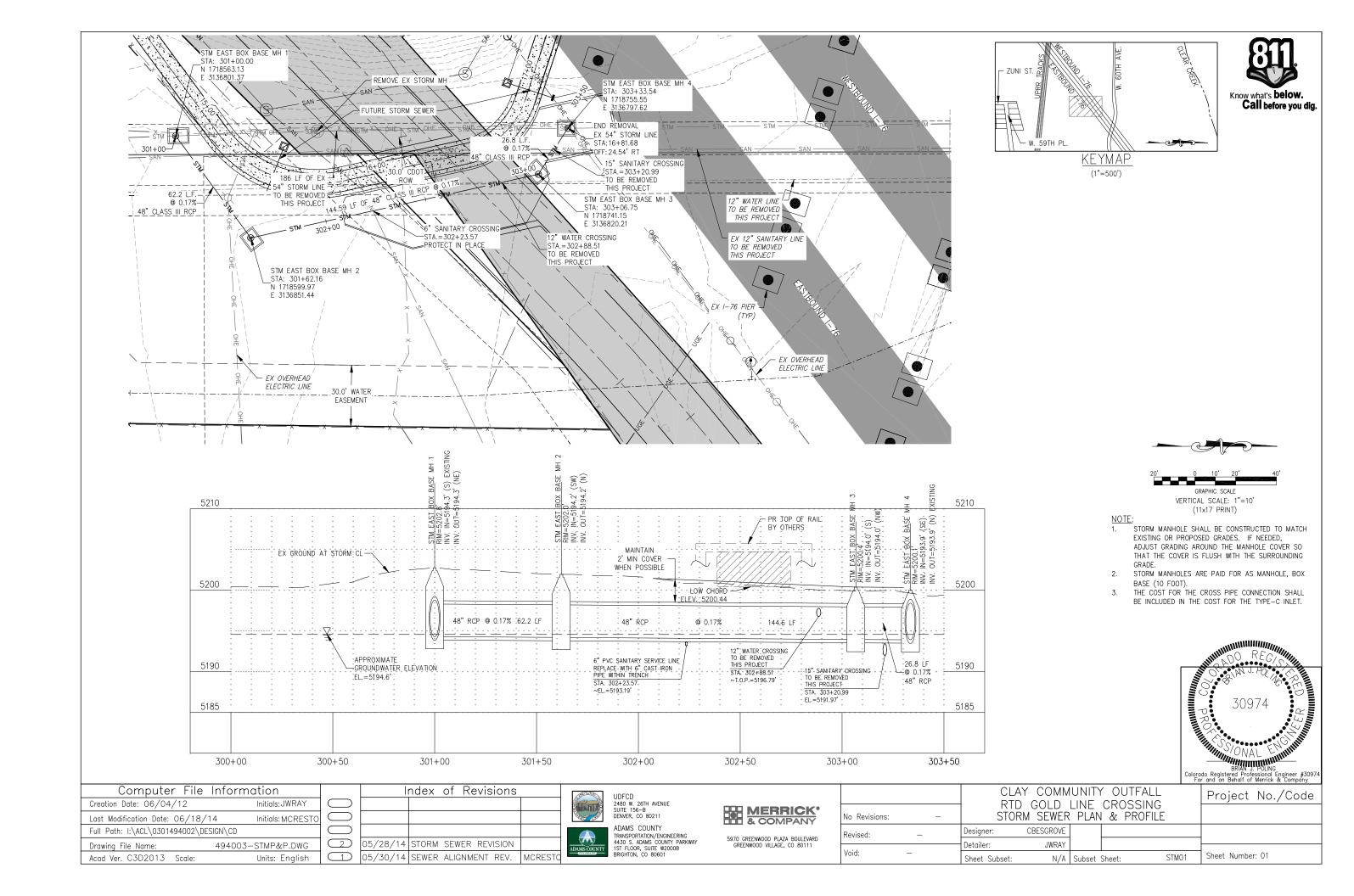
2480 W. 26TH AVENUE SUITE 156-B DENVER, CO 80211

ADAMS COUNTY TRANSPORTATION/ENGINEERING
4430 S. ADAMS COUNTY PARKWAY
1ST FLOOR, SUITE W2000B
BRIGHTON, CO 80601



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REENWOOD VILLAGE, CO 80111	Void:

		]	AY COMM				Project No./Code
No Revisions:	_	RTD GOLD LINE CROSSING SANITARY DETAILS					
Revised:	_	Designer:	CBESGROVE				
		Detailer:	JWRAY				
Void:	_	Sheet Subset:	N/A	Subset	Sheet:	SANDTL03	Sheet Number: 7



#### Exhibit J-4

# EXHIBIT "A" CLAY STREET COMMUNITY TRAIL AND OUTFALL SYSTEM ACCESS EASEMENT NO. 1 Date: February 11, 2015 DESCRIPTION

Clay Street Community Trail and Outfall System Access Easement No. 1 of the RTD Gold Line Corridor Commuter Rail Project, being GL-5A REV2 as described at Reception No. 2012000037579 recorded May 24, 2012 in the Adams County Clerk and Recorder's Office, located in the Southwest Quarter of Section 9, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being additionally described as follows:

COMMENCING at the West Quarter Corner of said Section 9 (being a found 3-¼" aluminum cap stamped "COLO DEPT OF HIGHWAYS T3S R68W S8 S9 ¼ 1988 PLS 20160"), WHENCE the Center Quarter Corner of said Section 9 (being a found 3-¼" aluminum cap stamped "Flatirons Surveying T3S R68W C1/4 Sec 9 1996 LS 16406") bears S89°57'48"E a distance of 1335.49 feet (basis of bearing – assumed); THENCE S18°41'56"E a distance of 395.26 feet to the westerly line of Disner Subdivision, recorded July 21, 1978 in File 14, Map 415 at Reception No. B145125, and the POINT OF BEGINNING;

THENCE the following four (4) courses coincident with the westerly, northwesterly and southeasterly lines of said GL-5A REV2:

- 1) N00°11'46"E a distance of 27.86 feet;
- 2) N47°04'10"E a distance of 0.94 feet;
- 3) N55°04'08"E a distance of 126.58 feet;
- 4) \$45°59'57"W a distance of 145.36 feet to the POINT OF BEGINNING.

Containing 1,460 square feet, (0.034 Acres), more or less.

Prepared by: 24

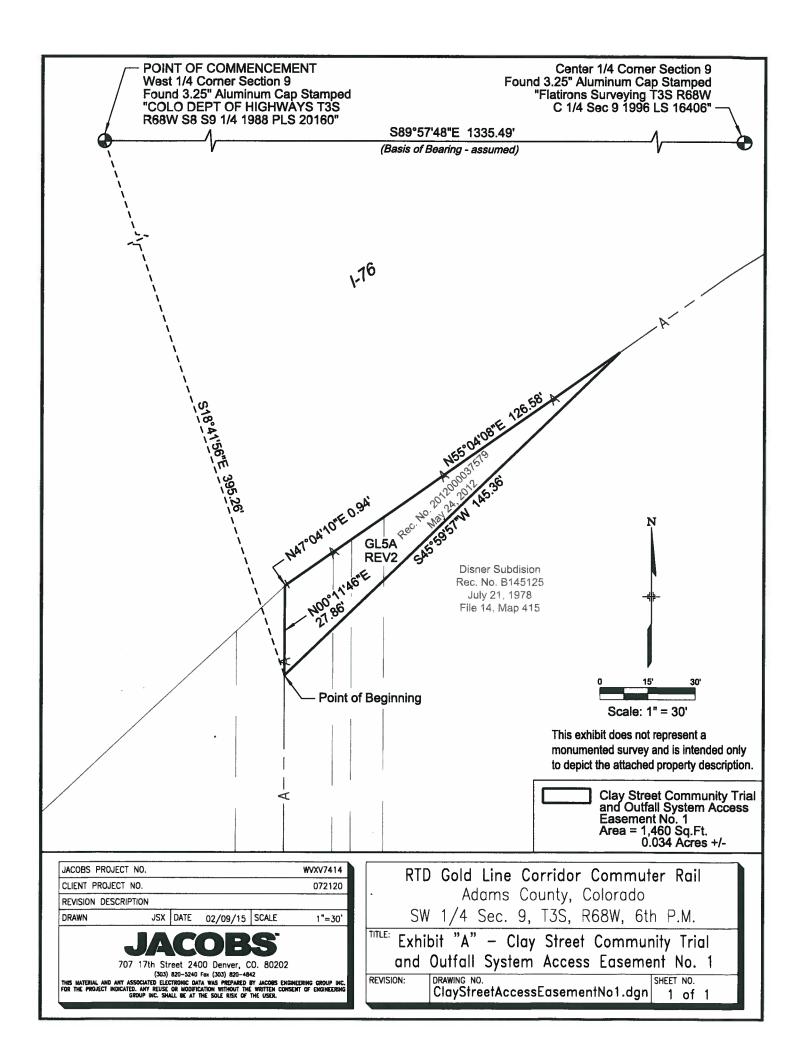
Kenneth W. Carlson PLS 24942

For and an behalf of Jacobs Engineering Group Inc.

707 17th Street#2400

Denver, CO 80202

303.820.5240



# EXHIBIT "A" CLAY STREET COMMUNITY TRAIL AND OUTFALL SYSTEM ACCESS EASEMENT NO. 2

Date: February 11, 2015 <u>DESCRIPTION</u>

Clay Street Community Trail and Outfall System Access Easement No. 2 of the RTD Gold Line Corridor Commuter Rail Project, being a portion of PE-5A as described at Reception No. 2012000037580 recorded May 24, 2012 in the Adams County Clerk and Recorder's Office, located in the Southwest Quarter of Section 9, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

COMMENCING at the West Quarter Corner of said Section 9 (being a found 3-¼" aluminum cap stamped "COLO DEPT OF HIGHWAYS T3S R68W S8 S9 ¼ 1988 PLS 20160"), WHENCE the Center Quarter Corner of said Section 9 (being a found 3-¼" aluminum cap stamped "Flatirons Surveying T3S R68W C1/4 Sec 9 1996 LS 16406") bears S89°57'48"E a distance of 1335.49 feet (basis of bearing – assumed); THENCE S18°41'56"E a distance of 395.26 feet to the southwesterly corner of GL-5A REV2 as described at Reception No. 2012000037579 recorded May 24, 2012 in said office, and the POINT OF BEGINNING;

THENCE N45°59'57"E coincident with the southeasterly line of said GL-5A REV2 a distance of 145.36 feet:

THENCE N55°04'08"E coincident with the southeasterly line of the I-76 right-of-way a distance of 279.87 feet;

THENCE S51°20'49"E a distance of 20.85 feet:

THENCE S55°04'08"W coincident with a line 20.00 feet southeasterly of and parallel with said southeasterly right-of-way line a distance of 284.18 feet;

THENCE S45°59'57"W coincident with a line 20.00 feet southeasterly of and parallel with said southeasterly line of GL-5A REV2 a distance of 163.22 feet;

THENCE N00°11'46"E coincident with the westerly line of said PE-5A a distance of 27.90 feet to the POINT OF BEGINNING.

Containing 8,726 square feet, (0.200 Acres), more or less.

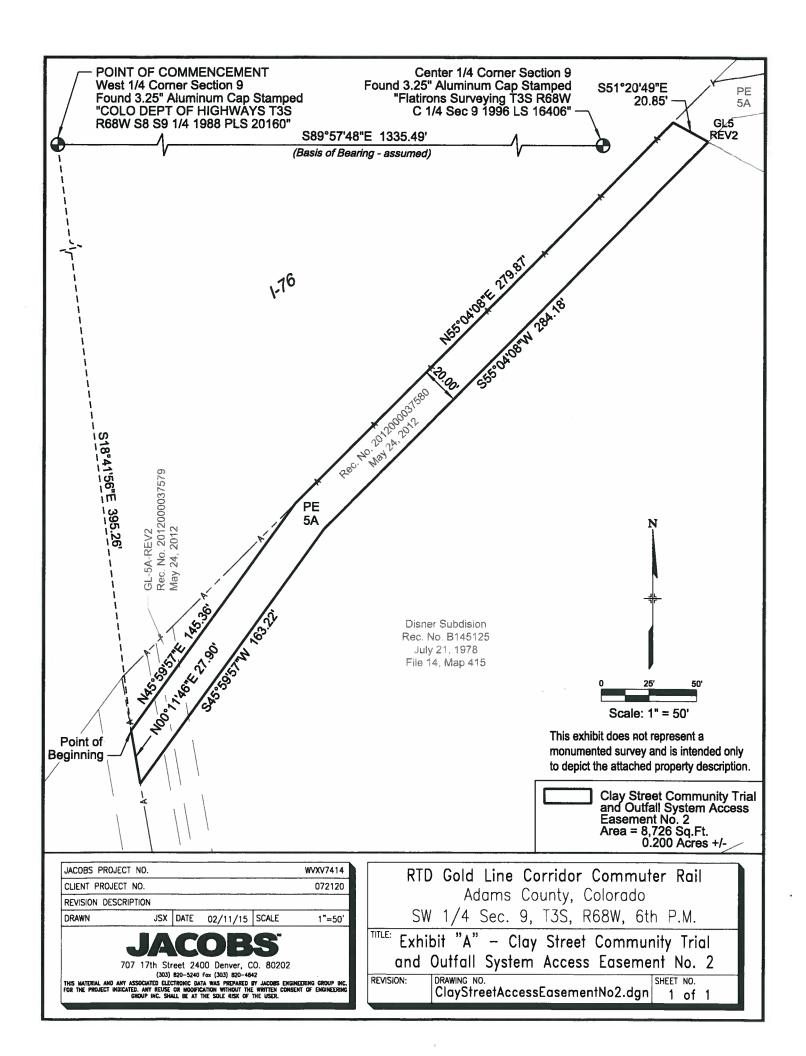
Prepared by:

Kenneth W. Carlson PLS 24942

For and on behalf of Jacobs Engineering Group Inc.

707 17th Street #2400 ALL

Denver, CO 80202 303.820.5240



RECEPTION#: 2012000037580, 05/24/2012 at 02:23:46 PM, 1 OF 5, TD Pgs: 0 Doc

Type: EAS Karen Long, Adams County, CO Recorded As Received

# DRIVEWAY AND ACCESS ROAD EASEMENT AGREEMENT

THIS DRIVEWAY AND ACCESS ROAD EASEMENT AGREEMENT (this "Agreement") is made and entered into as of the 24<sup>th</sup> day of May, 2012, by and between Patrick Henry Disner and Kathleen I. Disner ("Grantors"), with a mailing address of 15301 Pless Drive, Brighton, CO 80601 and the REGIONAL TRANSPORTATION DISTRICT ("Grantee"), a political subdivision of the State of Colorado with a mailing address of 1600 Blake Street, Denver, CO 80202-1399 (individually, a "Party" and collectively, the "Parties").

Subject to and in accordance with the terms, covenants and conditions contained in this Agreement, and in consideration of the mutual agreements contained herein, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

- GRANT. Grantor hereby grants to Grantee, its heirs, successors and assigns, a nonexclusive, permanent easement (the "Easement") for the purposes of (i) the reconstruction and reorientation of a driveway by Grantee (the "Driveway") (ii) vehicular and pedestrian ingress and egress to and from West 60th Avenue across the Driveway to Grantee's transit corridor, including without limitation a parcel of land as described and/or depicted on Exhibit A, attached hereto and incorporated herein by this reference (the "Grantee's Property"); and (iii) vehicular and pedestrian ingress and egress to and from West 60th Avenue across the Driveway to current and future utility easements in the vicinity of the Southerly right-of-way line of I-76, all on certain real property owned by Grantor and described on the attached Exhibit B-1 (the "Driveway Easement") and Exhibit B-2 (the "Access Easement") (collectively, the "Premises"), together with all appurtenances thereto, and together with the right to enter upon the Premises and upon so much of the adjoining land of Grantor as may be reasonably required to install and construct the Driveway and to utilize the Access Easement (the "Use"). Grantee shall have no maintenance obligations of the Driveway and reconstruction of the Driveway shall not include any seeding, reseeding, planting, replanting, mowing or landscaping. The Easement shall be an easement appurtenant to Grantee's Property, shall run with the land, and shall inure to the benefit of Grantee's heirs, successors and assigns, subject to the conditions set forth herein. Grantor shall maintain the Driveway in good order, condition and repair, in compliance with all laws and regulations and free of mechanics' or materialmen's liens. All costs associated with Grantor's use of the Driveway, including without limitation reconstruction, repair, maintenance, landscaping, snow removal, and use by third parties shall be borne by Grantor.
- II. RESERVED RIGHTS. Grantor retains the right to use and occupy the Premises insofar as such use and occupancy is consistent with and does not impair the Grantee's Use of the Easement.
- III. COVENANTS. Grantor covenants and agrees that, as of the date hereof, Grantor is well seized of the property underlying the Premises, and has full power and authority to grant and convey the Premises, and that the Premises is free and clear of all former grants, bargains, sales, liens, delinquent taxes or assessments, or any other encumbrances or restrictions of any kind. Grantor hereby warrants title in the Premises to RTD, its successors and assigns, against the claims and demands of any persons lawfully claiming the same. Grantor covenants and agrees that no building, structure, wall, fence, tree, irrigation system, utility installation or other above or below ground obstruction that would interfere with the Use is now or may be placed, erected, installed or permitted on the Premises; and further covenants and agrees that in the event of any violation of the terms of this covenant, such violation will be corrected and eliminated immediately upon receipt of notice from Grantee, and Grantee shall have the right to

RECEPTION#: 2012000037580, 05/24/2012 at 02:23:46 PM, 2 OF 5, Doc Type:EAS TD

Flages: 0 Karen Long, Adams

correct and eliminate such violation in which event the Grantor, its administrators, legal representatives, successors and assigns, shall promptly reimburse Grantee for the actual costs thereof.

**IV. ASSIGNMENT.** The Easement, or any part thereof or interest therein, may be assigned by Grantee without the prior consent of Grantor.

IN WITNESS WHEREOF, the Grantor has executed this Agreement.

GRANTORS:	Date: 5/24/12
Patrick Henry Disner	
Kathleen I. Disner	n
STATE OF COLORADO ) ss.	

The foregoing instrument was acknowledged before me this 24<sup>th</sup> day of May, 2012, by Patrick Henry Disner and Kathleen I. Disner.

**Notary Public** 

Witness my hand and official seal.

My commission expires:

MICHELE A SPENCER NOTARY PUBLIC STATE OF COLORADO

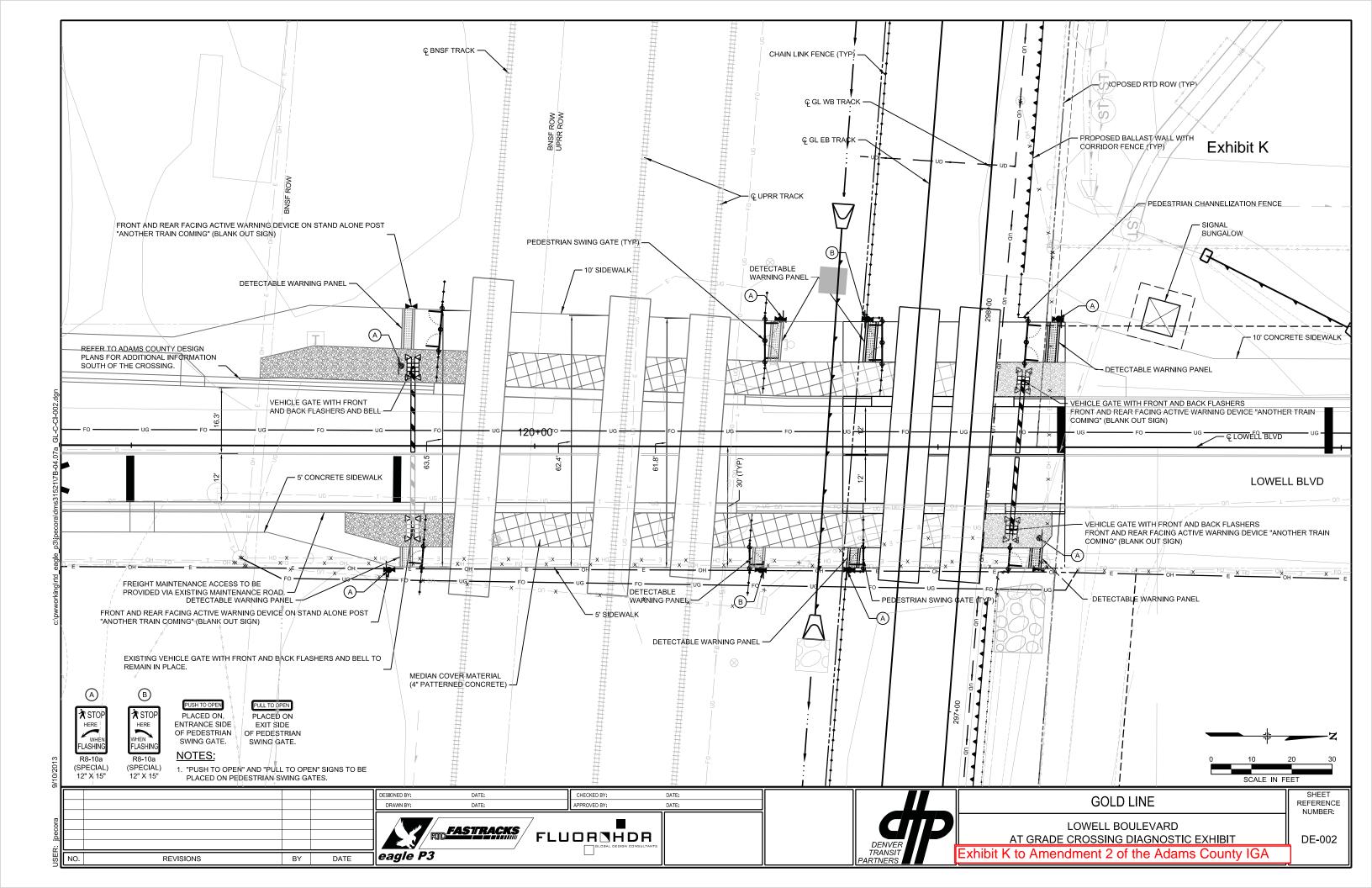
MY COMM. EXP. 11/2/2014

#### **ATTACHMENT 4**

### Exhibit K to the IGA

## **Lowell Boulevard Crossing**

[attached]



#### **ATTACHMENT 5**

#### Exhibit L-1 and L-2 to the IGA

## West 60<sup>th</sup> Avenue Improvements and Federal Requirements

- 1) Exhibit L-1: West 60th Avenue Improvements
- 2) Exhibit L-2: Federal Requirements

[attached]

#### TABULATION OF LENGTH & DESIGN DATA

	FE	ET
STATION	ROADWAY	MAJOR STRUCTURE
STA. 100+42, BEGIN PROJECT STA. 114+40, END PROJECT	1,398	N/A
DESIGN DATA (ADCO DESIGN CRITERIA U.N.O)		
DESIGN SPEED POSTED SPEED LIMIT	35 MPH 30 MPH	
MINIMUM HORIZONTAL RADIUS (ADCO T. 7.12) MAXIMUM DEGREE OF CURVE AT DESIGN SPEED	415 11.23	
MINIMUM HORIZONTAL RADIUS (AASHTO T. 3-13a) MAXIMUM DEGREE OF CURVE AT DESIGN SPEED	510' 13.81	
MAXIMUM / MINIMUM ALLOWABLE GRADE	0.5% / 4%	
MINIMUM S.S.D. HORIZONTAL (ADCO T. 7.3) MINIMUM S.S.D. VERTICAL (ADCO T. 7.14)	225' - 250' 225' - 250'	
K MIN (CREST) (ADCO T. 7.14) K MIN (SAG) (ADCO T. 7.14)	40 - 50 50	
DESIGN GRADE: MIN / MAX DESIGN K MIN	0.5% / 2.27% 50	
2034 DESIGN ESAL	2,068,801	
PROJECT DESIGN EXCEPTIONS		
NONE AS OF THIS PROGRESS SET NONE KNOWN AT THIS TIME	N/A	

#### **CONTACTS**

COUNTY ENGINEER:

ADAMS COUNTY 4460 S. ADAMS COUNTY PARKWAY

BRIGHTON, CO 80601 GREG LABRIE, PE 720-523-6824

CIVIL ENGINEER

4582 S. ULSTER STREET #240 DENVER, CO 80237 BRIAN McLAREN, PE 303-740-7325

REFER TO ########## SHEET #### FOR UTILITY OWNERS.



# **ADAMS COUNTY**

# **DEPARTMENT OF TRANSPORTATION** PLAN AND PROFILE OF PROPOSED WEST 60TH AVENUE REALIGNMENT FEDERAL BOULEVARD TO THE RTD GOLD LINE FEDERAL STATION

ADAMS COUNTY PROJECT NO. IMP2014-000## ADAMS COUNTY, COLORADO

TO WESTMINSTER



VICINITY MAP SCALE 1" = 500'

Exhibit L-1

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5-6	G005-G006	SUMMARY OF APPROXIMATE QUANITITES
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11 10	(NOT LIGED	)

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CDOT STANDARD PLANS

ADAMS COUNTY	
APPROVED FOR BID:	
DIRECTOR OR TRANSPORTATION	DATE
PROJECT MANAGER	DATE

Computer File Information Index of Revisions Designed By: DKIM R-Creation Date: (R-02/26/2014 R-Last Modification Date: EED 04/30/2014 Drawing File Name: ../SHEET/86901-PL001-GCV.DWG AutoCAD Version: C3D 2011 Units:

COLORADO BRIGHTON, COLORADO, 80601 CONTACT: GREG LABRIE, PE

4582 S. Ulster St. Ste 240 Denver, CO 80237 Phone (303) 740-7325 Fax (303) 224-9997

CONTACT: BRIAN McLAREN, PE

AS OF 07/18/2014 NOT FOR CONSTRUCTION

**PROGRESS** 

PRINT

W. 60TH AVENUE & CLEAR CREEK

ROADWAY AND CHANNEL REALIGNMENT

Sheet Name

**GENERAL COVER SHEET** 

G001 Sheet Number

Project No. / Code

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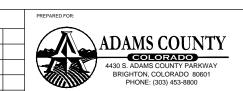
COLORADO DEPARTMENT OF TRANSPORTATION M&S STANDARDS PLANS LIST July 04, 2012

Revised on March 27, 2014

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

NEW OR REVISED STANDARD PLAN SHEETS APPLICABLE TO THIS PROJECT, INDICATED BY A MARKED BOX , WILL BE ATTACHED TO THE PLANS.

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S-627-1		PAVEMENT MARKIN	GS (5 SHEETS) (REVISED	ON SEPTEMBER 16, 2013) 234-238
S-630-1		TRAFFIC CONTROLS (20 SHEETS) (REVISE)	FOR HIGHWAY CONST ON MARCH 27, 2014)	RUCTION239-258
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□ S-630-7		ROLLING ROADBLOG (3 SHEETS)	CKS FOR TRAFFIC CON	TROL266-268



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CONTACT: BRIAN McLAREN, PE

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STANDARD PLANS LIST

W. 60TH AVENUE & CLEAR CREEK

ROADWAY AND CHANNEL REALIGNMENT **GENERAL** Sheet Name G002 Sheet Number

Comp	outer File Infor	mation			Index of Revisions	
Designed By:	DKIM	Drawn By:	DKIM	R-		
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AutoCAD Version:	C3D 2011	Units:	English	R-		

- GENERAL
  THE NOTES PROVIDED ON THIS SHEET ARE APPLICABLE TO ALL SHEETS CONTAINED WITHIN THIS SET OF DRAWINGS. THE ORGANIZATIONAL HEADINGS PROVIDED ON THIS SHEET ARE FOR SYSTEMATIC STRUCTURE ONLY, AND DO NOT LIMIT THE APPLICABILITY OF THE SPECIFIC NOTE; NOTES ARE NOT LIMITED TO THE HEADING OF THE SECTION THE NOTE IS LISTED UNDER.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE COPY OF THE APPROVED PLANS & SPECIFICATIONS, STANDARDS, APPROVED GEOTECHNICAL REPORT CONTAINING SOILS AND PAVEMENT RECOMMENDATIONS, AND DETAILS FROM THE APPROPRIATE URISDICTIONAL AGENCIES, COPIES OF THE STORM WATER MANAGEMENT PLAN AS FILED WITH THE STATE AND LOCAL JURISDICTION. AND COPIES OF ALL PERMITS AT THE JOB SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH ADAMS COUNTY DEVELOPMENT STANDARDS AND REGULATIONS, THE COLORADO DEPARTMENT TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE CONTRACT DOCUMENTS. FOR OTHER APPLICABLE STANDARDS, IT IS THE INTENT OF THE COUNTY TO USE COLORADO DEPARTMENT OF TRANSPORTATION M & S STANDARDS, MOST RECENT EDITION. DRAINAGE RELATED APPURTENANCES NOT REFERENCED BY ADAMS COUNTY STANDARDS SHALL BE PER URBAN DRAINAGE & FLOOD CONTROL DISTRICT STANDARDS & POLICIES.
- 4. PAVEMENT RECOMMENDATIONS PER "GEOTECHNICAL ENGINEERING STUDY PAVEMENT THICKNESS DESIGN / LOWELL BOULEVARD WIDENING / CLEAR CREEK TO 62ND AVENUE / ADAMS COUNTY, COLORADO", PREPARED BY KUMAR & ASSOCIATES,
- 5. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND BONDS REQUIRED, INCLUDING WATER TAP(S).
- 6 CONTRACTOR IS RESPONSIBLE FOR BEING AWARE OF NOTIFYING COORDINATING AND SCHEDULING ALL INSPECTIONS REQUIRED FOR FINAL APPROVALS AND PROJECT ACCEPTANCE. PRIOR TO FINAL ACCEPTANCE, ALL DISTURBED PORTION OF THE COUNTY RIGHT-OF-WAY SHALL BE CLEANED AND RESTORED TO THE ORIGINAL CONDITION, SUBJECT TO COUNTY APPROVAL.
- STATIONS, ELEVATIONS, AND DIMENSIONS CONTAINED IN THESE PLANS ARE CALCULATED FROM THE RECENT FIELD SURVEY. THE CONTRACTOR SHALL VERIFY DEPENDENT DIMENSIONS IN THE FIFLD AND SHALL VERIFY ALL INFORMATION AND
- DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY IF CRITICAL DIMENSIONS ARE NOT SHOWN ON THE DRAWING, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION.
- 9. DIMENSIONS SHOWN TO RIGHT-OF-WAY LINES AND EXISTING PHYSICAL STRUCTURES ARE TYPICAL AND MAY VARY.
- 10. UNLESS OTHERWISE NOTED, PROPOSED DIMENSIONS, RADII, AND ELEVATIONS ARE TO THE FLOWLINE.
- 11. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL SURVEY MONUMENTS, BENCH MARKS, RANGE TIES, PROPERTY MARKERS, REFERENCE POINTS, AND STAKES. IN CASE OF HIS DESTRUCTION OF THESE. THE CONTRACTOR WILL BE CHARGED WITH THE EXPENSE OF REPLACEMENT AND SHALL BE RESPONSIBLE FOR ANY MISTAKE OR LOSS OF TIME THAT MAY BE CAUSED.
- 12. MITIGATION FOR NOXIOUS WEEDS WILL INCLUDE TREATING NOXIOUS WEEDS IN THE PROJECT AREA WITH HERBICIDE OR PHYSICALLY REMOVING THE WEEDS BEFORE CONSTRUCTION. KEEP VEHICLES FROM TRACKING WEED SEEDS IN THEIR TIRES BY INSPECTING AND CLEANING THE TIRE TREAD. RESEED DISTURBED AREAS AS SOON AS POSSIBLE AND USE CERTIFIED WEED-FREE MULCH AND SEED MIXES.
- 13. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL STRUCTURAL ELEMENTS, DECK SLABS UNDER ISLAND, VAULTS, UNDERGROUND CONDUITS AND OTHER APPURTENANCES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL PROPOSED AND EXISTING STRUCTURES THROUGHOUT THE DURATION OF CONSTRUCTION.
- 14 THE CONTRACTOR IS REQUIRED TO KEEP EXISTING DRAINAGE STRUCTURES FUNCTIONAL AND MAINTAIN DRAINAGE TO THOSE STRUCTURES AT ALL TIMES DURING CONSTRUCTION ALL STORM DRAIN INLETS LATERALS MAINS AND OTHER STORM RUNOFF APPURTENANCES WITHIN THE PROJECT LIMITS SHALL BE CLEARED OF SEDIMENT AND DEBRIS BEFORE THE COMMENCEMENT OF CONSTRUCTION. ANY SEDIMENT AND/OR DEBRIS REMAINING IN THE STORM SEWER SYSTEM AFTER CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR AT NO COST TO THE COUNTY.
- 15. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING. REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE OWNER.
- 16. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT HIS OWN EXPENSE. ACTIVITIES. IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES. SHALL INCLUDE THE PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, DISPOSAL OF LITTER AND ANY OTHER ACTION WHICH WOULD ALTER THE EXISTING CONDITIONS.

- 17 REMOVAL OF EXISTING ASPHALT MAT CONCRETE PAVEMENT CLIRB AND GLITTER OR SIDEWALK REQUIRED ON THIS PROJECT SHALL BE SAW CUT TO A VERTICAL EDGE. COST TO BE INCLUDED IN WORK. LIMITS OF REMOVAL SHALL BE VERIFIED BY THE ENGINEER PRIOR TO THEIR REMOVAL.
- 18. STRUCTURAL EXCAVATION, INCLUDING DISPOSAL OF SPOILS, AND BACKFILL FOR INLETS, PIPES, MANHOLES & HEADWALLS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN COST OF EACH ITEM.
- 19. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED BY THE COUNTY. WATER SHALL NOT BE MEASURED AND
- 20. WETTING, EXCAVATION, RECONDITIONING, AND COMPACTION SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE WORK
- 21. SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER WILL BE EXCAVATED, DISPOSED OF AND REPLACED WITH AGGREGATE BASE COURSE. REMOVED MATERIALS WILL BE PAID AS MUCK EXCAVATION.
- 22 EXCAVATION REQUIRED FOR COMPACTION OF BASES OF CUTS AND FILLS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE EARTHWORK. DEPTH OF MOISTURE / DENSITY CONTROL SHALL BE A 1-FOOT DEPTH OF ALL EMBANKMENT BASES OF CUTS AND FILLS.
- 23. WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL IS TO BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- 24 PRIOR TO PLACING NEW EMBANKMENTS ON EXISTING GROUND THE EXISTING SUBGRADE SHALL BE PROOFROLLED TO THE SATISFACTION OF THE ENGINEER.
- 25. ALL WORK AREAS SHALL BE PROPERLY PROTECTED PRIOR TO THE END OF WORKDAY, NO OPEN HOLES ARE ALLOWED OVERNIGHT. ALL WORK IS TO BE IN ACCORDANCE WITH APPLICABLE STANDARDS.
- 26. COVERS ON ALL MATERIALS LOADS TO AND FROM THE SITE WILL BE REQUIRED.
- 27. FILL SHOULD BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES. FILL CLASSIFYING BETWEEN A-1 AND A-2-5 SHOULD BE COMPACTED TO AT LEAST 95% OF MODIFIED PROCTOR (AASHTO T-180) MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 2 PERCENTAGE POINTS OF OPTIMUM. FILL CLASSIFYING BETWEEN A-2-6 AND 1-7 SHOULD BE COMPACTED TO AT LEAST 96% OF STANDARD PROCTOR (AASHTO T-99) MAXIMUM DRY DENSITY AT A MOISTURE CONTENT BETWEEN OPTIMUM AND 3 PERCENTAGE POINTS ABOVE OPTIMUM.
- 28. THE CONTRACTOR SHALL REMOVE MATERIALS AND EQUIPMENT FROM THE ROADWAY ROW AT THE CLOSE OF DAILY OPERATIONS. THE TCP MUST INCLUDE PROTECTIVE MEASURES WHERE MATERIALS AND EQUIPMENT MAY BE STORED ON R.O.W., BUT ENSURE FIVE FEET OF PEDESTRIAN CLEARANCE ON SIDEWALKS.
- 29. THE CONTRACTOR SHALL REFER TO THE ENVIRONMENTAL ASSESSMENT WHICH WAS PERFORMED FOR THIS PROJECT FOR THE REQUIREMENTS OF THE MATERIAL MANAGEMENT PLAN.

TRAFFIC CONTROL & CONSTRUCTION PHASING

- 30. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE TRAFFIC CONTROL THROUGHOUT THE PROJECT, INCLUDING PERMITS AND PROPER TRAFFIC CONTROL DEVICES AND/OR PERSONNEL AS REQUIRED. TRAFFIC CONTROL PLANS, DEVICES AND BARRICADES MUST BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND APPROVED BY ADAMS COUNTY.
- 31 THE CONTRACTOR SHALL BE SUBJECT TO LIQUIDATED DAMAGES IN THE AMOUNTS DEFINED IN THE GENERAL CONDITIONS FOR: A) FAILURE TO CONDUCT THE CONTRACTORS' OPERATIONS IN A SAFE MANNER AND/OR B) CAUSING UNDUE INCONVENIENCE TO THE TRAVELING PUBLIC (AS DIRECTED BY THE PROJECT ENGINEER OR THE CONSTRUCTION MANAGER)
- 32. TRAFFIC CONTROL DEVICES AND BARRICADES MUST BE KEPT IN GOOD WORKING ORDER AT ALL TIMES. NO PAYMENT WILL BE MADE FOR BARRICADES THAT ARE DAMAGED, INOPERABLE, OR HAVE NON-FUNCTIONAL LIGHTS (IF REQUIRED), ETC.
- 33. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL DESIGNATE A CERTIFIED TRAFFIC CONTROL SUPERVISOR AS BEING RESPONSIBLE FOR TRAFFIC CONTROL AND BARRICADING FOR THE PROJECT. IT WILL BE THAT PERSON'S RESPONSIBILITY TO MAKE SURE ALL BARRICADES ARE PROPERLY PLACED ON THE PROJECT AT ALL TIMES, AND THAT TRAFFIC IS BEING MAINTAINED AS APPROVED. IF THE CONTRACTOR IS NOT WORKING ON THE JOB SITE, THE CONTRACTOR MUST STILL CHECK THE BARRICADES EVERY DAY, INCLUDING WEEKENDS AND HOLIDAYS, TO MAKE SURE ALL BARRICADES ARE CORRECTLY PLACED AND FUNCTIONAL

- II. SURFACE IMPROVEMENTS

  34. CURB RAMPS AND HANDICAPPED ACCESS ALONG WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ADA, AND SHALL BE APPROVED BY THE PROJECT MANAGER. RAMP SURFACES SHALL BE MANIPULATED TO MEET THE ELEVATIONS GIVEN AND TO ACHIEVE PROPER
- 35. ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE A SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED. FOR PLAN QUANTITIES OF BITUMINOUS MATERIALS, THE FOLLOWING RATES OF APPLICATION WERE USED
- o DILUTED EMULSIFIED ASPHALT (SLOW SETTING) AT 0.10 GALLONS/SQ. YD. (DILUTED)
- BITUMINOUS PAVEMENT AT 110 LBS./SQ. YD. PER ONE-INCH THICKNESS
- 36. DILUTED EMULSIFIED ASPHALT (SLOW-SETTING) SHALL BE APPLIED BETWEEN PAVEMENT COURSES. DILUTED EMULSIFIED ASPHALT SHALL CONSIST OF ONE PART EMULSIFIED ASPHALT AND ONE PART WATER. RATES OF APPLICATION SHALL BE AS
- 37. WHEN AN EXISTING ASPHALT STREET IS CUT, THE STREET MUST BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. THE EXISTING STREET CONDITION SHALL BE DOCUMENTED BEFORE ANY CUTS ARE MADE. PATCHING SHALL BE DONE IN CONFORMANCE WITH THE PROJECT STANDARDS. THE FINISHED PATCH SHALL BLEND SMOOTHLY INTO THE EXISTING SURFACE, WHERE FEASIBLE, PATCHES SHALL BE PAVED WITH AN ASPHALT LAY-DOWN MACHINE.
- 38. PATCH ASPHALT PAVING AS NECESSARY TO JOIN NEW GUTTERS WITH THE
- 39. CONCRETE SHALL BE DEPTH(S) AS SHOWN ON THE DRAWINGS AND OF MIX DESIGN CLASS "D" (4200 PSI AT 28 DAYS), WITH NOVOMESH e3 (OR APPROVED BY THE ENGINEER) FIBER REINFORCEMENT APPLICATION RATE FOR THE FIBER MESH SHALL BE 24 LBS PER CUBIC YARD (OR EQUIVALENT FOR AN APPROVED ALTERNATE)

- IV. LANDSCAPING
   40. THE CONTRACTOR SHALL PROTECT EXISTING TREES ADJACENT TO THE PROJECT AREA. IRRIGATION MATERIALS AND VEGETATION WHICH ARE DAMAGED OR INJURED DURING CONSTRUCTION WILL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- 41. SEEDING, SODDING AND PLANTING SHALL BE AS SPECIFIED, OR OTHERWISE APPROVED IN THE FIELD BY THE COUNTY. CONSTRUCTION, MAINTENANCE AND WATERING REQUIREMENTS SHALL CONFORM WITH THE COUNTY STANDARD
- 42. ALL IRRIGATION MATERIALS IMPACTED BY THIS PROJECT SHALL BE REPLACED IN

43. "AS-BUILT" DRAWINGS AND FIELD NOTES ARE TO BE MAINTAINED AND UPDATED BY THE CONTRACTOR OVER THE LIFE OF THE PROJECT AS WORK PROGRESSES AND SUBMITTED TO THE COUNTY AT COMPLETION OF THE PROJECT.

- /I. DRAINAGE AND UTILITIES

  44. EXISTING UTILITIES AS SHOWN ON THE DRAWINGS ARE PLOTTED FROM AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES THAT IMPACT THIS PROJECT.
- 45. POTHOLES OF UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 46. THE CONTRACTOR SHALL CALL THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 FOR UTILITY LOCATIONS AT LEAST THREE WORKING DAYS PRIOR TO ANY DIGGING. THE CONTRACTOR SHALL COOPERATE AND COORDINATE ALL UTILITY WORK WITH THE CONCERNED UTILITY COMPANY OR AGENCY.
- 47. THE CONTRACTOR SHALL PERFORM ALL REQUIRED UTILITY ADJUSTMENTS ON STORM, SANITARY, AND WATER IMPROVEMENTS, AS SHOWN ON THE PLANS. ALL OTHER UTILITY ADJUSTMENTS WILL BE CONSTRUCTED BY THE UTILITY OWNERS.
- 48. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADJUST AND/OR REPLACE ALL WATER VALVE BOXES AND MANHOLES TO MEET FINAL GRADES IN THIS
- 49. THE CONTRACTOR IS REQUIRED TO RESET, ADJUST, OR REPLACE ANY UTILITIES THAT ARE IMPACTED BY CONSTRUCTION AND DESIGNATED TO REMAIN. UNLESS SPECIFICALLY NOTED ON THE PLANS, THE CONTRACTOR WILL NOT BE COMPENSATED FOR WORK OUTSIDE THE LIMITS OF CONSTRUCTION.
- 50. ALL PERMITS AND/OR BONDS REQUIRED BY UTILITY OWNERS FOR CONSTRUCTION SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
- 51. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III (MINIMUM) WITH WATER TIGHT JOINTS.
- 52. CONTRACTOR SHALL NOTIFY 24 HOURS IN ADVANCE ALL RESPECTIVE AGENCY PRIOR TO INSTALLATION OF ITEMS REQUIRING THEIR INSPECTION AND/OR APPROVAL. KNOWN UTILITY OWNERS WITHIN THIS PROJECT ARE

AGENCY	CONTACT	PHONE/FAX
ADAMS COUNTY STORMWATER MANAGEMENT TRAFFIC CONSTRUCTION MANAGEMENT	ANDREA BERG ANTHONY HERNANDEZ GORDON STEVENS	720-523-6960 (O) 303-853-7130 (F) 303-947-9633 (O)
BERKELEY WATER & SANITATION 4455 W. 58TH AVENUE, UNIT A ARVADA, CO 80002	SHARON WHITEHAIR  BILL WILLIS  C/O MARTIN/MARTIN, INC.	303-477-1914 (O) 303-433-1036 (F) 303-431-6100 (O) 303-456-9923 (F)
CENTURYLINK (LOCAL) 5325 ZUNI ST., SUITE 728 DENVER, CO 80221	SHAWN HERMANSON	303-451-3087 (O) 720-387-6407 (C) 303-451-3205 (F)
CENTURYLINK (LONG HAUL) 96 STONE ROAD RIVERTON, WY 82501	SHAYNE BRACKEN	303-885-8867 (C)
COMCAST 8490 N. UMATILLA ST. FEDERAL HEIGHTS, CO 80260	GLEN NELSON	303-284-7546 (O) 720-281-8488 (C) 720-242-7077 (F)
MCI / VERIZON 24055 E. 6TH AVE. AURORA, CO 80018	DAVID McALLISTER	303-214-7115 (O) 801-301-0937 (C)
XCEL ENERGY 555 ZANG ST., SUITE 250 LAKEWOOD, CO 80228	SHAUN HUGHES	303-592-2747 (O) 720-354-2000 (C) 303-451-3205 (F)
ZAYO GROUP 400 CENTENNIAL PKWY. LOUISVILLE, CO 80027	JERAMIE TROTTER STEVE BROWN	303-632-0027 (O) 406-209-7259 (C) 720-305-9937 (O) 303-898-1027 (C) 303-740-0025 (F)



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Computer File Information Index of Revisions DKIM R-Designed By DKIM DKIM (R-Creation Date 02/26/2014 Initials R-Last Modification Date 03/07/2014 Initials: DKIM R-../SHEET/86901-PL003-GN.DWG Drawing File Name AutoCAD Version: C3D 2011 Units: English R-

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4582 S. Ulster St. Ste 240 Denver, CO 80237 Phone (303) 740-7325 Fax (303) 224-9997

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AS OF 07/18/2014 NOT FOR CONSTRUCTION

**PROGRESS** PRINT

> **GENERAL** NOTES

W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

HUITT-ZOLLARS: R300869.01

Sheet Name G003

Sheet Number

Project No. / Code

# SUMMARY OF APPROXIMATE QUANTITIES

PROJECT	CDOT	DECORIDATION		LOWEL	I DI VD					1				PROJEC	T TOTALS
ITEM NO.	ITEM #	DESCRIPTION	UNIT	LOWEL	L BLVD.					l .				PLAN	AS/
TIEWING.	II LIVI #			PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	FLAIN	CONST.
1	201-00000	CLEARING AND GRUBBING	LS	1										1	
2	202-00033	REMOVAL OF PIPE	EA	4										4	
3	202-00037	REMOVAL OF END SECTION	EA	3										<u></u>	
4	202-00200	REMOVAL OF SIDEWALK	SY	100										100	
5	202-00220	REMOVAL OF ASPHALT MAT (INC'L SAW CUT)	SF	6,670										6,670	
6	202-00240	REMOVAL OF ASPHALT MAT (PLANING)	SF	42,164										42,164	
7	202-00500	REMOVAL OF PORTIONS OF PRESENT STRUCTURE (PIPE)	EA	6										6	
8	202-01000	REMOVAL OF FENCE	LF	563										563	
9	203-00010	UNCLASSIFIED EXCAVATION (COMPLETE IN PLACE)	CY	950										950	
10	203-00060	EMBANKMENT MATERIAL (COMPLETE IN PLACE)	CY	4,350										4,350	
11	203-01597	POTHOLING	HR	40									$\perp$	40	
										<del></del>					
12	206-00000	STRUCTURE EXCAVATION	CY	578									$\perp$	578	
13	206-00100	STRUCTURAL BACKFILL (CLASS 1)	CY	476						-cX	\ _		$\perp$	476	
14	206-00520	FILTER MATERIAL (CLASS B)	CY	44										44	
													$\perp$		
15	208-00002	EROSION LOG (12-INCH)	LF	300	<u> </u>					<u>/</u>	1			300	
16	208-00020	SILT FENCE	LF	4,720										4,720	
17	208-00045	CONCRETE WASHOUT STRUCTURE	EA	1 1	<u> </u>									1	
18	208-00050	STORM DRAIN INLET PROTECTION	EA	10					K-2					10	
19	208-00070	VEHICLE TRACKING PAD	EA	2	<u> </u>				4*					2	
20	208-00205	EROSION CONTROL SUPERVISOR	HR	156	ER		ļ	MIL			1			156	
							1)								
21	210-00001	RESET STRUCTURE [IRRIGATION CONTROL DEVICE]	EA	1 1			$\perp$							1	
22	210-00010	RESET MAILBOX STRUCTURE	EA	10									$\perp$	10	
23	210-00050	RESET FIRE HYDRANT	EA	1		'	<b>Y</b> \						$\perp$	1	
24	210-00810	RESET GROUND SIGN	EA	8		$-\alpha$	\						$\perp$	8	
25	210-00810	RESET ELECTRICAL PULL BOX	EA	1									$\perp$	1	
26	210-01011	RESET GATE	EA	7									$\perp$	7	
27	210-01050	RESET CHAIN LINK FENCE	LF	470	$-\infty$	<u> </u>							$\perp$	470	
28	210-01199	RESET GUARDPOST	EA	6										6	
29	210-04050	ADJUST VALVE BOX (WATER)	EA	4	X									4	
30	212-00006	SEEDING (NATIVE)	AC		<u> </u>									1.5	
31	213-00002	MULCHING (WEED FREE HAY)	AC											1.5	
32	216-00021	SOIL RETENTION BLANKET (CLASS 1)	SY	3,580										3,580	
			_M	<b>\</b>											
33	304-06007	AGGREGATE BASE COURSE (CLASS 6) [DRIVEWAYS, 12" THICK]	- CX-	436										436	
			$\infty$												
34	403-32741	HOT MIX ASPHALT GRADING SG (75) (PG 64-22) [DRIVEWAYS, 4" THICK]	TON	55										55	
35	403-33741	HOT MIX ASPHALT GRADING S (75) (PG 64-22)	TON	1,230								<b>_</b>		1,230	
36	403-34741	HOT MIX ASPHALT GRADING SG (75) (PG 64-22) [DRIVEWAYS, 4" THICK] HOT MIX ASPHALT GRADING S (75) (PG 64-22) HOT MIX ASPHALT GRADING SX (75) (PG 64-22)  EMULSIFIED ASPHALT (SLOW SETTING)	TON	878								<b>_</b>		878	
37	411-10216	EMULSIFIED ASPHALT (SLOW SETTING)	GAL	812										812	
		, , , , , , , , , , , , , , , , , , ,											+		
38	504-03500	MECHANICALLY STABILIZED EARTH RETAINING BLOCK VALE	SF	245			1				1		+	245	+
200	500 00 110		01/	<del></del>			1				1		+		+
39	506-00412	SOIL RIPRAP (12 INCH) [STORM DRAIN]	CY	36			-				<del>                                     </del>		+	36	+
10	004 04050	COMODETE OLAGO D (MALL)		<del>                                     </del>			-				<del>                                     </del>		+	455	+
40	601-01050	CONCRETE CLASS B (WALL)	CY	157			-				<del>                                     </del>		+	157	+
41	601-40300	STRUCTURAL CONCRETE COATING	SY	293			-				<del>                                     </del>		+	293	+
42	602-00020	REINFORCING STEEL (EPOXY COXTES)	LBS	12,300			-				<del>                                     </del>		+	12,300	+
10	000 01105	401 POP (01 400 NA 000 TTE NA PI 40E)	<u> </u>	<del></del>			-				<del>                                     </del>		+		+
43	603-01125	12" RCP (CLASS IV) COMPLETE IN PLACE)	LF	52	<b></b>		1				+		+	52	+
44	603-01155	15" RCP (CLASS IV) COMPLETE IN PLACE)	LF	96	<b></b>		1				+		+	96	+
45	603-01185	18" RCP (CLASSIV) (COMPLETE IN PLACE)	LF	1,360	<b></b>		1				+		+	1,360	+
46	603-01185	18" RCP POC COLLAR	EA	1			1				1		+	1	+
47	603-01245	24" ROP (CLASS IV) (COMPLETE IN PLACE)	LF	430			-				<del>                                     </del>		+	430	+
48	603-01245	24 RCP PCC COLLAR	EA	1			1				1		+	1	+
49	603-01305	30" RCP (COMPLETE IN PLACE)	LF	213			1				1		+	213	+
50	603-01365	36" RCP (COMPLETE IN PLACE)	LF	49	<b></b> '		1				1		+	49	+
51	603-05012	12" RCP FLARED END SECTION (COMPLETE IN PLACE)	EA	2	<u> </u>						1		+	2	
52	803-05015	15" RCP FLARED END SECTION (COMPLETE IN PLACE)	EA	1	ļ						1		+	1	
53	603-05018	18" RCP FLARED END SECTION (COMPLETE IN PLACE)	EA	8	ļ						1		+	8	
	603-05024	24" RCP FLARED END SECTION (COMPLETE IN PLACE)	EA	1							1		+	1	
54															1
54 55 56	603-05030 603-05036	30" RCP FLARED END SECTION (COMPLETE IN PLACE)  36" RCP FLARED END SECTION (COMPLETE IN PLACE)	EA EA	1						<u> </u>				1	



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4.07	Designed By:	DKIM	Drawn By:	DKIM	R-				
201	Creation Date:	02/26/2014	Initials:	DKIM	R-				
₩P:	Last Modification Date:	03/07/2014	Initials:	DKIM	R-				
ITST,	Drawing File Name:	/SHEET/8	6901-PL005-S	SAQ.DWG	(F)				
影	AutoCAD Version:	C3D 2011	Units:	English	(R- )				





PROGRESS PRINT
AS OF 07/18/201

ROADWAY AND CHANNEL REALIGNMENT SUMMARY OF

W. 60TH AVENUE & CLEAR CREEK	Project No. / Code		
ROADWAY AND CHANNEL REALIGNMENT	ADAMS COUNTY:		

HUITT-ZOLLARS: R300869.01 Sheet Name G005

Sheet Number

CONTACT: BRIAN McLAREN, PE

NOT FOR CONSTRUCTION

APPROXIMATE QUANITITES

## SUMMARY OF APPROXIMATE QUANTITIES

PROJECT	CDOT	DECORIDATION		I OWE	LL BLVD.									PROJECT	TOTALS
ITEM NO.	ITEM#	DESCRIPTION	UNIT											PLAN	AS/
57	000 04000	OLOTESI PIPE (COMPLETE IN PLACE)		PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST		CONST.
57 58	603-81006	6" STEEL PIPE (COMPLETE IN PLACE)	LF	31										31	
59	603-81006 603-99999	6" STEEL ANGLE SWEEP / COUPLER  VIF PIPE (COMPLETE IN PLACE)	EA LF	1 17										1	
60	603-99999	,	EA											2	
61	603-99999	VIF PIPE PCC COLLAR  VIF PIPE END SECTION	EA EA	3 2									<del>                                     </del>	3 2	
01	003-99999	VIF PIPE EIND SECTION	EA											2	
62	604-00305	INLET TYPE C (5-FOOT)	EA	2										2	
63	604-19105	INLET TYPE R L5 (5-FOOT)	EA	8										8	
64	604-20003	OUTLET STRUCTURE (SPECIAL) (COMPLETE IN PLACE) [WATER QUALITY ORIFACE PLATE]	EA	1										1	
65	604-30005	MANHOLE SLAB BASE (5-FOOT)	EA	1										1	
66	604-30010	MANHOLE SLAB BASE (10-FOOT)	EA	2										2	
67	604-30015	MANHOLE SLAB BASE (15-FOOT)	EA	1							- PA			1	
68	605-00060	6 INCH PERFORATED PLASTIC PIPE (UNDERDRAIN)	LF	106						41				106	
69	605-00060	6 INCH PERFORATED PLASTIC PIPE (UNDERDRAIN)  6 INCH PERFORATED PLASTIC PIPE (UNDERDRAIN) ANGLE SWEEP	EA	1						_	$\sim$			1	
	000 0000	O INCITI ENG GIVILED I ENGINETIN E (GNEEKENGIN) / WOLL GWELL								<del>• ( • • • • • • • • • • • • • • • • • •</del>	•			·	
70	607-53161	FENCE CHAIN LINK (SPECIAL) (60-INCH) [RETAINING WALL]	LF	423					_<					423	
71	607-11455	FENCE WOOD	LF	48										48	
72	607-11200	FENCE COMBINATION WIRE WITH METAL POSTS	LF	515										515	
								1							
73	608-00010	CONCRETE CURB RAMP (CLASS D W/ FIBERMESH)	SY	21					<b>\</b>		-			21	
74	608-00015	TRUNCATED DOMES	SF	130										130	
75	608-00005	CONCRETE SIDEWALK (SPECIAL) (8 INCH) (CLASS D W/ FIBERMESH)	SY	264				1800						264	
76	608-00006	CONCRETE SIDEWALK (6 INCH) (CLASS D W/ FIBERMESH)	SY	3,041			+	<b>~</b> ,—						3,041	
77	608-10010	SIDEWALK DRAIN	EA	2			- VXI							2	
78	609-21020	CURB AND GUTTER TYPE 2 (SECTION II-B)	LF	4,038			0r							4,038	
79	609-21021	CURB AND GUTTER TYPE 2 (SECTION II-M)	LF	98		$\sim$	<b>\</b>							98	
80	609-22901	DRIVEWAY ENTRANCE TYPE 1 APRON (CLASS D W/ FIBERMESH) (FAST TRACK)	SY	528										528	
						2									
81	610-00026	MEDIAN COVER MATERIAL (6-INCH PATTERNED CONCRETE) (COLORED)	SF	1,623 954	+-QX									1,623	
82	610-00030	MEDIAN COVER MATERIAL (6-INCH CONCRETE) (COLORED) [SHOULDER]	SF	954							+			954	
83	614-00216	STEEL SIGN POST (2X2 INCH TUBING)	LF	45										45	
84	625-00000	CONSTRUCTION SURVEYING	LS											1	
				$\mathbf{X}$											
85	626-00000	MOBILIZATION	187	<b>&gt;</b> 1										1	
86	627-02010	PREFORMED PLASTIC PAVEMENT MARKING (TYPE II) (INLAID) (YELLOW)		2,200										2,200	
87	627-02010	PREFORMED PLASTIC PAVEMENT MARKING (TYPE II) (INLAID) (TELLOW)  PREFORMED PLASTIC PAVEMENT MARKING (TYPE II) (INLAID) (WHITE)	SF	81										81	
88	627-30410	PREFORMED THERMOPLASTIC PAVEMENT MARKING (TYPE II) (INEXID) (WITTE)	SF	180										180	
89	627-30405	PREFORMED THERMOPLASTIC PAVEMENT MARKING (WORD-SYMBOL)	SF	168										168	
90	629-01001	SURVEY MONUMENT (TYPE 1)	EA	5										5	
91	630-00000	FLAGGING	HR	720										720	
92	630-00007	TRAFFIC CONTROL INSPECTION	DAY	30										30	
93	630-00012	TRAFFIC CONTROL MANAGEMENT	DAY	180							1			180	
94	630-80001	FLASHING BEACON	EA	2										2	
95	630-80336 630-80341	CONSTRUCTION TRACEIC SIGN (DAME ALL A)	EA EA	4 12										12	
96 97	630-80342	BARRICADE (TYPE 3 M-A) (TEMPORAPY) CONSTRUCTION TRAFFIC SIGN (PANEL 1) & A) CONSTRUCTION TRAFFIC SIGN DANKE SIZE A)	EA	6										6	
98	630-80360	DRUM CHANNELIZING DEVICE	EA	136										136	
		X													
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4582 S. Ulster St. Ste 240 Phone (303) 740-7325 Denver, CO 80237 Fax (303) 224-9997 CONTACT: BRIAN McLAREN, PE

PROGRESS PRINT
AS OF 07/18/201

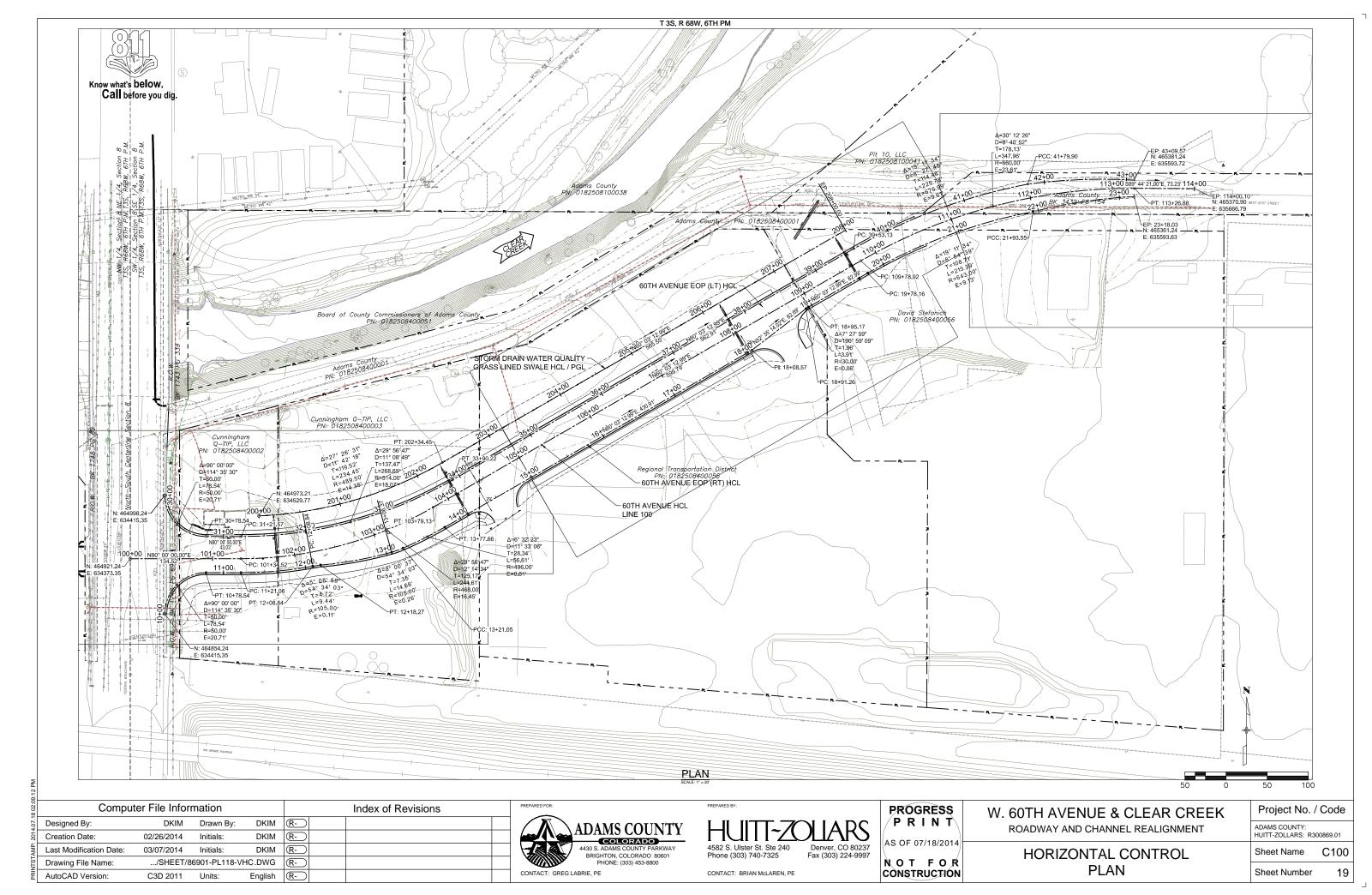
NOT FOR CONSTRUCTION

W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT SUMMARY OF

EK	Project No.	/ Code
-	ADAMS COUNTY: HUITT-ZOLLARS: R:	300869.01
	Shoot Namo	COOR

Sheet Name

APPROXIMATE QUANTITIES Sheet Number



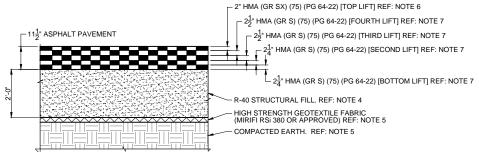
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#### TYPICAL SECTION NOTES

- 1. MATCH EXISTING PAVEMENT CROSS SLOPE AND GRADES AT BEGIN AND END PROJECT.
- BREAK POINTS ON SLOPES AND IN BOTTOMS OF DITCHES SHALL BE ROUNDED DURING CONSTRUCTION. SEE CDOT STANDARDS FOR DETAILS OF CUT SLOPE TREATMENT, FLARING AND WIDENING.
- 3. REFER TO ROADWAY CROSS SECTIONS CUT AND FILL SLOPES. 4:1 NOMINAL SLOPE. MINIMUM 4:1 SLOPE FOR TOP & BOTTOM 4' HORIZ / 1' VERT WITH REMAINDER MINIMUM 3:1 SLOPES.
- 4. STRUCTURAL FILL MATERIAL FOR ROADWAY SUBGRADE SHALL BE A MINIMUM OF R-40.
- REFER TO GEOTECHNICAL INVESTIGATION FOR PAVEMENT SECTION, MATERIALS & SUBGRADE REQUIREMENTS.
- 6. THE TOP LIFT SHALL BE PLACED MONOLITHIC.
- 7. HMA (GR S) (75) (PG 64-22) SHALL BE LIMITED TO THE BOTTOM LIFT, SECOND LIFT, AND THIRD LIFT OF FULL DEPTH PAVEMENT SECTIONS. PATCHING RESULTING FROM OTHER WORK SHALL BE CONSIDERED SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE ASSOCIATED WORK.
- THE CONTRACTOR WILL BE REQUIRED TO PLACE 4" OF TOPSOIL TO THIS LINE AFTER COMPLETION OF CURB, GUTTER & SIDEWALK OPERATION.
- POADWAY CROSS-SLOPE (2% NOMINAL)

#### **PAVEMENT SECTIONS**

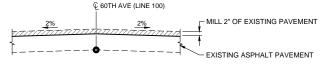
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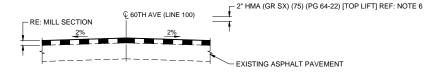
#### MILL & OVERLAY

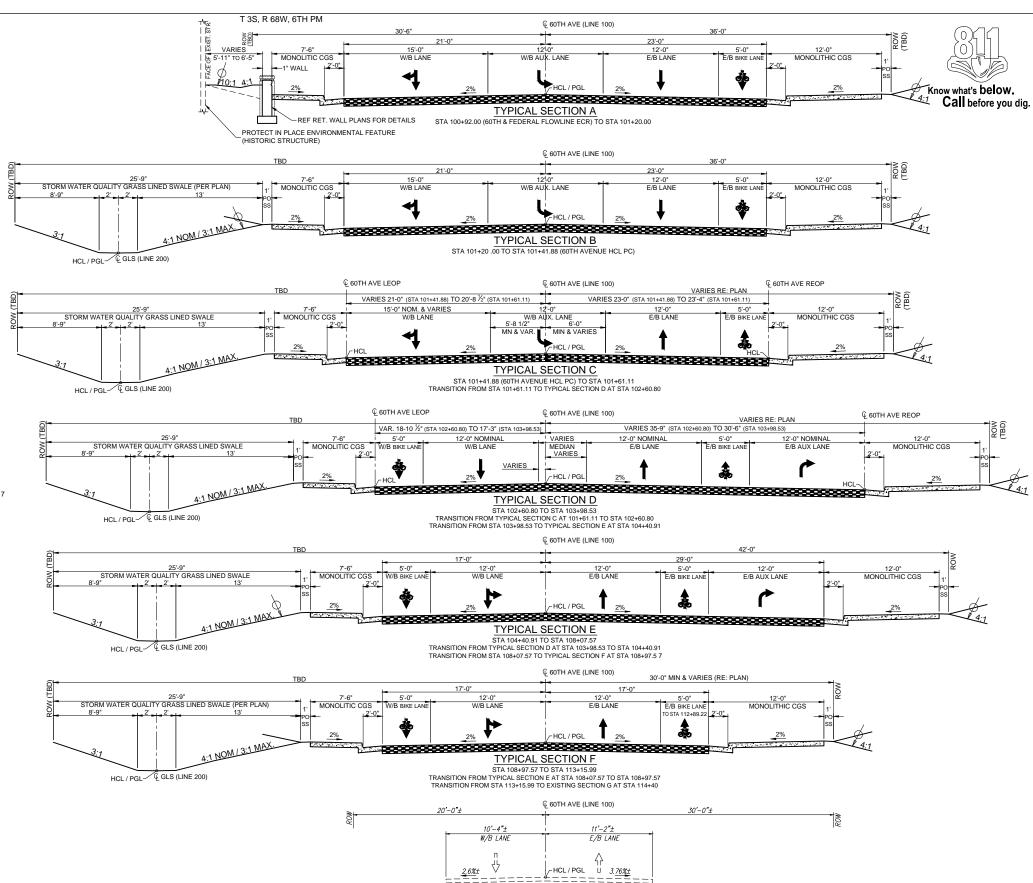
TRANSITION ONTO EXISTING 60TH AVE

### MILL



#### **OVERLAY**





#### **EXISTING SECTION G**

TRANSITION FROM TYPICAL SECTION F AT STA 1113+15.99 STA 114+40.00

Computer File Information Index of Revisions Designed By: DKIM DKIM R-Creation Date: DKIM (R-02/26/2014 R-Last Modification Date DKIM 03/07/2014 Initials: R-Drawing File Name: ../SHEET/86901-PL200-TXS.DWG AutoCAD Version: C3D 2011 Units: English

ADAMS COUNTY

GOLORADO

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4582 S. Ulster St. Ste 240
Phone (303) 740-7325

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PROGRESS P R I N T AS OF 07/18/2014

NOT FOR

CONSTRUCTION

W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

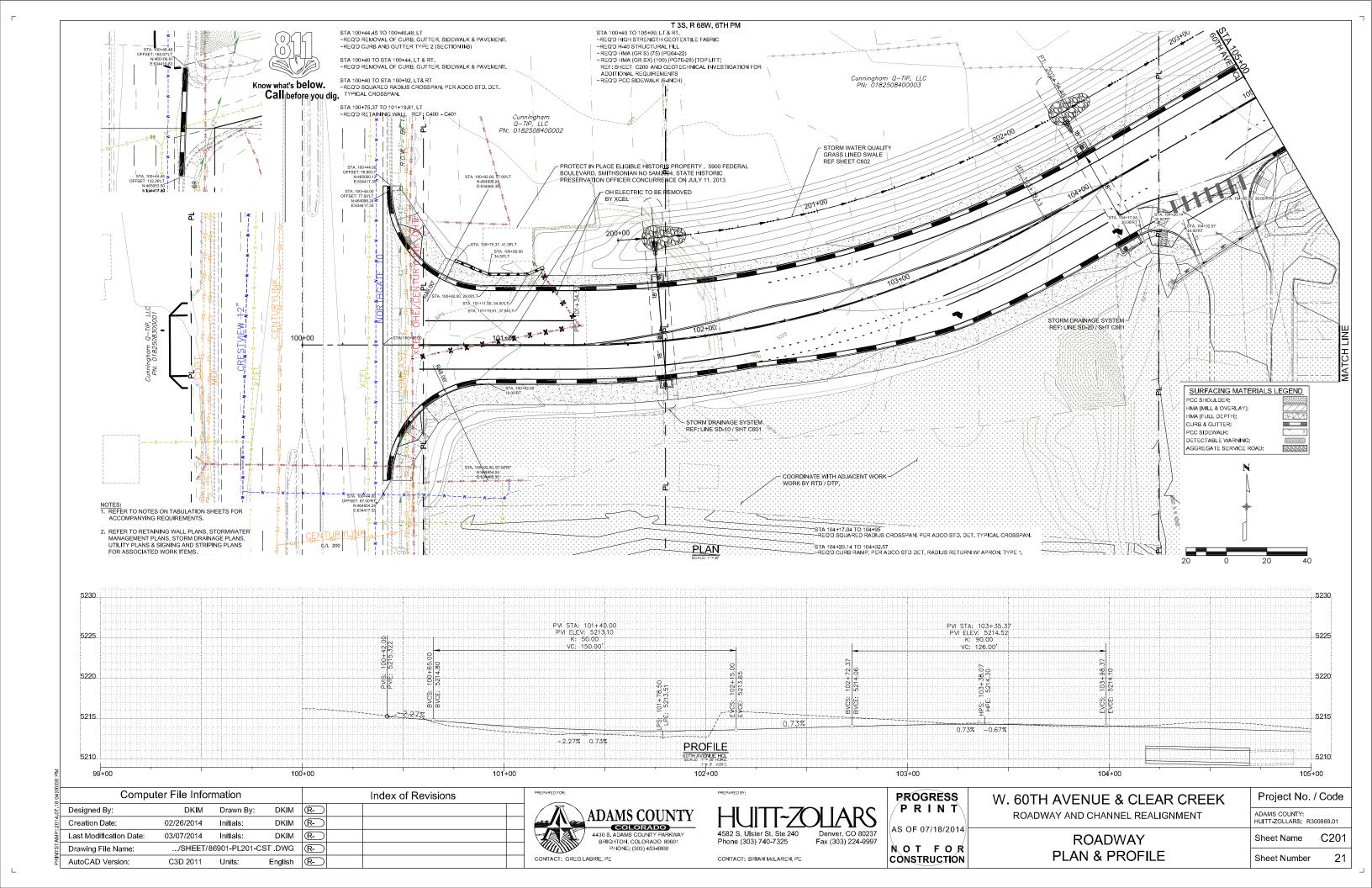
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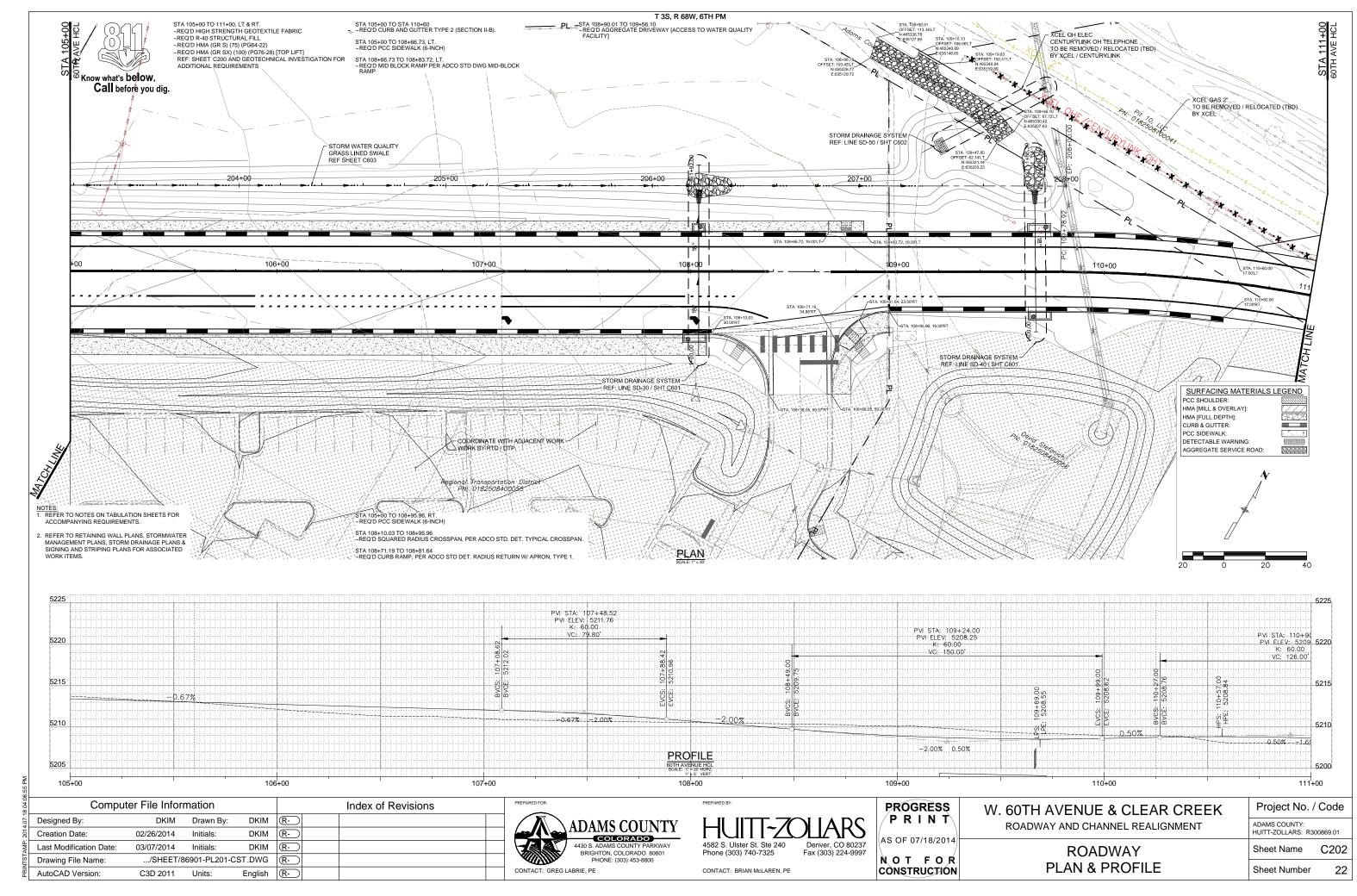
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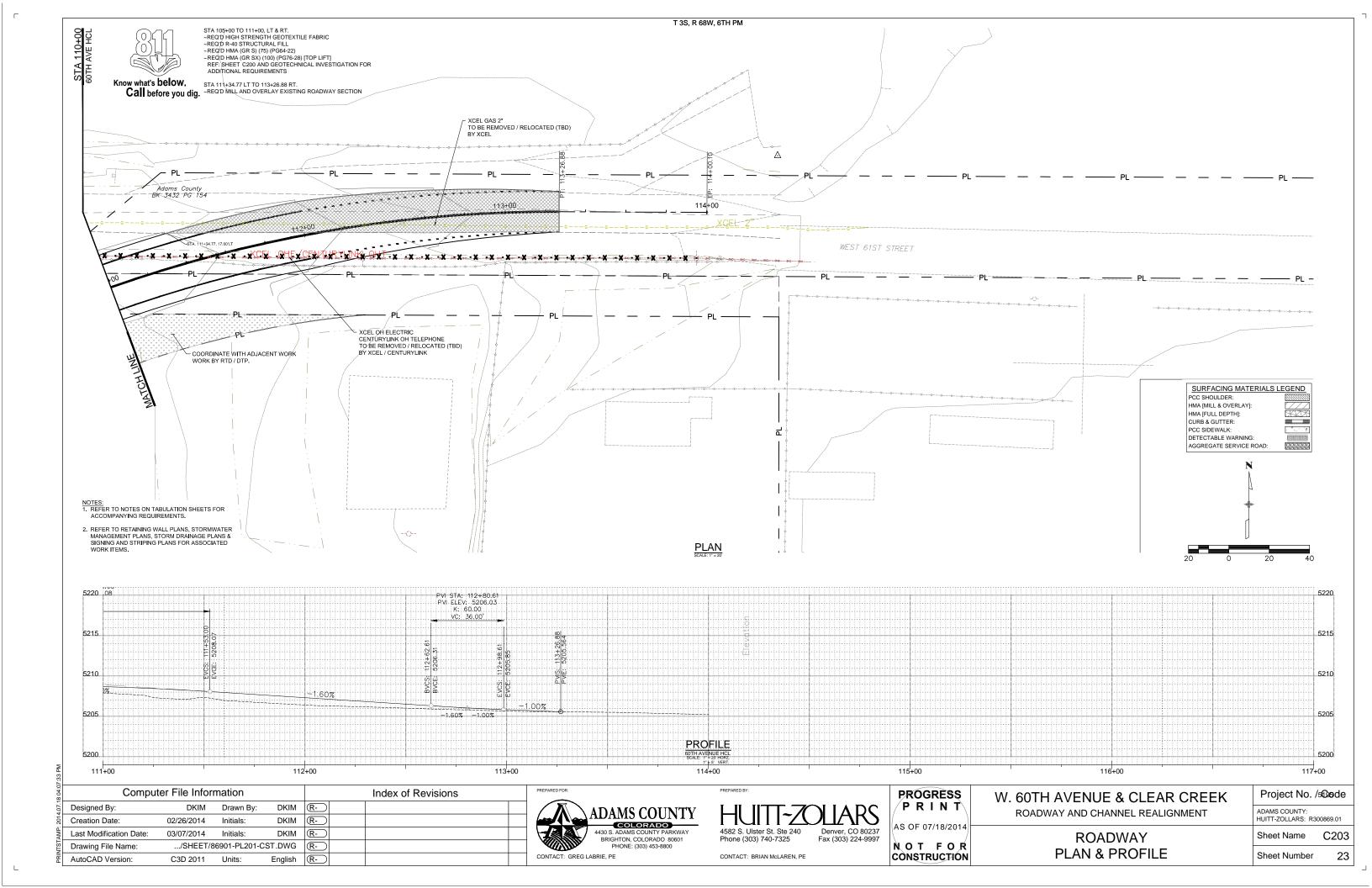
ROADWAY
TYPICAL SECTION

Sheet Name C200
Sheet Number 20

Project No. / Code







#### TABULATION OF PERMANENT SIGNS

				SIGN	BACK	REQ'D	REQ'D	REMOVE	RESET	NO.			PO	ST TYPE	(FOR IN	FORMAT	TON ON	_Y)			SIGN F	ANEL (S	Q. FT.)
SIGN NO.	SIGN CODE	SIGN DESCRIPTION	LOCATION	PANEL SIZE	GROUND COLOR	GROUND SIGN (EACH)	GROUND SIGN (SF)	GROUND SIGN (EACH)	GROUND SIGN (EACH)	OF POSTS (EACH)		P2 POST W/ SLIP BASE	8 X 8 TIMBER	W6X12 BEAM		W8X18 BEAM				S4X7.7 BEAM	CLASS I	CLASS II	CLASS
1	W11-2	PEDESTRIAN CROSSING	STA 101+02.29, LT	30" X 30"	YELLOW				1	0.5	0.5										-0-		
2	W16-9P	"AHEAD"	STA 101+02.29, LT	12" X 24"	YELLOW				1	0.5	0.5												
3	W8-1	"BUMP"	STA 117+07.13, RT	30" X 30"	YELLOW				1	0.5	0.5												
4	W13-1 (25)	"25 M.P.H."	STA 117+07.13, RT	18" X 18"	YELLOW				1	0.5	0.5												
5	R2-1 (40)	"SPEED LIMIT 40"	STA 117+71.10, LT	24" X 30"	WHITE				1	1	1												
6	R7-2	NO PARKING / DBL ARROW	STA 119+30.52, LT	12" X 18"	WHITE				1	1	1												
7	W8-1	"BUMP"	STA 123+10.17, LT	30" X 30"	YELLOW				1	0.5	0.5												
8	W13-1 (25)	"25 M.P.H."	STA 123+10.17, LT	18" X 18"	YELLOW				1	0.5	0.5												
9	XXX	XXX	STA XXX+XX.XX, L/RT	XX" X XX"	CLR				-0-	-0-	-0-												
10	XXX	XXX	STA XXX+XX.XX, L/RT	XX" X XX"	CLR				-0-	-0-	-0-												
	PROJECT TOTAL						-0-	-0-	8	-0- 5	-0- 5	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-

#### SUMMARY OF PERMANENT SIGNING QUANTITIES

ITEM NO.	ITEM NO.	UNIT	PROJECT TOTALS
202	REMOVAL OF GROUND SIGN	EA	-0-
210	RESET GROUND SIGN	EA	8
614	STEEL SIGN POST (2X2 STEEL)	LF	45

- 1. CONTRACTOR SHALL COORDINATE SIGNING AND STRIPING REQUIREMENTS WITH ADAMS COUNTY PRIOR TO ORDERING SIGNS AND PRIOR TO STRIPING OPERATION
- 2. CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS FOR THIS WORK. 3. SIGNS NOT DESIGNATED FOR RESET / REMOVAL SHALL BE PROTECTED IN PLACE.
- 4. P2 POSTS ARE NOT TO BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF RESET GROUND SIGN (EACH).

#### TABULATION OF PERMANENT PAVEMENT MARKINGS

	ED	(LF)           EDGE         LANE         CENTER           WHITE SOLID         WHITE 10/40         YELLOW SOLID         YELLOW 10/40								627- PREFORMED THERMOPLASTIC PAVEMEN MARKING (WORD-SYMBOL) (LF / EA)  CROSS WALK STOP PAVEMEN WHITE SOLID WHITE SOLID SYMBOL					
LOCATION	4 IN	4 INCH		4 INCH		4 INCH		4 INCH PLAN		18 INCH		24 INCH PLAN		R X R	
STA 99+78 TO STA 106+00	-0-		PLAN -0-		1.817		80		85		16		-0-		
31A 99+70 10 31A 100+00	-0-		-0-		1,017		00		65		10		-0-		
STA 106+00 TO STA 112+00	-0-		-0-		1,200		300		-0-		-0-		-0-		
STA 112+00 TO STA 118+00	-0-		-0-		1,912		101		-0-		-0-		1		
STA 118+00 TO STA 123+65	243		100		1,190		-0-		-0-		10		-0-		
PROJECT TOTALS	243		100		6,119		481		85		26		1		

#### SUMMARY OF PERMANENT PAVEMENT MARKINGS QUANTITIES

	627 - PREFORI PAVEMENT MAI (INL	RKING (TYPE II)	627 - PRE THERMOPLAST MARKING (XWA	TIC PAVEMENT	627 - PREFORMED THERMOPLASTIC PAVEMEN MARKING (WORD-SYMBOL)			
	SQ.	FT.	SQ.	FT.	SQ. FT.			
COLOR	PLAN		PLAN		PLAN			
YELLOW	2,200		-0-		-0-			
WHITE	81		180		168			
PROJECT TOTALS	2,281		180		168			

#### SCHEDULE OF CONSTRUCTION TRAFFIC CONTROL DEVICES

CONSTRUCTION TRAFFIC SIGNS												
01011		SIGN	LOWELL BLVD.									
SIGN CODE	SIGN DESCRIPTION	PANEL	PANEL SIZE									
CODL		SIZE	Α	В	С	SPECIAL						
R2-1 (25)	"SPEED LIMIT 25"	24" X 30"	2									
R2-6P	"FINED DOUBLED"	18" X 24"	2									
R52-6a	"BEGIN FINES DOUBLED IN WORK ZONE"	24" X 30"	2									
R52-6b	"END FINES DOUBLED IN WORK ZONE"	24" X 30"	2									
G20-5P	"WORK ZONE"	18" X 24"	4									
G20-10	XYZ CONSTRUCTION "THANKS YOU" 555-5555	48" X 48"		2								
W20-1	"ROAD WORK AHEAD" W/ FLASHING BEACON	48" X 48"		2								
W20-7	FLAGGER	48" X 48"		2								
	PHASE	SUBTOTAL	12	6								

	CONSTRUCTION TRAFFIC CONTROL DEV	/ICES	-
ITEM CODE	ITEM	UNIT	QUANTITY
630	FLAGGING	HR	720
630	TRAFFIC CONTROL INSPECTION	DAY	30
630	TRAFFIC CONTROL MANAGEMENT	DAY	180
630	FLASHING BEACON	EA	2
630	BARRICADE (TYPE 3 M-A) (TEMPORARY)	EA	4
630	CONSTRUCTION TRAFFIC SIGN (PANEL SIZE A)	EA	12
630	CONSTRUCTION TRAFFIC SIGN (PANEL SIZE A)	EA	6
630	DRUM CHANNELIZING DEVICE	EA	136

1. CONSTRUCTION TRAFFIC CONTROL QUANTITIES ARE BASED ON THE SCHEMATICS DEPICTED IN THIS PLAN SHEET. RESET OF ITEMS MAY BE NECESSARY AS CONSTRUCTION PHASING PROGRESSES. RESET OF ITEMS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.

THE PHASING CONCEPT DEPICTED IN THE PLANS REPRESENTS ONE POTENTIAL METHODOLOGY FOR CONSTRUCTION UNDER TRAFFIC. THE PHASING PLAN DEPICTED HEREIN IS CONCEPTUAL ONLY. THE CONTRACTOR SHALL SUPPLY DETAILED PHASING AND TRAFFIC CONTROL PLANS TO THE OWNER FOR REVIEW AND APPROVAL BASED ON THE PROPOSED CONSTRUCTION PHASING

FAST TRACK WORK
THE CONTRACTOR SHALL PERFORM FAST-TRACK WORK AT CRITICAL AREAS, INCLUDING (BUT NOT
LIMITED TO) DRIVEWAYS, PIPE CROSSINGS, AND THE RAIL CROSSING. FAST TRACK CONSTRUCTION
MATERIAL SHALL BE HIGH EARLY STRENGTH CONCRETE TO FACILITATE THE REOPENING OF THE FAST TRACK AREAS.

DRIVEWAYS
THE CONTRACTOR'S APPROVED METHOD OF HANDLING TRAFFIC SHALL ADDRESS THE METHODOLOGY FOR PROVIDING PROPERTY ACCESS AT THE DRIVEWAYS ALONG THE PROJECT DURING ALL CONSTRUCTION ACTIVITIES. ACCESS TO INDIVIDUAL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS AND / OR TENANTS NO LESS THAN FIVE (5) CALENDAR DAYS IN ADVANCE OF PROPOSED ACCESS RESTRICTIONS AT THE PROPERTY IN QUESTION.

- CROADWAY AND DRAINAGE FACILITIES SHALL BE CONSTRUCTED IN SUCH A MANNER TO MAINTAIN ONE TRAVEL LANE IN EACH NORTH- AND SOUTH-BOUND DIRECTIONS. WHERE WORK ACTIVITIES WARRANT, ONE-WAY CONSTRUCTION TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE TO COOT STANDARD DRAWING 630. THE CONTRACTOR SHALL SUBMIT THE ONE-WAY CONSTRUCTION TRAFFIC CONTROL TO THE OWNER FOR REVIEW AND APPROVA
- 2. CONTRACTOR SHALL MAINTAIN A NOMINAL ROADWAY LANE WIDTH OF 11-FEET WITH A 1-FOOT SHY DISTANCE AT ALL TIMES. WHERE WORK ZONE ACTIVITIES WARRANT, THE MINIMUM LANE WIDTH SHALL BE 10-FEET.
- 3. THE CONTRACTOR SHALL USE TEMPORARY CONCRETE BARRIER OR DRUM CHANNELIZATION DEVICES TO SEPARATE TRAFFIC FROM CONSTRUCTION AREAS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 4. DURING THE CONSTRUCTION OF THIS PROJECT, TRAFFIC SHALL USE PRESENT TRAVELED ROADWAYS AT ALL TIMES UNLESS OTHERWISE AUTHORIZED BY THE OWNER.

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Creation Date:	02/26/2014	Initials:	DKIM	R-						
Last Modification Date:	03/07/2014	Initials:	DKIM	R-				١ ١		
Drawing File Name:	/SHEET/8	36901-PL300-	TSS.DWG	R-						
AutoCAD Version:	C3D 2011	Units:	English	R-				(		

ADAMS COUNTY COLORADO 4430 S. ADAMS COUNTY PARKWAY BRIGHTON, COLORADO, 80601 CONTACT: GREG LABRIE, PE

4582 S. Ulster St. Ste 240 Denver, CO 80237 Phone (303) 740-7325 Fax (303) 224-9997

CONTACT: BRIAN McLAREN, PE

NOT FOR CONSTRUCTION

**PROGRESS** W. 60TH AVENUE & CLEAR CREEK PRINT ROADWAY AND CHANNEL REALIGNMENT AS OF 07/15/2014

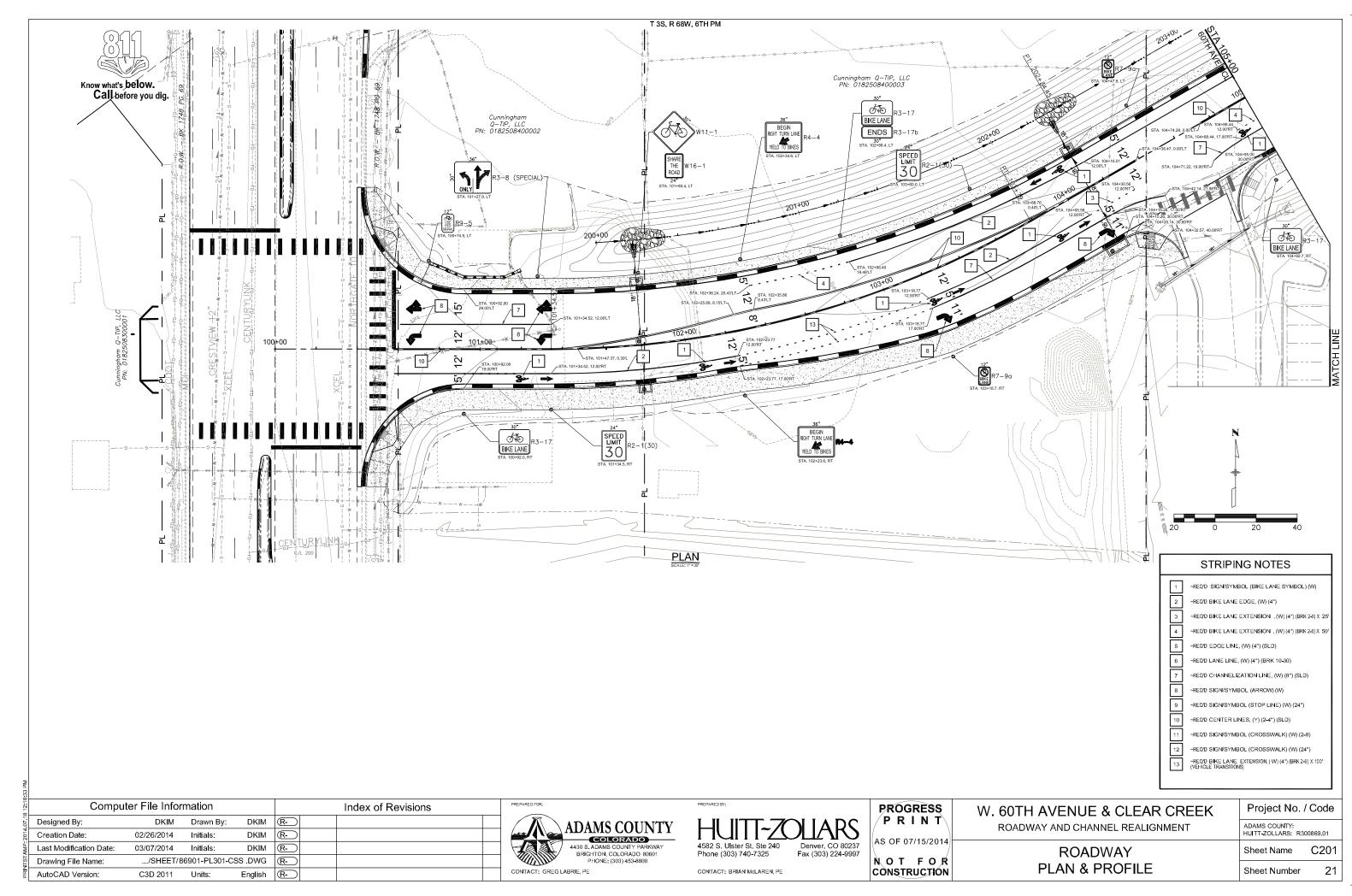
TABULATION OF SIGNING & PAVEMENT MARKINGS Project No. / Code

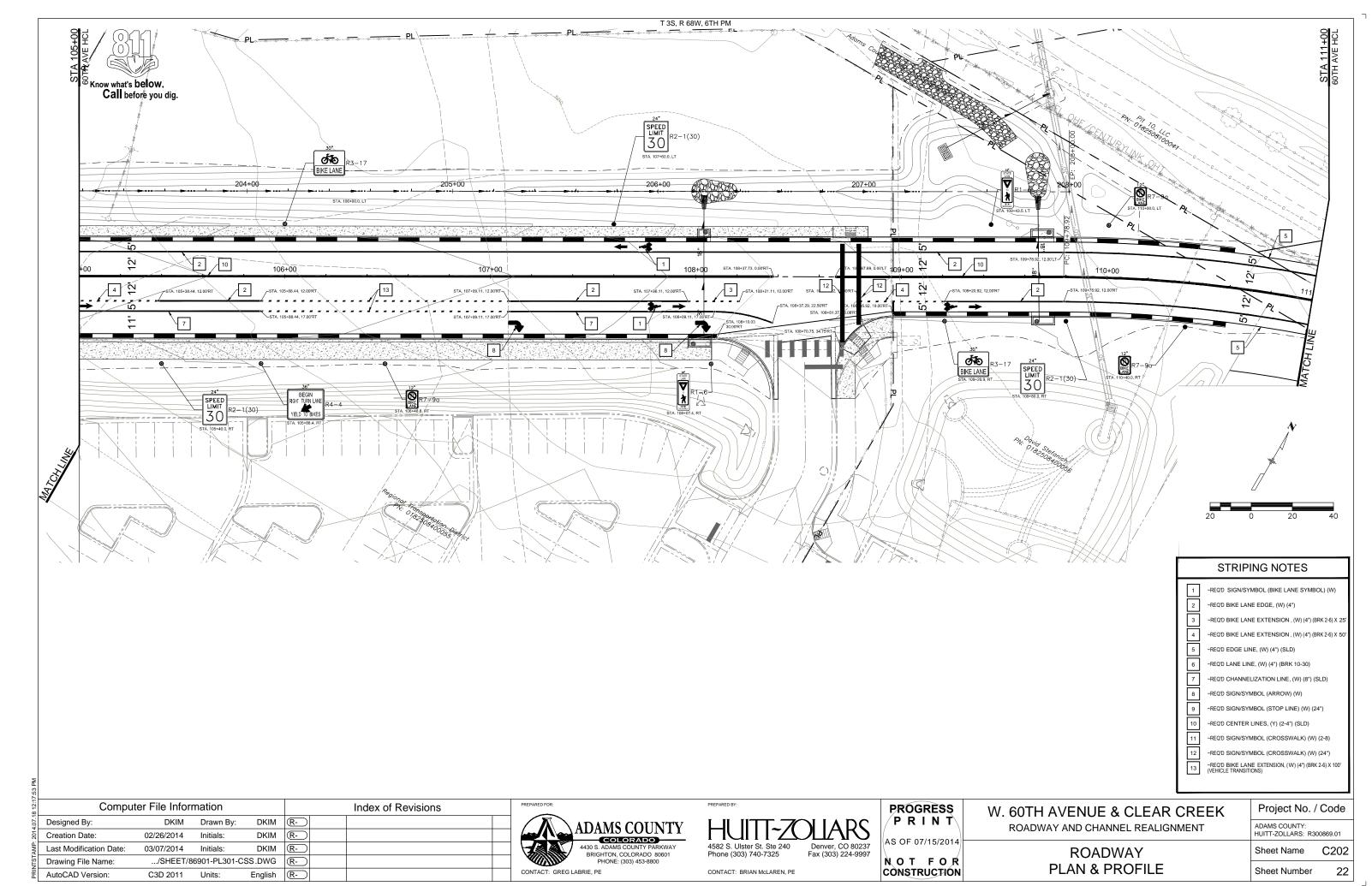
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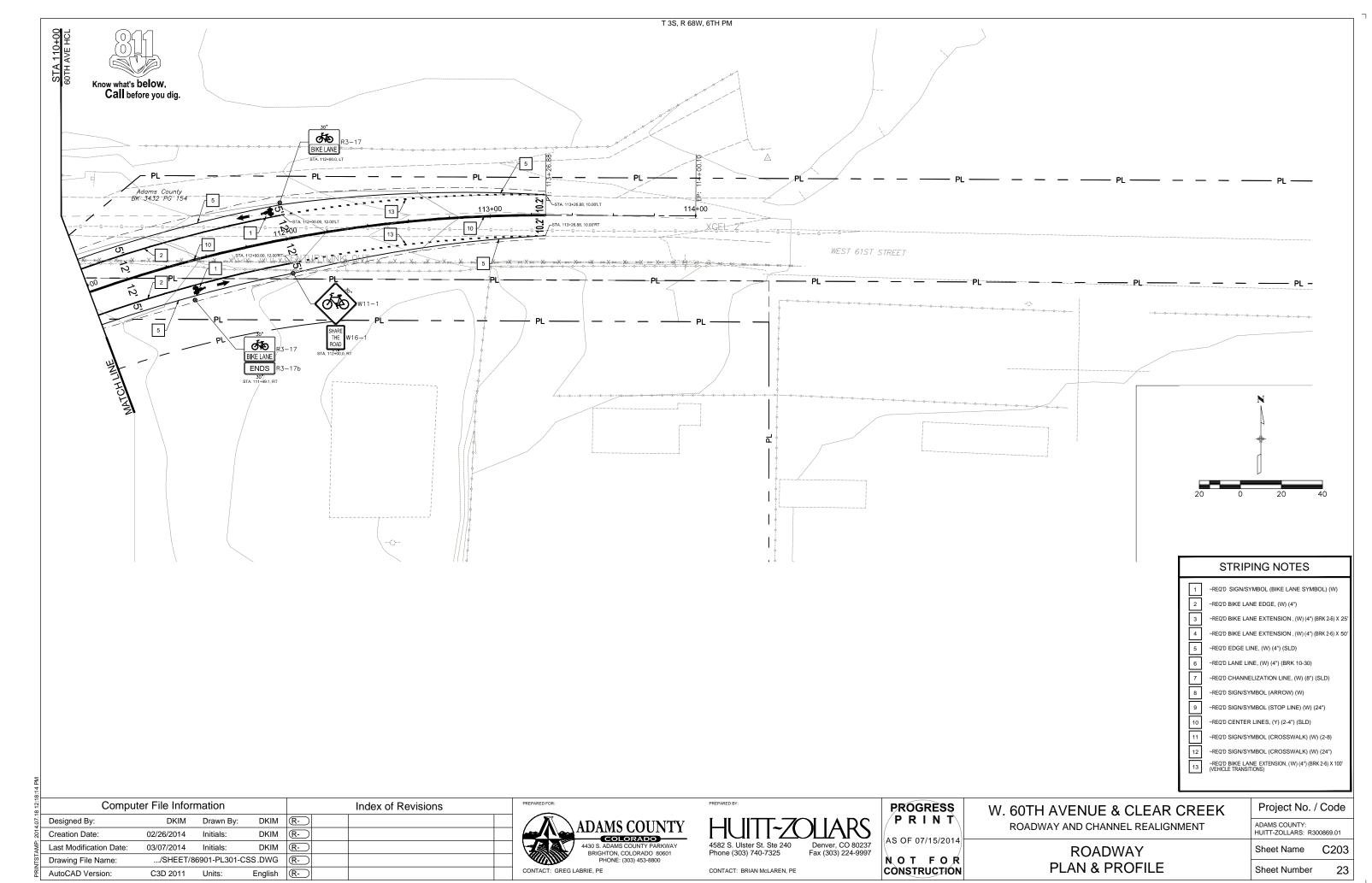
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Sheet Number

C300







EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213.

ALL CONCRETE SHALL BE CLASS B (WALL).

CHAMFER ALL EXPOSED CONCRETE CORNERS 3/4".

STRUCTURAL CONCRETE STAIN FINISH SHOWN ON THE PLAN AND DETAILS IS REQUIRED ON EXPOSED CONCRETE SURFACES. THE COLOR SHALL BE DAVIS COLOR SAN DIEGO BUFF 5237 OR EQUIVALENT AS APPROVED BY THE COUNTY.

DRAINS, WATERSTOPS AND ALL OTHER INCIDENTALS WILL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN ITEM 601 - CONCRETE CLASS B

GRADE 60 REINFORCING STEEL IS REQUIRED FOR ALL BARS. REINFORCING STEEL DESIGNATION IS IN ACCORDANCE WITH ASTM A615.

ALL REINFORCING STEEL SHALL BE EPOXY COATED, UNLESS OTHERWISE NOTED.

EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M213.

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR EPOXY COATED REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06, OF THE CDOT STANDARD SPECIFICATIONS. THESE SPLICE LENGTHS SHALL BE INCREASED BY 25% FOR BARS SPACED AT LESS THAN 6" ON CENTER. ALL OTHER TENSION LAP SPLICES ARE DETAILED IN THE PLANS

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
SPLICE LENGTH								
FOR CLASS B	1'-3"	1'-7"	2'-6"	3'-5"	4'-6"	5'-8"	7'-2"	8'-10"
CONCRETE								

THE ABOVE SPLICE LENGTHS SHALL BE INCREASED BY 20 PERCENT FOR 3 BAR BUNDLES AND 33 PERCENT FOR 4 BAR BUNDLES.

ANY CONSTRUCTION JOINTS AND/OR REINFORCING BAR SPLICES NOT SHOWN ON THE PLANS, BUT PROPOSED BY THE CONTRACTOR, SHALL BE APPROVED BY RTD PRIOR TO CONSTRUCTION.

APPLIED WIND LOADS AND FARTHOLIAKE LOADS WERE NOT CONSIDERED IN ANALYZING THE STRUCTURE FOR STABILITY DURING CONSTRUCTION STAGES. THE CONTRACTOR IS RESPONSIBLE FOR STABILITY DURING CONSTRUCTION.

STATIONS, ELEVATIONS, AND DIMENSIONS CONTAINED IN THESE PLANS ARE CALCULATED FROM A RECENT FIELD SURVEY. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS BEFORE ORDERING OR FABRICATION ANY MATERIAL.

WHERE ROUGHENED CONSTRUCTION JOINTS ARE SHOWN, THE CONCRETE SURFACE SHALL BE ROUGHENED TO AN AMPLITUDE OF 1/4".

LAYOUT LINE IS AT FRONT FACE OF WALL.

#### **DESIGN DATA**

AASHTO SPECIFICATIONS: LFRD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION

REINFORCED CONCRETE: REINFORCING STEEL:

LOAD AND RESISTANCE FACTOR DESIGN CLASS B CONCRETE: f'c = 4,500 PSI

DKIM R-

(R-

R-

R-

DKIM

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ACTIVE SOIL PRESSURE 35 PCF (UNFACTORED)

Computer File Information

02/26/2014

03/07/2014

C3D 2011

Initials:

Units:

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#### **CONSTRUCTION NOTES**

ADEQUATE SHORING, AS NECESSITATED BY CONSTRUCTION SEQUENCING, SHALL BE PROVIDED DURING ALL PHASES OF CONSTRUCTION. SHORING PLANS ARE TO BE STAMPED BY A COLORADO REGISTERED PROFESSIONAL ENGINEER. SHORING SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN ITEM

T 3S. R 68W, 6TH PM

THE CONTRACTOR SHALL MAINTAIN TRAFFIC ON EXISTING ROADWAYS DURING CONSTRUCTION OF WALLS BY USE OF SHORING OR OTHER MEANS NECESSARY. SHORING SHALL BE DESIGNED BY THE CONTRACTOR. METHOD OF SHORING AND DESIGN SHALL BE SUBMITTED TO RTD PRIOR TO EXCAVATION. PAYMENT FOR SHORING SHALL BE INCLUDED IN THE WORK

THE CONTRACTOR SHALL NOTIFY ADAMS COUNTY 5 WORKING DAYS IN ADVANCE OF BEGINNING EXCAVATION.

#### UTILITY NOTES

THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. ALL COSTS OF REPAIR, REPLACEMENT, OR PROTECTION NOT SPECIFICALLY DETAILED IN THE PLANS SHALL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 AT LEAST 3 DAYS (NOT INCLUDING THE DAY OF NOTIFICATION) PRIOR TO ANY EXCAVATION OR OTHER

DEMOLITION OR CONSTRUCTION OF ANY UTILITIES FOR PURPOSES OF RETAINING WALL CONSTRUCTION SHALL BE COORDINATED WITH UTILITIES PLAN.

PIPE AND UTILITY PENETRATIONS SHALL BE WRAPPED WITH 1/2" EXPANSION JOINT

REFER TO RETAINING WALL TYPICAL SECTION AND DETAILS SHEET S 7.2 FOR CONSTRUCTION OF WALL AROUND EXISTING STORM DRAIN.

#### **ABBREVIATIONS**

DIAMETER

AASHTO AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION

**OFFICIALS** 

AMERICAN SOCIETY FOR TESTING AND MATERIALS

BOTTOM OF <DESCRIPTION> BOREHOLE

BOW BOTTOM OF WALL

CDOT CIP COLORADO DEPARTMENT OF TRANSPORTATION

CAST IN PLACE CL CONTROL LINE

CLR

CONSTRUCTION JOINT CJ E/B EASTBOUND

**EXISTING GRADE** FFW FRONT FACE OF WALL

FTG GR FOOTING GRADE (REINF. STEEL)

DESIGN HEIGHT

HCL HORIZONTAL CONTROL LINE

MAXIMUM MINIMUM

MIN NTS NOT TO SCALE O.C. ON CENTER

PC POINT OF CURVATURE PFG PROPOPOSED FINISHED GRADE

POINT OF INTERSECT

POINT OF TANGENCY

PVMT **PAVEMENT** 

RE: RET. REFERENCE / REFER TO RETAINING (WALL)

REINF REINFORCEMENT

ROW RIGHT OF WAY

STA **STATION** 

THICKNESS (OF STEM) T.O TOP OF < DESCRIPTION> TBW TOP BACK OF WALL

TOW TOP OF WALL

**TYPICAL** WESTBOUND

Index of Revisions



CONTACT: GREG LABRIE, PE



CONTACT: BRIAN McLAREN, PE

**PROGRESS** PRINT AS OF 07/18/2014

(SPECIAL) QUANTITIES.

NOT FOR CONSTRUCTION

SUMMARY OF APPROXIMATE QUANTITIES

1) 504 MECHANICALLY STABILIZED EARTH RETAINING WALL SF (FACE)

① GEOTEXTILE FABRIC SHALL NOT BE MEASURED AND PAID FOR SEPARATELY,

② REFER TO TABULATION OF CURB, GUTTER AND SIDEWALK FOR SIDEWALK

UNIT

CY

C.Y.

C.Y.

C.Y.

S.Y.

LB

WALL

110-LT

ITEM DESCRIPTION

206 STRUCTURE EXCAVATION

206 FILTER MATERIAL (CLASS B)

2 601 CONCRETE CLASS B (WALL)

601 STRUCTURAL CONCRETE COATING

602 REINFORCING STEEL (EPOXY COATED)

607 FENCE CHAIN LINK (SPECIAL) (60-INCH)

BUT SHALL BE INCLUDED IN ITEM 504.

206 STRUCTURE BACKFILL (CLASS 1)

#### W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

**RETAINING WALL GENERAL NOTES** 

STRUCTURE

Project No. / Code

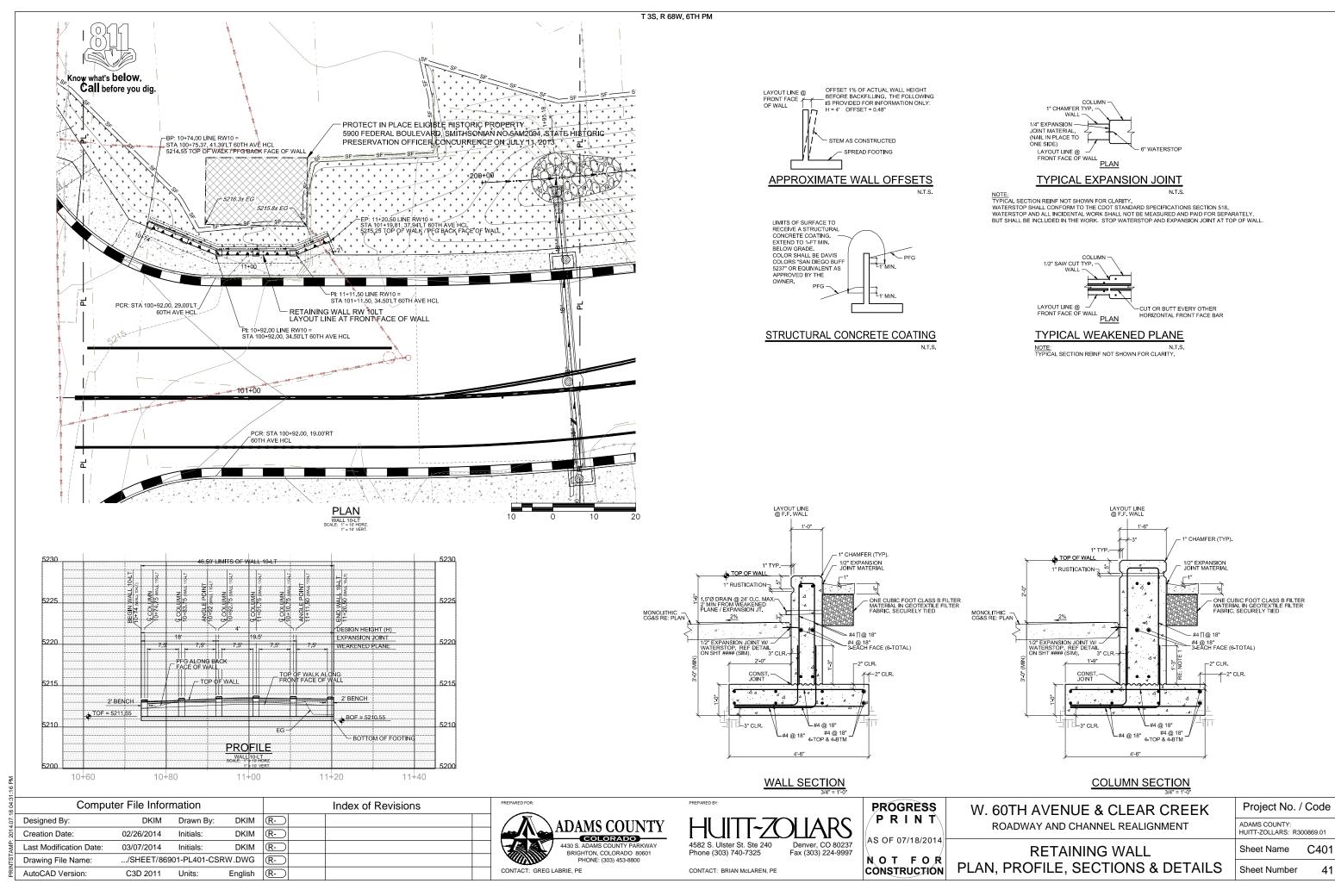
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HUITT-ZOLLARS: R300869.01 Sheet Name

Sheet Number

Designed By: Creation Date Last Modification Date: Drawing File Name: AutoCAD Version:



- ALL GRADING AND EROSION CONTROL MEASURES ARE SUBJECT TO THE REQUIREMENTS NOTED ON THE PROJECT GENERAL NOTES SHEET G101. THE LANDSCAPE REVEGETATION NOTED IN THE LANDSCAPE PLANS, AND THE GRADING AND EROSION CONTROL NOTES NOTED ON THIS SHEET.
- 2. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY". FOR INFORMATION, PLEASE CONTACT COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, WQCD-PE-B2, 4300 CHERRY CREEK DRIVE SOUTH, DENVER, COLORADO 80222-1530. ATTENTION: PERMITS AND ENFORCEMENT SECTION. PHONE 303-692-3590.
- 3 FROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION ACTIVITIES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED DURING AND AFTER CONSTRUCTION AND SHALL BE INSTALLED WITHIN 48 HOURS OF NOTIFICATION BY THE COUNTY.
- AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANNING, IMPLEMENTING AND MAINTAINING ON-SITE EROSION AND SEDIMENT CONTROL MEASURES AS FIELD CONDITIONS WARRANT. ANY EROSION CONTROL FACILITY DAMAGED REMATURELY, BY ANY MEANS, SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DUE TO CHANGES IN CONSTRUCTION, UNFORESEEN EROSION PROBLEMS, OR IF THE CONSTRUCTION PLANS DO NOT FUNCTION AS INTENDED. THE CONTRACTOR SHALL ADJUST, MODIEY, ADD, OR REPAIR PERMANENT AND TEMPORARY EROSION CONTROL FEATURES AS DIRECTED THE OWNER / ENGINEER TO REDUCE THE ENVIRONMENTAL IMPACT. ADJUSTMENTS TO EROSION AND EDIMENT CONTROL FEATURES SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- ALL PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY OTHER EARTH-DISTURBING ACTIVITY, ALL OTHER STRUCTURAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AS SOON AS THE FACILITIES, AROUND WHICH THEY ARE BASED, BECOME OPERATIONAL
- THERE SHALL BE NO EARTH-DISTURBING ACTIVITY OUTSIDE THE LIMITS DESIGNATED ON
- A WATER TRUCK SHALL BE KEPT ON-SITE AT ALL TIMES DURING EARTHWORK ACTIVITIES FOR DUST ABATEMENT.
- 9. SILT AND SEDIMENT SHALL BE REMOVED AFTER EACH SUBSTANTIAL RAINFALL. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD AND CONSTRUCTION DEBRIS THAT MAY HAVE ACCUMULATED IN THE FLOWLINES AND PUBLIC RIGHTS-OF-WAYS OF ADAMS COUNTY AS A RESULT OF THIS PROJECT. SAID REMOVAL SHALL BE CONDUCTED WITHIN 48 HOURS OR AS DIRECTED BY THE COUNTY
- 10. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM AND RECEIVING WATERS DURING ALL WORK ASSOCIATED WITH THIS PROJECT. NEGATIVE IMPACTS TO DOWNSTREAM AREAS CAUSED BY GRADING ARE TO BE MONITORED AND CORRECTED BY THE CONTRACTOR. ANY OFF-SITE CLEAN-UP, INCLUDING STREET CLEANING, AS DIRECTED BY THE OWNER, SHALL BE COMPLETED WITHIN 24-HOURS OF WRITTEN INSTRUCTION, OR RISK CONSTRUCTION STOPPAGE. IF NOT COMPLETED WITHIN THE 24-HOURS ALLOTTED THE OWNER MAY PERFORM THE WORK AND DEDUCT SUCH COST FROM THE CONTRACTORS WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF
- 11. TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL SUCH TIME AS ALL TRIBUTARY-DISTURBED AREAS ARE SUFFICIENTLY STABILIZED. AS DETERMINED BY THE OWNER, TO MINIMIZE EROSION POTENTIAL.
- 12. WHEN TEMPORARY EROSION CONTROL MEASURES ARE REMOVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP AND REMOVAL OF ALL SEDIMENT AND DEBRIS FROM ALL DRAINAGE AND OTHER PUBLIC FACILITIES.
- 13. ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS-OF-WAYS. ALL MUD AND SEDIMENT TRACKED ONTO PUBLIC STREETS SHALL BE CLEANED IMMEDIATELY BY THE CONTRACTOR. STREET CLEANING INCLUDES SHOVELING AND SWEEPING ACTIVITIES. AT NO TIME SHALL SEDIMENT BE WASHED DOWN INI ETS INTO THE CITY STORM SEWER SYSTEM. IE THIS OCCURS, THE CONTRACTOR SHALL VACUUM SEDIMENT FROM THE STORM SEWERS AT NO ADDITIONAL COST TO THE PROJECT.
- 14. EROSION CONTROL DEVICES TO BE PLACED AT LOCATIONS INDICATED ON THE PLANS SHALL BE INSTALLED IN ACCORDANCE WITH URBAN DRAINAGE AND FLOOD CONTROL DISTRICT STANDARD DETAILS, AND SPECIFICATIONS.
- 15. SOILS THAT WILL BE STOCKPILED FOR MORE THAN 30 DAYS SHALL BE MULCHED AND SEEDED WITH A TEMPORARY OR PERMANENT GRASS COVER WITHIN 14 DAYS OF STOCKPILE CONSTRUCTION. IE STOCKPILES ARE LOCATED WITHIN 100 FEET OF A PRAINAGEWAY, ADDITIONAL SEDIMENT CONTROLS SUCH AS TEMPORARY DIKES OR SILT
- 16. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY". FOR INFORMATION, PLEASE CONTACT COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, WQCD-PE-B2, 4300 CHERRY CREEK DRIVE SOUTH, DENVER, COLORADO 80222-1530. ATTENTION: PERMITS AND ENFORCEMENT SECTION. PHONE 303-692-3590.

- 17. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A STATE OF COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) GENERAL PERMIT APPLICATION -STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY PRIOR TO CONSTRUCTION (NPDES PERMIT). THE CONTRACTOR SHALL PROVIDE THE COUNTY WITH A COPY OF THIS PERMIT APPLICATION TO THE STATE PRIOR TO RECEIVING A GRADING/CONSTRUCTION PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THIS STATE PERMIT. THE CONTRACTOR SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO PERMIT FOR STORM WATER DISCHARGE AND
- 18. MODIFICATION OF AN ACTIVE EROSION AND SEDIMENT CONTROL PERMIT BY THE CONTRACTOR, OR THEIR AUTHORIZED AGENTS SHALL REQUIRE TIMELY NOTIFICATION OF AND APPROVAL BY THE COUNTY. TERMINATION OF AN ACTIVE EROSION AND SEDIMENT CONTROL PERMIT UPON COMPLETION OF THE PROJECT REQUIRES NOTIFICATION OF AND
- 19. CONTRACTOR IS RESPONSIBLE FOR FILING A STATE OF COLORADO, CDPHE INACTIVATION NOTICE - CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT CERTIFICATION; ONCE THE CONSTRUCTION SITE HAS BEEN FINALLY STABILIZED ACCORDING TO THE APPROVED PERMIT. THE CONTRACTOR SHALL PROVIDE THE CITY WITH A COPY OF THIS NOTICE. THERE IS NO FEE ASSOCIATED WITH THIS NOTICE AND THE THERE WILL BE NO FEE CHARGED TO THE CITY OR IF THE CONTRACTOR NEGLECTS TO FILE THIS NOTICE.
- 20. APPROVED EROSION AND SEDIMENT CONTROL "BEST MANAGEMENT PRACTICES" (BMP) SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL BMP'S WEEKLY AND AFTER SIGNIFICANT PRECIPITATION EVENTS. PERIODIC INSPECTIONS SHALL ALSO INCLUDE INSPECTING EQUIPMENT FOR LEAKS AND REVIEWING EQUIPMENT MAINTENANCE PRACTICE. ANY EROSION CONTROL BMPS THAT HAVE BEEN COMPROMISED OR HAVE BEEN DISTURBED SHALL BE REPLACED OR RECONSTRUCTED. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR, AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMP. THE CONTRACTOR SHALL HAVE ALL EROSION CONTROL DEVICE IN PLACE AND EFFECTIVE PRIOR TO A STORM EVENT
- 21. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED WITHIN 48 HOURS UNLESS OTHERWISE AGREED UPON. ALL INSPECTIONS AND MAINTENANCE SHALL BE DOCUMENTED BY THE PROJECT EROSION CONTROL SUPERVISOR AND MADE AVAILABLE TO THE COUNTY AND THE CDPHE UPON REQUEST.
- 22. THE CONCRETE WASHOUT CONTAINMENT STRUCTURE SHALL CONTAIN ALL WASHOUT WATER. THE CONCRETE WASHOUT CONTAINMENT STRUCTURE SHALL BE LOCATED A MINIMUM OF 50-HORIZONTAL-FEET FROM STATE WATERS. THE CONCRETE WASHOUT CONTAINMENT STRUCTURE SHALL BE SIGNED AS "CONCRETE WASHOUT" CONTRACTOR SHALL CHECK ALL CONCRETE WASHOUT AREAS CAPACITY. WASTE MATERIAL FROM CONCRETE WASHOUT OPERATIONS MUST BE REMOVED AND LEGALLY DISPOSED OF WHEN IT HAS ACCUMULATED TWO-THIRDS OF THE WET STORAGE CAPACITY OF THE STRUCTURE.THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM
- 23. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS

SWMP BMP MAINTENANCE NOTES

- 24. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL SILT FENCING SO THAT IT FUNCTIONS PROPERLY DURING CONSTRUCTION AND WORK SUSPENSIONS. ALL SILT FENCING SHALL BE REMOVED BY THE CONTRACTOR UPON SUBSTANTIAL PERMANENT STABILIZATION UNLESS OTHERWISE DIRECTED BY AUTHORIZED CITY PERSONNEL.
- 25. ALL INLET/OUTLET PROTECTION WILL BE CHECKED FOR MAINTENANCE AND FAILURE SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF ONCE IT HAS ACCUMULATED TO HALF THE DESIGN OF THE TRAP.
- 26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VEHICLE TRACKING CONTROL DURING THE ENTIRE TIME THAT IT IS IN LISE IN THE PROJECT. THE VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE COMPLETION OF THIS PROJECT UNLESS OTHERWISE DIRECTED BY AUTHORIZED CITY PERSONNEL
- 27. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, OR CONTAINED UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. MANUFACTURE'S RECOMMENDED. METHODS FOR SPILL CLEANUP SHALL BE FOLLOWED, ALONG WITH PROPER DISPOSAL
- 28. EACH CONCRETE TRUCK OPERATOR SHALL BE AWARE OF THE DESIGNATED CONCRETE WASHOUT AREA. WASTE MATERIALS MUST BE REMOVED AND LEGALLY DISPOSED OF WHEN IT HAS ACCUMULATED TO TWO-THIRDS OF THE WET STORAGE CAPACITY OF THE
- 29. ALL CONCRETE WASHOUT AREAS SHALL BE CLEARLY MARKED. CONCRETE WASHOUT CONTAINMENT TO INCLUDE ORANGE PLASTIC CONSTRUCTION FENCING OR EQUIVALENT AROUND THE WASHOUT STRUCTURE AND A SIGN POSTED LABELED "CONCRETE
- 30. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND/OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- 31. AT THE END OF CONSTRUCTION, ALL WASTE CONCRETE SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT AN APPROVED WASTE SITE.

THE GENERAL REQUIREMENTS FOR EROSION CONTROL WORK SHALL BE AS FOLLOWS:

- 32 TEMPORARY FROSION CONTROL FACILITIES AND/OR PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF AN EARTH DISTURBANCE OPERATION SHALL BE INSTALLED BEFORE ANY EARTH DISTURBANCE OPERATIONS TAKE PLACE.
- 33. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION, AND SHALL NOT EXCEED THE EROSION EXPECTED TO OCCUR FOR THE SITE IN ITS TOTALLY UNDEVELOPED
- 34. PERSONS ENGAGED IN EARTH DISTURBANCES SHALL DESIGN, IMPLEMENT, AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS ADOPTED BY THE CITY.
- 36. EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE
- 37. SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH DISTURBANCE
- 38. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA
- TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATIONS PRESCRIBED IN ACCORDANCE WITH THE PROVISIONS OF THE "EROSION AND SEDIMENT CONTROL FOR CONSTRUCTION ACTIVITIES" AND IN ACCORDANCE WITH THE PERMANENT EROSION CONTROL FEATURES SHOWN ON THE SOIL STABILIZATION PLAN APPROVED BY THE CITY
- 40. PERMANENT EROSION CONTROL MEASURES FOR SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR COMPLETION OF THE FINAL EARTH DISTURBANCE. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH DISTURBANCE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH DISTURBANCE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED WITHIN 14 CALENDAR DAYS. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION MEASURES ARE IMPLEMENTED. EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST POSSIBLE PERIOD OF TIME.

INTERIM AND FINAL STABILIZATION

41. SEEDING PLAN: SOIL PREPARATION, SOIL CONDITIONING OR TOPSOIL, SEEDING (NATIVE), MULCHING (WEED FREE) AND MULCH TACKIFIER WILL BE REQUIRED. THE FOLLOWING

	POUNDS	% OF	
COMMON NAME	PLS/ACRE	MIX	
WESTERN WHEATGRASS	10.00	28.0	
JUNEGRASS	1.25	4.0	
ARIZONA FESCUE	3.75	11.0	
INDIAN RICEGRASS	5.00	14.0	
PRAIRIE DROPSEED	3.00	9.0	
LITTLE BLUESTEM	4.50	13.0	
SIDEOATS GRAMA	7.50	21.0	
TOTAL	35.00	100.00	

- 42. SPECIAL REQUIREMENTS: DUE TO HIGH FAILURE RATES, HYDROMULCHING AND/OR HYDROSEEDING WILL NOT BE ALLOWED
- 43. RESEDING OPERATIONS/CORRECTIVE STABILIZATION: PRIOR TO FINAL ACCEPTANCE
- A. SEEDED AREAS SHALL BE REVIEWED DURING THE 14 DAY INSPECTIONS BY THE EROSION CONTROL SUPERVISOR FOR BARE SOILS CAUSED BY SURFACE OR WIND EROSION, BARE AREAS CAUSED BY SURFACE OR GULLY EROSION, BLOWN AWAY MULCH, ETC. SHALL BE REGRADED, SEEDED, MULCHED AND HAVE MULCH TACKIFIER (OR BLANKET) APPLIED AS NECESSARY, AT NO ADDITIONAL COST TO THE PROJECT.
- B. AREAS WHERE SEED HAS NOT GERMINATED AFTER ONE SEASON SHALL BE EVALUATED BY THE OWNER. AREAS THAT HAVE NOT GERMINATED SHALL HAVE SEED, MULCH AND MULCH TACKIFIER (OR BLANKET) REAPPLIED. WORK SHALL BE PAID FOR BY THE
- C. THE CONTRACTOR SHALL MAINTAIN SEEDING/MULCH/TACKIFIER, MOW TO CONTROL WEEDS OR APPLY HERBICIDE TO CONTROL WEEDS IN THE SEEDED AREAS UNTIL FINAL ACCEPTANCE

PROJECT SITE DRAINAGE RUNOFF

INCREASE IN IMPERVIOUS AREA: 2.0 ACRES

RECEIVING SYSTEMS

RECEIVING WATER

CONTACT: BRIAN McLAREN, PE

EXISTING OVERLAND & STORM DRAINAGE SYSTEM CLEAR CREEK

#### SUMMARY OF EARTHWORK

EARTHWORK SHALL NOT BE MEASURED, BUT SHALL BE PAID PLAN QUANTITY (COMPLETE IN PLACE).

	CU. YDS.
EMBANKMENT MATERIAL (COMPLETE IN PLACE) (FOR INFORMATION ONLY)	###
UNCLASSIFIED EXCAVATION (FOR INFORMATION ONLY)	###
COMPACTION (AASHTO-T99)(FOR INFORMATION ONLY)	
EMBANKMENT MATERIAL	###
BASES OF CUTS AND FILLS	###
TOTAL	###
WETTING (FOR INFORMATION ONLY) COMPACTION X 0.040	MGAL ###
EMBANKMENT X 1.15	###

#### SUMMARY OF EROSION CONTROL / STORM WATER MANAGEMENT FOR INFORMATION ONLY

PAY ITEM DESCRIPTION	QUANTITY	UNIT
208 EROSION BALES	15	EA
208 EROSION LOG (8 INCH)	5	LF
208 SILT FENCE	2750	LF
208 CONCRETE WASHOUT STRUCTURE	1	EA
208 STORM DRAIN INLET PROTECTION	5	EA
208 VEHICLE TRACKING PAD W/ STABILIZED STAGING AREA	1	EA
208 EROSION CONTROL SUPERVISOR	###	HR
212 SEEDING (NATIVE)	0.814	AC
213 MULCHING (WEED FREE HAY)	0.814	AC
216 SOIL RETENTION BLANKET (CLASS 1)	###	SY

- PLACEMENT OF CONCRETE WASHOUT AREA, VEHICLE TRACKING PAD AND STABILIZED STAGING AREAS TO BE DETERMINED BY THE CONTRACTOR. PLACEMENT SHALL REQUIRE APPROVAL BY THE COUNTY. STABILIZED STAGING AREAS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY. BUT SHALL BE INCLUDED IN THE WORK.
- 2. REFER TO STORM DRAIN PLANS FOR SOIL RIPRAP OUTLET PROTECTION.

Know what's below. Call before you dig.

Computer File Information Index of Revisions DKIM R-Designed By DKIM DKIM (R-02/26/2014 Creation Date R-Last Modification Date: 03/07/2014 Initials: DKIM R-../SHEET/86901-PL500-GEC-GN.DWG Drawing File Name: AutoCAD Version: C3D 2011 Units: English

ADAMS COUNTY COLORADO BRIGHTON, COLORADO, 80601 CONTACT: GREG LABRIE, PE

4582 S. Ulster St. Ste 240 Phone (303) 740-7325 Fax (303) 224-9997

PRINT

AS OF 07/18/2014 NOT FOR CONSTRUCTION

**PROGRESS** 

W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

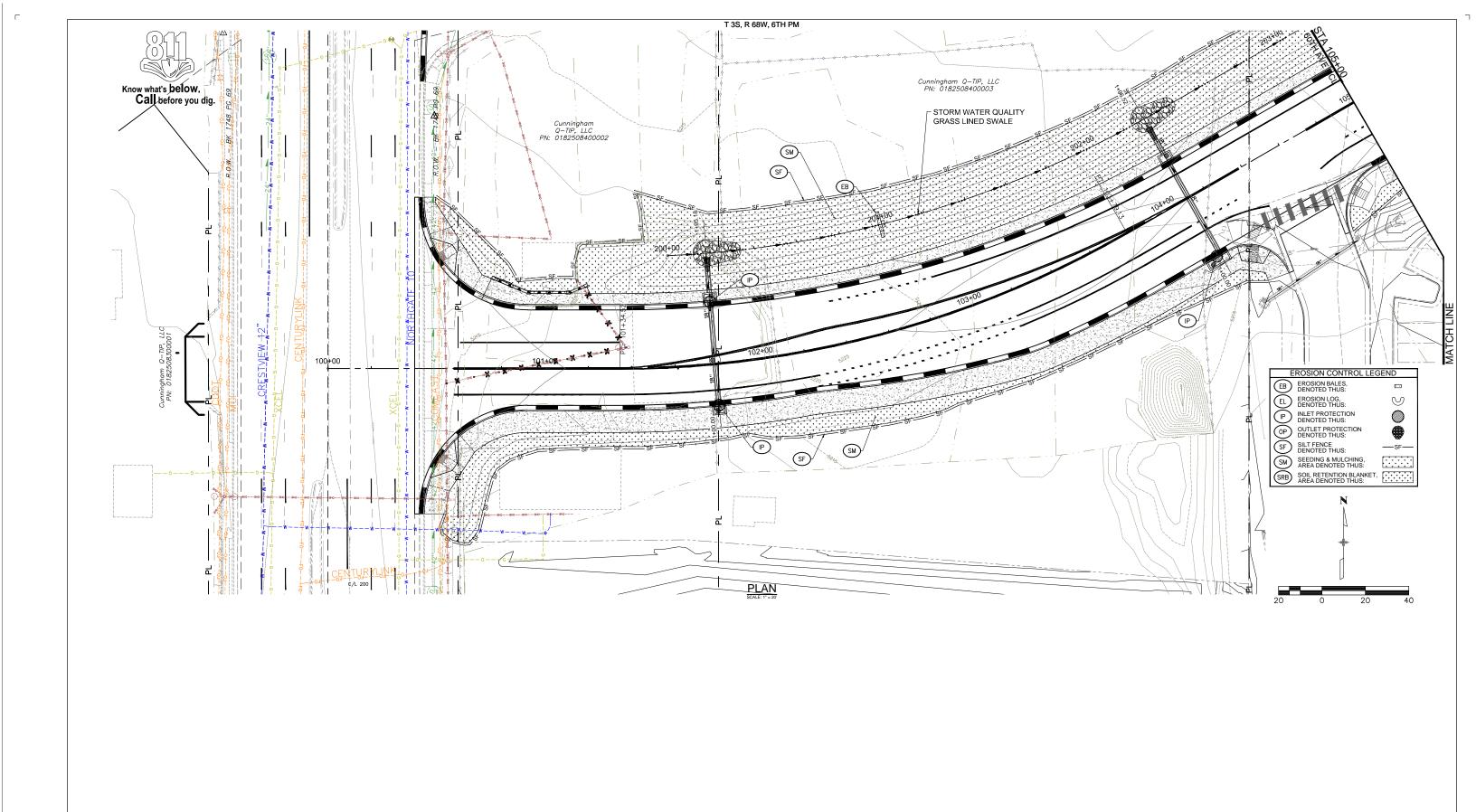
GRADING AND EROSION CONTROL **GENERAL NOTES** 

Project No. / Code

HUITT-ZOLLARS: R300869.01 Sheet Name

Sheet Number

C500



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4582 S. Ulster St. Ste 240 Phone (303) 740-7325 Denver, CO 80237 Fax (303) 224-9997

CONTACT: BRIAN McLAREN, PE

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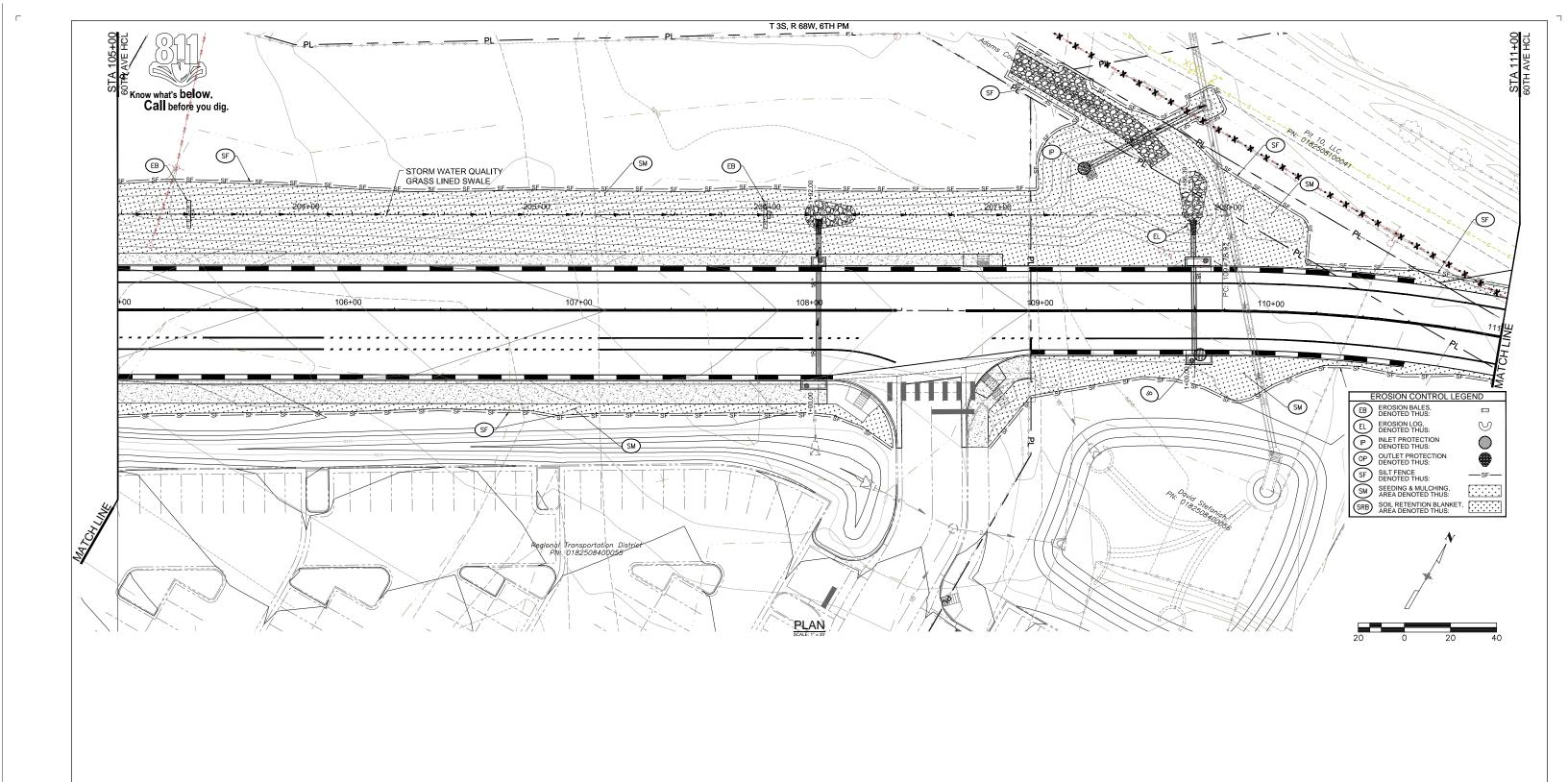
AS OF 07/18/2014 NOT FOR CONSTRUCTION W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

Project No. / Code ADAMS COUNTY: HUITT-ZOLLARS: R300869.01

Sheet Name C501

**EROSION CONTROL** STORM WATER MANAGEMENT PLAN

Sheet Number



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8	AutoCAD Version:	C3D 2011	Units:	English	(R- )						



HUITT-ZOLLARS
4582 S. Ulster St. Ste 240 Denver, CO 80237
Phone (303) 740-7325 Fax (303) 224-9997

CONTACT: BRIAN McLAREN, PE

80237 4-9997 NOTFOR CONSTRUCTION

PROGRESS PRINT

W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

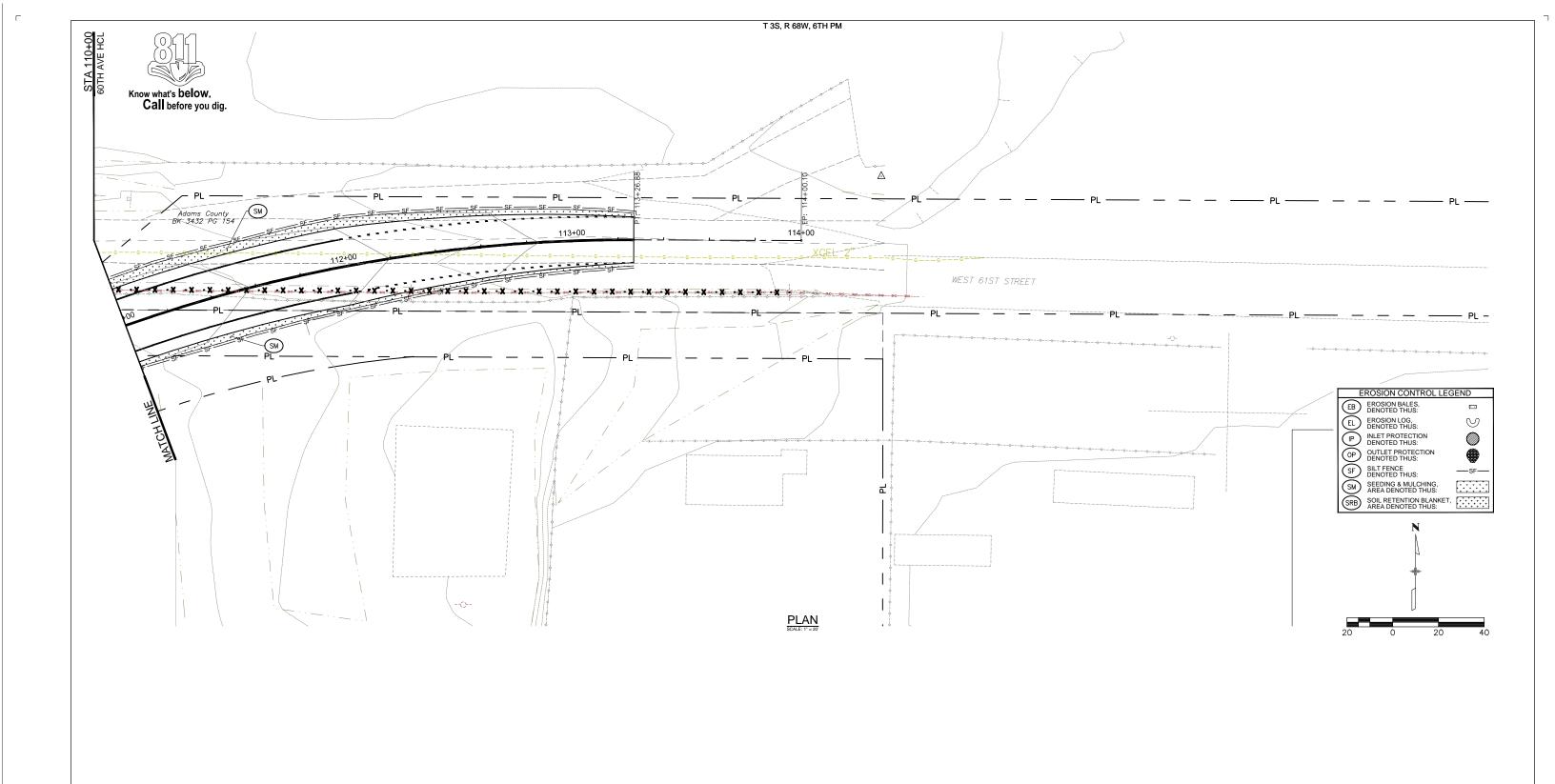
EROSION CONTROL STORM WATER MANAGEMENT PLAN Project No. / Code

ADAMS COUNTY:
HUITT-ZOLLARS: R300869.01

Sheet Name C502

Sheet Number 52

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ADAMS COUNTY

COLORADO

4430 S. ADAMS COUNTY PARKWAY
BRIGHTON, COLORADO 80601
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PROGRESS PRINT

AS OF 07/18/2014 NOT FOR CONSTRUCTION W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

Project No. /5@ode ADAMS COUNTY: HUITT-ZOLLARS: R300869.01

**EROSION CONTROL** STORM WATER MANAGEMENT PLAN

Sheet Name C503 Sheet Number

# TABULATION OF STORM DRAINAGE SYSTEM

			INI EA	LET				MAN EA	HOLE CH		E PLATE]	_EVA <sup>-</sup>	TION				STOR	M DR	AINAGE	PIPE				LLAR	SWEEP	END :	SECTIC	N	REMOVAL OF PIPE PIPE (PARTIAL) REMOVAL OF REMOVAL OF REMOVAL OF STRICTIRE	URE	SOIL RIPRAP (BURIED)	
		L=5 H (PAY) 5 10 15	TYPE R L=10	L=	15	TYPE	С	SLAB BASE	BOX BASE	SIDE/ DRAIN	ORIFAC			LII	NE	IN\	/ERT	ADE	REINFO	LI RCED CO	NEAR F	EET E PERF	. PVC		I GLE	E INFORCEI	EACH D CONCRI	ETE	PIPE (PAR PEMOV/ PAR PIPE (PAR PEMOV/ PAR PE	) DIFY RUCT	CU.YDS.	MISCELLANEOUS
LOCATION 60th Avenue HCL	SIDE	H (PAY)	H (PAY)	H (P	AY)	H (PA	Y) H	(PAY)	H (PA)	/) W=18" 2	RI	М	LOWER NVERT	FROM UPPER	TO	LIDDED	LOWER	% GR	CLAS	SS IV	30 30	SDF	R 26 E	\frac{1}{2}   \frac{1}{2}	ΕΛ 12	ROI	JND	36 V/IE		MC ST	TYPE M H	
STA 101+78.63	RT		3 10 13		7 13	3 10	13 3	10 13	3 10	13 LA			5209.99	OTT EIX	LOWER	OFFLIX	LOVER	0,	12 13	10 24	30 3	0 0	24 0		LA 12	13 16	24 30	30 111			I-10A	A-R
STA 101+78.63 TO STA 101+78.53	RT													I-10A-R	MH-10	5209.99	5209.91	0.50		30											I-10 <i>A</i>	A-R, P-10, MH-10
STA 101+78.53	LT						1				521	3.47	5209.78																		MH-	-10
STA 101+78.53 TO STA 101+78.92	LT													MH-10	I-10B-L	5209.78	5209.55	0.50		30											MH-	-10, P-11, I-10B-L
STA 101+78.92	LT	1									521	3.31	5209.57																		I-10E	B-L
STA 101+78.92 TO STA 101+78.92	LT													I-10B-L	FES-10	5209.55	5209.48	0.50		15											I-10E	B-L, P-12, FES-10
STA 101+78.92	LT												5209.48													1					FES	S-10
STA 104+11.49	RT	1									521	4.00	5210.74																		I-20A	A-R
STA 104+11.49 TO STA 104+11.88	R-L													I-20A-L	I-20B-R	5210.74	5210.51	0.50		55											I-20A	A-R, P-20, I-20B-R
STA 104+11.88	LT	1									521	4.00	5210.40																		1-20	)B-L
STA 104+11.88 TO STA 104+11.88	LT													I-20B-R	FES-20	5210.40	5210.34	0.50		15											I-20E	B-L, P-21, FES-20
STA 104+11.88	LT												5210.34													1					FES	S-20
STA 108+03.86	RT										521	0.73	5207.39																		I-30A	A-R
STA 108+03.86 TO STA 108+03.86	R-L													I-30A-R	I-30B-L	5207.39	5207.15	0.50		55											I-30 <i>A</i>	A-R, P-30, I-30B-L
STA 108+03.86	LT	1									521	0.64	5207.05																		I-30E	B-L
STA 108+03.86 TO STA 108+03.86	LT													I-30B-L	FES-30	5207.05	5206.99	0.50		15											I-30E	B-L, P-31 , FES-30
STA 108+03.86	LT												5206.99													1					FES	S-30
STA 109+66.90	RT	1									520	8.90	5208.56																		I-40 <i>A</i>	A-R
STA 109+66.90 TO STA 109+66.51	R-L													I-40A-R	I-40B-L	5205.56	5205.39	0.50		55											I-40 <i>F</i>	A-R, P-40, I-40B-L
STA 109+66.51	LT	1									520	8.71	5205.37																		I-40E	B-L
STA 109+66.51 TO STA 109+66.51	LT													I-40B-L	FES-40	5205.37	5205.29	0.50		15											I-40E	B-L, P-41 , FES-40
STA 109+66.51	LT												5206.99													1					FES	S-40



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4MP:	Last Modification Date:	03/07/2014	Initials:	DKIM	R-						
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PROJECT TOTALS





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AS OF 07/15/2014

NOTFOR

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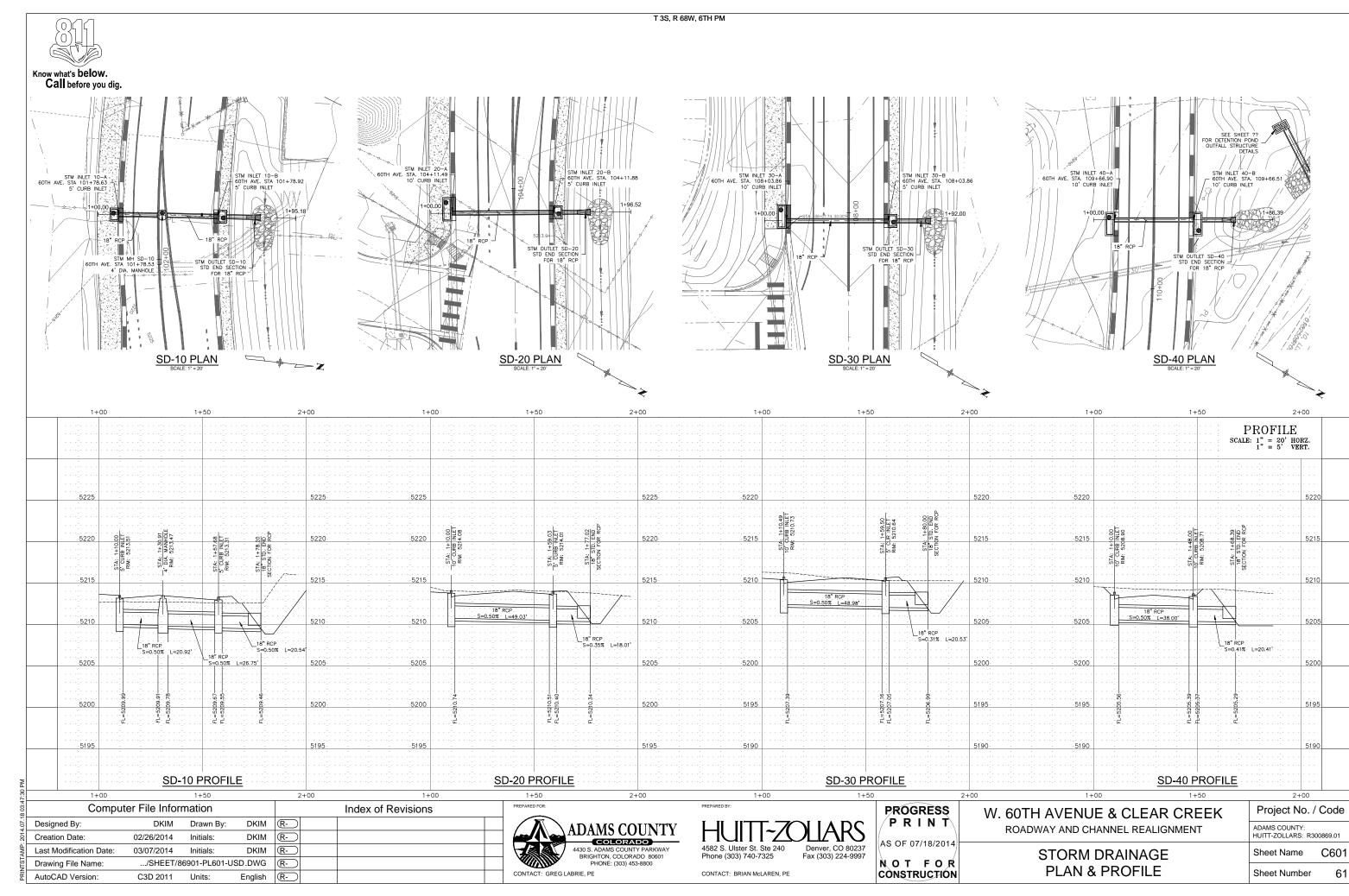
W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT

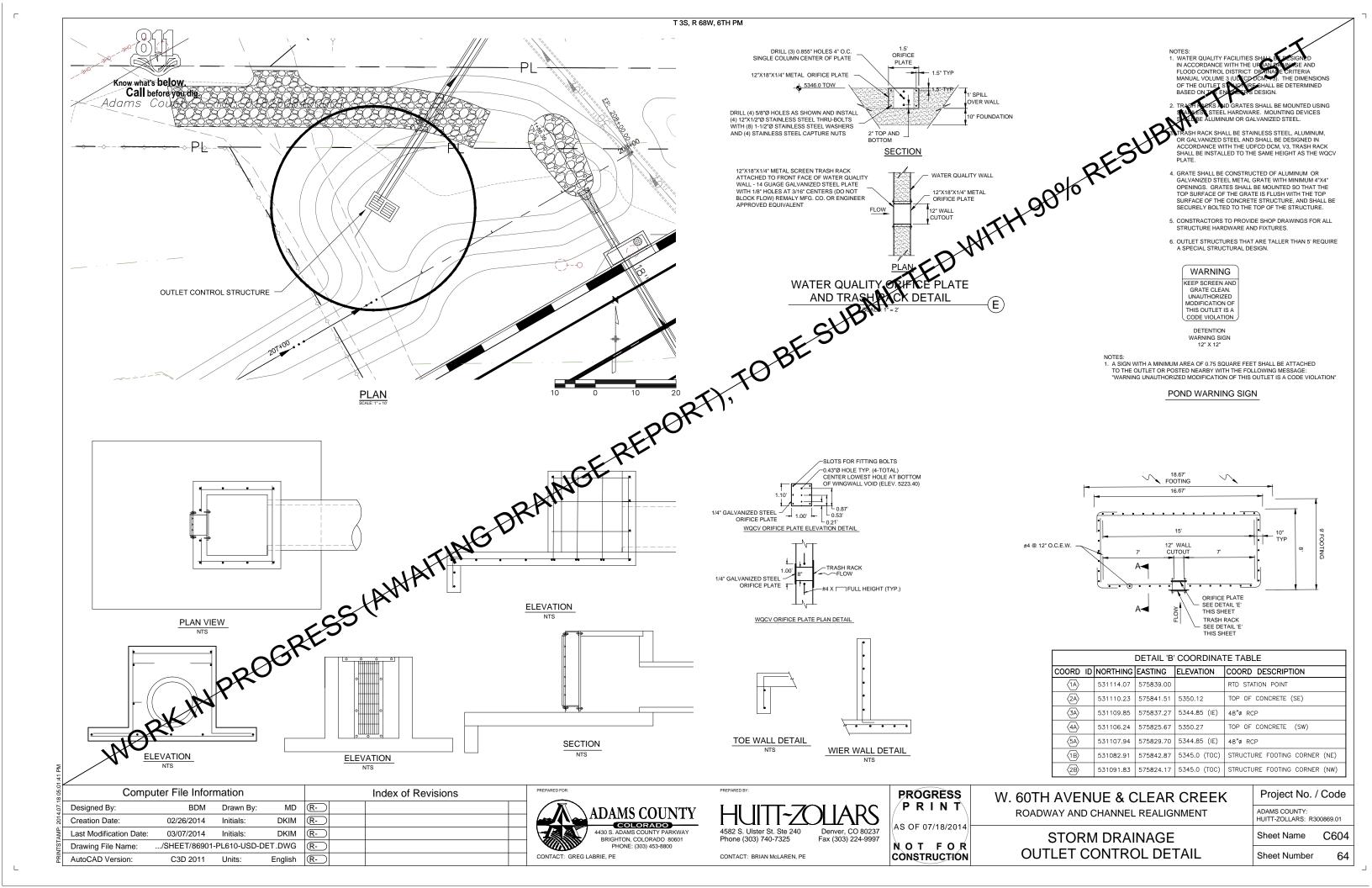
TABULATION OF STORM DRAINAGE

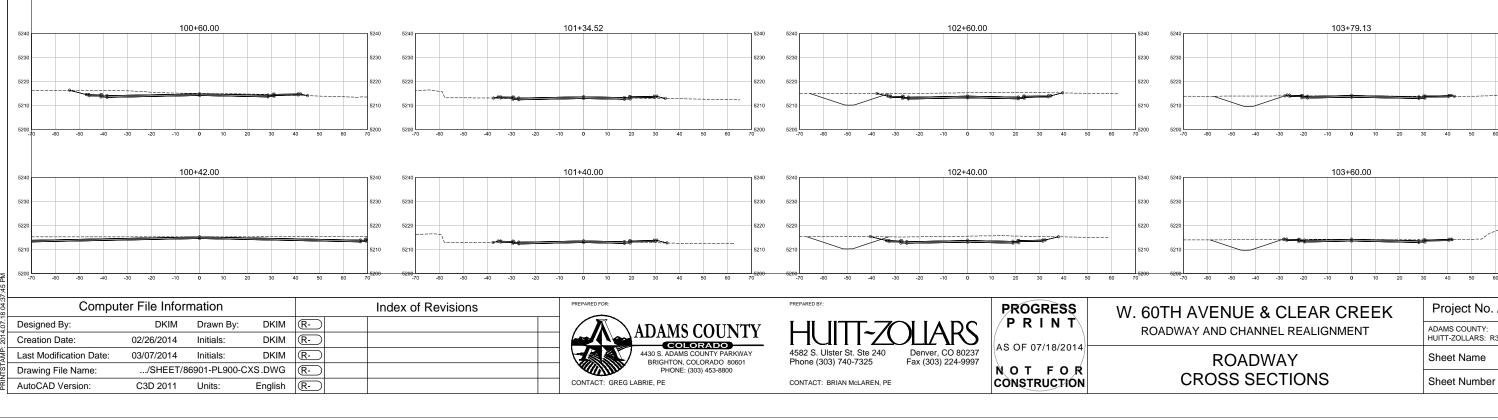
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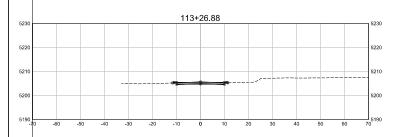


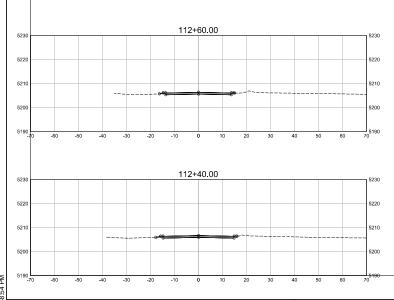




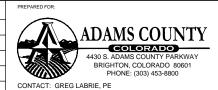
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Computer File Information Index of Revisions DKIM R-Designed By: DKIM R-02/26/2014 DKIM R-Last Modification Date: 03/07/2014 Initials: R-.../SHEET/86901-PL900-CXS.DWG Drawing File Name: AutoCAD Version: C3D 2011 Units: English R-



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CONTACT: BRIAN McLAREN, PE	CONSTRUCTION

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AS OF 07/18/2014 FOR W. 60TH AVENUE & CLEAR CREEK ROADWAY AND CHANNEL REALIGNMENT **ROADWAY** 

**CROSS SECTIONS** 

Project No. / Code

ADAMS COUNTY: HUITT-ZOLLARS: R300869.01

Sheet Name C904

Sheet Number

#### EXHIBIT L-2 FEDERAL REQUIREMENTS

The County shall comply with and perform its obligations under Section 7.12 (*Federal Station*) of this IGA, and (where relevant) shall require each of its consultants, contractors and their respective subcontractors to perform their respective obligations under Section 7.12 (*Federal Station*) this IGA in accordance with, the following requirements.

## 1. FEDERAL REQUIREMENTS APPLICABLE TO ARCHITECTURAL AND ENGINEERING CONTRACTS AND SUBCONTRACTS

#### 1.1 Disadvantaged Business Enterprises Requirements

In accordance with Section 3 of this Exhibit.

#### 1.2 Incorporation of FTA Terms

The provisions of this IGA include, in part, certain Standard Terms and Conditions required by the United States Department of Transportation (*DOT*), whether or not expressly set forth in the IGA provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, dated November 01, 2008, as may be amended, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in the IGA. The County shall not perform any act, fail to perform any act, or refuse to comply with any RTD requests which would cause RTD to be in violation of the FTA terms and conditions. The incorporation of FTA terms has unlimited flow down.

#### 1.3 Federal Changes

All applicable FTA regulations, policies, procedures and directives, including those listed directly in or referred to in the current FTA Master Agreement, as may be amended or promulgated from time to time during the term of this IGA.

#### 1.4 No Government Obligation to Third Parties

The County acknowledges and agrees that, notwithstanding any concurrence by the Federal Government in or approval of the IGA or the solicitation or award of the underlying contracts or subcontracts, absent the express written consent by the Federal Government, the Federal Government is not a party to this IGA or such contracts and subcontracts and shall not be subject to any obligations or liabilities to RTD, the County, or any other party (whether or not a party to the IGAs or other contracts) pertaining to any matter resulting from the IGA.

#### 1.5 Selection of Architects and Engineers (Brooks Act)

All applicable provisions of 40 U.S.C. § 1101, et seq. The County shall use competitive proposal procedures based on the Brooks Act when contracting for architectural and engineering services as defined in 40 U.S.C. § 1101.

#### 1.6 Debarment

(i) Federal Executive Order no. 12549 (Feb. 18, 1986), (ii) Federal Executive Order no. 12689 (Aug. 16, 1989), (iii) 31 U.S.C. § 6101 note (Section 2455, Pub. L. 103-355, 108 Stat. 3327) and (iv) 49 CFR Part 29 "Governmentwide Debarment and Suspension (Nonprocurement)".

#### 1.7 Lobbying

31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995) and 31 U.S.C. 3801, et seq.

#### 1.8 Program Fraud and False or Fraudulent Statements and Related Acts

The provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and USDOT regulations, "Program Fraud Civil Remedies", 49 CFR Part 31.

#### 1.9 Civil Rights

- (a) 49 U.S.C. § 5332 (Nondiscrimination in Federal Public Transportation Programs);
- (b) Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §§ 2000d et seq., and with USDOT regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation Effectuation of Title VI of the Civil Rights Act", 49 CFR Part 21;
- (c) All applicable requirements of Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. §§ 1681 *et seq.*, and any Federal regulations that prohibit discrimination on the basis of sex that may be applicable;
- (d) The Age Discrimination Act of 1975, as amended, 42 U.S.C. §§ 6101 *et seq.*, and any U.S. Health and Human Services implementing regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance", 45 CFR Part 90;
- (e) The Age Discrimination in Employment Act, 29 U.S.C. §§ 621 through 634 and any U.S. Equal Employment Opportunity Commission implementing regulations, "Age Discrimination in Employment Act", 29 CFR Part 1625;
- (f) All equal employment opportunity provisions of 49 U.S.C. § 5332, with Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e, and Federal implementing regulations and any subsequent amendments thereto, except to the extent FTA determines otherwise in writing, and any applicable Federal equal employment opportunity directives that may be issued from time to time; and
- (g) All applicable equal employment opportunity requirements of U.S. Department of Labor regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor", 41 CFR Parts 60 *et seq.*, which implement Executive Order No. 11246, "Equal Employment Opportunity", as

amended by Executive Order No. 11375, "Amending Executive Order No. 11246 Relating to Equal Employment Opportunity", 42 U.S.C. § 2000e, and also with any Federal laws, regulations, and directives that may in the future affect construction undertaken as part of the project.

#### 1.10 Fly America Requirements

49 U.S.C. § 40118 (the *Fly America Act*) and the General Services Administration's regulations at 41 CFR Part 301-10.

#### 1.11 Access Requirements For Persons With Disabilities

- (a) 49 U.S.C. § 5301(d);
- (b) All applicable provisions of Section 504 of the Rehabilitation Act of 1973, as amended by 29 U.S.C. § 794;
- (c) The Americans with Disabilities Act of 1990, as amended, 42 U.S.C. §§ 12101 *et seq.*; and
- (d) The Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 et seq...

#### 1.12 Energy Conservation Requirements

- (a) All applicable mandatory energy efficiency standards and policies within applicable State energy conservation plans issued in accordance with the Energy Policy and Conservation Act, 42 U.S.C. §§ 6321 et seq.; and
- (b) The Requirements of FTA regulations, "Requirements for Energy Assessments", 49 CFR Part 622, Subpart C.

#### 1.13 Clean Water Requirements

All applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.

The County shall report all violations thereof to RTD, to FTA and to the appropriate Environmental Protection Agency Regional Office.

#### 1.14 Clean Air Requirements

All applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq.

The County shall report all violations to RTD, to FTA and to the appropriate Environmental Protection Agency Regional Office.

#### 1.15 Access to Records and Reports

- (a) For a period of three years following final payment, the County shall maintain, preserve and make available to RTD, the FTA Administrator, the Comptroller General of the United States, and any of their authorized representatives, access at all reasonable times to any books, documents, papers and records of the County which are directly pertinent to this work for the purposes of making audits, examinations, excerpts and transcriptions. The County also agrees, pursuant to 49 CFR 633.17, to provide the FTA Administrator or his or her authorized representatives, including any project management oversight contractor, access to County's records and sites pertaining to a major capital project, defined at 49 U.S.C. § 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. §§ 5307, 5309 or 5311.
- (b) The County shall maintain and RTD shall have the right to examine and audit all records and other evidence sufficient to reflect properly all prices, costs or rates negotiated and invoiced in performance of this work. This right of examination shall include inspection at all reasonable times of the County's offices engaged in performing the work.
- (c) If this Contract is completely or partially terminated, the County shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement. The County shall make available records relating to appeals or to litigation or the settlement of claims arising under or relating to work until such appeals, litigation, or claims are finally resolved.

#### 1.16 Seismic Safety Requirements

The standards for Seismic Safety required in USDOT Seismic Safety Regulations, 49 CFR Part 41j.

#### 2. FEDERAL REQUIREMENTS APPLICABLE TO CONSTRUCTION CONTRACTS AND SUBCONTRACTS

#### 2.1 Disadvantaged Business Enterprises Requirements

In accordance with Section 3 of this Exhibit.

#### 2.2 Incorporation of FTA Terms

The provisions of this IGA include, in part, certain Standard Terms and Conditions required by the United States Department of Transportation (*DOT*), whether or not expressly set forth in the IGA provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, dated November 01, 2008, as may be amended, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in the IGA. The County shall not perform any act, fail to perform any act, or refuse to comply with any RTD requests which would cause RTD to be in violation of the FTA terms and conditions. The incorporation of FTA terms has unlimited flow down.

#### 2.3 FTA regulations and policies

All applicable FTA regulations, policies, procedures and directives, including those listed directly in or referred to in the current FTA Master Agreement, as may be amended from time to time during the term of this IGA.

#### 2.4 No Government Obligation to Third Parties

The County acknowledges and agrees that, notwithstanding any concurrence by the Federal Government in or approval of the IGA or the solicitation or award of the underlying contracts or subcontracts, absent the express written consent by the Federal Government, the Federal Government is not a party to this IGA or such contracts and subcontracts and shall not be subject to any obligations or liabilities to RTD, the County, or any other party (whether or not a party to the IGAs or other contracts) pertaining to any matter resulting from the IGA.

#### 2.5 Debarment

(i) Federal Executive Order no. 12549 (Feb. 18, 1986), (ii) Federal Executive Order no. 12689 (Aug. 16, 1989), (iii) 31 U.S.C. § 6101 note (Section 2455, Pub. L. 103-355, 108 Stat. 3327) and (iv) 49 CFR Part 29 "Governmentwide Debarment and Suspension (Nonprocurement)".

#### 2.6 Lobbying

31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995) and 31 U.S.C. 3801, et seq.

#### 2.7 Program Fraud and False or Fraudulent Statements and Related Acts

The provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and USDOT regulations, "Program Fraud Civil Remedies", 49 CFR Part 31.

#### 2.8 Civil Rights

- (a) 49 U.S.C. § 5332 (Nondiscrimination in Federal Public Transportation Programs);
- (b) Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §§ 2000d et seq., and with USDOT regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation Effectuation of Title VI of the Civil Rights Act", 49 CFR Part 21;
- (c) All applicable requirements of Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. §§ 1681 *et seq.*, and any Federal regulations that prohibit discrimination on the basis of sex that may be applicable;
- (d) The Age Discrimination Act of 1975, as amended, 42 U.S.C. §§ 6101 *et seq.*, and any U.S. Health and Human Services implementing regulations, "Nondiscrimination

- on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance", 45 CFR Part 90;
- (e) The Age Discrimination in Employment Act, 29 U.S.C. §§ 621 through 634 and any U.S. Equal Employment Opportunity Commission implementing regulations, "Age Discrimination in Employment Act", 29 CFR Part 1625;
- (f) All equal employment opportunity provisions of 49 U.S.C. § 5332, with Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e, and Federal implementing regulations and any subsequent amendments thereto, except to the extent FTA determines otherwise in writing, and any applicable Federal equal employment opportunity directives that may be issued from time to time; and
- (g) All applicable equal employment opportunity requirements of U.S. Department of Labor regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor", 41 CFR Parts 60 et seq., which implement Executive Order No. 11246, "Equal Employment Opportunity", as amended by Executive Order No. 11375, "Amending Executive Order No. 11246 Relating to Equal Employment Opportunity", 42 U.S.C. § 2000e, and also with any Federal laws, regulations, and directives that may in the future affect construction undertaken as part of the work.

#### 2.9 Fly America Requirements

49 U.S.C. § 40118 (the *Fly America Act*) and the General Services Administration's regulations at 41 CFR Part 301-10.

#### 2.10 Access Requirements For Persons With Disabilities

- (a) 49 U.S.C. § 5301(d);
- (b) All applicable provisions of Section 504 of the Rehabilitation Act of 1973, as amended by 29 U.S.C. § 794;
- (c) The Americans with Disabilities Act of 1990, as amended, 42 U.S.C. §§ 12101 et seq.; and
- (d) The Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 et seq..

#### 2.11 Energy Conservation Requirements

- (a) All applicable mandatory energy efficiency standards and policies within applicable State energy conservation plans issued in accordance with the Energy Policy and Conservation Act, 42 U.S.C. §§ 6321 et seq.; and
- (b) The Requirements of FTA regulations, "Requirements for Energy Assessments", 49 CFR Part 622, Subpart C.

#### 2.12 Clean Water Requirements

All applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.

The County shall report all violations thereof to RTD, to FTA and to the appropriate Environmental Protection Agency Regional Office.

#### 2.13 Clean Air Requirements

All applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq.

The County shall report all violations to RTD, to FTA and to the appropriate Environmental Protection Agency Regional Office.

#### 2.14 Contract Work Hours and Safety Standards Act

All applicable requirements of the Contract Work Hours and Safety Standards Act 40 U.S.C. 3702 *et seq.*, and all applicable implementing regulations.

#### 2.15 Seismic Safety Requirements

The standards for Seismic Safety required in USDOT Seismic Safety Regulations, 49 CFR Part 41j.

#### 2.16 Recycled Products

All requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended by 42 U.S.C. 6962, including the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

#### 2.17 Buy America

49 U.S.C. 5323(j) and 49 CFR Part 661. The County shall obtain Buy America certifications from each contractor, supplier and vendor and shall provide copies of such certifications to RTD.

#### 2.18 Cargo Preference Requirements

All applicable requirements of 42 U.S.C. 1241 and 46 CFR 381.

#### 2.19 Access to Records and Reports.

(a) For a period of three years following final payment, the County shall maintain, preserve and make available to RTD, the FTA Administrator, the Comptroller General of the United States, and any of their authorized representatives, access at all reasonable times to any books, documents, papers and records of the County which are directly pertinent to this work for the purposes of making audits, examinations, excerpts and transcriptions. The County also agrees, pursuant to 49

CFR 633.17, to provide the FTA Administrator or his or her authorized representatives, including any project management oversight contractor, access to County's records and sites pertaining to a major capital project, defined at 49 U.S.C. § 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. §§ 5307, 5309 or 5311.

- (b) The County shall maintain and RTD shall have the right to examine and audit all records and other evidence sufficient to reflect properly all prices, costs or rates negotiated and invoiced in performance of this work. This right of examination shall include inspection at all reasonable times of the County's offices engaged in performing the work.
- (c) If this Contract is completely or partially terminated, the County shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement. The County shall make available records relating to appeals or to litigation or the settlement of claims arising under or relating to work until such appeals, litigation, or claims are finally resolved.

#### 2.20 Davis-Bacon and Copeland Anti-Kickback Acts

The provisions of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 and any rulings and interpretations issued by the Secretary of the United Stated Department of Labor.

#### (a) Davis-Bacon -

(1) Minimum wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto as Annex 1 and made a part of this IGA, regardless of any contractual relationship which may be alleged to exist between the County and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified

for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the County and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the County and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the County, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the County shall either pay the benefit as stated in the wage determination or shall pay another bona

fide fringe benefit or an hourly cash equivalent thereof.

- (iv) If the County does not make payments to a trustee or other third person, the County may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the County, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the County to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (2) Withholding. RTD shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the County under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the County or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, RTD may, after written notice to the County, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or quarantee of funds until such violations have ceased.
- (3) Payrolls and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the County during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the County shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. The County, if employing apprentices or trainees under approved programs, shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (ii)(A) The County shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Transit Administration if the agency is a

party to the contract, but if the agency is not such a party, the County will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The County is responsible for the submission of copies of payrolls by all subcontractors. The County and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Federal Transit Administration if the agency is a party to the contract, but if the agency is not such a party, the County will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Transit Administration, the County, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the County or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- ( 2 ) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the County or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

- (iii) The County or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the County or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the County, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) Apprentices and trainees (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the County as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where the County is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the County's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the County will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (ii) *Trainees*. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed

pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the County will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) Compliance with Copeland Act requirements. The County shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (6) Subcontracts. The County or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as RTD may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The County shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of this IGA, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the

Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the County (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

- (10) Certification of eligibility. (i) The County certifies that neither it (nor he or she) nor any person or firm who has an interest in the County's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (b) Contract Work Hours and Safety Act Provisions -
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics (which terms are expanded to include watchmen and guards by 29 CFR 5.5(b)) shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the County and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, the County and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. RTD shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the County or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

- (4) Subcontracts. The County or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The County shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in §5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the County or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the County or subcontractor for inspection, copying, or transcription by authorized representatives of RTD and the Department of Labor, and the County or subcontractor will permit such representatives to interview employees during working hours on the iob.

#### 3. DISADVANTAGED BUSINESS ENTERPRISES PROGRAMS

- (a) The County shall comply with all requirements of Title 49, Code of Federal Regulations, Part 26, Participation by Disadvantaged Business Enterprises ("DBEs") in Department of Transportation Financial Assistance Programs. The goal for participation of DBEs is 25%.
- (b) The County shall not discriminate on the basis of race, color, national origin, or sex in the performance of this IGA. RTD's commitment to the DBE goal is not intended to, and shall not be used as a justification to, discriminate against any qualified company or group of companies.
- (c) The County shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted IGA. Failure by the County to carry out these requirements is a material breach of this IGA, which may result in the termination of this IGA or such other remedy as RTD deems appropriate. Each subcontract for the work include the assurance in this paragraph in accordance with 49 CFR 26.13(b).
- (d) The County shall cooperate with RTD with regard to maximum utilization of DBEs and will use its best efforts to insure that DBEs shall have the maximum practicable opportunity to compete for subcontract Work under this IGA. The County shall assist RTD in verifying compliance with the DBE requirements of this IGA by submitting the forms attached as Annex 2. Upon completion of the work, the County shall submit a summary of payments, by subcontract, made to all subcontractors to RTD's Business Opportunity and Outreach Officer.

## (e) Prompt Payment of DBE Subcontractors

## The County shall ensure that:

- (i) its contractor shall pay its DBE subcontractors for satisfactory performance of their contracts, as that concept is described in 49 C.F.R. 26.29(c), no later than 30 days from receipt of each payment a duly submitted invoice for payment, regardless of whether such the County has been paid for such invoice;
- (ii) approval of invoices is not unreasonably delayed and that invoices shall be either approved or rejected with written notice of deficiency or dispute to the payee subcontractor within ten days of receipt of invoice by the contractor; and
- (iii) the contractor makes prompt and full payment of any retainage kept by contractor to its DBE subcontractors within 30 days after such DBE's work has been satisfactorily completed.

#### (f) Defaulting DBE Subcontractors/Termination of Subcontracts

- (i) The County must ensure that no DBE subcontractor performing work related to this IGA is terminated without RTD's prior written consent, which RTD is prohibited from providing unless the County has shown good cause, as that term is described in 49 C.F.R. 26.53(f)(3), to terminate the DBE subcontractor.
- (ii) The County will follow the notice and opportunity for response identified in 49 C.F.R. 26.53(f)(4) and (5). The County shall make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work.
- (g) RTD will follow the procedures set forth in 49 CFR. 26.53 and Appendix A to 49 CFR Part 26 in determining whether the County has demonstrated good faith efforts in meeting the DBE Goals.
- (h) The County shall submit at least monthly a participation report (a **DBE Participation Report**) in the form set out in Annex 2. At the completion of the work, the County shall submit to RTD a summary of payments made to all DBEs.

# Annex 1 Wage Determinations Applicable to the Work

Element of the Work	Wage Determination to be Applied
Roadway	Roadway (Adams County) – General Decision Number: CO100014 10/08/2010 CO14
	(see attached)

General Decision Number: C0100014 10/08/2010 C014

Superseded General Decision Number: C020080014

State: Colorado

Construction Type: Highway

Counties: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo and Weld

Counties in Colorado.

#### HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	03/12/2010
1	05/07/2010
2	06/04/2010
3	08/06/2010
4	10/08/2010

ELEC0012-005 06/01/2009

PUEBLO COUNTY

I	Rates	Fringes
ELECTRICIAN (Excluding		
ELECTRICIAN (Excluding traffic signal installation)		
Electrical work where the		
total cost is \$150,000 or		
less\$	22.85	10.79
Electrical work where the		
total cost is over \$150,000.\$	27.00	10.91
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1\$		13.75%+4.75
Zone 2\$	26.83	13.75%+4.75

## TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

Colorado Springs - Nevada & Bijou

Denver - Ellsworth Avenue & Broadway

Ft. Collins - Prospect & College

Grand Junction - 12th & North Avenue

Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

\* ELEC0068-012 06/01/2010

ADAMS, ARAPAHOE, BOULDER, BROOMFIELD, DENVER, DOUGLAS, JEFFERSON, LARIMER AND WELD COUNTIES

Rates Fringes

**ELECTRICIAN** (Excluding

<pre>traffic signal installation)\$</pre>	31.60	12.32
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1\$	23.83	13.75%+4.75
Zone 2\$	26.83	13.75%+4.75

## TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

Colorado Springs - Nevada & Bijou

Denver - Ellsworth Avenue & Broadway

Ft. Collins - Prospect & College

Grand Junction - 12th & North Avenue

Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

ELEC0113-005 06/01/2009

#### EL PASO COUNTY

	Rates	Fringes
ELECTRICIAN\$	28.80	3%+13.10
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1\$	23.83	13.75%+4.75
Zone 2\$	26.83	13.75%+4.75
TRAFFIC SIGNAL INSTALLER ZONE DE	FINITIONS	

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

Colorado Springs - Nevada & Bijou

Denver - Ellsworth Avenue & Broadway

Ft. Collins - Prospect & College

Grand Junction - 12th & North Avenue

Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

ELEC0969-005 06/01/2009

### MESA COUNTY

	Rates	Fringes
ELECTRICIAN (Excluding traffic signal installation)\$ TRAFFIC SIGNALIZATION: Traffic Signal Installation	20.31	8.92
Zone 1\$ Zone 2\$		13.75%+4.75 13.75%+4.75

## TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

Colorado Springs - Nevada & Bijou

Denver - Ellsworth Avenue & Broadway

Ft. Collins - Prospect & College

Grand Junction - 12th & North Avenue

Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

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ENGI0009-002 05/01/2010

	Rates	Fringes
Power equipment operators:		
Asphalt Screed	.\$ 23.67	9.22
Spreader/Laydown Machine	.\$ 23.67	9.22
Bulldozer		9.22
Crane: 50 tons and under	.\$ 23.82	9.22
Crane: 51 to 90 tons	.\$ 23.97	9.22
Crane: 91 to 140 tons	.\$ 24.12	9.22
Crane: 141 tons and over Drill Operator: William	.\$ 24.88	9.22
MF/Watson 2500 only	.\$ 23.97	9.22
Grader/Blade: Finish	.\$ 23.97	9.22
Grader/Blade: Rough		9.22
Loader: Barber Green, etc.		
& Up to and including 6		
cubic yards	.\$ 23.67	9.22
Loader: Mechanic/Welder		
(heavy duty)		9.22
Loader: Over 6 cubic yards.	.\$ 23.82	9.22
Mechanic and/or Welder		
(Includes heavy duty &		
combination mechanic and		
welder):		9.22
Oiler	.\$ 22.97	9.22
Power Broom: 70 HP and over		9.22
Power Broom: Under 70 HP	.\$ 22.97	9.22
Roller (excluding dirt &		
soil compaction): Self-		
propelled, all types over	¢ 22 67	0.22
5 tons	.\$ 23.67	9.22
Roller (excluding dirt &		
<pre>soil compaction): Self- propelled, rubber tires</pre>		
under 5 tons	¢ 22 22	9.22
Scraper: Single bowl	.\$ 23.32	9.22
including pups 40 cubic		
yards and tandem bowls and		
over	\$ 23 97	9.22
Scraper: Single bowl under	.4 =3.31	J. L L
40 cubic yards	.\$ 23.82	9.22
Trackhoe		9.22

LAB00086-002 05/01/2009

Rates Fringes

Laborers: Asphalt Laborer/Raker, Common Laborer & Concrete Laborer/Mason Tender\$	18.68	6.78
SUC02001-003 12/20/2001		
	Rates	Fringes
BRICKLAYER\$	15.55	2.85
Carpenters: Form Work (Excluding Curbs & Gutters)\$ All Other Work\$	16.54 16.61	3.90 3.88
Concrete Finisher/Cement Mason\$	16.05	3.00
Ironworkers: Bridge Rail (Excludes Guardrail)\$ Reinforcing\$		6.01 5.45
Laborers: Fence Erector (Includes fencing on bridges)\$ Form Work (Curbs &	13.02	3.20
Form Work (Curbs & Gutters only)\$ Guardrail Erector (Excludes bridgerail)\$		3.45 3.20
Landscape and Irrigation Laborer\$ Pipelayer\$	12.26	3.16 2.41
Striping Laborer (Pre-form layout and removal of pavement markings)\$ Traffic and Sign Laborer (Sets up barricades and cones, and installs permanent signs)\$	12.62	3.21
Traffic Director/Flagger\$ Painters:	9.55	3.05
Brush\$ Spray\$		2.10 2.87
Power equipment operators:  Backhoes	15.37 16.70	4.24 4.28 3.30 4.30
Drill Operator: All except William MF/ Watson 2500\$ Forklift\$ Post Driver/Punch Machine\$ Rotomill Operator\$ Tractor\$	15.91 16.07 16.22	2.66 4.09 4.41 4.41 2.95

TRAFFIC SIGNALIZATION:	
Traffic Signal Installation	
Groundman	
Class C\$ 11.44	3.25
T	
Truck drivers:	
Floats-Semi Truck\$ 14.86	3.08
Multipurpose Truck-	
Specialty & Hoisting\$ 14.35	3.49
Pickup Truck (Includes	
Pilot and Sign/Barricade	
Truck)\$ 13.93	3.68
Single Axle Truck 14.24	3.77
Truck Mechanic\$ 16.91	3.01
TEAM0435-002 05/01/2000	
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	Rates	Fringes
Truck drivers:		
Distributor Truck	\$ 15.80	5.27
Dump Truck: Over 14 cubic yards to and including 29		
cubic yards	\$ 15.27	5.27
Dump Truck: Over 29 cubic yards to and including 79		
cubic yards	\$ 15.80	5.27
Dump Truck: Over 79 cubic yards	¢ 16 45	5.27
Dump Truck: To and	\$ 10.43	5.27
including 6 cubic yards &		
<pre>over 6 cubic yards to and including 14 cubic yards;</pre>		
Water Truck		5.27
Low Boy Truck	\$ 17.25	5.27

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

\_\_\_\_\_

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

				Control of Dun	and a second					
CONTRACT INFORMATION:				Contract Dur Project Ref. N						
Original Contract Value:				Report for Mo						
Change Orders Values:		-		Name and Lo	cation of Projec	t				
Final Contract Value:		-		Name and Ad	dress of Prime	Contractor:				
Total Payments Received To Date:		_			Respond "Yes"	or "No" to the	Questions Below:			
Payments Received This Month:		-	Did your firm	or an affiliate re	nt or lease equi	pment to a DB	E/SBE?			
Start Date:		-	T				of your firm or an	affiliate?	-	
Completion Date:		-	-				non-DBE/SBE sind		ort firm?	
		-	-				any DBE/SBE sin			
Name of Subcontractor	Project Task	CERT #	Original Contract Amount	Original Contract +/- Amount C.O.	Payment This Month	Previous Payments	Total Payments	Pending C.O.'s Amount and Date	Overall Work Completed %	Contract P.O. Submitted
								Date		
TOTAL			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
COMMENTS:										
<b>D.</b>										-
Prime Contractor  Compliance Officer:				_	Telephone:			-		
Signature:					Date:					

#### SCHEDULE OF DBE SUBCONTRACTOR PARTICIPATION

#### NAME OF CONTRACTOR:

Regarding: Adams County/RTD Intergovernmental Agreement for the design and construction of the 60<sup>th</sup> Avenue Improvements.

Total cost of the DBE work: US\$

NAME AND ADDRESS OF DBE	TYPE OF WORK (ELECTRICAL, PAVING, ETC.) AND CONTRACT ITEMS OR PART THEREOF TO BE PERFORMED BY DBE	PROJECTED START & COMPLETION DATES FOR DBE	AGREED PRICE TO BE PAID TO DBE

- 1. A current DBE certification for each listed DBE must accompany this enclosure. Failure to provide proof of current DBE certification for any or all listed DBEs will eliminate such listed DBE's participation, and work performed by such DBE will not count towards satisfaction of the DBE goal. If additional pages are required to list all contracted DBEs, photocopy this enclosure as required to make a complete list.
- 2. Contracts with DBEs for materials or supplies will be counted toward the DBE goal as follows:
- (i) materials or supplies obtained from a DBE manufacturer will be counted at 100% toward the DBE goals; and
- (ii) materials or supplies obtained from a DBE regular dealer will be counted at 60% toward the DBE goals. Please refer to 49 CFR §26.55 for specifics with respect to how DBE participation is counted toward DBE goals.

# LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

	60 <sup>th</sup> Avenue Improven	_	t for the design and							
connection with the		to a contract (the <b>DE</b>	to perform work in BE Contract) between							
an ir	ndividual	a corporation								
a pa	nt venture									
	nd represents a com		attached schedule of d as of the date on							
Item	Projected Commencement Date	Projected Completion Date	соѕт							
	lar value of the DBE is and/or non- DBE su		et and/or awarded to							
NAME OF CONTRAC	CTOR	NAME OF DB	E							
SIGNATURE		SIGNATURE								
TITLE	DATE	TITLE	DATE							

#### **SOLICITATION STATISTICS**

RTD is required to create and maintain bidder statistics for all firms bidding on prime contracts and bidding or quoting Subcontracts on USDOT-assisted projects per 49 CFR Part 26.11. The County is required to make copies of this form, send a copy with their initial contact to each contractor and subcontractor (both DBEs and non-DBEs and require each contractor and subcontractor to return a completed form with its bid.

Firm Name:					
Firm Address (Office Reporting):					
Status as a DBE or Non-DBE (check one	):				
DBE Non-DBE	<u> </u>				
Annual Gross Receipts of the Firm: (che	eck one):				
U.S.\$0 to U.S.\$500,000 Million	U.S.\$500,000 to U.S.\$1,000,000	U.S.\$1	Million	to	U.S.\$5
U.S.\$5 Million to U.S.\$10 Million	U.S.\$10 Million to U.S.\$20.41 Million	Above U	.S.\$20.41	Million	
Age of the firm:					
Signature:					
Name:					
Title: Date:					

# EMPLOYER CERTIFICATION OF WORKFORCE

The undersigned certifies that he/she is legally authorized to make the statements and representations contained in this report and that the statements and representations contained herein are true and correct to the best of his/her knowledge and belief.

Firm Name:			
Signature:			
Name:			
Title:			
Date of Execution:			
Please note that this data may be ob employment records are prohibited b			
Current utilization as of	:	-	•

Job Categories	Total Emplo	yees in Estab	olishment	M = Male									F = Female				
	Total Employees Including	Total Male Employees Including	Total Female Employees		Black Americans		anic ricans		tive ricans		an- cific ricans	t A	ontinen sian ricans	Ot	her		
	Minorities	Minorities	Including Minorities	М	F	M	F	M	F	М	F	M	F	М	F		
Officials & Managers																	
Professionals																	
Technicians																	
Sales																	
Office & Clerical																	
Craft Workers (skilled)																	
Operatives (semi- skilled)																	
Laborers (unskilled)																	
Service Workers																	
TOTAL																	

#### **DESCRIPTION OF JOB CATEGORIES**

Officials and Managers – Occupations requiring administrative personnel who set board policies, exercise full responsibility for execution of these policies, and individual departments or special phases of the operations.

*Professionals* – Occupations requiring either college education or experience of such kind and amount as to provide a comparable background.

Technicians – Occupations requiring a combination of specific scientific knowledge and manual skill which can be obtained through about 2 years of post high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training.

Sales - Occupations engaging wholly or primarily in selling.

Office and clerical – Includes all clerical-type work, regardless of level of difficulty, where the activities are predominately non-manual though some manual work directly involved with altering or transporting the products is included.

*Craft Worker (skilled)* – Manual workers of relatively high skill level having a thorough and comprehensive knowledge of the processes involved in their work. Exercises considerable independent judgment and usually requires an extensive period of training.

Operatives (semi-skilled) – Workers who operate machines or processing equipment or perform other factory-related duties of intermediate skill level which can be mastered in a few weeks and require only limited training.

Laborers (unskilled) – Workers in manual occupations which generally require no special training perform rudimentary duties that may be learned in a few days and require the application of little or no independent judgment.

Service Workers - Workers in both protective and unprotective service occupations.

#### RACE/ETHNIC IDENTIFICATION

White (not Hispanic origin) - All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East

Black Americans (not Hispanic origin) - All persons having origins in any of the Black racial groups of Africa

Hispanic Americans - All persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or

Portuguese culture or origin, regardless of race

Asian-Pacific Americans – All persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong

Subcontinent Asian Americans – All persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka

Native American – All persons having origins in any of the original peoples of North America, including American Indians, Eskimos, Aleuts, or Native Hawaiians

# **DBE UNAVAILABILITY CERTIFICATION**

I, Name				tle						
	vernme	ental Agreemer		the DBE	e <b>ctor</b> ), certify that goal on the Adams ad construction of the					
[please attach any a	dditiona	al efforts that o	do not fit oi	n this for	m]					
<ul><li>A Contractor rep</li></ul>	resenta	tive attended	the pre-bid	meeting.	Yes No					
<ul> <li>Newspaper Adve</li> </ul>	ertiseme	ent Log: (attac	ch copies of	ads)						
Newspaper/Publica	ation	Type of P Minority/Ge			Dates of Advertisement					
<ul> <li>Selected portions</li> </ul>	s of the	work to be pe	erformed by	DBEs						
Work Categories	(Subo	rpe of Bid contractor or Supplier)	Contra Estim Budg	ated	Additional Comments					
	1									

 Made efforts to assist interested DBEs in obtaining bonding, lines of credit, insurance or any necessary equipment, supplies, materials, etc.

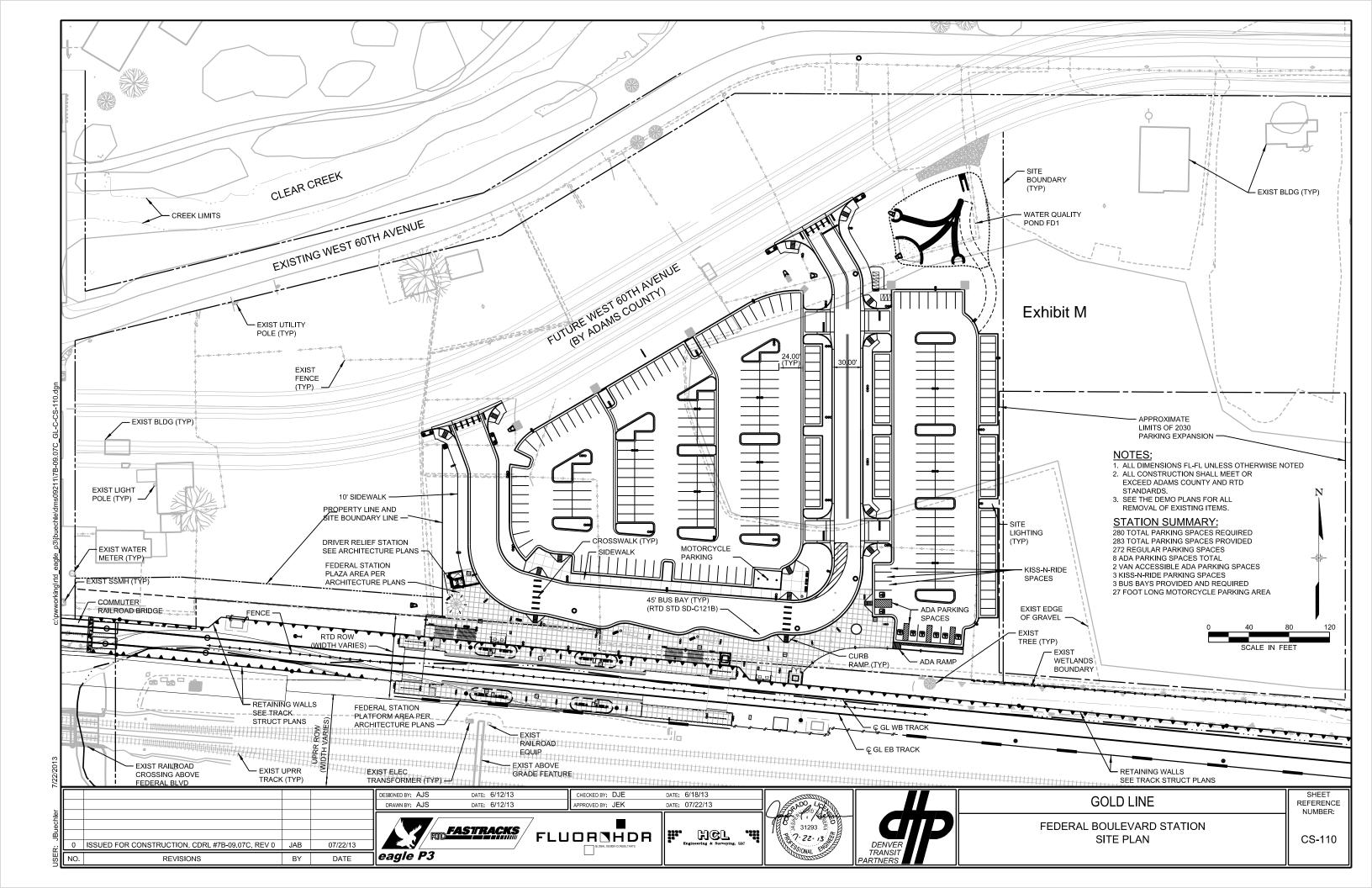
<ul> <li>Solicited th</li> </ul>	e following DBE				
Date Contacted	Name of DB Firm	E Contact Person	Phon	e #	Work Categor
<ul> <li>Followed u</li> </ul>	p with initial con	acts			
Date	Name of DB		Biddi	ing	Additional
			(Yes	or No)	Comments
		I			L
	he following other	r agencies, organizatio	ons in recr	uitment of	DBEs including
RTD:					
Da	te	Organization		Phone	#
			Coal that re	o hovo mo	de good faith effor
Da	te		Coal that w		

# **ATTACHMENT 6**

# Exhibit M to the IGA

Clear Creek ● Federal Station Changes

[attached]



# ATTACHMENT 7

# Exhibit N to the IGA

Clear Creek ● Federal Station Utility Matrix

[attached]

# **GOLD LINE UTILITY MATRIX**

# Note: Changes to the PLANS and/or MATRIX are highlighted in yellow

Abbreviations:		Utility Type:
CRT	Commuter Rail Transit	C Communications
C/F	Cut/Fill	E Electric
OH	Overhead	ELT Electric Transmission
PH	Pothole	G Gas
PNR	Park-n-Ride	SS Sanitary Sewer
UG	Underground	W Water
UO	Utility Owner	
PBN	Proposed Burlingtion Northern	

			EXISTING	G UTILITY DA	ATA						CONFLICT DATA A	AND RESOLUTION					(	CONCESSIONA	IRE TRACKING	IG					RTD TRACKING			
E .		APPROX. STREET LOCATION	APPROX. ST	-A	el (P), Xing (X) OH), or Underground (UG)	CARRIER FA	ACILITY COMMENTS	UTILITY IN CONFLICT WITH	PROPOSED RESOLUTION		DESIGN		CONSTRUCTION	COMMENTS	RTD Relocated Utilities		то ве	FILLED OUT E	BY CONCESSIO	ONAIRE					RTD COST			
UTILITY ID NO.	UTILITY OWNER	On or Near	Begin E	Ēnd	Parall Overhead (	Size	Notes on Detail Information Material (Abandoned, Environmental, et	,	Remove, Relocate, Reconfigure, Lower, etc.)	Concessionaire or	Work Order Design Period (Date to Date)	Constructed by Concessionaire or Utility Owner	Work Order Construction Period (Date to Date)	Notes on Relocation	Estimated Completion Date	DRAL (Date)	Deisgn Work Order (Date)	Const Work Order (Date)		lo Conflict orm (Date)	As Builts (Date)	PRE Construction (Date)	Construction Start (Date)	Construction Completion (Date)	Utility Company Estimate	RTD Internal Estimate	Changes A	Actual Cost
	CENTURY LINK	FEDERAL BLVD		0+00	р ОН			60th REALIGNMENT	RELOCATE	UO		UO																
GL-2-36-E.1 E	XCEL ENERGY	FEDERAL BLVD	261+00 27	0+00	x OH			60th REALIGNMENT	RELOCATE	UO		UO																

# **ATTACHMENT 8**

# Exhibit O-1 and O-2 to the IGA

# **Temporary Construction Easements**

1) Exhibit O-1: County TCE

2) Exhibit O-2: DTP TCE

[attached]

# EXHIBIT O-1 FORM OF ADAMS COUNTY TEMPORARY CONSTRUCTION EASEMENT

THIS **TEMPORARY CONSTRUCTION EASEMENT** is made this [●] day of [●], 20[●] (this "Easement"), by and between the Regional Transportation District, a political subdivision of the State of Colorado ("Grantor" or "RTD") and Adams County, a county of the State of Colorado, organized pursuant to Article XIV, Section 18(2)(a) and Article XX of the Colorado Constitution and Section 29-1-201 et seq., Colorado Revised Statutes, as amended ("Grantee") (individually a "Party" and collectively, the "Parties").

RTD and Grantee are party to Amendment No. 2 to the Gold Line Corridor and Northwest Electrified Segment Local Agency Contribution Intergovernmental Agreement dated [•], which contemplates the execution of this Easement by the Parties.

Subject to and in accordance with the terms, covenants and conditions contained in this Easement, and in consideration of the mutual agreements contained herein, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

- I. PREMISES. Grantor owns a parcel of land in Adams County, Colorado, (the "Property") and Grantee desires to use a portion of the Property (the "Premises") for the purposes indicated herein. The Premises are identified as Adams County Conveyance 1-Rev2 and those portions of GL6 and GL 6AREV1 that are north of Adams County Conveyance 1-Rev 2 on Exhibit A attached hereto and incorporated herein by this reference.
- II. GRANT. Grantor hereby grants a revocable, nonexclusive, nontransferable, temporary easement to Grantee, its contractors, agents and assigns to use the Premises subject to and in accordance with the terms, covenants and conditions of this Easement.
- III. TERM. The term of this Easement shall commence at [●] [a.m./p.m.] on [●], 20[●] and automatically terminate upon dedication of the Improvements as public right of way, unless sooner terminated (the "Term").
- IV. PERMITTED USE. Grantor hereby grants permission to Grantee to use, on a temporary basis for the Term of this Easement, the Premises to construct a roadway for public purposes in accordance with Exhibit B (the "Improvement(s)"), attached and incorporated herein. Installation of the Improvement(s) shall not interfere with the right of Grantor and its contractors to implement improvements on the RTD Property or the right of Grantor and its contractors to access the RTD Property across the Premises nor interfere with existing utilities or other facilities installed on or adjacent to the Property. Grantor shall retain all rights in and usage of the Premises. Permission for the Grantee or its contractors to traverse the property of any other property-owners or interest-holders is the sole responsibility of Grantee. Procurement of any applicable regulatory permission or consent is the sole responsibility of Grantee. Grantee shall ensure that each contractor and subcontractor performing any activities on behalf of Grantee on the Property shall provide to RTD a fully executed contractor right of entry agreement ("Contractor ROE") in the form attached hereto and incorporated herein as Exhibit C, along will all supporting

documentation required therein. Grantee shall maintain the Premises in a clean, neat and sanitary condition, and properly and promptly dispose of all litter and debris.

- V. HAZARDOUS SUBSTANCES. Grantee shall, at its sole cost, perform the management, removal, disposal or remediation (as applicable) of solid and hazardous materials encountered on the RTD Property. Grantee shall ensure that each contractor and subcontractor performing any activities on behalf of Grantee on the Property shall comply with Section 4 of the Contractor ROE.
- VI. INSURANCE. Grantee shall require its contractor(s) to obtain and maintain insurances in accordance with the requirements of the Contractor ROE. Grantee shall furnish to RTD, in a form satisfactory to RTD, a copy of said policies or certificates indicating that such insurance has been issued.
- VII. TOOLS AND EQUIPMENT. Grantee shall promptly remove all tools, equipment and materials from the Premises upon completion of Improvement(s) and restore the Premises to substantially the same state and condition as when entered upon.
- VIII. CONDITION OF PREMISES. Grantee acknowledges that it has inspected the Premises and finds the Premises to be suitable. Grantee hereby waives all warranties (express or implied) as to the suitability of Premises.
- IX. SURRENDER. At the expiration or earlier termination of this Easement, Grantee shall promptly quit and surrender the Premises in a condition deemed to be reasonably satisfactory to RTD. If all or any portion of Premises is not vacated at the end of the Term, RTD shall be and is hereby authorized to remove from the Premises and store, at the expense of Grantee, all goods, wares, merchandise and property of any kind or description (collectively, the "Goods") which may be then occupying all or any portion of the Premises. All removal and/or storage charges must be paid to RTD by Grantee before the Goods will be released to Grantee. In any event, RTD may dispose of any the Goods as it sees fit after the expiration of thirty (30) calendar days from the end of the Term. RTD shall not be liable for any damage to or loss of the Goods sustained either during the removal, storage and/or disposal of same and RTD is hereby expressly released from any and all claims for any such loss or damage. This Section shall survive expiration or earlier termination of this Easement.
- X. APPLICABLE LAWS; VIOLATION. Grantee shall use and occupy the Premises in a safe and careful manner and shall comply with all applicable ordinances and resolutions of the County in which the Premises is situated, the laws of the State of Colorado and of the United States of America, and all other rules of governmental authorities as may be in force and effect during the Term. If at any time the use of the Premises by Grantee violates said applicable ordinances or laws, Grantee shall either cease and desist from continuing such use or shall surrender the Premises upon demand by Grantor.
- XI. ADDITIONAL GRANTEES. Grantee understands and agrees that during the Term, facilities on the Property may be used by the public or otherwise, and Grantee shall conduct its work so as not to unreasonably interfere with such other uses.

- XII. ASSIGNMENT AND SUBLETTING. Neither this Easement nor any interest herein may be assigned by Grantee, voluntarily or involuntarily, by operation of law or otherwise. In addition, Grantee agrees that it will not sublet the Premises, or any part thereof, or any interest therein, without the prior written consent of Grantor. No assignment or subletting shall release Grantee from any responsibility or liability hereunder. Any subletting or assignment in violation of this Section shall be null and void.
- **XIII. GRANTOR EQUIPMENT.** Grantee shall not use Grantor equipment, tools or furnishings located in or about Premises without prior approval by Grantor.
- XIV. INDEMNIFICATION AND WAIVER. Grantee shall ensure that Grantee's contractors and subcontractors provide the indemnification required by Section 2 of the Contractor ROE. Grantee hereby waives and releases all claims against the parties indemnified therein, with respect to all matters for which RTD has disclaimed liability pursuant to this Easement. This Section shall survive expiration or earlier termination of this Easement.
- XV. BREACH. Any failure of Grantee to fulfill any of Grantee's obligations hereunder shall constitute a breach of this Easement and subject Grantee to immediate termination of the Easement.
- **XVI. NOTICES.** All notices provided for herein shall be in writing and shall be personally delivered or mailed by registered or certified United States mail, postage prepaid, return receipt requested, to the Parties at the addresses given below or at such other address that may be specified by written notice in accordance with this Section:

#### **Grantor:**

Assistant General Manager, Capital Programs 1560 Broadway, Suite 700 Denver, Colorado 80202

#### Grantee:

County Administrator 4430 South Adams County Parkway Brighton, Colorado 80601

### with a copy to:

General Counsel 1600 Blake Street, BLK-23 Denver, CO 80202

- **XVII. ENTIRE AGREEMENT.** This Easement, together with Section 2.4 of the Amendment, incorporated herein by reference, represents the entire agreement between the Parties regarding the Easement.
- **XVIII. AMENDMENTS TO EASEMENT.** No changes, alterations or modifications to any of the provisions hereof shall be effective unless contained in a written agreement signed by the Grantor and Grantee.
- XIX. WAIVER, SEVERABILITY. The failure of any Party to exercise any right hereunder, or to insist upon strict compliance by the other Party, shall not constitute a waiver of either Party's right to demand strict compliance with the terms and conditions of this Easement. If any provision of this Easement is held to be unenforceable for any reason, its

unenforceability shall not affect the remainder of this Easement, which shall remain in full force and effect and enforceable in accordance with its terms.

**XX. GOVERNING LAW AND LEGAL EFFECT.** This Easement shall be interpreted and enforced according to the laws of the State of Colorado. This Easement runs with the land and the benefits and burdens thereof inure to the benefit of and without further action become binding upon the Parties and their respective successors and assigns.

IN WITNESS WHEREOF, the Parties have executed this Easement:

GRANTEE:	
ADAMS COUNTY	
By:  Name:  Title:	Date
GRANTOR: REGIONAL TRANSPORTATION DISTRICT:	
Ву:	Date
APPROVED AS TO LEGAL FORM:	
By:  Marla Lien  General Counsel	Date

# Exhibit A

to

# Form of Adams County Temporary Construction Easement Premises

[to be attached]

# **Exhibit B**

to

# Form of Adams County Temporary Construction Easement Improvements

[to be attached]

# Exhibit C

to

# Form of Adams County Temporary Construction Easement Contractor Right of Entry Agreement

## EXHIBIT C TO TEMPORARY CONSTRUCTION EASEMENT

#### CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

	This right of entry	<sup>,</sup> agreemen	t ("Agreem	nent") is made	e [●] by and be	tween the Re	egiona
Transpo	ortation District, a	political s	ubdivision	of the State o	f Colorado ("R	TD" or "Lice	nsor")
1560	Broadway,	Suite	650,	Denver,	Colorado	80202	and
[	name of Contrac	tor]				("Contra	actor")
with an	address of		[contracto	r address]	<u>.</u>		

RTD and Adams County (the "County") are parties to a certain Temporary Construction Easement dated [•] (the "Easement") whereby RTD granted a license to enter upon a portion of the RTD Property, as that term is defined in the Easement, for the purposes described in the Easement.

Denver Transit Partners, LLC ("DTP") leases the RTD Property for purposes of designing, constructing, operating and maintaining the Gold Line commuter rail line on behalf of RTD.

The County has employed Contractor and requested RTD to permit Contractor to perform the work on the Premises, as that term is defined in the Easement, and RTD is agreeable thereto, subject to the following terms and conditions.

In consideration of the permission of RTD for Contractor to enter upon the Premises between RTD and the County, Contractor hereby agrees as follows:

# SECTION 1 THE LICENSE

Permission to enter upon the Premises is granted solely for purposes of Contractor performing work under the Easement. Contractor shall comply with all terms of the Easement applicable to its work on the Premises. Contractor specifically acknowledges and agrees that DTP has the full right and authority to enforce, and to cause Contractor to come into compliance with, the terms of this Agreement.

# SECTION 2 LIABILITY

Contractor shall, and shall contractually require its contractors to, indemnify, defend and hold harmless Licensor and its officers, directors, employees, agents and contractors; and Denver Transit Partners, LLC and its officers, directors, employees, agents and contractors against and from all claims (including without limitation actions, demands, expenses, costs, attorneys' fees, court costs and judgments) arising out of or caused by Contractor's and/or its contractors' use of the Premises or the RTD Property hereunder, including, but not limited to, Environmental Damages. It is the intention of the parties hereto that the indemnity from Contractor to Licensor provided for in this section indemnifies RTD, its officers, directors, and

Exhibit C to Temporary Construction Easement

employees for their own negligence, whether that negligence is active or passive, or is the sole or a concurring cause of the injury, death or damage; provided that said indemnity shall not protect RTD from liability for death, injury or damage arising solely out of the willful misconduct, gross negligence and/or criminal actions of RTD, its officers, directors or employees. In the event of any claims made or suits filed, each party shall give the other prompt written notice thereof, and Licensor shall have the option to defend or reasonably settle the same as to claims or suits made against it, without effect as to Contractor's obligations hereunder. The provisions of this paragraph shall survive the termination, in whole or in part, of the license granted under this Agreement.

# SECTION 3 INSURANCE

- A. Contractor shall procure and maintain, and shall require that any contractors and subcontractors procure and maintain, the following types of insurance, at minimum, with an insurer or insurers and in a form satisfactory to RTD:
  - 1. Comprehensive general and automobile liability insurance with contractual liability endorsement and products and completed operations hazards included, which shall provide coverage for limits of not less than \$ 5,000,000.00 bodily injury liability and property damage liability, combined single limits.
  - 2. Workers' Compensation and Employers' Liability Insurance covering all employees of Contractor, wherever they may be in the United States of America so long as they are engaged in the work covered by this Agreement. The policy or policies shall cover the entire liability of the Contractor and its contractors as determined by the Workers' Compensation laws of the state or states under which such liability arises, and shall contain, so far as it is lawful to obtain the same, a waiver of insurer's right of subrogation against RTD for payments made to or on behalf of employees of the Contractor. Employer's Liability Insurance shall provide coverage for limits of not less than \$ 500,000.
  - 3. Prior to entry upon, above or adjacent to RTD's property, Contractor agrees to furnish RTD with a certificate of insurance for itself and for each of its contractor(s)' policy(ies). Contractor shall provide 30 days' advance notice of cancellation of the policy by Registered or Certified mail.
  - 4. Each such comprehensive general and automobile liability certificate shall have the following endorsements attached thereto:
    - a) An endorsement naming each of RTD and Denver Transit Partners, LLC additional insured;
    - An endorsement providing for contractual liability coverage for liability assumed by the Contractor under this Agreement;
    - c) A Broad Form Property Damage endorsement; and

- d) An endorsement providing that in the event of reduction or exhaustion of the applicable aggregate limit or limits of liability under the primary policy or policies referred to in the certificate of insurance solely by reason of losses paid hereunder on account of occurrences during the policy period, the excess policy, if any, referred to in the certificate shall (1) in the event of reduction, apply as excess of the reduced limit of liability thereunder; and (2) in the event of exhaustion, continue in force as though it were primary insurance.
- B. Liability of Contractor under this section shall not be limited to coverage provided under said insurance policies.
- C. Only those contractors and subcontractors of Contractor whose operations are covered by insurance will be authorized to work upon or about the Premises or the RTD Property.

# SECTION 4 ENVIRONMENTAL OBLIGATIONS

- A. For purposes of this "Environmental Obligations" section, the terms "Activity" and "Activities" shall include any action or omission of Contractor, and/or the subsidiaries, affiliates, agents, contractors, employees, successors or assigns of Contractor.
- B. No Hazardous Material on Property. Except in strict compliance with all Environmental Requirements, Contractor shall not cause, permit or suffer any Hazardous Material (defined below) to be brought upon, treated, kept, stored, disposed of, discharged, released, produced, manufactured, generated, refined or used upon, about or beneath the RTD Property or any portion thereof by Contractor, its agents, employees, contractors, tenants or invitees, or any other person.
- C. <u>No Violations of Environmental Requirements</u>. Contractor, in performing the Activities shall not cause, permit or suffer the existence or the commission by Contractor, its agents, employees, contractors, or invitees, of a material violation of any Environmental Requirements upon, about or beneath the RTD Property or any portion thereof.
- D. No Environmental or Other Liens. Contractor, in performing the Activities, shall not create or suffer to exist with respect to the RTD Property, or permit any of its agents (including, but not limited to, contractors) to create or suffer to exist any lien, security interest or other charge or encumbrance of any kind, including without limitation, any lien imposed pursuant to section 107(f) of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. Section 9607(1) or any similar state statute.
- E. For purposes of this Agreement, "Hazardous Material(s)" means any and all substances, chemicals, wastes, or other materials now or from time to time hereafter:
  - defined as hazardous substances or hazardous wastes pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. § 9601 et seq.) (CERCLA), the Resource Conservation and Recovery Act (42 U.S.C. § 6901 et seq.)

(RCRA), and/or the Colorado Hazardous Waste Act Sections 25-15-101 et seq., Colorado Revised Statutes and the Colorado Hazardous Waste Regulations, 6 C.C.R. 1007-3:

- 2. characterized as hazardous or toxic materials, substances, chemicals, pollutants, contaminants or wastes that are regulated, subject to permitting or warning requirements, or for which removal, remediation or disposal is required or regulated, under any and all Laws for the protection of the environment, human health and safety, including without limitation CERCLA, RCRA, the Hazardous Materials Transportation Act (49 U.S.C. § 1801, et seq.), the Federal Water Pollution Control Act (33 U.S.C. § 1251, et seq.), the Clean Air Act (42 U.S.C. § 7401 et seq.) and/or the Colorado Hazardous Waste Act (§ 25 15-311 et seq., Colorado Revised Statutes); the Colorado Solid Waste Act (§ 30-20-100.5 et seq., C.R.S); the Colorado Water Quality Control Act (§ 25-8-101 et seq., Colorado Revised Statutes), Title 8 Article 20.5, Colorado Revised Statutes and any federal, state or local regulations and associated guidance promulgated thereunder; or
- 3. otherwise posing a present or potential risk to human health, welfare or the environment,

including, without limitation, asbestos, flammable, explosive, corrosive or radioactive materials, gasoline, oil, motor oil, waste oil, petroleum (including without limitation, crude oil or any component thereof), and petroleum-based products, paints and solvents; lead, cyanide, DDT and other pesticides, and polychlorinated biphenyls.

- 4. "Environmental Requirements" means all applicable present and future statutes, regulations, rules, ordinances, codes, licenses, permits, orders, approvals, plans, authorizations, concessions, franchises, and similar items, of all governmental agencies, departments, commissions, boards, bureaus, or instrumentalities of the United States, states and political subdivisions thereof and all applicable judicial, administrative, and regulatory decrees, judgments, and orders relating to the protection of human health or the environment, including, without limitation:
  - a) All requirements, including but not limited to those pertaining to reporting, licensing, permitting, investigation, and remediation of emissions, discharges, releases, or threatened releases of Hazardous Materials, whether solid, liquid, or gaseous in nature, into the air, surface water, groundwater, or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of Hazardous Materials, whether solid, liquid, or gaseous in nature; and
  - b) All requirements pertaining to the protection of the health and safety of employees or the public.
- "Environmental Damages" means all claims, judgments, damages, losses, penalties, fines, liabilities (including strict liability), encumbrances, liens, costs, and expenses of investigation and defense of any claim, whether or not such claim is ultimately

defeated, and of any good faith settlement of judgment related to Activities, of whatever kind of nature, contingent or otherwise, matured or unmatured, foreseeable or unforeseeable, including without limitation reasonable attorneys' fees and disbursements and consultants' fees, any of which are incurred at any time as a result of the existence of Hazardous Material upon, about, or beneath the RTD Property or migrating or threatening to migrate to or from the RTD Property, or the existence of a violation of Environmental Requirements pertaining to the RTD Property and including without limitation:

- a) Damages for personal injury, or injury to property or natural resources occurring upon or off of the RTD Property, foreseeable or unforeseeable, including, without limitation, lost profits, consequential damages, the cost of demolition and rebuilding of any improvements on real property, interest and penalties including but not limited to claims brought by or on behalf of employees of Contractor;
- b) Fees incurred for the services of attorneys, consultants, contractors, experts, laboratories and all other costs incurred in connection with the investigation or remediation of such Hazardous Materials or violation of Environmental Requirements including, but not limited to, the preparation of any feasibility studies or reports or the performance of any cleanup, remediation, removal, response, abatement, containment, closure, restoration or monitoring work required by any federal, state or local governmental agency or political subdivision, or reasonable necessary to make full economic use of the RTD Property or any other property otherwise expended in connection with such conditions, and including without limitation any attorneys' fees, costs and expenses incurred in enforcing this Agreement or collecting any sums due hereunder; and
- Liability to any third person or governmental agency to indemnify such person or agency for cost expended in connection with the items referenced in subparagraph
   (b) herein.

#### SECTION 5 SUBCONTRACTORS

All of the limitations and obligations imposed upon the Contractor pursuant to this Agreement shall be to apply with equal force and effect to any of Contractor's sub-contractors (together "subcontractors") performing any work on or about the RTD Property. The Contractor shall be primarily liable and responsible to Licensor for all acts or omissions of any sub-contractor employed upon or about the RTD Property pursuant hereto. Nothing herein contained shall be construed to preclude the Licensor from proceeding against the Contractor and any sub-contractor individually or collectively. Only those sub-contractors whose operations are covered by the insurance provisions hereof will be authorized to work upon the property of Licensor. In the event that any sub-contractor does not have its own insurance coverage as set forth in Section 3, hereof, Contractor shall cause such sub-contractor to be a named insured under Contractor's policies set forth in Section. No sub-contractor shall be permitted entry upon Licensor's property until proof of sub-Contractor's coverage required by Section 3 and this section is submitted to Licensor, and approved by Licensor's Risk Manager.

### SECTION 6 DIGGING OR BORING

Prior to performing any digging or boring activities on the Premises, the Contractor shall determine if a telecommunications system or other utility is buried anywhere on or about the Premises in the location where Contractor will perform such digging or boring activities. If there is such a telecommunications system or other utility, Contractor will inform itself as to the owner of such telecommunications system or other utility, and take such measures in concert with the owner(s) as are necessary so as not to damage such system or utility.

#### SECTION 7 SAMPLES/REMOVAL

As between Licensor and Contractor only, Contractor shall be solely responsible for the lawful removal, manifesting, transport, testing and disposal of any samples or other materials removed from the Premises or generated as a result of Contractor's activities done pursuant to this Permit, and shall duly and properly perform or cause to be performed any such activities that it undertakes or is required to undertake pursuant to law. Contractor releases Licensor from liability or legal obligation for, and covenants not to sue Licensor concerning, any and all materials removed from the Premises or generated as a result of Contractor's sampling and/or testing activities pursuant hereto.

### SECTION 8 MISCELLANEOUS

- A. <u>Term and Termination</u>. This Agreement shall be effective upon the latter date of execution by all parties hereto and the execution of the Easement. The permission granted herein shall expire 120 days from the date of execution of this Agreement or upon completion of the work, whichever occurs first.
- B. <u>Assignment</u>. The license granted herein may not be assigned by Contractor and Contractor shall not sublet the Premises, or any part thereof, or any interest therein, without the prior written consent of Licensor. No Licensor-approved assignment or subletting shall release Contractor from any responsibility or liability hereunder. Any subletting or assignment in violation of this Agreement shall be null and void.
- C. <u>Amendment</u>. This Agreement may not be amended except in writing by mutual agreement of Contractor and Licensor, nor may rights be waived except by an instrument in writing signed by the party charged with such waiver.
- D. <u>Independent Contractors</u>. It is expressly understood and agreed that Licensor and Contractor do not intend to be and shall not in any respect be deemed agents of each other, but shall be deemed to each be an independent contractor.

⊏. 		. Contra											
		performa	ance	of work	nereu	ınder,	and s	naii p	promptly	cause	any su	ch lien t	o be
remov	ed.												
Exhibit (	C to Ter	mporary Co	onstru	ction Eas	ement								

**IN WITNESS WHEREOF**, the parties have duly executed this Agreement, effective the day and date first above written.

		NSOR IONAL TRANSPORTATION DISTRICT
	Ву:	Richard Clarke Assistant General Manager, Capital Programs Date:
APPROVED AS TO LEGAL FORM FOR THE REGIONAL TRANSPORTATION DISTRICT General Counsel		
		TRACTOR t name of Contractor]
	By:	Name: Title: Date:

#### TEMPORARY CONSTRUCTION EASEMENT

This agreement, hereinafter "Agreement", made this day of, 20, by and between, a [Delaware limited liability company], hereinafter referred to as the "Contractor" and, a, hereinafter referred to as "Landowner".
WITNESSETH:
WHEREAS, the [Contractor's client] entered into a Concession Agreement dated with [name of Concessionaire], a [Delaware limited liability company], concerning the [description of project], hereinafter the "Project", [pursuant to [name of enabling legislation]];
WHEREAS, [name of Concessionaire] entered into a Design/Build Contract with Contractor dated whereby Contractor is responsible for the design and construction of the Project;
WHEREAS, Landowner owns a parcel of land identified as in hereinafter, "the Property";
WHEREAS, Contractor, its employees, agents, contractors and assigns need access to and certain rights in relation such Property from [date] in order to perform its obligations in relation to the Project, in particular in order to:
<ol> <li>[description of required activities on the Property];</li> <li>[description of required activities on the Property]</li> </ol>
1-5 above are hereinafter collectively referred to as the "Works";
WHEREAS, Landowner is willing to grant Contractor the right to enter and perform Works on the Property;
NOW, THEREFORE, for and in consideration of \$10.00, paid to the Landowner by Contractor, receipt of which is hereby acknowledged by Landowner, Landowner hereby grants to Contractor, its employees, agents, contractors and assigns, permission to enter upon the Property and proceed with the Works at Property.
This grant is subject to any existing easement or right of way of record.
This Agreement shall remain in full force and effect until the Works have been completed.
Contractor and its contractors who enter the Property shall maintain or ensure that others maintain the following insurance coverage:

Landowner shall ensure that people and property (other than employees, representatives or property of Contractor or its subcontractors) are kept clear from Contractor's construction activities on the Property. Contractor shall have no liability under or arising out of this agreement for consequential or indirect loss or damage, including any loss of profits or revenue. Subject to the provisions of this paragraph, Contractor shall indemnify, defend and hold harmless Landowner, its members, partners, officers, directors, affiliates, subsidiaries, employees, contractor, subcontractors and agents from and against any and all claims, liabilities, losses and expenses (including reasonable attorneys fees) for death or injury to person or damage to property occurring during this Agreement that arise out of the use of the Property by Contractor under this Agreement.

Following completion of the Works, Contractor shall restore any parts of the Property affected by the exercise by Contractor of its rights hereunder to a condition equivalent to that which it was in when Contractor first accessed the Property pursuant to this Agreement

Landowner shall have the right to terminate this Agreement, effective upon written notice to Contractor, if Contractor or its employees, agents, contractors or assigns violate any term or condition hereof and Contractor fails to respond to a fifteen business day prior notice to correct the violation. In addition to any and all remedies available to the parties at law or in equity, the prevailing party in any action or proceeding involving this agreement shall be entitled to seek reasonable attorney's fees and costs.

Landowner specifically reserves title to the Property.

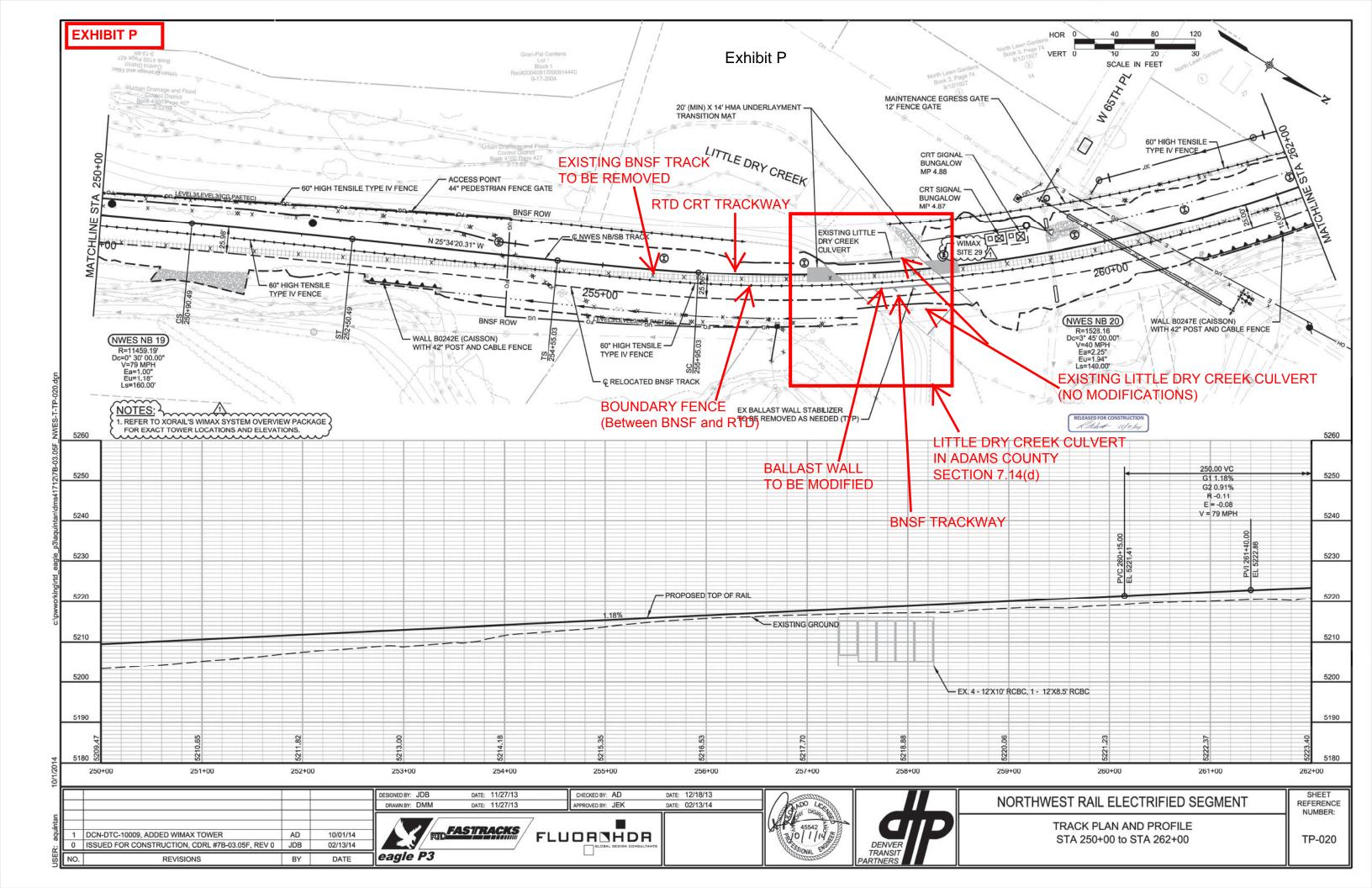
hand, (	e addressed to the parties at their respective addresses as set forth below and delivered by (i) (ii) a nationally recognized overnight express courier, or (iii) registered or certified mail return requested. Either party may at any time change its address by giving the other party notice in
accorda	ance with the above, stating the change and setting forth the new address.
	In witness whereof, Landowner and Contractor have each duly executed this instrument this
day of _	, 20

Whenever any demand, request, approval, consent or notice is given by one party to the other, it

#### **ATTACHMENT 9**

## Exhibit P to the IGA ADCO/RTD/BNSF Culverts Ballast Wall

[attached]



#### **ATTACHMENT 10**

#### Exhibit Q and Q-1 to the IGA

#### **Lowell Boulevard**

- 1. Exhibit Q: Lowell Boulevard Permanent Easement
- 2. Exhibit Q-1: Lowell Boulevard Parcel

[attached]

#### Exhibit Q

#### PERMANENT EASEMENT

THIS Permanent EASEMENT dated as of	, 20, is entered into
between the Regional Transportation District ("Grantor") and the	Adams County, a Colorado
(" <u>Grantee</u> ").	

WHEREAS, Grantor is the owner of the real property described on <u>Exhibit A</u> attached hereto (the "<u>Easement Area</u>") and Grantee is a County of the State of Colorado responsible for providing services to the residents of the county in which <u>Easement Area</u> is located.

WHEREAS, Grantor is constructing and will operate a rail line in Adams County for the benefit of the residents of Adams County and others. Adams County wishes to implement improvements to an existing at grade crossing according to Lowell Boulevard Improvements – Clear Creek to 62<sup>nd</sup> Avenue, Adams County Project No. IMP2013-00009 (Exhibit B, the "Improvements"), which will also provide pedestrian crossing facilities allowing persons to cross the rail line at grade. This Easement is for the purposes of constructing said Improvements on county owned or controlled land and the Easement Area.

WHEREAS, Grantor and Grantee desire to establish an easement on and across the Easement Area for the installation, use, operation, maintenance, repair and replacement of said Improvements crossing the RTD railroad tracks.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor and Grantee hereby agree as follows:

- 1. Subject to the terms and conditions set forth in this Permanent Easement ( "Easement"), Grantor hereby grants and conveys to Grantee a non-exclusive easement on and across the Easement Area for the installation, use, operation, maintenance, repair and replacement of said Improvements.
- 2. Improvements shall be installed within the Easement Area at Grantee's expense in accordance with plans mutually agreed upon by Grantor and Grantee in the location shown on Exhibit B.
- 3. Grantee shall, at Grantee's sole cost and expense, operate and maintain the Improvements at all times in good condition and repair and in accordance with all applicable laws, ordinances, rules and regulations (including, without limitation, all rules, regulations and requirements of the Colorado Public Utilities Commission). If Grantee fails to so maintain the Improvements, Grantor shall have the right, but not Grantee's obligation, to perform any necessary maintenance or repair and Grantee shall reimburse Grantor for all Grantee costs incurred by Grantor in connection therewith. Such reimbursement shall be due and payable within 30 days after Grantor's request therefor, and any amounts not paid when due shall accrue interest on the outstanding balance at the rate of 15% per annum from the date due until paid in full.
- 4. To the extent permitted by law and without waiving any provisions of the Colorado Governmental Immunity Act, C.R.S. 24-10-101, et seq. as to amount or type of

immunity Grantee shall indemnify, defend and hold Grantor and its contractors constructing operating and maintaining Grantor's rail line harmless from and against any and all claims, suits, actions, judgments, damages, losses, costs and expenses (including, without limitation, reasonable attorneys' fees) arising out of or relating to the negligent acts or omissions in its use of the Easement Area by Grantee or its employees, agents, contractors, subcontractors, or tenants. Grantee's indemnification obligations shall not include any claims, suits, actions, judgments, damages, losses, costs or expenses arising from the negligent acts or omissions of Grantor, its contractors, subcontractors, employees, or agents. Grantee shall at all times maintain contractual and comprehensive general liability insurance and railroad protective insurance coverage covering Grantee's liability under this Section 3 with an insurance company reasonably acceptable to Grantor and in such amounts and on such forms as are reasonable and customary. As of the date of this Agreement, insurance in the amount of \$2,000,000 shall be considered reasonable and customary. Such insurance policy shall name Grantor and its contractors Denver Transit Partners and Denver Transit Operators as an additional insureds and shall provide that the insurance will not be cancelled or materially changed in the scope or amount of coverage unless 30 days' advance notice is given to the Grantor. Such insurance shall be primary, and not as contributing with, or in excess of, any insurance carried by Grantor. Prior to making any use of the Easement Area, and at least 30 days prior to the expiration of any insurance policy required hereunder, Grantee shall deliver a certificate of insurance to Grantor evidencing insurance meeting the foregoing requirements.

- 5. All Grantee's work shall be performed in a good and workmanlike manner in compliance with all applicable laws, rules, regulations, ordinances and other requirements of governmental authorities, and in a manner which will, to the extent practical, minimize disturbance of the surface and any interference with Grantor's operations. All such work shall be diligently pursued to completion and, upon completion of such work Grantee shall promptly restore all disturbed areas as nearly as practical to its prior condition. Grantee's contractor, or Grantee as applicable, is required to execute the Contractor's right of entry attached as Exhibit C prior to performing any work including but not limited to construction, maintenance, repair or replacement of the Improvements.
- 7. Grantee shall keep the Easement Area free from all liens of mechanics, materialmen or others arising out of or relating to the construction, installation, use, operation, maintenance, repair or replacement of the Improvements. If any such lien shall be filed, Grantee shall cause the lien to be discharged of record within thirty (30) days after it is filed by payment, provision of a statutory bond, or otherwise. If a final judgment establishing the validity or existence of a lien for any amount is entered, Grantee shall pay and satisfy the same at once. If Grantee fails to pay any charge for which any such lien has been filed and the lien is not discharged of record as described above, Grantor, at its option, may pay such charge and related costs and interest, or may obtain a statutory bond to remove the lien from the Easement Area, and the amount paid by Grantor, together with reasonable attorneys' fees incurred in connection therewith, shall be immediately due from Grantee to Grantor. Any such amounts not paid when due shall accrue interest at the rate of 10% per annum from the date due until paid in full.
- 8. Grantor reserves the right to use, and allow others to use, the Easement Area for any purpose and in any manner that does not unreasonably interfere with Grantee's use and enjoyment of the Easement.

- 9. Any notice, request, demand or other communication required or permitted under this Agreement (collectively, "Notices") shall be in writing and shall be addressed to the party to whom the Notice is being sent at the address listed in the Adams County Assessor's records for delivery of real property tax statements for such party's property. Any such Notice shall be deemed given and received (i) when hand delivered to the intended recipient; (ii) three days after the same is deposited in the United States mail, with adequate postage prepaid, and sent by certified mail, return receipt requested; or (iii) one business day after the same is deposited with an overnight courier service of national or international reputation.
- 10. Each party shall be entitled to all remedies at law or in equity for the enforcement of this Easement. In any action brought to enforce any provision of this Easement, or to obtain a declaration of the rights or obligations of any party hereunder, the prevailing party shall be awarded all costs and expenses (including, without limitation, reasonable attorneys' fees and disbursements) incurred by such party in connection with such action.
- 11. The failure or delay of Grantor or Grantee to exercise any of its rights under this Easement shall not constitute a waiver of any such rights. Grantor and/or Grantee shall not be deemed to have waived any right under this Easement unless such waiver is made expressly and in writing, and no waiver made as to any instance or any particular right shall be deemed a waiver as to any other instance or any other right.
- 12. This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, all of which together shall constitute one and the same instrument.

EXECUTED as of the date first set forth herein above.

#### **GRANTOR**:

REGIONAL TRANSPORTATION DISTRICT, a political subdivision of the State of Colorado

By: David Genova, Interim General Manager
Approved as to legal form:
Marla Lien, General Counsel

GRAN	TEE:
------	------

## COUNTY OF ADAMS, STATE OF COLORADO BOARD OF COUNTY COMMISSIONERS

	Charles "Chaz" Tedesco, Chair
ATTEST: STAN MARTIN, CLERK & RECORDER	,
Deputy Clerk	
APPROVED AS TO FORM:	
Adams County Attorney's Office	

#### EXHIBIT A

#### **Description of Easement Area**

[see attached]

#### EXHIBIT B

#### <u>Description of Benefited Property</u>

[see attached]

# EXHIBIT "A" LOWELL CROSSING PARCEL Rev1 Date: August 19, 2015 DESCRIPTION

Lowell Crossing Parcel Rev1 of the RTD Gold Line Corridor Commuter Rail Project, being a portion of the tract of land described at Reception No. 2011000085014, Parcel 2.4 recorded December 23, 2011, and excluding an existing 60 foot road Right-of-Way, being 30 feet each side of the section line common to Sections 7 & 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, as established by Road Petition 128 dated December 6, 1889 in the Adams County Clerk and Recorder's Office, located in the Southeast Quarter of Section 7 and the Southwest Quarter of Section 8, Township 3 South, Range 68 West of the Sixth Principal Meridian, Adams County, Colorado, being more particularly described as follows:

COMMENCING at the East Quarter Corner of said Section 7 (a found 2" aluminum cap stamped "1998 LS 12840"), WHENCE the Center Quarter Corner of said Section 7 (a found aluminum cap stamped "ERNEST KNIGHT LS 7276 T3S R68W S7 C1/4 1988 ADAMS COUNTY"), bears S89°45'54"W a distance of 2639.98 feet (basis of bearing – assumed); THENCE S05°52'57"W, a distance of 358.27 feet to the northerly line of said parcel 2.4 and the POINT OF BEGINNING;

THENCE the following three (3) courses coincident with the northerly line of said Parcel 2.4:

- 1) THENCE S85°30'18"E a distance of 36.11 feet;
- 2) THENCE N00°06'55"E a distance of 7.02 feet;
- 3) THENCE S85°30'18"E a distance of 31.09 feet;

THENCE S00°06'55"W, coincident with a line 31.00 feet easterly of and parallel with the easterly line of said Southeast Quarter, a distance of 52.77 feet to the southerly line of said Parcel 2.4;

THENCE N85°28'57"W, coincident with said southerly line, a distance of 67.20 feet; THENCE N00°06'55"E, coincident with a line 36.00 feet westerly of and parallel with said Southeast Quarter, a distance of 45.72 feet to the POINT OF BEGINNING.

EXCLUDING an existing 60 foot road Right-of-Way, being 30 feet each side of the section line common to said Sections 7 & 8, as established by said Petition 128.

Containing 327 square feet (0.0075 Acres), more or less.

Prepared by

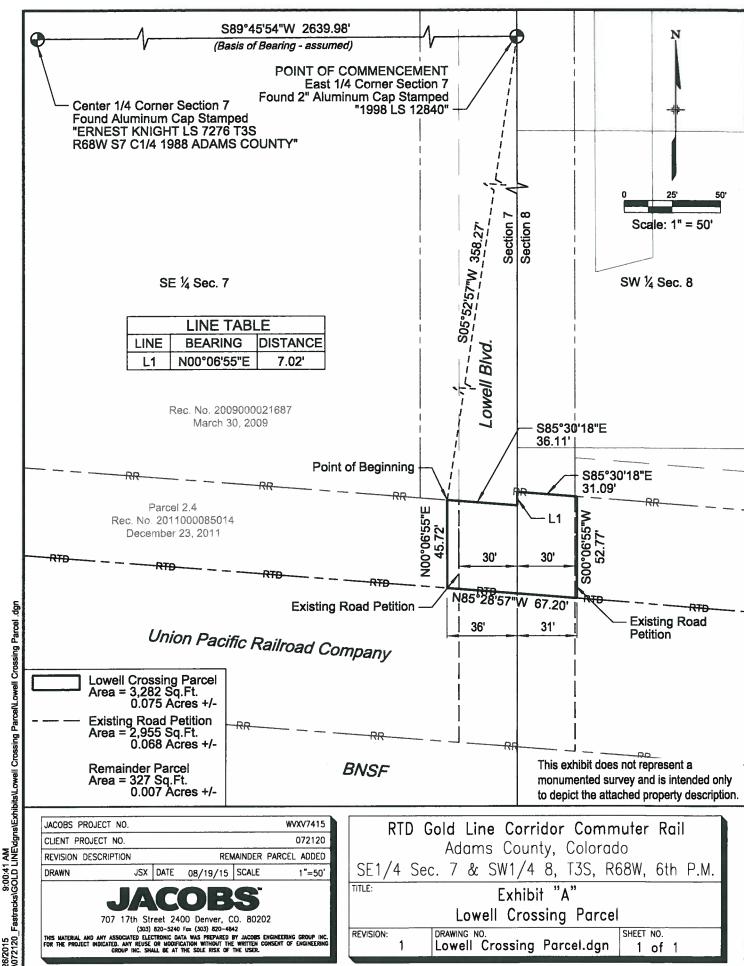
Kenneth W. Carlson PLS 24942

For and on behalf of Jacobs Engineering Group Inc.

707 17<sup>th</sup> Street #2400<sup>AL</sup>

Denver, CO 80202

303.820.5240



#### Attachment 11

Exhibit R to the IGA

**ROE Permit-Contractor** 

[attached]

#### Exhibit R

### CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

THIS	<b>AGREEMENT</b>	is made	and	entered	into	as of	the _	da	ay of
	, 20	), by	and be	tween Th	e Region	ıal Trans	portation	District (F	RTD) a
political subdiv	rision of the State of	f Colorado	("RTD"	); and					
	, a			corpora	tion ("C	ontractor	:").		
RECITALS:									
Contrac	ctor has been hired	by Adams	County	to perforn	n work re	elating to	)		
					(the	'work"),	as more	fully des	scribed
on the CONTR	ACTOR'S WORK	PLAN atta	ached to	this his l	Right of	Entry Pe	ermit as <b>I</b>	Exhibit A-	1 with
all or a portion	n of such work to	be perfor	med on	property	of RTI	o at or	in the vio	cinity of l	Lowell
	, as such lo		_	neral loca	tion sho	wn on th	e print ma	arked <b>Exh</b>	ibit A,
	s willing to permi							at the lo	ocation

#### **AGREEMENT:**

**NOW, THEREFORE**, it is mutually agreed by and between RTD and Contractor, as follows:

#### ARTICLE 1 - DEFINITION OF CONTRACTOR.

For purposes of this Agreement, all references in this agreement to Contractor shall include Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

#### ARTICLE 2 - RIGHT GRANTED; PURPOSE.

RTD hereby grants to Contractor the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the property described in the Recitals for the purpose of performing the work described in Exhibit A-1. The right herein granted to Contractor is limited to those portions of RTD's property specifically described herein, or as designated by the RTD Representative named in Article 4.

#### ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS B, C AND D.

The terms and conditions contained in **Exhibit B**, **Exhibit C** and **Exhibit D**, attached hereto, are hereby made a part of this Agreement.

## ARTICLE 4 - EXPENSES and INDEMNIFICATION TO BE BORNE BY CONTRACTOR; RTD REPRESENTATIVE.

- A. Contractor shall bear any and all costs and expenses associated with any work performed by Contractor, or any costs or expenses incurred by RTD relating to this Agreement.
- B. Contractor shall coordinate all of its work with the following RTD representative or his or her duly authorized representative (the "RTD Representative"):

	Regional Transportation District	<del>_</del>	
Denver, CO	80202		

C. Contractor, at its own expense, shall adequately police and supervise all work to be performed by Contractor and shall ensure that such work is performed in a safe manner as set forth in Section 7 of **Exhibit B**. The responsibility of Contractor for safe conduct and adequate policing and supervision of Contractor's work shall not be lessened or otherwise affected by RTD's approval of plans and specifications involving the work, or by RTD's collaboration in performance of any work, or by the presence at the work site of a RTD Representative, or by compliance by Contractor with any requests or recommendations made by RTD Representative.

Contractor will conduct any activities on the Premises at Contractor's own risk and at Contractor's sole cost. Contractor will comply at all times with all applicable laws and will indemnify, defend and hold Seller harmless from any loss, liability, claim, demand, action, suit, judgment, damage, cost or expense (including without limitation reasonable attorneys' fees) on account of Contractor's inspection activities on or relating to the Premises, including but not limited to any personal or bodily injury or death to any person, property damage, and mechanic's and materialmen's liens arising in connection with Contractor's activities, or on account of Contractor's breach of its obligations under Right of Entry Permit. Contractor shall be liable for any loss of value or damage to the Premises arising from the spread or exacerbation of any condition adverse to the development or sale of the Premises caused directly by Contractor's inspection activities on the Premises. If any action or proceeding is brought against RTD by reason of any matter for which Contractor has indemnified RTD under this Right of Entry Permit, Contractor, upon notice from RTD, will defend the same at Contractor's expense with counsel reasonably satisfactory to RTD.

Contractor shall be required to return the property to its original condition after all work is performed.

Samples/Removal. Contractor shall be solely responsible for the lawful removal, manifesting, transport, testing and disposal of any samples or other materials removed from the Premises or generated as a result of activities done pursuant to this Agreement, and shall duly and properly perform or cause to be performed any such activities that it undertakes or is required to undertake pursuant to law. Contractor states and agrees that as between Contractor and RTD, it is the sole Generator of any materials removed from the Premises or generated as a result of its activities pursuant hereto, as the term "Generator" is used in applicable statutes and regulations concerning the removal, transport and/or disposal of hazardous materials, substances, waste or other contaminants. Contractor shall promptly provide to RTD a copy of any and all reports that incorporate, or are based upon, in full or in part, data obtained from the sampling and/or testing conducted pursuant to this grant.

#### **ARTICLE 5 - TERM; TERMINATION**.

- A. The grant of right herein made to Contractor shall commence on the date of this Agreement, and continue until \_\_\_\_\_\_\_, unless sooner terminated as herein provided, or at such time as Contractor has completed its work on RTD's property, whichever is earlier. Contractor agrees to notify the RTD Representative in writing when it has completed its work on RTD's property.
- B. This Agreement may be terminated by either party on sixty (60) days written notice to the other party unless termination is for default by Contractor. RTD shall advise Contractor in writing of any default and Contractor shall have 10 business days to cure or provide a work plan for a cure, approval of which shall not be unreasonably withheld. RTD shall provide written notice of default to BNSF and to Contractor.

#### ARTICLE 6 - <u>CERTIFICATE OF INSURANCE</u>.

- A. Before commencing any work, Contractor will provide RTD with the (i) insurance binders, policies, certificates and endorsements set forth in **Exhibit C** of this Agreement except as to those requirements waived in writing by RTD's Risk Manager, and (ii) the insurance endorsements obtained by each subcontractor as required under Section 12 of **Exhibit B** of this Agreement.
- B. All insurance correspondence, binders, policies, certificates and endorsements shall be sent to:

Regional Transportation District 1600 Blake Street Denver,CO 80202

Attn: Risk Manager

With a copy to:

**Denver Transit Partners** 

#### ARTICLE 7 - DISMISSAL OF CONTRACTOR'S EMPLOYEE.

At the request of RTD, Contractor shall remove from RTD's property any employee of Contractor who fails to conform to the instructions of the RTD Representative in connection with the work on RTD's property, provided that RTD shall not give instructions that conflict with any Federal Railroad Administration regulations, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify RTD against any claims arising from the removal of any such employee from RTD's property.

#### ARTICLE 8 – [RESERVED]

#### **ARTICLE 9 - CROSSINGS.**

No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over RTD's trackage shall be installed or used by Contractor without the prior written permission of RTD.

#### ARTICLE 10.- EXPLOSIVES.

Explosives or other highly flammable substances shall not be stored on RTD's property without the prior written approval of RTD.

**IN WITNESS WHEREOF**, the parties hereto have duly executed this agreement in duplicate as of the date first herein written.

Regional Transportation District
By: Title:
(Name of Contractor)
By: Title:

## $\frac{\text{EXHIBIT A}}{\text{TO}} \\ \text{CONTRACTOR'S RIGHT OF ENTRY AGREEMENT}$

#### **General Location**

(attached hereto)

## EXHIBIT B TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

#### Section 1. NOTICE OF COMMENCEMENT OF WORK FLAGGING.

Contractor agrees to notify the RTD Representative at least ten (10) working days in A. advance of Contractor commencing its work under this right of entry permit will provide a general work plan describing the proposed performance of any work by Contractor in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of RTD's track(s) at any time, for any reason, unless and until a RTD flagman is provided to watch for trains unless flagging has been waived by RTD for work in conformance with the general work plan. Upon receipt of such ten (10)-day notice and work plan, the RTD Representative will determine and inform Contractor whether a flagman need be present and whether Contractor needs to implement any special protective or safety measures or if flagging is waived. If flagging or other special protective or safety measures are performed by RTD, RTD will bill Contractor for such expenses incurred by RTD, unless RTD and a federal, state or local governmental entity have agreed that RTD is to bill such expenses to the federal, state or local governmental entity. If RTD will be sending the bills to Contractor, Contractor shall pay such bills within thirty (30) days of Contractor's receipt of billing. If RTD performs any flagging, or other special protective or safety measures are performed by RTD, Contractor agrees that Contractor is not relieved of any of its responsibilities or liabilities set forth in this Agreement.

(1)

- B. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with RTD's labor agreements and schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement (if applicable) and unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between RTD and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.
- C. Reimbursement to RTD will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other RTD work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other RTD work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which RTD is required to pay the flagman and which could not reasonably be avoided by RTD by assignment of such flagman to other work, even though Contractor may not be working during such time. When it becomes necessary for RTD to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide RTD a minimum of five (5) days notice prior

to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to RTD if flagging services are needed again after such five day cessation notice has been given to RTD.

#### Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED.

The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the RTD to use and maintain its entire property and Contractor may not interfere with the RTD's use of the Premises except at the locations and for the periods specified herein or otherwise agreed upon by RTD and Amtrak and/or Contractor.

#### Section 3. NO INTERFERENCE WITH OPERATIONS OF RTD AND ITS TENANTS.

- A. Contractor shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of DUS. Nothing shall be done or permitted to be done by Contractor at any time that would in any manner impair the safety of such operations. When not in use, Contractor's machinery and materials shall be within the areas described in the workplan, and there shall be no vehicular crossings of RTDs tracks except at existing open public crossings.
- B. Operations of RTD and work performed by RTD personnel and delays in the work to be performed by Contractor caused by such RTD operations and work are expected by Contractor, and Contractor agrees that RTD shall have no liability to Contractor, or any other person or entity for any such delays. Contractor shall coordinate its activities with those of RTD and third parties so as to avoid interference with RTD operations. The safe operation of RTD train movements and other activities by RTD takes precedence over any work to be performed by Contractor.

#### Section 4. LIENS.

Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of RTD for any such work performed. Contractor shall indemnify and hold harmless RTD from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. If Contractor fails to promptly cause any lien to be released of record, RTD may, at its election, discharge the lien or claim of lien at Contractor's expense.

#### Section 5. [RESERVED.]

#### Section 6. <u>PERMITS - COMPLIANCE WITH LAWS</u>.

In the prosecution of the work covered by this Agreement, Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal RTD Administration regulations.

#### Section 7. <u>SAFETY</u>.

- A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Contractor. Contractor shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Contractor shall at a minimum comply with RTD's safety standards listed in **Exhibit D**, hereto attached, to ensure uniformity with the safety standards followed by RTD's own forces. As a part of Contractor's safety responsibilities, Contractor shall notify RTD if Contractor determines that any of RTD's safety standards are contrary to good safety practices. Contractor shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.
- B. Without limitation of the provisions of paragraph A above, Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.
- C. Contractor shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Contractor shall promptly notify RTD of any U.S. Occupational Safety and Health Administration reportable injuries. Contractor shall have a nondelegable duty to control its employees while they are on the job site or any other property of RTD, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.
- D. If and when requested by RTD, Contractor shall deliver to RTD a copy of Contractor's safety plan for conducting the work (the "Safety Plan"). RTD shall have the right, but not the obligation, to require Contractor to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

#### Section 8. <u>INDEMNITY</u>.

- A. Contractor shall indemnify, defend and hold harmless RTD, its affiliates, its station operator, Denver Transit Partners and Denver Transit Operators, and its and their officers, agents and employees (individually an "Indemnified Party" or collectively "Indemnified Parties") from and against any and all loss, damage, injury, liability, claim, demand, cost or expense (including, without limitation, attorney's, consultant's and expert's fees, and court costs), fine or penalty (collectively, "Loss") incurred by any person (including, without limitation, any Indemnified Party, Contractor, or any employee of Contractor or of any Indemnified Party) arising out of or in any manner connected with (i) any work performed by Contractor, or (ii) any act or omission of Contractor, its officers, agents or employees, or (iii) any breach of this Agreement by Contractor.
- B. The right to indemnity under this Section 8 shall accrue upon occurrence of the event giving rise to the Loss, and shall apply regardless of any negligence of any Indemnified Party, except where the Loss is caused by the sole active negligence, gross negligence, or willful and wanton conduct of an Indemnified Party as established by the final judgment of a court of competent jurisdiction. The sole active negligence of any Indemnified Party shall not bar the recovery of any other Indemnified Party.
- C. Contractor expressly and specifically assumes potential liability under this Section 8 for claims or actions brought by Contractor's own employees. Contractor waives any immunity it may have under worker's compensation or industrial insurance acts to indemnify the Indemnified Parties under this Section 8. Contractor acknowledges that this waiver was mutually negotiated by the parties hereto.

- D. No court or jury findings in any employee's suit pursuant to any worker's compensation act or the Federal Employers' Liability Act against a party to this Agreement may be relied upon or used by Contractor in any attempt to assert liability against any Indemnified Party.
- E. The provisions of this Section 8 shall survive the completion of any work performed by Contractor or the termination or expiration of this Agreement. In no event shall this Section 8 or any other provision of this Agreement be deemed to limit any liability Contractor may have to any Indemnified Party by statute or under common law.

#### **RESTORATION OF PROPERTY.**

In the event RTD authorizes Contractor to take down any fence of RTD or in any manner move or disturb any of the other property of RTD in connection with the work to be performed by Contractor, then in that event Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Contractor shall remove all of Contractor's tools, equipment, rubbish and other materials from RTD's property promptly upon completion of the work, restoring RTD's property to the same state and condition as when Contractor entered thereon.

#### Section 10. WAIVER OF DEFAULT.

Waiver by RTD of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Contractor shall in no way impair the right of RTD to avail itself of any remedy for any subsequent breach or default.

#### **Section 11. MODIFICATION - ENTIRE AGREEMENT.**

No modification of this Agreement shall be effective unless made in writing and signed by Contractor and RTD. This Agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Contractor and RTD and cancel and supersede any prior negotiations, understandings or agreements by and between Contractor and RTD, whether written or oral, with respect to the work to be performed by Contractor.

#### Section 12. ASSIGNMENT - SUBCONTRACTING.

Contractor shall not assign or subcontract this Agreement, or any interest therein, without the written consent of the RTD. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability RTDs" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With RTDs" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site except as to any policies the requirements for which have been waived pursuant to Article 6.

# EXHIBIT C TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

### RTD Insurance Provisions For Contractor's Right of Entry Agreement

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on RTD's property has been completed and the Contractor has removed all equipment and materials from RTD's property and has cleaned and restored RTD's property to RTD's satisfaction, the following insurance coverage:

A. <u>Commercial General Liability</u> insurance. Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage including ECP 1024 10 06).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability RTDs ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "RTD Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage including ECP 1021 10 06) showing the project on the form schedule.
- **B.** Business Automobile Coverage insurance. Business auto coverage written on ISO form CA 00 01 03 06 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 for each accident and coverage must include liability arising out of any auto (including owned, hired and non-owned autos).

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With RTDs ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "RTD Property" as the Designated Job Site.
- Motor Carrier Act Endorsement Hazardous materials clean up (MCS-90) if required by law
- C. <u>Workers' Compensation and Employers' Liability</u> insurance. Coverage must include but not be limited to:
  - Contractor's statutory liability under the workers' compensation laws of the state where the work is being performed.
  - Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, evidence of state approval and excess workers compensation coverage must be provided. Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing RTD in the schedule as the alternate employer (or a substitute form providing equivalent coverage).
- **Railroad Protective Liability** insurance. Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of RTD as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. A binder stating the policy is in place must be submitted to RTD before the work may be commenced and until the original policy is forwarded to RTD.
- **E.** <u>Umbrella or Excess</u> insurance. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.
- **F.** Pollution Liability insurance. Pollution liability coverage may be included on form ECP 1024 10 06 or may be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least \$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to RTD evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

#### **Other Requirements**

- G. All policy(ies) required above (except worker's compensation and employers liability) must include RTD as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage including ECP 1005 10 06). The coverage provided to RTD as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for RTD's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.
- **H.** Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.
- I. Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against RTD and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.
- **J.** Prior to commencing the work, Contractor shall furnish RTD with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.

- **K.** All insurance policies must be written by a reputable insurance company acceptable to RTD or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state where the work is being performed.
- L. The fact that insurance is obtained by Contractor or by RTD on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by RTD from Contractor or any third party will not be limited by the amount of the required insurance coverage.

## $\frac{\text{EXHIBIT D}}{\text{TO}}$ CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

#### **Minimum Safety Requirements**

The term "employees" as used herein refer to all employees of Contractor as well as all employees of any subcontractor or agent of Contractor.

#### I. Clothing

A. All employees of Contractor will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Contractor's employees must wear:

- (i) Waist-length shirts with sleeves.
- (ii) Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
- (iii) Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.
- B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.
- C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

#### II. Personal Protective Equipment

Contractor shall require its employees to wear personal protective equipment as specified by RTD rules, regulations, or recommended or requested by the RTD Representative.

- (i) Hard hat that meets the American National Standard (ANSI) Z89.1 latest revision. Hard hats should be affixed with Contractor's company logo or name.
- (ii) Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.
- (iii) Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:
  - 100 feet of a locomotive or roadway/work equipment
  - 15 feet of power operated tools
  - 150 feet of jet blowers or pile drivers
  - 150 feet of retarders in use (when within 10 feet, employees must wear dual ear protection plugs and muffs)

(iv) Other types of personal protective equipment, such as respirators, fall protection equipment, and face shields, must be worn as recommended or requested by the RTD Representative.

#### **III.** On Track Safety

Contractor doing roadway work are responsible for compliance with the Federal RTD Administration's Roadway Worker Protection regulations – 49CFR214, Subpart C and RTD's On-Track Safety rules. Under 49CFR214, Subpart C, RTD contractors are responsible for the training of their employees on such regulations. In addition to the instructions contained in Roadway Worker Protection regulations, all employees must:

- (i) Maintain a distance of twenty-five (25) feet to any track unless the RTD Representative is present to authorize movements.
- (ii) Wear an orange, reflectorized workwear approved by the RTD Representative.
- (iii) Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Contractor must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. Contractor will also receive special instructions relating to the work zone around machines and minimum distances between machines while working or traveling.

#### IV. Equipment

- A. It is the responsibility of Contractor to ensure that all equipment is in a safe condition to operate. If, in the opinion of the RTD Representative, any of Contractor's equipment is unsafe for use, Contractor shall remove such equipment from RTD's property. In addition, Contractor must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:
  - Familiar and comply with RTD's rules on lockout/tagout of equipment.
  - Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
  - Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other railbound equipment.
- B. All self-propelled equipment must be equipped with a first-aid kit, fire extinguisher, and audible back-up warning device.
- C. Unless otherwise authorized by the RTD Representative, all equipment must be parked pursuant to the authorized workplan. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement.
- D. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead powerlines.

#### V. General Safety Requirements

A. Contractor shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.

- B. Upon initial acceptance of the workplan Contractor shall ensure that all employees participate in and comply with a job briefing conducted by the RTD Representative, if requested by RTD. During this briefing, the RTD Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change. Contractor shall be responsible for instructing any employees who have not received an RTD briefing as to RTD required procedures.
- C. All track work performed by Contractor meets the minimum safety requirements established by the Federal RTD Administration's Track Safety Standards 49CFR213.
- D. All employees comply with the following safety procedures when working around any RTD track:
  - (i) Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
  - (ii) Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
  - (iii) In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment if the opening is less than one car length (50 feet).
  - (iv) Avoid walking or standing on a track unless so authorized by the employee in charge.
  - (v) Before stepping over or crossing tracks, look in both directions first.
  - (vi) Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.
- E. All employees must comply with all federal and state regulations concerning workplace safety.

THIS AMENDMENT NUMBER TWO TO THE GOLD LINE CORRIDOR/NORTHWEST ELECTRIFIED SEGMENT LOCAL AGENCY CONTRIBUTION INTERGOVERNMENTAL AGREEMENT (this *Amendment*) is dated as of August 28, 2015 and made:

#### **BETWEEN:**

- (1) **REGIONAL TRANSPORTATION DISTRICT**, a public body politic and corporate and political subdivision of the State of Colorado, organized and existing under the terms of the Regional Transportation District Act, Section 32-9-101 *et seq.*, Colorado Revised Statutes, as amended (*RTD*); and
- (2) Adams County, a county of the State of Colorado, organized pursuant to Article XIV, Section 18(2)(a) and Article XX of the Colorado Constitution and Section 29-1-201 et seq., Colorado Revised Statutes, as amended (*Adams County* or *County*).

RTD and Adams County are hereinafter sometimes referred to individually as a *Party* and collectively as the *Parties*.

#### WHEREAS:

- A. RTD and Adams County are party to the Gold Line Corridor and Northwest Electrified Segment Local Agency Contribution Intergovernmental Agreement ("Agreement" of "IGA") dated June 2, 2011.
- B. The Parties now wish to amend the IGA to reflect the continued work and advancement in refining the below elements of Sections 1, 5, 6, 7 and 8 (Exhibits), Local Agency Contributions (LAC), Transit System Elements, Specific Design Requirements and Betterments (respectively):
  - a. 1.3: Reference Exhibits
  - b. 1.4: Attached Exhibits
  - c. 5.1: County Property Interests
  - d. 5.4: Credit for Pecos Grade Separation Project
  - e. 5.6(b): Denver Regional Council of Governments ("DRCOG") Funds Designated for FasTracks
  - f. 6.1: Transit System Elements
  - g. 7.8(b): Future Clay Community Trail
  - h. 7.8(f): Lowell Boulevard
  - i. 7.8(h): 64<sup>th</sup> Avenue Grade Separation
  - j. 7.12: Clear Creek Federal Station (West 60<sup>th</sup> Avenue Improvements per 7.3 Traffic Mitigation)
  - k. 7.14(a): Utah Junction Clay Street Outfall System

#### I. 7.14(d): Little Dry Creek Culverts at NWES

**NOW, THEREFORE**, in consideration of their mutual undertakings and agreements hereunder, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Amendment undertake and agree as follows:

#### 1. **DEFINITIONS AND INTERPRETATION**

Terms used but not defined herein shall have the respective meanings ascribed to such terms in the IGA, as amended hereby.

#### 2. **AMENDMENTS**

With effect on and after the date hereof, the IGA shall be amended as follows:

- (a) Section 1.4 (*Attached Exhibits*) is amended as follows:
  - I. Exhibit D-1 and D-2: incorporated as Attachment 1 are hereby replaced in this IGA amendment.
  - II. <u>Exhibit G</u>: Update to Local Agency Contribution, attached and completely replaces original Exhibit G herein as Attachment 2.
  - III. Exhibit J-1: Clay Street Outfall General Plan and Elevation and Clay Community Trail Plan sheet and Profile sheet, attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
  - IV. <u>Exhibit J-2</u>: Gold Line Bridge Typical Section attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
  - V. <u>Exhibit J-3:</u> Adams County Letter of Commitment to RTD for the Clay Community Outfall RTD Gold Line Crossing, dated July 1, 2014 attached and incorporated herein as Attachment 3, is hereby added to the list of Attached Exhibits.
  - VI. <u>Exhibit J-4</u>: Clay Street Community Trail and Outfall System Access Easement No. 1 and Access Easement No. 2, attached and incorporated herein as Attachment 3, are hereby added to the list of Attached Exhibits.
  - VII. <u>Exhibit K</u>: Lowell Boulevard Crossing, attached and incorporated herein as Attachment 4, is hereby added to the list of Attached Exhibits.
  - VIII. Exhibit L-1 and L-2: West 60<sup>th</sup> Avenue Improvements and Federal Requirements, attached and incorporated herein as Attachment 5, is hereby added to the list of Attached Exhibits.
    - IX. <u>Exhibit M</u>: Clear Creek Federal Station Changes, attached and incorporated herein as Attachment 6, is hereby added to the list of Attached Exhibits.
    - X. <u>Exhibit N</u>: Clear Creek Federal Station Utility Matrix, attached and incorporated herein as Attachment 7, is hereby added to the list of Attached Exhibits.

- XI. <u>Exhibit O-1 and O-2</u>: County and Denver Transit Partners (DTP) Temporary Construction Easements, attached and incorporated herein as Attachment 8, are hereby added to the list of Attached Exhibits.
- XII. <u>Exhibit P</u>: ADCO/RTD/BNSF Culverts Ballast Wall, attached and incorporated herein as Attachment 9, is hereby added to the list of Attached Exhibits.
- XIII. <u>Exhibit Q:</u> Lowell Boulevard Permanent Easement, attached and incorporated herein as Attachment 10, is hereby added to the list of Attached Exhibits.
- XIV. <u>Exhibit Q-1</u>: Lowell Crossing Parcel attached and incorporated herein as Attachment 10, is hereby added to the list of Attached Exhibits.
- XV. <u>Exhibit R</u>: Right of Entry (ROE) Permit-Contractor attached and incorporated herein as Attachment 11, is hereby added to the list of Attached Exhibits.
- (b) Section 5.1 is hereby amended as follows:
  - I. Subparagraph a (*GL 7. Parcel ID-182508400001. West 60<sup>th</sup> Avenue street improvements*), is hereby deleted in its entirety and replaced with the word "Reserved". RTD agrees to provide a permanent easement for the right-of-way for the 60<sup>th</sup> Avenue Project prior to County advertising construction for the project. When permitted by FTA, RTD will convey this right-of-way to the County. Additionally, RTD shall convey the property rights for the channel parcel north of 60<sup>th</sup> Avenue.
  - II. Subparagraph b (*GL 7B. Parcel ID- 182508100038.* Clear Creek Federal Station storm sewer outfall) is hereby amended to read:
    - (A) Federal P&R Outfall: RTD will design and construct a drainage system from RTD's onsite water quality pond to include a junction structure in the future 60<sup>th</sup> Avenue right-of-way. The County will maintain the portion of the outfall from the junction structure in the West 60<sup>th</sup> Avenue right-of-way, located near the southern right-of-way line to the outfall in Clear Creek. The County will receive 50% LAC for the design and construction of the outfall. The County will design and construct the access to the curb return to the Clear Creek Federal Station consistent with the County's W. 60<sup>th</sup> Avenue project.
- (c) Section 5.4 is hereby eliminated and replaced with Exhibit G.
- (d) Section 5.6(b) is hereby eliminated and replaced with Exhibit G.
- (e) 6.1 Transit System Elements is hereby revised to read in its entirety:

Certain Project elements included in a Submittal are transit elements that are crucial to Commuter Rail Transit ("CRT") system operation, compliance with NEPA documentation, or and/or compliance with FTA or FRA requirements (collectively, "Transit System Elements"). County permitting requirements shall not apply to Transit System Elements constructed within the CRT track-way clearance envelope boundaries as depicted in Exhibit I in the first executed IGA between RTD and the

County or to certain Transit System Elements that are constructed outside the boundaries of the CRT track-way clearance envelope on RTD Project property with the exception of elements subject to the provisions of the County's water quality regulations or floodplain regulations. Transit System Elements include, without limitation, trackage, prefabricated traction power substations, prefabricated signal houses, prefabricated communications houses, noise and ballast walls, and station platforms and associated vertical circulation. It is specifically agreed the elevators at the stations would be subject to county inspection. Plans provided by RTD or the Concessionaire for Transit System Elements are for information purposes only, and are not subject to the County's review fees or processes; however, plans provided by RTD or the Concessionaire for roadway and drainage improvements, and erosion control are subject to the County's review and permitting processes.

(f) Section 7.8(b) (*Future Clay Community Trail*) is deleted and replaced with the following:

#### Section 7.8(b) Gold Line Bridge, Clay Community Trail and Clay Street Outfall:

- I. Responsibilities. RTD shall implement the Gold Line Bridge for the CRT in accordance with Exhibit J-2 and PUC Decision No. C13-1339 (Proceeding Number 13A-0956R) and build certain elements of the Clay Community Outfall/Trail (CC Betterment Project) per the Letter of Commitment for the Betterment package for the Clay Community Outfall Project - RTD Gold Line Crossing, dated July 1, 2014 and herein incorporated as Exhibit J-3, hereinafter referred to as the "Clay Betterment Project". At such a time in the future as the County decides to build the remaining improvements for the Clay Community Trail or Clay Street Outfall System under the Gold Line Bridge, the County shall construct the improvements materially in accordance with Exhibit J-1 and PUC Decision No. C13-1339 (Proceeding Number 13A-0956R). RTD shall construct overpass fencing protection on the Gold Line Bridge that meets the standards and requirements included in the Concession Agreement. The Parties shall coordinate the construction of the Gold Line Bridge with the future Clay Community Trail and Clay Street Outfall System. RTD shall, at no cost to the County, maintain the Gold Line Bridge, including overpass fencing protection, as required by and in accordance with applicable laws. The County shall, at no cost to RTD, maintain the Clay Street Outfall System and the Clay Community Trail, including, without limitation, the walls, trails, liners and all other items constructed by the County.
- II. Approvals and Permissions. Except as otherwise provided herein, RTD shall obtain the permissions necessary to implement the Gold Line Bridge and the Clay Betterment Project. The County shall obtain the permissions necessary to implement the Clay Community Trail and the Clay Street Outfall System. The County shall coordinate with CDOT to ensure that CDOT will not be adversely impacted by implementation of the Clay Community Trail and Clay Street Outfall System and, if necessary, obtain any necessary crossing permission. By opening day of the Gold Line corridor, RTD shall grant to the County a non-exclusive access easement, consistent with and subject to those prior rights granted to RTD, as shown in Exhibit J-4, parcel PE-5A (Rec. No. 2012000037580); and a non-exclusive permanent easement as shown in Exhibit J-4, parcel GL-5A REV2, for the Clay Street Community Trail and Outfall System improvements. Easement across GL-5A REV2 will provide permission to

implement the Clay Community Trail and the Clay Street Outfall System on, across, under, and along the RTD property.

- III. Cost Responsibility for the Gold Line Bridge. Of the cost to RTD to implement the Gold Line Bridge, \$599,000, RTD shall be responsible for \$138,000. The County shall pay to RTD \$461,000 as approved in the County's 2014 budget. The total County contribution includes the original \$75,000 agreed to in 7.8(b) of the IGA. In addition, the County shall pay RTD the cost of the Clay Betterment Project within 30 days after receipt of an invoice from RTD for said capital costs. The cost for environmental remediation within the Clay Betterment Project, which costs are in addition to the Clay Betterment Project, shall be paid within 30 days of RTD's invoicing of that cost, following completion of the remediation work.
- (g) Section 7.8(f). Lowell Boulevard:
  - I. Section 7.8(f) (Lowell Boulevard) is hereby deleted and replaced with the following:
  - II. **Existing Crossing Responsibilities.** RTD will, at no cost to the County, construct the Lowell Boulevard crossing of the CRT right of way in accordance with Public Utilities Commission (PUC) Decision C14-0334 in Proceeding 14A-0124R. In addition, RTD will include long railroad ties on the CRT tracks to support additional crossing panels to match the width of the future Lowell Boulevard cross-section, as shown in Exhibit K.
  - III. **Future Crossing Responsibilities.** The County has designed the Lowell Boulevard Widening Project ("Lowell Widening") and shall construct the Lowell Widening in accordance with Exhibit K and PUC Decision C15-0195R.
  - IV. Property. RTD shall grant a permanent easement for Lowell Boulevard improvements outside County's existing 60 foot right of way width where such improvements encroach onto RTD property in the form shown in Exhibit Q attached.
  - V. **Maintenance**. The County shall maintain the roadway surface of Lowell Boulevard, including, if applicable, any widened sections and any sidewalk/regional trail installed in accordance with the PUC Order. RTD shall maintain the CRT crossing elements and the pedestrian treatments in accordance with applicable PUC rules and in accordance with the Order.
- 3. Section 7.8(h). 64<sup>th</sup> Avenue Grade Separation

The 64th Avenue Grade Separation (bridge) is a BNSF requirement of the EAGLE P3 project. The Parties acknowledge the bridge imposes a unique circumstance to the EAGLE P3 project and subsequent burden on the County's long term infrastructure program. Once the warranty period has ceased per the executed IGA, the County shall assume maintenance responsibilities of the bridge and perform all inspections and preventative maintenance as required under its Bridge Program. The County will inform RTD at such a time in the future when replacement of the bridge is required, within two (2) years ahead of the anticipated construction, the Parties shall coordinate and endeavor to

determine a fair and equitable financial arrangement to reconstruct the bridge to current standards and operational needs at that time.

4. **Section 7.12 <u>Federal Station.</u>** (Clear Creek • Federal Station) is hereby revised to read in its entirety:

#### West 60<sup>th</sup> Avenue Improvements.

- **a. Plans**. The County shall procure the design, right-of-way and construction of the roadway, the necessary roadway drainage facility improvements to the West 60<sup>th</sup> Avenue corridor, and the traffic mitigations for the Clear Creek Federal Station area identified in Section 7.3 (*Traffic Mitigations*) in accordance with Exhibit L-1 (collectively, the *West 60<sup>th</sup> Avenue Improvements*) and within the property identified as "Adams County Conveyance 1- Rev2" on Exhibit D-1 (*AdCo 1-Rev2*). The County shall avoid impacts to the historic structure as shown on Exhibit D-1 and approved by FTA in a Categorical Exclusion. The County acknowledges and agrees that it will construct the Traffic Mitigations and that the County's implementation of the West 60<sup>th</sup> Avenue Improvements shall satisfy RTD's obligation to construct the Traffic Mitigations. The County shall obtain RTD's approval of any material change from Exhibit L-1 before implementing such changes. RTD will provide comments or a statement of no exceptions to any revised design plans within 30 days of submission.
- **b. ADCO Construction and Access.** The County and RTD shall enter into a temporary easement as substantially defined in the easement shown on Exhibit D-2 for the property identified as "Adams County Conveyance 1-Rev2" on Exhibit D-1 to allow the County to construct the West 60th Avenue Improvements prior to the property owned by RTD (Adams County Conveyance 1-Rev2) being conveyed to the County. Both parties shall adhere to the requirements defined in the temporary easement in Exhibit D-2.
- c. Federal Requirements. In the implementation of the West 60<sup>th</sup> Avenue Improvements, the County shall procure the construction of the work in accordance with FTA Circular 4220.1F. The County shall provide RTD the opportunity to review solicitations for the construction contracts and shall allow RTD to take part in the evaluation and selection of the prime construction contractor, including evaluation of the RFP by the County and proposals submitted by contractors. This Section 7.12 of the IGA is subject to those terms and conditions identified on Exhibit L-2. The County shall ensure Exhibit L-2 is incorporated into, and appended to, each applicable contract or subcontract entered into for the West 60<sup>th</sup> Avenue Improvements. The County shall ensure all certifications are obtained from the County's contractor before notice to proceed is issued. RTD shall be the oversight entity for Contractor compliance with the DBE Program described in the Exhibit. Contractor shall be responsible for all reporting and compliance specified therein.
- **d. Retainage and Bonds.** The County shall comply with CRS 24-91-101, *et seq.* and CRS 38-26-101, *et seq.* in the procurement, administration and closeout of applicable construction contracts awarded for the West 60<sup>th</sup> Avenue Improvements work. The County shall ensure that RTD is an obligee on all public works bonds obtained by the County's contractors for construction of the West 60<sup>th</sup> Avenue Improvements. The County shall forward to RTD executed copies of

such bonds and all contracts and subcontracts for construction, materials or otherwise that are entered into with respect to the West 60<sup>th</sup> Avenue Improvements.

- **e. Permits.** The County shall be solely responsible to obtain permits necessary to implement the West 60<sup>th</sup> Avenue Improvements, including CDOT approvals.
- **f. Reporting**. The County shall provide to RTD copies of all executed contracts and subcontracts not later than 30 days from execution thereof. If RTD or FTA should issue findings following an audit of this IGA or any such contracts for compliance with federal requirements, the County agrees to amend this IGA and to use best efforts to amend any such contracts in order to respond to the audit findings. The County shall provide to RTD a quarterly report consisting of a brief narrative about the current status of the project, specifically advising of any change in milestone dates from the previous reporting period, and advising of the status of achievement of the following milestones for its contract(s):
- (A) bid release;
- (B) construction contract award;
- (C) construction completion; and
- (D) Contract closeout.
- (E) Milestone completion date reports
- **g. Environmental Work.** The County shall perform, at no cost to RTD, the management, removal, signing manifests as generator, disposal or remediation (as applicable) of solid and hazardous materials encountered during construction of West 60th Avenue Improvements including but not limited to those on property that is or will be owned or controlled by the County, any property purchased by the County for the West 60<sup>th</sup> Avenue Improvements; Parcel AdCo 1-Rev2 legally described on Exhibit D-1; and those portions of the property upon which the current West 60<sup>th</sup> Avenue corridor roadway is currently installed, exclusive of Parcel PE7A, legally described on Exhibit D-1. Environmental Work performed by the County that is over and above the DRCOG funded portion of the project will be credited to the County as LAC.
- h. Utilities and Restoration. The County shall coordinate with RTD in the design and construction of the West 60<sup>th</sup> Avenue Improvements and the placement of utilities within West 60<sup>th</sup> Avenue that are necessary to serve Clear Creek Federal Station, including the Berkeley Water and Sanitation lines. RTD shall be responsible for installing or relocating utilities required exclusively to serve Clear Creek Federal Station. The County shall submit plans at the 100% design level to RTD for the purpose of verifying that RTD can access the necessary utilities. RTD will provide concurrence or objection within 14 days of receipt. Disputes will be resolved as provided in Section 16 of the Agreement. The County shall be responsible for all other utilities identified on Exhibit N. RTD shall not be responsible to remove the current West 60<sup>th</sup> Avenue corridor roadway nor restore the property upon which it is installed.
- i. Access and Schedule. The County shall ensure that the existing West 60<sup>th</sup> Avenue, or a reasonable alternative, is open and accessible from Federal

Boulevard or West 60th Avenue at all times during implementation of Clear Creek • Federal Station and the Federal Drainage Facilities. The West 60<sup>th</sup> Avenue Improvements shall be substantially completed no later than August 31, 2016. Should the West 60<sup>th</sup> Avenue Improvements not be completed by August 31, 2016 the County will ensure that the existing 60<sup>th</sup> Avenue will be available for access to the Federal Station on opening day of the Gold Line (anticipated October, 2016). If the County fails to implement the West 60<sup>th</sup> Avenue Improvements by August 31, 2016, RTD may elect to implement the Traffic Mitigations and draw down funds from the DRCOG funding in an amount sufficient to reimburse RTD for the costs. Installation of intersection control is contingent upon applicable warrants being met. If the applicable warrants are not met at the time of construction, the county will not be responsible for these improvements and RTD will not penalize the County by drawing down the DRCOG funds.

**j. West 60<sup>th</sup> Avenue Improvements Communications.** The County shall address communications to RTD with respect to Federal Requirements, Retainage and Bonds, Reporting, and invoicing EAGLE P3 Cost Engineer via Aconex. All other communications shall be addressed in accordance with Section 22 (*Notices*).

#### 5. Clear Creek • Federal Station.

- a. Design and Construction. RTD shall design and construct Clear Creek Federal Station, the commuter rail station and Park-n-Ride at Federal and West 60th Avenue, in accordance with the FEIS, as revised by the Clear Creek • Federal Station Changes approved by FTA pursuant to a Categorical Exclusion entitled "60<sup>th</sup>/Federal Roadway Realignment on the Gold Line Federal Station" (approved by FTA 8/8/2013) and in accordance with the requirements of the Concession Agreement, Exhibit M, and any remaining design requirements. The County specifically acknowledges and agrees that RTD will implement Clear Creek • Federal Station, including the water quality pond, as depicted on Exhibit M whether or not the County implements the West 60<sup>th</sup> Avenue Improvements. RTD shall perform the management, removal, disposal or remediation (as applicable) of solid and hazardous materials encountered on property that will be owned or controlled by RTD, including: property purchased by RTD for Clear Creek • Federal Station; Parcels GL6 and GL6A REV1, and PE8, each as depicted on Exhibit D-1; and Parcels PE7 and PE7A, each as legally described on Exhibit D-1.
- b. Water Quality Pond and Clear Creek Federal Station Outfall System. Upon the County's approval on supporting plans reports, and legal description for those portions of the Clear Creek Drainage Facilities (the Federal Drainage Facilities) that will be implemented on Parcels PE7, and PE7A, the County expressly agrees to allow RTD to construct a single water quality pond to connect to a storm outlet within PE7, PE7A, and PE8 (the Clear Creek Federal Station Outfall System) that drains to Clear Creek in lieu of the water quality and detention pond identified in the Federal Station IGA Plans, as allowed by Section 9-01-12 DETENTION in the County's Development Standards & Regulations. The County will be permitted to utilize the pond for drainage from ADCO Clear Creek floodplain project north of RTD Clear Creek Federal Station. RTD will

design and construct the Clear Creek Federal Station Outfall System which will include a junction structure (manhole) such that Adams County has access to maintain the system. Adams County will take on maintenance of the Clear Creek Federal Station Outfall System from RTD station from said junction structure (manhole) to Clear Creek. The County will be eligible for 50% local agency contribution (LAC) based on construction costs to install the outfall system from the station water quality pond to Clear Creek.

#### c. Right-of-Way Transactions.

- C1. RTD has acquired Parcels GL6, GL6A REV1, AdCo 1-Rev2, GL9A, GL9C, GL9D, and PE8, each as depicted on Exhibit D-1. RTD has complied with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (the *Uniform Act*) and its implementing regulations located at 49 C.F.R. Part 24 in acquiring property that is necessary to implement Clear Creek •Federal Station.
- C2. RTD shall convey to the County, at no cost, the AdCo 1-Rev2 property shown on Exhibit D-1 in order to implement the West 60<sup>th</sup> Avenue Improvements and necessary traffic mitigations referenced in Section 7.12(I) **Plans**.
- C3. RTD shall convey to the County, at no cost, the property north of AdCo 1-Rev2 property shown on Exhibit D-1 for County implementation of a water quality facility/pond for the roadway drainage to drain to Clear Creek Federal Station Outfall System to Clear Creek as referenced in Section 7.12(II) **Permits**. RTD shall also convey PE-8 to county for the outfall maintained by the county.

Conveyance of property north of AdCo 1-Rev2 and PE-8 are subject to terms and conditions to RTD and/or FTA approval.

RTD will provide, at no cost to the County, property that it owns (north of AdCo 1-Rev2 property shown on Exhibit D-1) for right of way required for West 60<sup>th</sup> Avenue capacity increases created by the **Clear Creek • Federal Station** and/or additional ingress and egress to **Clear Creek • Federal Station**.

- C4. Both properties shall be conveyed to the County within days of the passage of a resolution or other dedication by the County for use of the property as public right of way.
- C5. The County and RTD shall work together in the future to address future roadway widening plans by the County starting near the eastern Clear Creek Federal Station access to the eastern RTD property line. The County has proposed potential widening improvements along the southern edge of West 60<sup>th</sup> Avenue to facilitate a standard roadway section that does not impact the station water quality pond. This proposal shows additional right-of-way required up to approximately 7.5 feet on eastern property line. The County would be responsible for any modifications to RTD's infrastructure necessary for the right-of-way change and roadway improvements. RTD agrees to convey to the County, at no cost, the necessary right-of-way to facilitate the roadway widening improvements if the County demonstrates proper funding is in place for improvements prior to conveyance. Property will be conveyed subject to dedication of the same as public right of way.

- C6. The County shall acquire all other real property necessary to implement the West 60<sup>th</sup> Avenue Improvements. The County shall comply with the Uniform Act and its implementing regulations located at 49 C.F.R. Part 24 in acquiring property that is necessary to implement the West 60<sup>th</sup> Avenue Improvements and shall provide to RTD all documentation necessary for RTD to obtain FTA concurrence on the purchase of the real property. FTA concurrence must be obtained prior to acquiring real property for the West 60<sup>th</sup> Avenue Improvements.
- C7. RTD shall grant to the County, at no cost, a non-exclusive temporary construction easement in the form attached and incorporated herein as Exhibit O-1 (the *AdCo TCE*) pursuant to which the County shall have authority to enter upon Parcels GL6, GL6A REV1 and AdCo 1-Rev2 for purposes of constructing the West 60<sup>th</sup> Avenue Improvements. The AdCo TCE shall be subject at all times to the right of the Concessionaire to construct utilities necessary for Clear Creek Federal Station upon AdCo 1-Rev2 and to have access across Parcels GL6, GL6A REV 1 and AdCo 1-Rev2 from existing West 60<sup>th</sup> Avenue to the remaining portions of Parcels GL6, GL6A, PE7, PE7A and PE8. The AdCo TCE and the Concessionaire's access rights shall automatically terminate upon the effectiveness of the grant of Parcel AdCo 1-Rev2 to the County in accordance with the below Section 7.12(c)(v).
- C8. The county shall grant to RTD/DTP a non-exclusive temporary construction easement (if necessary) on County property surrounding parcels PE-7, PE-7A, and PE-8 to construct the Clear Creek Federal Station Outfall system. A non-exclusive temporary construction easement will be in the form attached and incorporated herein as Exhibit O-2 (the DTP TCE) pursuant to which, RTD/DTP shall have authority to enter upon said County property for the purpose of constructing the Clear Creek Federal Station Outfall system.
- C9. Any permanent easements granted for utilities over property dedicated to the County for right of way purposes shall become subordinate to the County's rights. As necessary, said permanent easements granted by RTD to utility companies shall contain a facsimile subject to necessary modifications for the name or appropriate designation of the grantee of the following provision:

Notwithstanding the above-referenced limitations. the **Parties** acknowledge that Grantor may be required to dedicate a portion or all of the property encumbered by the easement for use as County right-ofway. To the extent that such dedication occurs, the parties agree that the easement shall be vacated with respect to the portion of the property so dedicated as county right-of-way and District's easement rights hereunder shall immediately terminate with respect to such property. dedication, District's access and use rights with respect to such property shall be solely by virtue of its rights as a utility provider within the county right-of-way, to be administered under the provisions of the county's utility permit. Upon dedication of the property as county right-of-way, District agrees to be issued a no-fee utility permit by the county. District shall be responsible, at District's sole cost, to re-locate any of its infrastructure located within the County's right-of-way upon written notice by the County to commence such re-location.

C10. RTD and the County shall exchange property interests in one another's property in accordance with this Section 7.12(c)(vi).

#### d. Cost Responsibility for the West 60<sup>th</sup> Avenue Improvements

- D1. Allowable Costs for West 60th Avenue Improvements. The County shall follow the applicable cost principles circulars, currently in Title 2 of the Code of Federal Regulations, in determining whether project costs are allowable or unallowable. Title 2 C.F.R. part 225, also known as OMB Circular A-87, establishes principles and standards for determining costs applicable to grants, contracts, and other agreements with State and local governments and federally recognized Indian tribal governments. Title 2 C.F.R. part 230 also known as OMB Circular A-122 establishes cost principles for nonprofits. The County's costs must specifically relate to the purpose of the DRCOG funding and the latest approved project budget. The County may incur costs of both a direct and indirect nature. Direct costs are costs that can be identified specifically with a particular cost objective and may be charged directly to a grant, contracts, or to other programs. All direct costs, even for project administration activities, must be adequately supported with proper documentation. For example, all labor charges must be supported with Time, Equipment and Materials records. Indirect costs are costs incurred for a common or joint purpose benefiting more than one cost objective. Indirect costs must be supported by an approved cost allocation plan (CAP) and/or indirect cost rate proposal.
- D2. In response to the 2008 Resolution Number 20 of the Denver Regional Council of Government (DRCOG) which approved \$6.461 million of federal funding from its Transportation Improvement Program (TIP) to the Gold Line base project costs, together the City and County of Denver, RTD, Adams County, the City of Arvada, the City of Wheat Ridge and the Colorado Department of Transportation (collectively, the "Gold Line Partners") agreed to the Gold Line Partners' proposed base projects and the corresponding allocation of the approved funds.
- D3. This Amendment provides for the funding to The County of \$2,213,923 of Federal Highway Administration (FHWA) funds which were transferred by the FHWA to the Federal Transportation Administration (FTA) to be administered by DRCOG through RTD Grant CO 95 X017-01 for the County's improvements to West 60<sup>th</sup> Avenue Improvements. The County and RTD jointly agreed, along with the other Gold Line Partners, to the allocation of \$2,213,923 of those DRCOG TIP funds to The County for its performance of certain base improvements as part of the Gold/NWES corridor project, specifically improvements to West 60<sup>th</sup> Avenue.
- D4. The County shall submit invoices justifying costs incurred, and they will be reimbursed at a rate of 100%.
- D5. **Local Agency Contribution**. The County shall receive local agency credit towards the Gold Line for the \$2,213,923 of DRCOG Second Commitment In Principle (SCIP) funding pursuant to section 5.6(b) of the Agreement.

D6. The Denver Regional Council of Government (DRCOG) approved Federal funding from the SCIP to the North Metro project team, including the City and County of Denver, RTD, Adams County, the City of Commerce City, the City of Northglenn, City of Thornton and the Colorado Department of Transportation (collectively, the "The North Metro Line Partners"), agreed to the North Metro Line Partners' proposed projects and the corresponding allocation of the approved funds.

D7. The County and RTD jointly agreed, along with the other North Metro Line Partners, with the County's request to transfer funds intended for the benefit of the North Metro Corridor to the Gold Line Project; specifically the West 60<sup>th</sup> Avenue Improvements. This Amendment provides for the funding to The County of \$984,000 of FHWA funds which were transferred by the FHWA to FTA to be administered by DRCOG through RTD for the County's improvements to West 60<sup>th</sup> Avenue Improvements

D8. The County is to assist in the payment of actual eligible costs within the scope of this project equal to 20%. The County shall submit invoices justifying costs incurred, and they will be reimbursed at a rate of 80%. The County must justify \$1,230,000 in federally eligible project costs to receive the grant reimbursement of \$984,000.

D9. RTD agrees to drawdown the original Gold Line SCIP funds of \$2.2 million first, before drawing down the North Metro funds transferred to this project.

- **e. Invoicing**. The County shall pay all costs associated with elements other than design and shall construct the West 60<sup>th</sup> Avenue Improvements, including costs to acquire real property necessary for the project. The County shall provide invoices with supporting documentation demonstrating the amount of the County's payments to its construction contractors. Provided the County is not in breach of any obligation under this Section 7.12, all contractor certifications have been received, and no contractor is in violation of federal flow down requirement RTD shall pay, within 30 days of receipt of the invoice, the DRCOG funding to the County on the basis of actual allowable costs invoiced and paid by the County, for federally eligible elements of work in an amount not to exceed the DRCOG funding amount of \$2,213,923. The County's final invoice to RTD shall be for any outstanding retainage amounts due to the County's contractors in accordance with CRS 24-91-101, *et seq.*
- f. Disallowed Costs. The County agrees that reimbursement of any cost in accordance herewith does not constitute a final FTA decision about the whether or not the FTA will allow that cost and does not constitute a waiver of any violation by the County of the terms of the approved grant Agreement. If FTA determines that the County is not entitled to receive any part of the Federal funds requested, RTD will notify the County stating the reasons and RTD will deduct disallowed amounts from pending invoices or if all have been paid, the County will return any funds due to FTA, within 60 days from receipt of a written demand from RTD.
- g. Clear Creek Federal Station Costs. RTD shall be solely responsible for the costs of implementing the Clear Creek • Federal Station Changes, including costs to acquire real property for Clear Creek • Federal Station.

6. **Section 7.14(a)** (*Utah Junction – Clay Street Outfall System*) is hereby revised to read in its entirety:

RTD's obligation to incorporate the Clay Street Outfall System into the Project design shall be deemed satisfied by implementation of the Gold Line Bridge in accordance with Section 7.8(b) of this IGA.

#### 7. 7.14(d): Little Dry Creek Culverts at NWES

- 1. Adams County is the grantee of an easement from BNSF Railway Company (BNSF) for a drainage culvert accommodating Little Dry Creek. RTD will be utilizing the existing culvert to construct the CRT Transit System Elements adjacent to the BNSF track-way. RTD will relocate the BNSF track-way to the north on the existing culvert and build the CRT Transit Elements to the south with no required improvements to the culvert except modifications to the existing ballast wall located in the center of the culvert as shown on Exhibit P. RTD agrees to become the grantee of a separate easement for the south half of the existing culvert utilized by RTD. RTD and the County will seek BNSF consent to terminate the easement to the County for the southern half of the easement property utilized by the RTD CRT Transit System Elements and defined by the boundary fence between RTD and BNSF track-ways. RTD will seek a separate easement from BNSF for the construction and maintenance of the south half of the existing culvert utilized by RTD.
- 2. In the event the BNSF will not allow two easement agreements separating the Parties' respective ownership and maintenance responsibilities, RTD will pay for maintenance obligations associated with the portion within RTD's Right-of-Way. In satisfying RTD's maintenance obligations, RTD may perform or contract for performance of maintenance to the extent and under the terms permitted by the BNSF easement. It is the preference of the County that RTD satisfy its maintenance obligations jointly with the County by reimbursing the County for half the costs related to the maintenance of the structural elements of the reinforced concrete box structure. RTD shall also reimburse the County for half the cost of re-establishment of the existing drainage and pedestrian accommodations provided by the existing reinforced concrete box culvert if required for railroad or CRT operations or to maintain structural sufficiency as defined by AREMA standards. RTD shall only be responsible for the maintenance or any other obligations or expenses that maintain current railroad or CRT related operations. Utility relocation costs, required for shared culvert maintenance expenses established herein shall be jointly developed and mutually agreed-upon prior to committing or expending any funds by either Party. RTD and the County shall plan and coordinate all nonemergency, expenditures sufficiently in advance of such commitments to allow the Parties the opportunity to review, concur and budget for their half of such expenses. The Parties shall renegotiate these terms in good faith if the culvert is significantly modified by either Party.
- a. Section 8.4(a) (Lowell Boulevard Street widening) is hereby deleted in its entirety.

Section 22 (Notices) is hereby revised as follows:

The introductory paragraph in Section 22 (*Notices*) is revised to read:

Except as may be specifically required herein, all communications required by this IGA will be made in writing via Aconex to the project liaisons identified below (or their delegates). If Aconex is not available, communications may be provided in writing or via e-mail, U.S. First Class Post to the attentions of:

The County copy notice shall be sent to:

Jeanne M. Shreve, Transportation Coordinator 4430 South Adams County Parkway, 1st Floor, Suite W2000A Brighton, Colorado, 80601 Email: jshreve@adcogov.org Phone: (720) 523-6847

The RTD primary notice shall be sent to:

Greg Straight, Eagle Project Manager 1670 Broadway, Suite 2700 Denver, Colorado, 80202 Email: greg.straight@rtd-denver.com

Phone: (303) 299-6906

#### h. CONFLICT OF TERMS

In the event of any conflict between the terms or provisions of the IGA and this Amendment, the terms of this Amendment shall govern.

#### i. DOCUMENTS OTHERWISE UNCHANGED

Except as herein provided, the IGA shall remain unchanged and in full force and effect in accordance with its terms, and each reference to the IGA and words of similar import in the IGA. as amended hereby, shall be a reference to the IGA as amended hereby and as the same may be further amended, supplemented and otherwise modified and in effect from time to time.

#### **CAPTIONS**

The captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Amendment.

#### k. GOVERNING LAW

This Amendment shall be construed in accordance with, and this Amendment and all matters arising out of or relating in any way whatsoever to this Amendment (whether in contract, tort or otherwise) shall be governed by, the law of the State of Colorado.

#### I. EXECUTION IN COUNTERPARTS

This Amendment may be executed and delivered in counterparts (including by facsimile or email transmission), each of which will be deemed an original, but all of which when taken together shall constitute a single contract. This Amendment shall become effective when it shall have

been executed by each Party and when each Party shall have received counterparts hereof, which, when taken together, bear the signatures of the other Party hereto, and thereafter shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page to this Amendment (including by facsimile or e-mail) shall be effective as delivery of a manually executed counterpart of this Amendment.

#### m. BINDING EFFECT

This Amendment shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

#### n. SEVERABILITY

Any provision of this Amendment held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Amendment to be executed and delivered as of the date first above written.

#### **REGIONAL TRANSPORTATION DISTRICT**

Зу:	
	David Genova
Title:	Interim General Manager
4pprov	ed as to legal form for the Regional Transportation District:
Зу:	
Name:	Marla Lien
Title:	General Counsel

ADAMS COUNTY:			
By:			
	les (Chaz) Tedesco: rman	-	
<b>LEGAL REV</b> Approved as			
By: County A	Attorney		



#### STUDY SESSION AGENDA ITEM

**DATE:** 9/17/15

**SUBJECT:** Employee Volunteer Program

**FROM:** Heather McDermott

AGENCY/DEPARTMENT: County Management

ATTENDEES: County Management

**PURPOSE OF ITEM:** Provide the Commissioners with a proposal for implementing the

County Employee Volunteer Program and the 8 hours/employee volunteer leave that was previously

approved by the Commissioners

**STAFF RECOMMENDATION:** Approve Employee Volunteer Program proposal and coordinate

dates for kick-off events.

#### **BACKGROUND:**

In 2015, the Commissioners approved 8 hours of leave for each County employee (over 30 hours) for purposes of volunteering within the Community. County Management has formulated the attached Implementation Plan for launching this employee volunteer program that will give back to the community; promote social responsibility and altruism; build and strengthen partnerships throughout Adams County; and promote and improve employee wellness.

#### AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

County Management, County Attorney's Office, Human Resources

#### **ATTACHED DOCUMENTS:**

Employee Volunteer Program - Implementation Plan Power Point DRAFT Flyer for Non-profit Volunteer Coordinator Meeting Draft T-shirt design

#### **FISCAL IMPACT:**

Either mark X if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):	
Cost center(s):	
Self-generated / dedicated revenues:	\$0
Annual operating costs:	\$1000
Annual net operating (cost) / income:	\$
Capital costs:	\$
Expenditure included in approved operating budget:	\$
Expenditure included in approved capital budget:	\$
New FTEs requested:	0

Costs included are estimated for employee t-shirts and possible annual appreciation event. Estimates for these costs are still being obtained.

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**APPROVAL OF FISCAL IMPACT:** 

Todd Leopold, County Manager	Muy Dum Budget / Finance
Raymond H. Gonzales, Deputy County Manager	Budget i ingree
Ed Finger, Deputy County Manager	

# Employee Volunteer Program

"Heart at Work!"



## Purpose

- Give back to the Adams County community
- Promote social responsibility and altruism
- Build and strengthen partnerships throughout Adams County
- Promote and improve employee wellness



### Commissioners' Goals

### **High Performing, Fiscally Sustainable Government**

- Goal 1 Strengthen employee and community engagement
  - Key Performance Measures
    - Number of employees participating
    - Number of hours donated
    - Number of non-profits served
- Goal 2 Improve employee morale, retention, and recruitment
  - Key Performance Measures
    - Impact on employee morale

### **Quality of Life**

- Goal 1 Neighborhood revitalization
  - Key Performance Measures
    - Number of projects completed
    - Number of causes served as they related to the Commissioners' Goals

## **Programs Served**

 Programs through established non-profit organizations that provide a direct benefit to the Adams County community

 Programs must be consistent with the mission, values and ethics of the County



## **Proposed Leave Policy**

- Employees working >30 hours approved for 8 hours / wellness credits (employees working <30 hours approved for wellness credits)
- New hires eligible to utilize volunteer hours immediately
- No employee will be able to transfer their hours to another employee
- Volunteer hours cannot be accrued from year to year (use-it or lose-it); not paid out upon seperation



### Vision ...

- Build partnerships with non-profits
- Identify project-based volunteer opportunities for employees
- Post all eligible projects,
   AND ...
- Sponsor and highlight a monthly "Heart-at-Work" Day





## **Proposed Next Steps**

- October Meet with Non-profit Volunteer Coordinators (Commissioner Kick-Off)
- November Identify projects for 2016
- December Kick off Event
- January 2016 "Heart at Work!"





# ADAMS COUNTY Volunteer Force



Adams County Government would like to partner with local non-profits that need volunteers to complete community projects throughout the year.

Our county commissioners have graciously offered employees paid time off in exchange for participating in our new volunteer program.

Please join us to learn more about our "Heart at Work" volunteer program and discover how Adams County government employees may be able to help your organization.

We look forward to seeing you on September 29.

September 29, 2015 10 to 11:30 a.m.

Conference Center Platte River D

Adams County Government Center 4430 South Adams County Parkway Brighton, CO 80601

Please RSVP to Dawn Riggs via email at DRiggs@adcogov.org or by phone at 720.523.6319.



#### STUDY SESSION AGENDA ITEM

**DATE:** September 22, 2015

SUBJECT: 2016 Preliminary Budget Update

FROM: Nancy Duncan, Budget Supervisor

AGENCY/DEPARTMENT: Budget Office

ATTENDEES: Budget Office Staff (Nancy Duncan, Theresa Wilson, Pernell Olson, Raylene Taylor)

PURPOSE OF ITEM: To update the Board of County Commissioners on the 2016 Preliminary Budget

**STAFF RECOMMENDATION:** To present information regarding the progress of the 2016 Preliminary Budget and answer questions.

#### **BACKGROUND:**

Periodic meetings will be held to update the Board of County Commissioners on the progress of the 2016 Preliminary Budget.

#### **AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:**

County Manager's Office and Budget Office

#### **ATTACHED DOCUMENTS:**

None

#### **FISCAL IMPACT:**

Either mark  $X \boxtimes$  if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):	TO VIEW STATE
Cost center(s):	
Self-generated / dedicated revenues:	\$
Annual operating costs:	\$
Annual net operating (cost) / income:	\$
Capital costs:	\$
Expenditure included in approved operating budget: \$	
Expenditure included in approved capital budget: \$	
New FTEs requested:	

Informational Only

APPROVAL SIGNATURES:	APPROVAL OF FISCAL IMPACT
APPROVAL SIGNATURES:	APPROVAL OF FISCAL IMPAC

Todd Leopold, County Manager

Budget / Finance

Raymond H. Gohzales, Deputy County Manager

Ed Finger, Deputy County Manager