



**DEVELOPMENT SERVICES  
CURRENT PLANNING**

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www.cityofloveland.org

**FINAL FINDINGS AND DETERMINATIONS**  
**Type II Zoning Permit**  
**Foothills Solar Park and Substation**  
**Special Review #915**

**Posted: January 18, 2016**

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**TITLE:** Foothills Solar Park and Substation, Special Review #915

**LOCATION:** The site is located south of West 29th Street, north of West 22nd Street, and west of Mehaffey Park

**APPLICANT:** City of Loveland Power Division  
Briana Reed-Harmel

**STAFF CONTACT:** Kerri Burchett, Current Planning

**APPLICATION TYPE:** Special Review #915

**STAFF RECOMMENDATION:** Staff recommends that the Current Planning Manager approve this special review allowing for the construction of a new substation and solar facility, subject to the conditions and corrections listed in Sections VIII and IX of this report.

**I. ATTACHMENTS**

- 1. Vicinity Map
- 2. Special Review/Site Development Plan
- 3. Site Renderings
- 4. Neighborhood meeting notes
- 5. Comments & Correspondence received during the Public Comment Period
  - A. Fred Burmont
  - B. Tony Benjamin

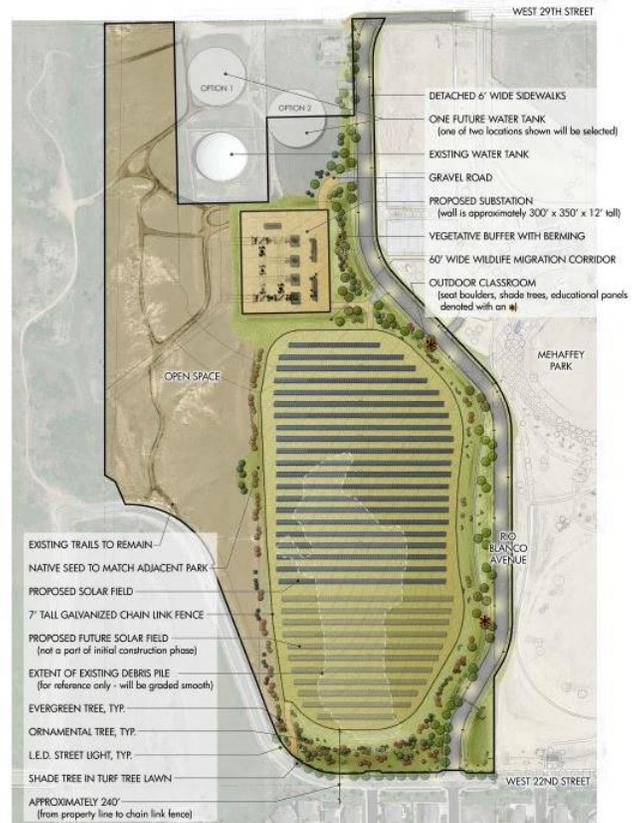
**II. SITE DATA**

EXISTING USE ..... Vacant  
PROPOSED USE ..... Solar and Substation Utility  
EXISTING ZONING AREA (acres)..... DR – Developing Resources (52.6 acres)  
EXISTING ADJACENT ZONING & USE- North..... DR – Developing Resource – water tank  
EXISTING ADJACENT ZONING & USE - East ..... PP – Public Park – Mehaffey Park  
EXISTING ADJACENT ZONING & USE- South..... PUD – Meadowbrook Ridge, single family residential  
EXISTING ADJACENT ZONING & USE - West..... PUD - Hunters Run West – residential approved, currently vacant  
UTILITY SERVICE – WATER..... City of Loveland  
UTILITY SERVICE – SEWER ..... City of Loveland  
UTILITY SERVICE – ELECTRIC ..... City of Loveland

**III. PROJECT DESCRIPTION**

The City Power Division is proposing to develop a 2.4 acre substation and a 19 acre solar facility on 52.6 acres of property located between West 22<sup>nd</sup> Street and West 29<sup>th</sup> Street, west of Mehaffey Park. The property is currently vacant and was recently rezoned to DR-Developing Resources. The facility would replace the City’s Idylwilde hydroelectric facility that was significantly damaged during the 2013 flood.

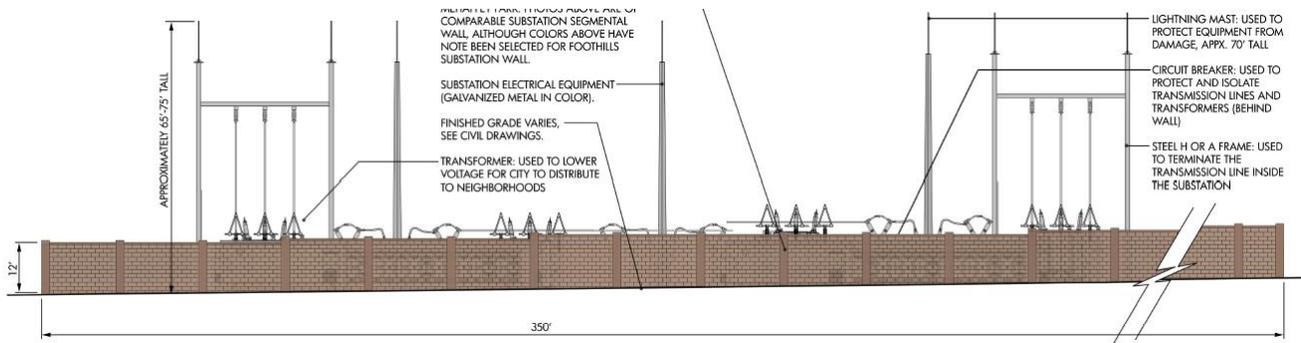
The special review plans, included as **Attachment 2** to this report, show the location of the substation near the existing water tank on W. 29<sup>th</sup> Street. The solar facility would be situated south of the substation. Two options for a new future water tank, located near the existing tank on 29<sup>th</sup> Street, are also shown, however the tank is not included in the special review proposal. The remaining property along the western portion of the site, which constitutes approximately 32% of the site, would remain as open space.



Development of the site would include the construction of Rio Blanco Avenue, a major collector road on the east side of the property. This road will serve as a north and south fairway between W. 22<sup>nd</sup> and W. 29<sup>th</sup> Streets. It will consist of two lanes, one going each direction with bike lanes, sidewalks and parallel parking available on each side of the road. Rio Blanco will also provide an entrance to Mehaffey Park as well as on-street parking for the park.

**Substation Facility**

The location for the new substation was chosen by the Power Division based on the expected growth in the northwestern portion of the city. The facility would replace the need for significant upgrades to the West Substation, located north of the Big Thompson River on Namaqua Road, which was affected during the September 2013 flood. Development of the new substation would include the installation of typical substation utility materials and transmission lines. A 12 foot tall masonry wall would screen much of the lower equipment within the facility. Transmission lines inside of the wall would be a maximum of 75 feet tall, including lightning masts used to protect the equipment from damage.



In terms of the wall appearance around the substation, the adjacent Home Owner Associations were provided 3 design and landscaping options as part of the public outreach efforts from the Power Division including:

- Decorative art wall with low landscaping and no berms in front of the wall so that the art is a visible to the public;
- Stone veneer wall matching the Mehaffey Park stone with landscaping meeting the standards in the Municipal Code and no berms; and
- Standard masonry wall with berms, landscaping and screening exceeding the quantity and height standards in the Municipal Code.



The 3 HOA’s (Meadowbrook Ridge, Hunter’s Run, and Quail Run) voted in separate meetings on each option and resoundingly chose the option with additional landscaping and berms (94% vote). The special review plans include landscaping and berms clustered around the east elevation of the wall, facing Rio Blanco. The landscaping would consist of both coniferous plantings ranging in size from 6-8 feet in height, deciduous trees ranging in caliper from 2 to 3 inches, and deciduous shrubs ranging in size from 5 feet to 15 feet tall when mature. Due to utility conflicts with water and transmission lines, landscaping adjacent to the west of the wall

was not possible. Land directly west of the site will be preserved as open space, as shown in the special review, and will continue to be used for informal pedestrian trails.

### Solar Facility

Concern over the view of the solar facility and fencing has been voiced by a few neighbors in the Meadowbrook Ridge Subdivision during the rezoning process and at the special review neighborhood meeting. Knowing that fencing and screening were a key issue, the Power Division provided 3 options to the HOA's with different fencing materials and landscaping along W. 22<sup>nd</sup> Street including:

- 7 foot chain link fence with landscaping and berms greatly exceeding the Municipal Code standards;
- 7 foot black wrought iron fence on W. 22<sup>nd</sup> Street with landscaping meeting the Municipal Code standards and lower berms; and
- 7 foot grey wrought iron fence on W. 22<sup>nd</sup> Street with landscaping meeting the Municipal Code standards and lower berms.

Perspectives of the site for each option from view corridors on W. 22<sup>nd</sup> Street were provided and the HOAs selected the chain link fence with significant landscaping and higher berms, as shown in the rendering below (75% vote). After the neighborhood meeting, the Power Department continued to look into additional alternative fencing costs, however cost differences between chain link and higher quality fences were substantial. The special review plans incorporate the increased landscaping and higher berms with the chain link fencing as selected by the HOA's.



#### **IV. KEY ISSUES**

There are still concerns voiced from a few members of the neighborhood regarding the use of the property as a solar and substation facility, compatibility with the residential neighborhood, and the use of chain link fencing along W. 22<sup>nd</sup> Street. The city's development review staff has not identified key issues associated with this special review application in terms of compliance with the standards in the Municipal Code.

During the public comment period in the special review process, staff receive two sets of comments from neighbors. The comments focused on compatibility of the use in relation to the neighborhood and Mehaffey Park, and the appearance of the chain link fence along Rio Blanco and W. 22<sup>nd</sup> Street. A more detailed description of the comments, a response from the Power Division and a staff analysis is included in Section VI.D, below. The comments are included as **Attachment 5** to this report.

#### **V. BACKGROUND**

2001                The PUD General Development Plan for Meadowbrook Ridge was approved by City Council. The GDP permitted residential uses within the property.

April 2015        The City's Power Division purchased 52.6 acres of property (Development Areas D, F, and G) in the Meadowbrook Ridge PUD.

November 3, 2015 City Council approved the rezoning of the property from PUD to DR Developing Resources on second reading.

#### **VI. STAFF, APPLICANT, AND NEIGHBORHOOD INTERACTION**

**A. Notification:** A letter advertising the neighborhood meeting was sent out by the City Power Division on December 2, 2015 to all neighbors within the "Neighborhood" as defined in Section 18.40.010.C of the Loveland Municipal Code and those who attended the public hearings for the rezoning. Meeting notice signs were also posted on the property on December 2, 2015.

**B. Public Website:** A public website was created where citizens can access information regarding the Foothills Substation and Solar Facility projects. The website address is [www.cityofloveland.org/Foothills](http://www.cityofloveland.org/Foothills). This website is continually updated with new information as the project continues. The informational items included on this site are:

- Public meeting schedules
- Meadowbrook Ridge General Development Plan documents
- Foothills annexation and rezoning documents
- Foothills site Development Plan and Special Review documents
- Substation and solar facility documents
- Items from Loveland Utilities Commission meetings
- Items from City Council meetings

- Project timelines
- Frequently asked questions on the projects
- Neighborhood meeting notes

**C. Neighborhood Response:** A neighborhood meeting was held at 5:30 on December 17, 2015 in the Public Works Administration Building. Twenty four members of the neighborhood attended the meeting along with City staff and consultants. Questions from the neighborhood centered around landscaping (location, watering and screening), project timeline, questions on the renderings prepared by the consultant, fencing type and location, use of the property for utilities as opposed to a civic use next to the park, comprehensive plan designations, technical questions on the solar panels, reflectivity, noise, lighting, vandalism, and the appeal process. The Power Division representatives and their consultants addressed the questions. Generally, there were positive comments from the neighborhood about the screening of the facility and the public outreach efforts from the Power Division. There were members of the neighborhood that voiced concerns over the use of the property for utilities, the compatibility with the neighborhood, and the material of the fencing.

**D. Comments received during Public Comment Period:**

During the public comment period in the special review process, staff received two sets of comments from neighbors. The comments focused on the compatibility of the use adjacent to a residential neighborhood and Mehaffey Park, and the appearance and security of the chain link fencing along Rio Blanco Avenue and W. 22<sup>nd</sup> Street.

1. **Fencing Comments:** The first set of comments was received on January 11, 2016 from Fred Burmont. The comments identified concerns with the appearance and the security of the chain link fencing and referenced a previous cost analysis on fencing that he had submitted to the Power Division at the neighborhood meeting. In his comments, Mr. Burmont requests wrought iron fencing be used at a minimum along Rio Blanco Avenue and W. 22<sup>nd</sup> Street in addition to the additional landscaping and berms. He stated that he believes that the chain link fence would be easy to climb, compromising security of the facility, and that the overall appearance of chain link fencing will be “industrial-looking”. He indicated that he believed that the city could purchase wrought iron fencing for less than \$400,000 through a competitive bidding process.

Power Division Response: Gretchen Stanford with the Water and Power Department responded to Mr. Burmont’s concerns in an email on January 12<sup>th</sup>. She reiterated that the Power Department provided three fencing and landscape options to the 3 adjacent neighborhoods, which included an option for a black or grey wrought iron fence. The result of the neighborhood’s vote was to add higher berms and more landscaping along W. 22<sup>nd</sup> Street to essentially screen the chain link fence from view instead of installing a higher quality wrought iron fence (vote of 75% preference). Based on the voting results and direction from the neighborhood, the Power Division incorporated additional landscaping (with larger plant sizes) and higher berms with a chain link fence into the special review proposal. Perspectives showing the visibility of the fence along W. 22<sup>nd</sup> Street were also created to demonstrate the amount of screening that will occur. Mrs. Stanford indicated that both wrought iron and chain link are climbable and the city is looking at several options for security around the solar facility. She further explained the cost differences between the wrought iron and chain link fencing, with a wrought iron fence costing around \$127 per lineal foot and the

cost of chain link fencing being approximately \$25 per lineal foot. These prices compared products with similar long term durability, coating systems, warranty and quality.

Planning Staff Analysis: Planning staff believes that with the additional berms and landscaping along W. 22<sup>nd</sup> Street, the majority of chain link fence will be screened and will not be visible from the south. Larger planting sizes have been incorporated into the plan to provide screening from day one and the species of shrubs selected will achieve taller heights between 10-15 feet to aid in screening. The chain link fence will be more visible along Rio Blanco Avenue, as it will sit on a higher elevation than the road with no screening berms. A revised landscape plan is included in **Attachment 2** that includes 34 evergreens along Rio Blanco, south of the substation. The evergreens will help soften the appearance of the fencing year round as viewed from Mehaffey Park. Overall, planning staff believes that the Power Division has incorporated significant landscaping into the edges along W. 22<sup>nd</sup> Street and Rio Blanco Avenue that will affectively screen and soften the visibility of the fence.

2. **Compatibility and Zoning Comments:** Comments were received from Tony Benjamin on January 14, 2016 that focused on the overall compatibility of a solar park and substation next to the residential neighborhoods and Mehaffey Park. Mr. Benjamin states that the City's Comprehensive Master Plan identifies residential land uses in that area and that people researching the area to purchase a home would never have known a utility could have been developed on the ridge. Secondly, Mr. Benjamin expresses concern that he has received inconsistent information from the City Attorney's office regarding his ability to communicate with the City Councilors and Planning Commissioners. He believes that if he was able to discuss the proposal with the councilors and commissioners, he would have better direction on whether to file an appeal of the project.

Planning Staff Analysis: The City's Comprehensive Plan does not have a separate land use category for utilities. Utilities are permitted in all zoning districts; aboveground utilities are a special review use requiring neighborhood notice and a neighborhood meeting. The special review process is administrative and does not require a public hearing, however the neighborhood is involved with the process and there is an ability for the neighborhood to appeal a decision to the Planning Commission and subsequently, City Council.

The property was originally zoned for residential uses in the Meadowbrook Ridge PUD. In November, City Council unanimously approved a rezoning of the property to DR-Developing Resource, which removed the ability to develop the land into residential uses. A conceptual plan for the solar park and substation was presented at the rezoning hearing and questions on the facility were addressed by the Water and Power Division. City Council directed staff to continue to work with the neighborhood to address concerns with the compatibility of facility, including the visual appearance. The Power Division began working with the adjacent residential neighborhoods and presented the HOA's with 3 design and streetscape options. The direction from the neighborhood was used in the development of the special review proposal. Planning staff has received positive comments from many of the neighbors who preferred the solar park and substation to the potential residential development.

The City Attorney's office is addressing comments about communication with City Council and Planning Commission and will respond directly to Mr. Benjamin. The Attorney's office advice is intended to maintain a neutral position of the City Council and Planning Commission should an appeal be filed.

**E. Project Schedule**

1. Special Review #915 was filed with the Current Planning Division on August 6, 2015.
2. A neighborhood meeting for the rezoning of the property was held on September 10, 2015 in the Public Works Administration Building. 99 neighbors attended the meeting.
3. Meetings were held with the homeowner associations for Quail Run, Hunters Run and Meadowbrook Ridge to provide an overview of the proposed projects and for the City to receive feedback on the design elements from the HOAs. These meetings were held October 6, 7 and 12, 2015 and were attended by 63 neighbors in total.
4. The rezoning of the property was unanimously approved by City Council at a public hearing on October 20, 2015. Second reading was approved on November 3, 2015.
5. Meetings were held again with the homeowner associations for Quail Run, Hunters Run and Meadowbrook Ridge to present design options for the landscape, berming and fencing around the substation and solar project sites. Each attendee was asked to vote on their first and second choice option for both the solar and substation sites. These meetings were held December 3, 7 and 8, 2015 and were attended by 52 neighbors in total.
6. A neighborhood meeting for the special review was held on December 17, 2015. 24 neighbors attended.
7. The staff preliminary findings and determination was posted on January 5, 2016.
8. The public comment period for the staff preliminary findings and determination was from January 6, 2016 to January 14, 2016. Staff received 2 sets of comments from members of the neighborhood (refer to Section VI.D, above).
9. The final findings and determination for the Special Review was posted on January 18, 2016 and the appeal period is from January 18, 2016 to January 28, 2016.

## **VII. FINDINGS AND ANALYSIS**

**Finding 1.** *That the proposed special review use meets the purposes set forth in Section 18.04.010 of the Loveland Municipal Code.*

The proposed development and construction of the solar and substation facility would meet the purposes set forth in Section 18.04.010 of the Loveland Municipal Code, would not create unsafe or unhealthy conditions and will generally promote the health and welfare of Loveland citizens in a utility sense. The development proposal would be consistent with the provision of current and future public infrastructure requirements and needs for the City as a whole.

**Finding 2.** *That the effects of the proposed special review use on the surrounding neighborhood and the public in general will be ameliorated.*

The effects of this use on the surrounding property owners will be lessened through the site layout, landscaping and screening of the project. The substation location was located near the existing water tank to lessen the impact on surrounding neighborhoods. Multiple outreach efforts to the adjacent Home Owners Associations (HOAs) have been undertaken by the Power Division to solicit feedback on the project. Options for both the substation wall design and fencing around the solar panels were presented to the three adjacent HOAs. Each person attending the meeting was given the opportunity to vote on their design preference, which shaped the end project design for the special review. Significant landscaping and berming is proposed to be clustered along W. 22<sup>nd</sup> Street and at the substation location. The view of these areas along the road will present a heavily landscaped edge. On Rio Blanco, between the substation and W. 22<sup>nd</sup> Street, the landscaping will be a combination of deciduous and evergreen trees meeting the City requirements and designed to present an edge similar to the approved landscape plan of Mehaffey Park. Meandering sidewalks will also be developed along Rio Blanco, mirroring Mehaffey Park. The development of Rio Blanco Avenue, new walkways and access to the park will provide for enhanced pedestrian vehicular connectivity for the area.

**Finding 3.** *That in assessing the potential affects of the proposed special review use, at a minimum, the following matters have been considered:*

**3a.** *Type, size, amount, and placement of landscaping;*

The landscape plan identifies bufferyards and screening proposed with the development. Landscaping quantities exceed the bufferyard standards along both Rio Blanco Avenue and W. 22<sup>nd</sup> Street, clustering additional plantings in areas identified by the neighborhood as needing more screening. Plant sizes meet or exceed the sizes required in the Municipal Code. The taller trees clustered along Rio Blanco Avenue in front of the substation wall and along W. 22<sup>nd</sup> Street are intended to provide additional screening on day one of the facility. After the neighborhood meeting, the Power Department proposed to increase the number of coniferous trees along Rio Blanco Avenue south of the substation to add more visual interest during winter months. The additional trees will be shown on the landscape plan with the final findings. The landscaping has been

designed to be water wise with plant species requiring less watering. The Power Division has indicated that a hydrozone plan will be submitted prior to construction of the facility.

**3b.** *Height, size, placement, and number of signs;*

Educational signs are proposed to be installed for the facility and will be similar in design and appearance to the educational signs installed at Mehaffey Park. The Power Department is looking into the possibility of using electronic educational kiosks powered by the solar field. No additional monument signs are proposed.

**3c.** *Use, location, number, height, size, architectural design, materials, and colors of buildings;*

Development of the substation will include utility equipment and transmission lines that have a maximum height of 75 feet. A 12 foot masonry wall would be constructed around the facility, screening much of the lower equipment. The colors of the masonry wall will be similar to colors used at Mehaffey Park. Screening and berming along Rio Blanco Avenue in front of the wall is proposed, as requested by the neighborhood, and will help soften the appearance of the wall along the roadway.

The solar panels will be a maximum height of 10 feet and will be designed to rotate with the sun. The solar portion of the facility will be surrounded by a 7 foot chain link fence on all sides. Along W. 22<sup>nd</sup> Street, tall berms and enhanced landscaping will be installed as requested by the neighborhood. The additional landscaping and berms will soften and in some instances completely screen the fence as viewed from Meadowbrook Ridge. Landscaping will also wrap around the western and eastern edges of the fence. Fencing in these locations will be visible, but will be softened by a variety of evergreens and deciduous trees.

**3d.** *Configuration and placement of vehicular and pedestrian access and circulation;*

Configuration and placement of vehicular and pedestrian access and circulation is compliant with City standards. A 20 foot gravel access road is proposed off of Rio Blanco Avenue to service the substation and solar facility. Detached sidewalks will be provided on Rio Blanco Avenue, mirroring the sidewalks installed with Mehaffey Park and along W. 22<sup>nd</sup> Street. Existing trails on the property will continue to be maintained by the Parks Department. Both Transportation and Fire Department staff have reviewed the special review plans and have indicated compliance with the City's Adequate Communities Facilities Ordinance.

**3e.** *Amount and configuration of parking;*

On-street parking will be available along Rio Blanco Avenue. A new entrance to Mehaffey Park will be installed from Rio Blanco Avenue with the project, at the location of the existing parking lot. Busses or vehicles visiting the site for educational purposes will be able to use either on-street parking or the parking lot for Mehaffey Park. No additional parking spaces are required.

**3f.** *Amount, placement, and intensity of lighting;*

The solar and substation facility is proposed to be non-illuminated with the exception of security lights on the substation that will be on a motion sensor. A photometric plan was not submitted as part of the special review application due to no permanent lights being proposed. Typical street lighting consisting of full cut-off cobra heads will be installed along Rio Blanco Avenue in compliance with the lighting regulations in the Municipal Code.

**3g.** *Hours of operation;*

Once constructed, the facility would operate continuously. Both the solar facility and the substation are unmanned facilities and will be accessed as needed in emergency and maintenance periods.

**3h.** *Emissions of noise, dust fumes, glare and other pollutants.*

City Power staff and consultants for the substation and solar facility have indicated that there will not be discernable noise from the facility. In terms of glare from the solar panels, consultants from Namaste, who are designing the solar facility, indicated at the neighborhood meeting that the solar panels will be much less reflective than a window on a residential house and will not cause excessive glare to the neighborhood;.

**Finding 4.** *Except as may be varied in accordance with this special review permit, the special review site plan conforms to the restrictions and regulations set forth in the Loveland Municipal Code for the zoning district in which the special review use is located.*

The proposed special review meets this finding. Through the special review, a 12 foot masonry wall would be approved to help screen and provide security for the substation. This wall height is greater than typical wall heights in the city, however it is required by electrical code and is desirable to help screen and provide security to the facility. A 12 foot masonry wall is customary with substation facilities. The proposed site, infrastructure and landscape standards comply with all normal applicable restrictions and regulations set forth in the site development performance standards and guidelines.

**Finding 5.** *The special review site plan meets the requirements set forth in the Section 16.41 – Adequate Community Services – of the Loveland Municipal code.*

**Transportation:** Staff believes that this finding can be met, due to the following:

- A Traffic Impact Worksheet has been submitted with the proposed special review application which demonstrates that the transportation system, incorporating typical expected improvements, can adequately serve the land uses proposed. All future development applications within this area are required to demonstrate compliance with the Larimer County Urban Area Street Standards (LCUASS) and the Adequate Community Facilities (ACF) Ordinance for transportation. Therefore, this proposed development will not negatively impact traffic in the area.

**Fire:** Staff believes that this finding can be met, based on the following facts:

- The development site will comply with the requirements in the ACF Ordinance for response distance requirements from the first due Engine Company.
- The development of the solar field and electrical substation will not negatively impact fire protection for the subject development or surrounding properties.

**Water/Wastewater:**

This development is situated within the City's current service area for both water and wastewater. The Department finds that the Development will be compliant to ACF for the following reasons:

- The proposed development will not negatively impact City water and wastewater facilities.
- The proposed public facilities and services are adequate and consistent with the City's utility planning and provides for efficient and cost-effective delivery of City water and wastewater service.

**Stormwater:** Staff believes that this finding can be met, due to the following:

- This project complies with the Adequate Community Services ordinance outlined in the Loveland Municipal Code, Section 16.41.140.

**Parks and Recreation:** Staff believes that this finding can be met, due to the following:

- Of the 52.6 acres being removed from the P.U.D., only 20.4 acres will be developed at this time, with 16.6 acres being noted to remain perpetually in an undeveloped state. This includes existing trails that will connect to Meadowbrook Ridge Natural Area, Mehaffey Park, and future residential developments to the north and west. The Parks and Recreation Department (Open Lands Division) will maintain these trails for use by the public. Open Lands anticipates improvements and maintenance to occur concurrently with the construction of Hunter's Run West residential development to the west of this site (or sooner). Because of the open space and trails proposed, the applicant will meet the intent of providing adequate community facilities.

**Building:** Staff believes that this finding can be met, due to the following:

- The proposed construction of the electrical substation and solar field will not negatively impact surrounding properties in regard to the adopted building codes. The proposed projects will be submitted and reviewed for building permits.

## **VIII. CONDITIONS OF APPROVAL**

### **Transportation**

1. All public improvements shall comply with the Larimer County Urban Area Street Standards (LCUASS).
2. The developer agrees to acquire and dedicate, at no cost to the City, any rights-of-way necessary for the required street improvements associated with this development.
3. Prior to the issuance of any building permits within the Foothills Solar and Substation development property, pursuant to the provisions in Section 16.40.010.B of the Loveland Municipal Code, the Developer shall design and construct the following public improvements unless already designed and constructed by others:
  - a) Rio Blanco Avenue shall be designed and constructed from 22nd Street to the east property boundary line to major collector street standards including full width pavement, curb & gutter and sidewalk on both sides as shown on the City approved Public Improvement Construction Plans for Foothills Solar and Substation, Vanguard-Famleco Seventeenth Subdivision.

## **IX. CORRECTIONS**

### **Water/Wastewater:**

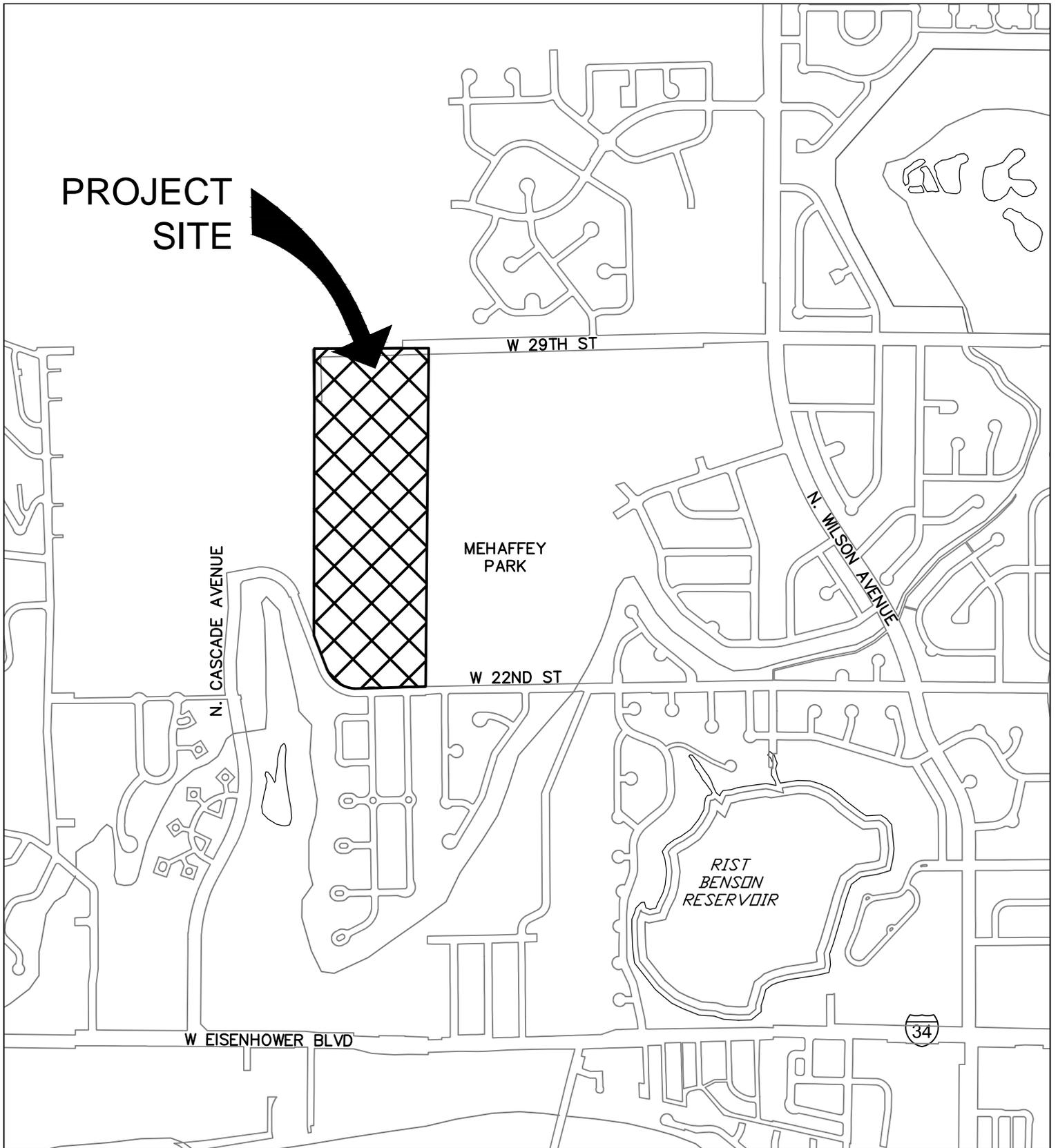
1. Sheet C200-The crossing is missing the insulation design as previously requested.
2. Landscape plan -- do not add trees (PI HE) directly east of the east side of the pump station building.
3. Landscape plan -- please add the Total Irrigated Area amount on the Landscape plan.

### **Stormwater**

1. Please upload the UD&FCD data sheet, along with the location and the surface area at design volume information, into the new state website database for the proposed water quality pond.

### **Parks and Recreation**

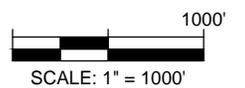
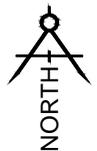
1. The sidewalk connections completed near Sta. 16+00 and Sta. 24+00 need to be revised per redline.



# FOOTHILLS SOLAR & SUBSTATION

## VICINITY MAP

JULY 31, 2015



SPECIAL REVIEW / SITE DEVELOPMENT PLANS FOR:

# FOOTHILLS SOLAR PARK AND SUBSTATION

2601 - 2621 RIO BLANCO AVE

SPECIAL REVIEW #915



Civil Engineering & Consulting

1501 Academy Ct.  
 Ste. 203  
 Fort Collins, CO 80524  
 (970) 530-4044  
 www.unitedcivil.com

## LEGAL DESCRIPTION

A PARCEL OF LAND BEING A PORTION OF TRACT C, VANGUARD-FAMLECO SECOND ADDITION TO THE CITY OF LOVELAND AS RECORDED MAY 5, 1982 AT BOOK 2166 PAGE 658 AS RECEPTION NO. 456846 OF THE RECORDS OF LARIMER COUNTY, SITUATE IN THE NORTHWEST QUARTER (NW1/4) OF SECTION NINE (9), TOWNSHIP FIVE NORTH (T.5N.), RANGE SIXTY-NINE WEST (R.69W.) OF THE SIXTH PRINCIPAL MERIDIAN (6TH P.M.), CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**COMMENCING** AT THE CENTER QUARTER CORNER OF SAID SECTION 9 AND ASSUMING THE EAST LINE OF THE NW1/4 OF SAID SECTION 9, AS MONUMENTED BY A #6 REBAR WITH A 2.5" ALUMINUM CAP STAMPED LS 34174 ON THE SOUTH END AND A #6 REBAR WITH A 2.5" ALUMINUM CAP STAMPED LS 38479 ON THE NORTH END, AS BEARING NORTH 00°10'56" WEST A DISTANCE OF 2619.00 FEET WITH ALL OTHER BEARINGS CONTAINED HEREIN BEING RELATIVE THERETO;

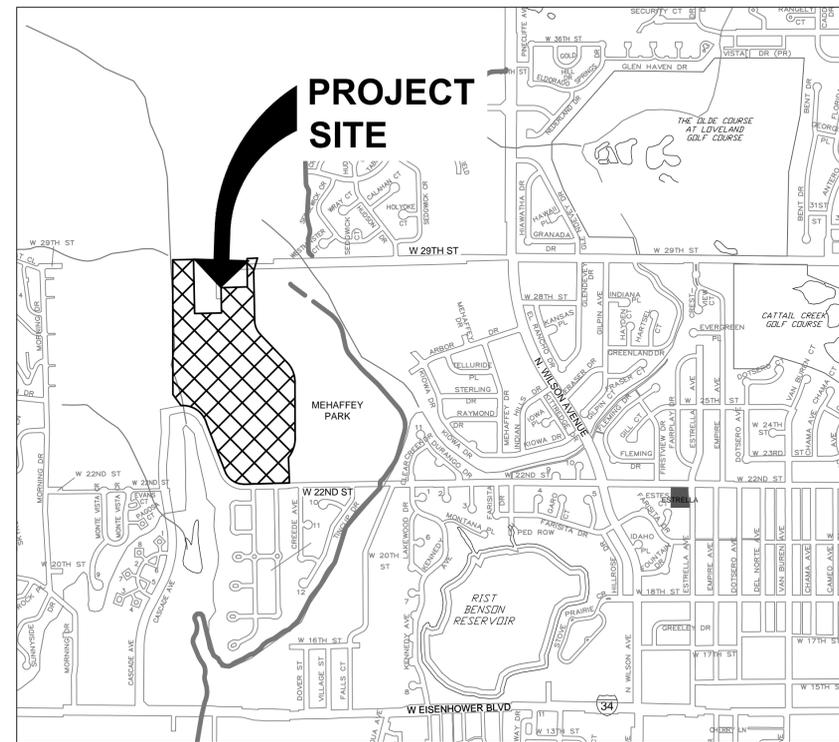
THE LINEAL DIMENSIONS AS CONTAINED HEREIN ARE BASED UPON THE "U.S. SURVEY FOOT."

THENCE NORTH 00°10'56" WEST ALONG SAID EAST LINE OF THE NW1/4 A DISTANCE OF 30.00 FEET TO THE NORTHEAST CORNER OF THE VANGUARD-FAMLECO TWELFTH SUBDIVISION RECORDED OCTOBER 17, 2003 AS RECEPTION NO. 2003-0132285 OF THE RECORDS OF LARIMER COUNTY AND TO THE **POINT OF BEGINNING**;

THENCE ALONG THE NORTH LINE OF SAID VANGUARD-FAMLECO TWELFTH SUBDIVISION THE FOLLOWING THIRTEEN (13) COURSES AND DISTANCES:

THENCE SOUTH 89°13'46" WEST A DISTANCE OF 98.23 FEET TO A POINT OF CURVATURE (PC);  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE NORTHEAST A DISTANCE OF 18.85 FEET,  
 SAID CURVE HAS A RADIUS OF 12.00 FEET, A DELTA OF 90°00'00", AND IS SUBTENDED BY A CHORD BEARING NORTH 45°46'14" WEST A DISTANCE OF 16.97 FEET;  
 THENCE SOUTH 89°13'46" WEST A DISTANCE OF 66.00 FEET TO A NON-TANGENT PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE NORTHEAST A DISTANCE OF 18.85 FEET,  
 SAID CURVE HAS A RADIUS OF 12.00 FEET, A DELTA OF 90°00'00", AND IS SUBTENDED BY A CHORD BEARING SOUTH 44°13'46" WEST A DISTANCE OF 16.97 FEET;  
 THENCE SOUTH 89°13'46" WEST A DISTANCE OF 198.00 FEET TO A PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE NORTHEAST A DISTANCE OF 18.85 FEET,  
 SAID CURVE HAS A RADIUS OF 12.00 FEET, A DELTA OF 90°00'00", AND IS SUBTENDED BY A CHORD BEARING NORTH 45°46'14" WEST A DISTANCE OF 16.97 FEET;  
 THENCE SOUTH 89°13'46" WEST A DISTANCE OF 50.00 FEET TO A NON-TANGENT PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE NORTHWEST A DISTANCE OF 18.85 FEET,  
 SAID CURVE HAS A RADIUS OF 12.00 FEET, A DELTA OF 90°00'00", AND IS SUBTENDED BY A CHORD BEARING SOUTH 44°13'46" WEST A DISTANCE OF 16.97 FEET;  
 THENCE SOUTH 89°13'46" WEST A DISTANCE OF 68.13 FEET TO A PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE NORTHEAST A DISTANCE OF 239.25 FEET,  
 SAID CURVE HAS A RADIUS OF 245.00 FEET, A DELTA OF 69°58'54", AND IS SUBTENDED BY A CHORD BEARING NORTH 55°46'47" WEST A DISTANCE OF 280.89 FEET;  
 THENCE NORTH 20°47'20" WEST A DISTANCE OF 601.12 FEET;  
 THENCE NORTH 89°12'40" EAST A DISTANCE OF 10.00 FEET TO A NON-TANGENT PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE SOUTHWEST A DISTANCE OF 383.03 FEET,  
 SAID CURVE HAS A RADIUS OF 315.00 FEET, A DELTA OF 71°29'16", AND IS SUBTENDED BY A CHORD BEARING NORTH 56°31'58" WEST A DISTANCE OF 368.02 FEET;  
 THENCE DEPARTING SAID NORTH LINE NORTH 22°02'05" WEST A DISTANCE OF 83.31 FEET;  
 THENCE NORTH 57°29'45" WEST A DISTANCE OF 44.91 FEET TO THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER (E1/2NW1/4) OF SAID SECTION 9;  
 THENCE NORTH 00°01'39" WEST ALONG THE WEST LINE OF THE E1/2NW1/4 OF SAID SECTION 9 A DISTANCE OF 1541.33 FEET TO THE NORTHWEST CORNER OF SAID E1/2NW1/4;  
 THENCE NORTH 88°02'05" EAST ALONG THE NORTH LINE OF SAID E1/2NW1/4 OF SAID SECTION 9 A DISTANCE OF 238.17 FEET TO THE NORTHWEST CORNER OF TRACT B, VANGUARD-FAMLECO SECOND ADDITION TO THE CITY OF LOVELAND;  
 THENCE ALONG THE WEST, SOUTH AND EAST LINES OF SAID TRACT B AND TRACT D, VANGUARD-FAMLECO SECOND ADDITION TO THE CITY OF LOVELAND THE FOLLOWING FIVE (5) COURSES AND DISTANCES:  
 THENCE SOUTH 01°09'51" EAST A DISTANCE OF 620.05 FEET;  
 THENCE NORTH 88°50'43" EAST A DISTANCE OF 309.86 FEET;  
 THENCE NORTH 01°10'01" WEST A DISTANCE OF 290.13 FEET;  
 THENCE NORTH 88°49'04" EAST A DISTANCE OF 299.84 FEET;  
 THENCE NORTH 01°09'51" WEST A DISTANCE OF 329.82 FEET TO THE NORTH LINE OF SAID SECTION 9;  
 THENCE NORTH 88°50'29" EAST ALONG SAID NORTH LINE A DISTANCE OF 111.43 FEET TO THE NORTHWEST CORNER OF THE AMENDED PLAT OF PARCELS 1 AND 2, MEHAFFEY PARK FIRST ADDITION; TRACT B, VANGUARD-FAMLECO FIRST ADDITION AND A PORTION OF TRACT C, VANGUARD-FAMLECO SECOND ADDITION RECORDED AUGUST 22, 2013 AS RECEPTION NO. 2013-0064633 OF THE RECORDS OF LARIMER COUNTY;  
 THENCE ALONG THE WEST LINE OF SAID AMENDED PLAT THE FOLLOWING SEVEN (7) COURSES AND DISTANCES:  
 THENCE SOUTH 87°03'11" WEST A DISTANCE OF 35.50 FEET TO A PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE SOUTHEAST A DISTANCE OF 118.99 FEET,  
 SAID CURVE HAS A RADIUS OF 242.00 FEET, A DELTA OF 28°10'23", AND IS SUBTENDED BY A CHORD BEARING SOUTH 12°55'20" WEST A DISTANCE OF 117.80 FEET;  
 THENCE SOUTH 01°09'51" EAST A DISTANCE OF 572.61 FEET TO A PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE NORTHEAST A DISTANCE OF 179.66 FEET,  
 SAID CURVE HAS A RADIUS OF 242.00 FEET, A DELTA OF 42°32'06", AND IS SUBTENDED BY A CHORD BEARING SOUTH 22°25'54" EAST A DISTANCE OF 175.56 FEET;  
 THENCE SOUTH 43°41'58" EAST A DISTANCE OF 449.08 FEET TO A PC;  
 THENCE ALONG THE ARC OF A CURVE CONCAVE TO THE SOUTHWEST A DISTANCE OF 33.41 FEET,  
 SAID CURVE HAS A RADIUS OF 308.00 FEET, A DELTA OF 06°12'55", AND IS SUBTENDED BY A CHORD BEARING SOUTH 40°35'30" EAST A DISTANCE OF 33.38 FEET TO THE EAST LINE OF SAID NW1/4;  
 THENCE SOUTH 00°10'56" EAST ALONG SAID EAST LINE A DISTANCE OF 1350.37 FEET TO THE **POINT OF BEGINNING**;

SAID PARCEL CONTAINS 52.60 ACRES (2,291,230 SQ. FT.) MORE OR LESS (+/-) AND IS SUBJECT TO ANY RIGHTS-OF-WAY OR OTHER EASEMENTS OF RECORD AS NOW EXISTING ON SAID DESCRIBED PARCEL OF LAND.



## VICINITY MAP

1" = 1000'



## PROJECT TEAM

### OWNER / APPLICANT

LOVELAND WATER & POWER  
 200 NORTH WILSON  
 LOVELAND, CO 80537  
 PHONE: 970-962-3592  
 CONTACT: BRIEANA REED-HARMEI

### SURVEYOR

LAT 40 PROFESSIONAL LAND SURVEYORS  
 6250 W. 10TH STREET, SUITE #2  
 GREELEY, CO 80634  
 PHONE: 970-776-3321  
 CONTACT: KYLE RUTZ

### IRRIGATION CONSULTANT

HINES INC.  
 323 W. DRAKE RD, SUITE 204  
 FORT COLLINS, CO 80526  
 PHONE: 970-282-1800  
 CONTACT: NATE HINES

### CIVIL ENGINEER

UNITED CIVIL DESIGN GROUP, LLC  
 1501 ACADEMY CT., STE 203  
 FORT COLLINS, CO 80524  
 PHONE: 970-530-4044  
 CONTACT: SAM ELIASON

### LANDSCAPE ARCHITECT

BHA DESIGN INCORPORATED  
 1603 OAKRIDGE DR. # 100,  
 FORT COLLINS, CO 80525  
 PHONE: 970-223-7577  
 CONTACT: JEROD HUWA

## SITE DATA

### PROJECT DESCRIPTION:

THE PROJECT PROPOSES TO DEVELOP A 2.4 ACRE ELECTRICAL SUBSTATION AND AN 18.1 ACRE SOLAR FIELD ON THE EASTERLY 34.5 ACRES. IN ADDITION, RIO BLANCO AVENUE, A MAJOR COLLECTOR, WILL BE DEVELOPED NORTH TO SOUTH THROUGH THE SITE. IN ADDITION, DRAINAGE SWALES, STORMWATER INFRASTRUCTURE AND A WATER QUALITY POND WILL BE DEVELOPED TO CONVEY STORMWATER FROM THE PROPOSED DEVELOPMENT TO THE SOUTHEAST CORNER OF THE SITE. THE WESTERN 18 ACRES INCLUDE STEEPER SLOPES AND A DRAINAGE ARROYO AND WILL LARGELY REMAIN UNDEVELOPED WITH EXCEPTION OF SOME TRANSMISSION POWER POLES AND OVERHEAD TRANSMISSION LINES TO CONNECT TO THE SUBSTATION. LANDSCAPING AND BERMING WILL BE PROVIDED ON THE SOUTH AND EAST SIDES OF THE SOLAR FIELD AND SUBSTATION TO PROVIDED A BUFFER BETWEEN THE EXISTING NEIGHBORHOOD TO THE SOUTH AND MEHAFFEY PARK TO THE EAST. THE SUBSTATION WILL BE SURROUNDED BY A 12' TALL BLOCK WALL WITH EARTH TONES TO BLEND IN WITH THE ADJACENT LANDSCAPE AND UNIFY WITH WALL COLORS USED AT MEHAFFEY PARK. THE SOLAR FIELD WILL BE SURROUNDED WITH A 6' CHAINLINK FENCE. THERE WILL THREE GRAVEL ACCESS ROADS USED TO ACCESS THE SOLAR FIELD AND SUBSTATION. THERE WILL BE NO ONSITE PARKING. THERE WILL BE STREET LIGHTS LOCATED ALONG RIO BLANCO AVENUE ALONG WITH LIMITED SECURITY LIGHTING INSIDE THE SOLAR FIELD AND SUBSTATION.

### PURPOSE:

THE SUBSTATION AND SOLAR FIELD IS BEING DEVELOPED FOR THE CITY OF LOVELAND TO GENERATE ELECTRICITY FOR THE CITIZENS OF LOVELAND FROM RENEWABLE SOLAR ENERGY.

### CONDITIONS OF SPECIAL REVIEW:

NONE AT THIS TIME

### COMPREHENSIVE PLAN - LAND USE DESIGNATION: LDR (LOW DENSITY RESIDENTIAL)

**ZONING:** DR (DEVELOPING RESOURCES)

**GROSS ACREAGE:** 52.60 ACRES

**NET ACREAGE:** 49.34 ACRES

**LAND USES:** SUBSTATION - 2.41 ACRES

SOLAR FIELD - 18.96 ACRES

STREET RIGHT OF WAY - 3.26 ACRES

PRIVATE ACCESS ROADS - 0.36 ACRES

LANDSCAPE BUFFERS / DRAINAGE FACILITIES - 10.96 ACRES

UNDEVELOPED OPEN SPACE - 16.62 ACRES

## SHEET INDEX

PAGE #	SHEET #	SHEET NAME
1	S000	COVER SHEET
2	S100	SITE PLAN
3-5	L100 - L300	LANDSCAPE PLANS AND DETAILS
6	A100	ARCHITECTURAL ELEVATIONS

## APPROVAL & SIGNATURE BLOCKS

### PROPERTY OWNER

THE UNDERSIGNED AGREE THAT THE REAL PROPERTY DESCRIBED IN THE APPLICATION FOR SITE DEVELOPMENT PLAN FILED HERewith, AND AS SHOWN ON THE SITE PLAN, SHALL BE SUBJECT TO THE REQUIREMENTS OF CHAPTER 18.46 OF THE MUNICIPAL CODE OF THE CITY OF LOVELAND, COLORADO, AND ANY OTHER ORDINANCES OF THE CITY OF LOVELAND THERETO. THE UNDERSIGNED ALSO UNDERSTANDS THAT IF CONSTRUCTION OF ALL IMPROVEMENTS IS NOT COMPLETED AND IF THE SITE DEVELOPMENT PLAN USES ARE NOT ESTABLISHED WITHIN THREE YEARS OF THE DATE OF APPROVAL, OR OTHER COMPLETION DATE OR DATES ESTABLISHED IN A DEVELOPMENT AGREEMENT APPROVED BY THE CITY, THE CITY MAY TAKE AN ACTION TO DECLARE THE SITE DEVELOPMENT PLAN ABANDONED AND NULL AND VOID.

(OWNER'S SIGNATURE)

(TITLE)

STATE OF COLORADO )

) SS.

COUNTY OF LARIMER )

THE FOREGOING AGREEMENT WAS ACKNOWLEDGED BEFORE ME THIS \_\_\_\_ DAY OF, \_\_\_\_, 2\_\_\_\_, BY

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: \_\_\_\_\_

NOTARY PUBLIC

### CITY SIGNATURE BLOCK

APPROVED THIS \_\_\_\_ DAY OF \_\_\_\_, 2\_\_\_\_, BY THE CURRENT PLANNING MANAGER OF THE CITY OF LOVELAND, COLORADO.

CURRENT PLANNING MANAGER

## TRANSPORTATION CONDITIONS OF APPROVAL

- ALL PUBLIC IMPROVEMENTS SHALL COMPLY WITH THE LARIMER COUNTY URBAN AREA STREET STANDARDS (LCUASS).
- THE DEVELOPER AGREES TO ACQUIRE AND DEDICATE, AT NO COST TO THE CITY, ANY RIGHTS-OF-WAY NECESSARY FOR THE REQUIRED STREET IMPROVEMENTS ASSOCIATED WITH THIS DEVELOPMENT.
- PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS WITHIN THE FOOTHILLS SOLAR AND SUBSTATION DEVELOPMENT PROPERTY, PURSUANT TO THE PROVISIONS IN SECTION 16.40.010.B OF THE LOVELAND MUNICIPAL CODE, THE DEVELOPER SHALL DESIGN AND CONSTRUCT THE FOLLOWING PUBLIC IMPROVEMENTS UNLESS ALREADY DESIGNED AND CONSTRUCTED BY OTHERS:

A) RIO BLANCO AVENUE SHALL BE DESIGNED AND CONSTRUCTED FROM 22ND STREET TO THE EAST PROPERTY BOUNDARY LINE TO MAJOR COLLECTOR STREET STANDARDS INCLUDING FULL WIDTH PAVEMENT, CURB & GUTTER AND SIDEWALK ON BOTH SIDES AS SHOWN ON THE CITY APPROVED PUBLIC IMPROVEMENT CONSTRUCTION PLANS FOR FOOTHILLS SOLAR AND SUBSTATION, VANGUARD-FAMLECO SEVENTEENTH SUBDIVISION.

## APPROVAL & SIGNATURE BLOCKS

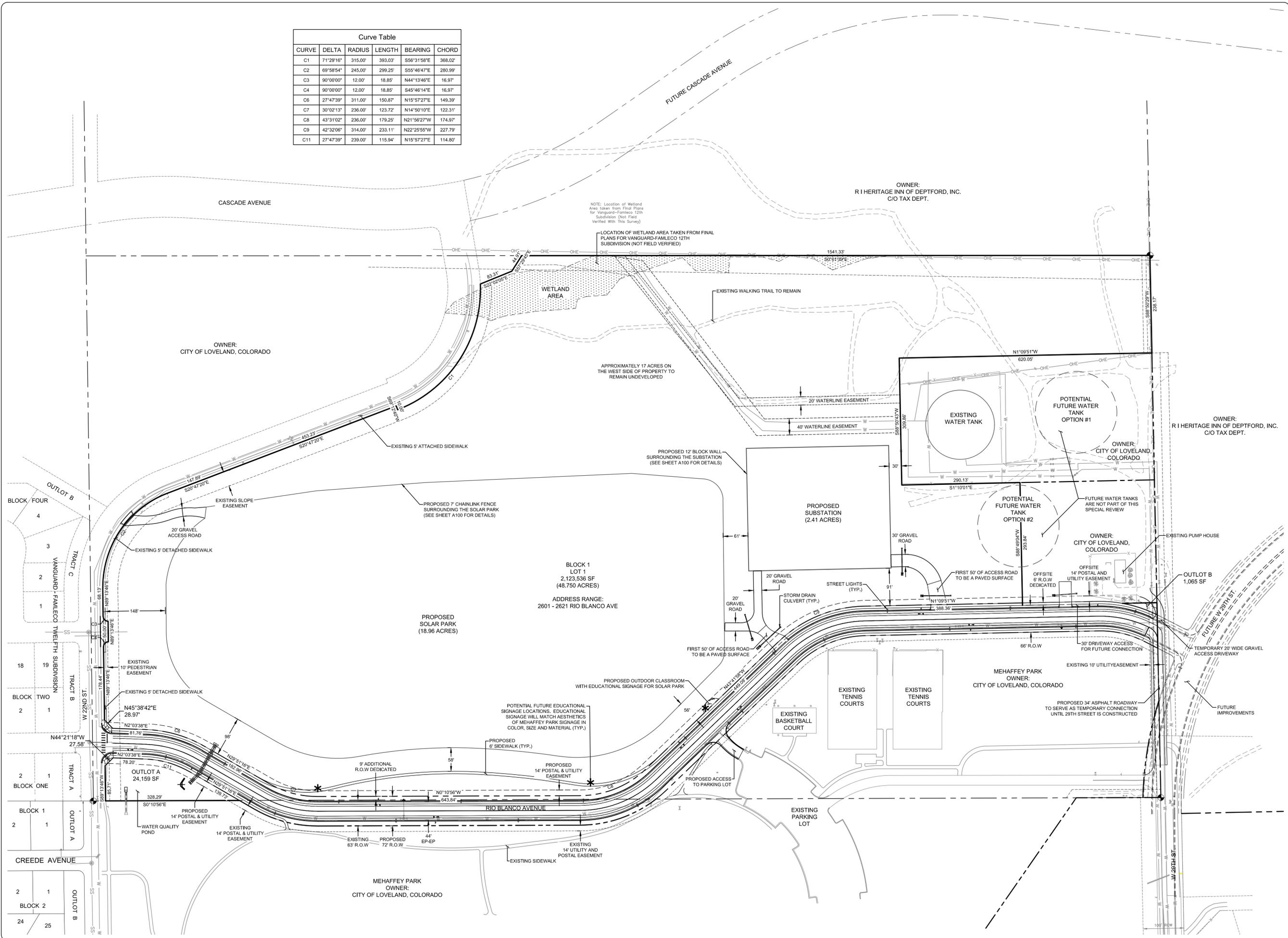
FOOTHILLS SOLAR PARK AND SUBSTATION  
 SPECIAL REVIEW #915  
 COVER SHEET

DATE SUBMITTED: 1/12/2016  
 PREPARED FOR: LOVELAND WATER & POWER

PRELIMINARY  
 PLANS  
 NOT FOR CONSTRUCTION

SHEET NUMBER	S000
1 OF 6 SHEETS	
SCALE	
VERTICAL: 1" = N/A	
HORIZONTAL: 1" = N/A	
JOB NUMBER	U15009

Curve Table					
CURVE	DELTA	RADIUS	LENGTH	BEARING	CHORD
C1	71°29'16"	315.00'	393.03'	S56°31'58"E	368.02'
C2	69°58'54"	245.00'	299.25'	S55°46'47"E	280.99'
C3	90°00'00"	12.00'	18.85'	N44°13'46"E	16.97'
C4	90°00'00"	12.00'	18.85'	S45°46'14"E	16.97'
C6	27°47'39"	311.00'	150.87'	N15°57'27"E	149.39'
C7	30°02'13"	236.00'	123.72'	N14°50'10"E	122.31'
C8	43°31'02"	236.00'	179.25'	N21°56'27"W	174.97'
C9	42°32'06"	314.00'	233.11'	N22°25'55"W	227.79'
C11	27°47'39"	239.00'	115.94'	N15°57'27"E	114.80'



Civil Engineering & Consulting

1501 Academy Ct.  
 Ste. 203  
 Fort Collins, CO 80524  
 (970) 530-4044  
 www.unitedcivil.com

NO.	BY	DATE	REVISIONS

CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or use of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

**FOOTHILLS SOLAR PARK AND SUBSTATION  
 SPECIAL REVIEW #915  
 SITE PLAN**

DATE SUBMITTED: 1/12/2016  
 PREPARED FOR: LOVELAND WATER & POWER

**PRELIMINARY  
 PLANS  
 NOT FOR CONSTRUCTION**

SHEET NUMBER  
**S100**  
 2 OF 6 SHEETS  
 SCALE  
 VERTICAL: 1" = N/A  
 HORIZONTAL: 1" = 100'  
 JOB NUMBER  
**U15009**

**PLANT LIST**

Key	Botanical Name	Common Name	Size of Planting	Root	Spacing	Quantity	Hydrozone Designation
<b>DECIDUOUS CANOPY TREE</b>							
GL SK	Gleditsia triacanthos inermis Skyline	Skyline Honeylocust	3" Cal.	BB	See Plan	14	LOW
GL SH	Gleditsia triacanthos inermis Shademaster	Shademaster Honeylocust	3" Cal.	BB	See Plan	8	LOW
GL SK	Gleditsia triacanthos inermis Skyline	Skyline Honeylocust	2" Cal.	BB	See Plan	9	LOW
QU MA	Quercus macrocarpa	Burr Oak	2" Cal.	BB	See Plan	12	LOW
CE OC	Celtis occidentalis	Hickberry	2" Cal.	BB	See Plan	5	LOW
CA SP	Catalpa speciosa	Western Catalpa	2" Cal.	BB	See Plan	12	LOW
GY ES	Gymnocladus dioica Espresso	Seedless Kentucky Coffee tree	2" Cal.	BB	See Plan	5	LOW
AC NE	Acer negundo Sensation	Sensation Boxelder	2" Cal.	BB	See Plan	14	LOW
<b>ORNAMENTAL TREES</b>							
AM LA	Amelanchier lamarckii	Lamarck Serviceberry	6" clump	BB	See Plan	9	LOW
AC TA	Acer tataricum	Tatarian Maple	10' clump	BB	See Plan	10	LOW
CR WK	Crotaegus viridis Winter King	Winter King Hawthorn	2" Cal.	BB	See Plan	14	LOW
<b>EVERGREEN TREES</b>							
PI ED	Pinus edulis	Pinon Pine	8"	BB	See Plan	30	VERY LOW
PI ED	Pinus edulis	Pinon Pine	6"	BB	See Plan	26	VERY LOW
PI NI	Pinus nigra	Austrain Pine	6"	BB	See Plan	35	LOW
PI HE	Pinus heldreichii (leucodermis)	Bosnian Pine	6"	BB	See Plan	17	LOW

NOTE: AC TA (10' clump), PI ED (8"), GL SK (3") AND GL SH (3") fulfill the 25% of trees of increased planting size commitment made at HOA meetings.

**PLANT LIST CONTINUED**

Key	Botanical Name	Common Name	Size of Planting	Root	Spacing	Quantity	Hydrozone Designation
<b>DECIDUOUS SHRUBS</b>							
CH AL	Chrysothamnus nauseosus albicollis	Tall Blue Rabbitbrush	5 Gal.	Cont.	See Plan	24	VERY LOW
CH GR	Chrysothamnus nauseosus graveolens	Tall Green Rabbitbrush	5 Gal.	Cont.	See Plan	31	VERY LOW
CO CO	Cornus sericea coloradense	Colorado Dogwood	5 Gal.	Cont.	See Plan	16	MEDIUM
CO BY	Cornus alba Buja's Yellow	Buja's Yellow Dogwood	5 Gal.	Cont.	See Plan	12	MEDIUM
RI CR	Ribes odoratum Crandall	Crandall's Yellow Currant	5 Gal.	Cont.	See Plan	11	LOW
RH CI	Rhus glabra cinnamomea	Rocky Mountain Sumac	5 Gal.	Cont.	See Plan	46	LOW
*AC GL	Acer glabrum	Rocky Mountain Maple	5 Gal.	Cont.	See Plan	62	LOW
*AM CA	Amelanchier canadensis	Shadblow Serviceberry	5 Gal.	Cont.	See Plan	45	LOW
AR ME	Artemisia melanocephala	Black Chokeberry	5 Gal.	Cont.	See Plan	12	LOW
PH CO	Physocarpus opulifolius Coppertina	Coppertina Ninebark	5 Gal.	Cont.	See Plan	10	LOW
AC BC	Acer ginnala Baily Compact	Dwarf Amur Maple	5 Gal.	Cont.	See Plan	17	LOW

\*SEE SHRUB PLANTING DETAIL ON SHEET L200 FOR REQUIRED EXCAVATION AND BACKFILL

**BUFFER YARD TABLE**

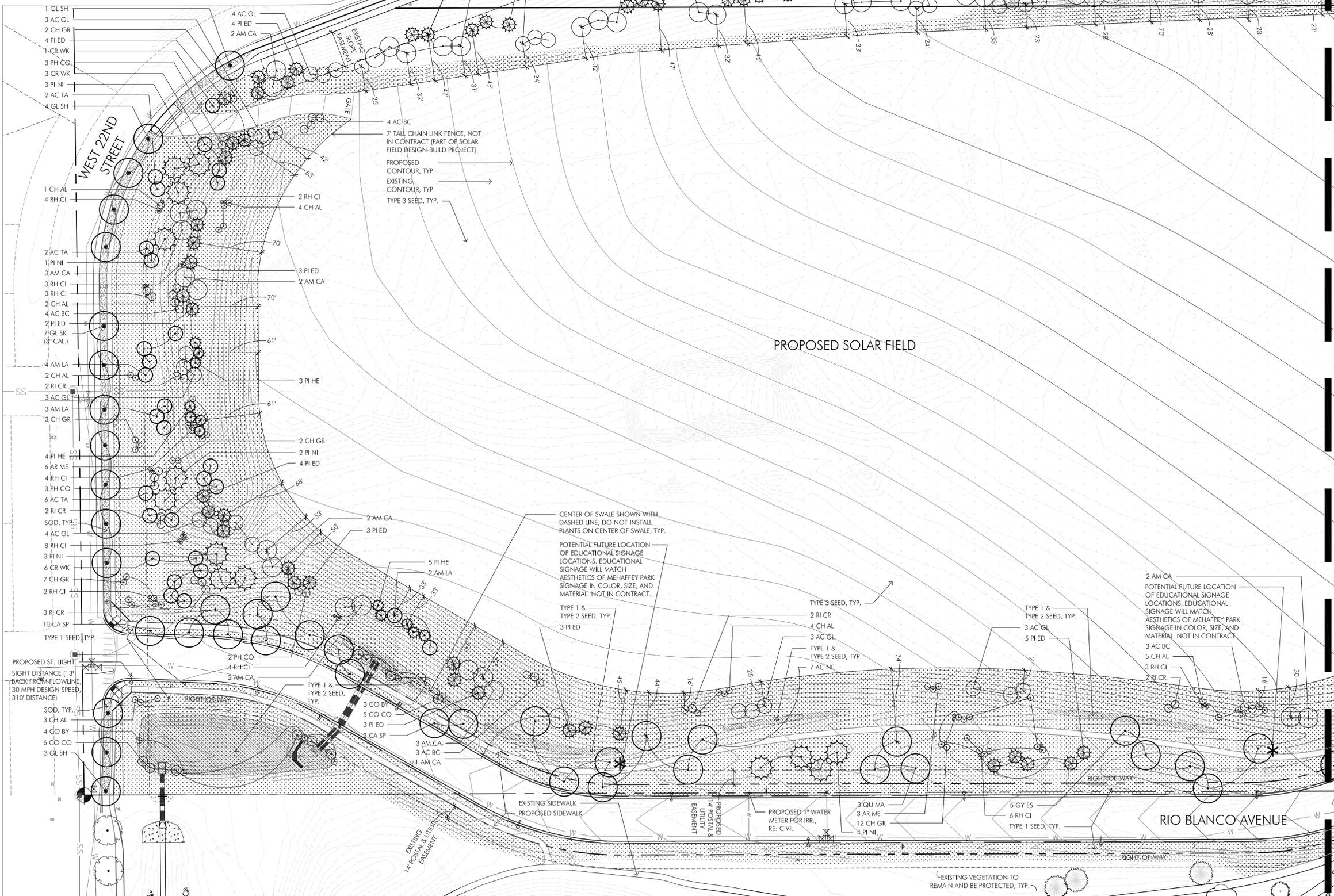
**WEST 22ND STREET BUFFER YARD:**  
 EXISTING SINGLE FAMILY HOME AND PROPOSED UTILITIES USE. TYPE E BUFFER REQUIRES 5 CANOPY TREES, 6 UNDERSTORY TREES, 30 SHRUBS, AND 4 EVERGREENS/CONIFERS PER 100 LINEAR FEET. PROPOSED WIDTH OF LANDSCAPE BUFFER IS APPX. 158' REQUIRING A PLANT MULTIPLIER OF 5. BUFFER LENGTH IS APPX. 550'  
 $550/100 = 5.5 \times (5 \text{ can.}, 6 \text{ unders.}, 30 \text{ shr.}, 4 \text{ everg.}) \times 5 = 13.75 \text{ can.}, 16.5 \text{ unders.}, 82.5 \text{ shr.}, 11 \text{ everg.}$  REQUIRED  
 $1.6 \text{ canopy}, 27 \text{ understory}, 98 \text{ shrubs}, 33 \text{ everg.}$  PROVIDED

**BIO BLANCO AVENUE BUFFER YARD:**  
 EXISTING MEHAFFEY PARK AND PROPOSED UTILITIES USE. TYPE C BUFFER REQUIRES 3 CANOPY TREES, 2 FLOWERING/LARGE SHRUBS, 15 SHRUBS, AND 3 EVERGREENS/CONIFERS PER 100 LINEAR FEET. PROPOSED WIDTH OF LANDSCAPE BUFFER IS APPX. 100' REQUIRING A PLANT MULTIPLIER OF 5. BUFFER LENGTH IS APPX. 2,780'  
 $2,780/100 = 28 \times (3 \text{ can.}, 2 \text{ flow.}, 15 \text{ shr.}, 3 \text{ everg.}) \times 5 = 42 \text{ can.}, 28 \text{ flowering}, 210 \text{ shr.}, 42 \text{ everg.}$  REQUIRED  
 $58 \text{ can.}, 6 \text{ flowering}, 123 \text{ shr.}, 58 \text{ everg.}$  PROVIDED

\*EVEN THOUGH THE CLOSEST NEIGHBORHOOD IS LOCATED APPX. 1,100 FEET AWAY TO THE SOUTHWEST, 17 EVERGREEN TREES AND 46 LARGE SHRUBS HAVE BEEN PROVIDED ON THE WEST SIDE OF THE SOLAR FIELD.

**NOTES:**

- ITEMS INTENDED TO REMAIN THAT ARE DAMAGED SHALL BE RESTORED AND REPAIRED AT CONTRACTOR'S EXPENSE.
- EXISTING TREES WITHIN MEHAFFEY PARK/ADJACENT TO PUMP HOUSE SHALL REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL STAKE TREE AND 'AC' GL, AM 'CA' SHRUB LOCATIONS FOR OWNERS REPRESENTATIVE TO REVIEW AND APPROVE PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL LABEL EACH STAKE WITH THE PROPOSED SPECIES OF PLANT, TYP.
- CONTRACTOR SHALL SUBMIT LIST OF PLANT SPECIES PULLED AT NURSERY FOR OWNERS REPRESENTATIVE TO REVIEW AND APPROVE PRIOR TO INSTALLATION.
- SHRUBS/TREES PLANTED ON A SLOPE SHALL BE PLANTED PER 'PLANTING ON A SLOPE' DETAIL, SHEET L200, TYP.
- 4" DIA. PLANTING PIT REQUIRED FOR TREES AND AC GL/AM CA SHRUBS. TYP. ONCE CONTRACTOR HAS EXCAVATED PLANTING PIT, CONTRACTOR SHALL COORDINATE TIME FOR OWNERS REPRESENTATIVE TO REVIEW AND APPROVE SIZE OF 4" DIA. PLANTING PIT, TYP.
- CONTOURS SHOWN ARE FOR REFERENCE ONLY. SEE CIVIL DRAWINGS FOR GRADING INFORMATION.
- HYDROZONE PLAN AND IRRIGATION DRAWINGS WILL BE PROVIDED FOR REVIEW IN SUBSEQUENT SUBMITTAL. TOTAL IRRIGATED AREA IS 349,000 SF (5,000 SF HIGH HYDROZONE, THE REMAINING 344,000 IS LOW HYDROZONE).



MATCHLINE - SEE SHEET L200

CALL UTILITY NOTIFICATION CENTER OF COLORADO  
 811  
 CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



NORTH

SCALE: 1" = 50'

FOOTHILLS SOLAR PARK AND SUBSTATION  
 LANDSCAPE PLAN, PLANT LIST, NOTES, BUFFER YARD TABLE

PRELIMINARY  
 PLANS  
 NOT FOR CONSTRUCTION

SHEET NUMBER  
**L100**  
 OF 6 SHEETS

JOB NUMBER  
 U15009

DATE	BY	REVISIONS
01/12/2016	AM	CITY RESUBMITTAL #2
01/12/2016	AM	CITY RESUBMITTAL #3
01/12/2016	AM	CITY RESUBMITTAL #4

CALLING

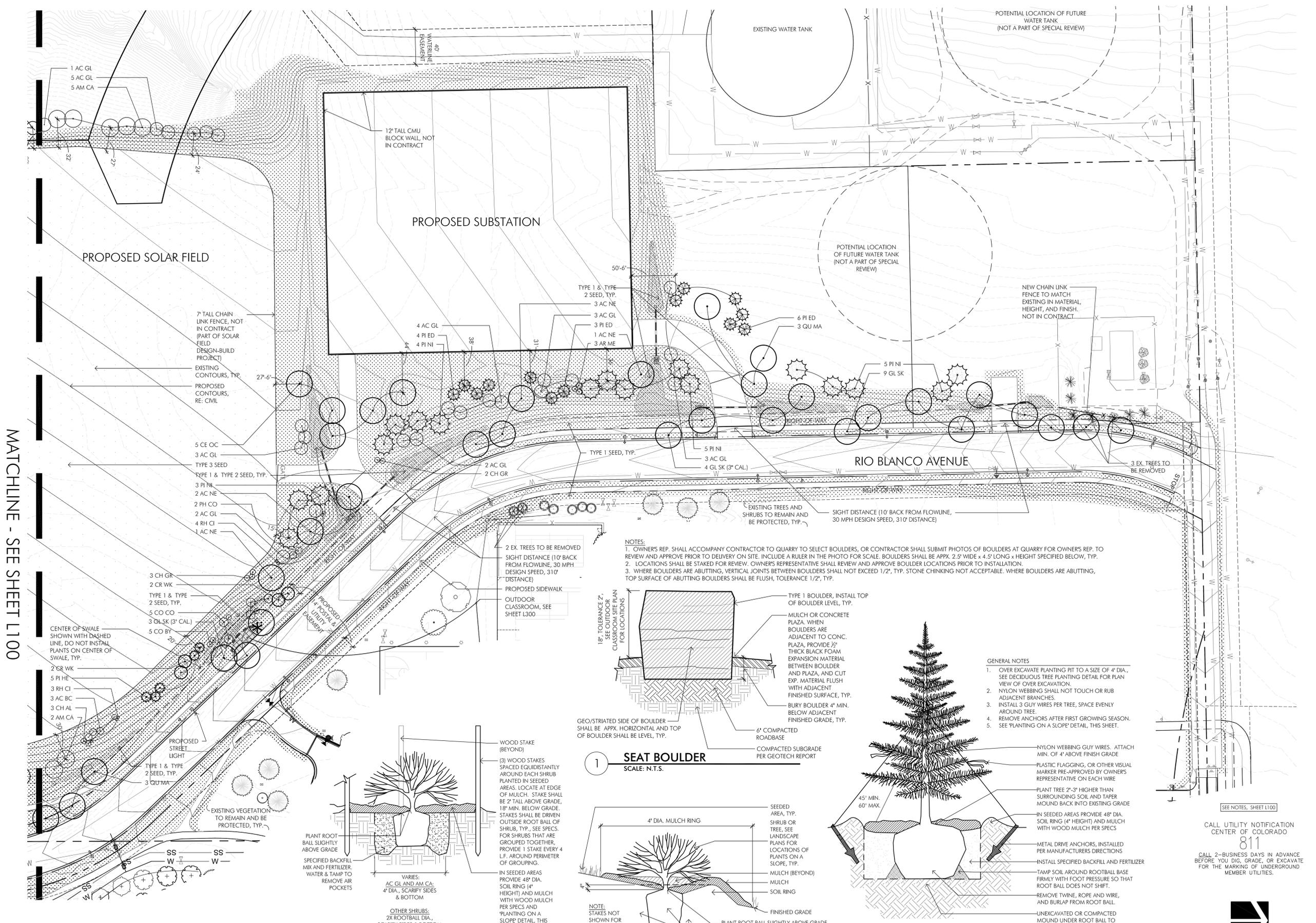
DATE SUBMITTED: 01/12/2016

PREPARED FOR: CITY OF LOVELAND

bha  
 1603 Oakridge Drive  
 Fort Collins, CO 80525  
 (970) 223-7577  
 fax: (970) 223-1827

Landscape Architecture  
 Urban Design  
 Graphic Design

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ DESIGNED: \_\_\_\_\_  
 DRAWING NAME: \_\_\_\_\_ PROJ. NO.: \_\_\_\_\_  
 PART: \_\_\_\_\_



MATCHLINE - SEE SHEET L100

**2 SHRUB PLANTING**  
SCALE: N.T.S.

**1 SEAT BOULDER**  
SCALE: N.T.S.

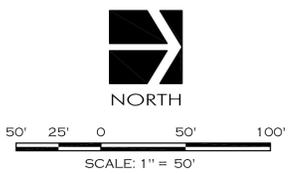
**3 PLANTING ON A SLOPE**  
SCALE: N.T.S.

**4 EVERGREEN TREE PLANTING**  
SCALE: N.T.S.

**NOTES:**  
 1. OWNER'S REP. SHALL ACCOMPANY CONTRACTOR TO QUARRY TO SELECT BOULDERS, OR CONTRACTOR SHALL SUBMIT PHOTOS OF BOULDERS AT QUARRY FOR OWNER'S REP. TO REVIEW AND APPROVE PRIOR TO DELIVERY ON SITE. INCLUDE A RULER IN THE PHOTO FOR SCALE. BOULDERS SHALL BE APPX. 2.5' WIDE x 4.5' LONG x HEIGHT SPECIFIED BELOW, TYP.  
 2. LOCATIONS SHALL BE STAKED FOR REVIEW. OWNER'S REPRESENTATIVE SHALL REVIEW AND APPROVE BOULDER LOCATIONS PRIOR TO INSTALLATION.  
 3. WHERE BOULDERS ARE ABUTTING, VERTICAL JOINTS BETWEEN BOULDERS SHALL NOT EXCEED 1/2", TYP. STONE CHINKING NOT ACCEPTABLE. WHERE BOULDERS ARE ABUTTING, TOP SURFACE OF ABUTTING BOULDERS SHALL BE FLUSH, TOLERANCE 1/2", TYP.

**GENERAL NOTES**  
 1. OVER EXCAVATE PLANTING PIT TO A SIZE OF 4" DIA., SEE DECIDUOUS TREE PLANTING DETAIL FOR PLAN VIEW OF OVER EXCAVATION.  
 2. NYLON WEBBING SHALL NOT TOUCH OR RUB ADJACENT BRANCHES.  
 3. INSTALL 3 GUY WIRES PER TREE, SPACE EVENLY AROUND TREE.  
 4. REMOVE ANCHORS AFTER FIRST GROWING SEASON.  
 5. SEE 'PLANTING ON A SLOPE' DETAIL, THIS SHEET.

SEE NOTES, SHEET L100  
 CALL UTILITY NOTIFICATION CENTER OF COLORADO  
 811  
 CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



**FOOTHILLS SOLAR PARK AND SUBSTATION**  
LANDSCAPE PLAN, PLANTING DETAILS

**PRELIMINARY PLANS**  
NOT FOR CONSTRUCTION

SHEET NUMBER  
**L200**  
OF 6 SHEETS

JOB NUMBER  
**U15009**

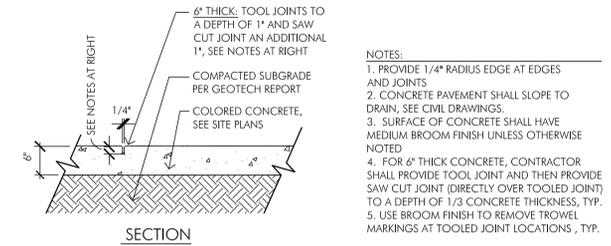
DATE SUBMITTED: 01/12/2016  
 PREPARED FOR: CITY OF LOVELAND

NO.	BY	DATE	REVISIONS
1	JH	01/12/2016	CITY RESUBMITTAL #2
2	JH	01/12/2016	CITY RESUBMITTAL #2
3	JH	01/12/2016	CITY RESUBMITTAL #2
4	JH	01/12/2016	CITY RESUBMITTAL #2

**CAUTION**  
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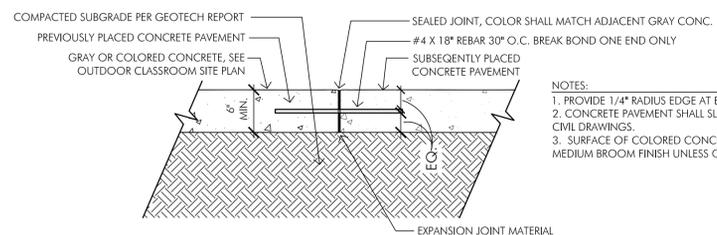
**bha**  
 Landscapes Architecture  
 Urban Design  
 Graphic Design  
 1603 Oakridge Drive  
 Fort Collins, CO 80525  
 (970) 223-7577  
 fax (970) 223-1827

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ DESIGNED BY: \_\_\_\_\_  
 DRAWING NAME: \_\_\_\_\_ PROLOG: \_\_\_\_\_  
 PART: \_\_\_\_\_



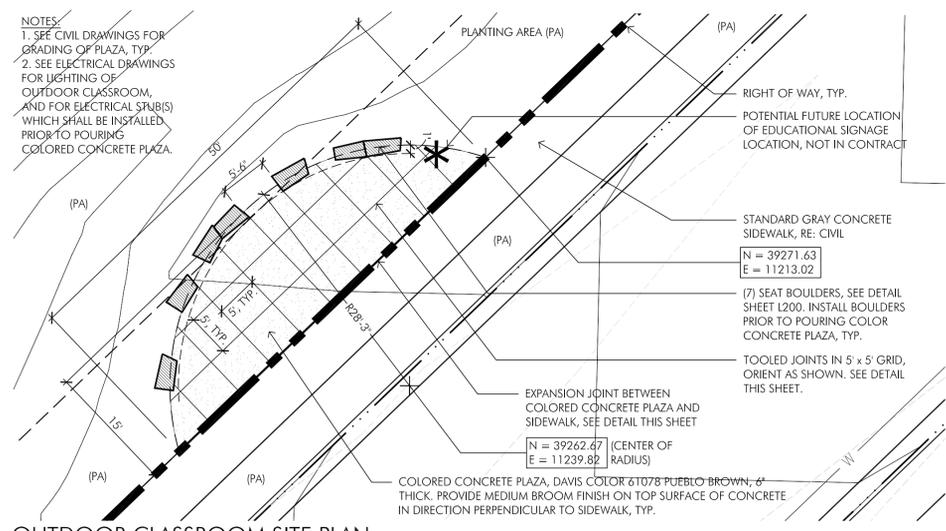
- NOTES:
1. PROVIDE 1/4" RADIUS EDGE AT EDGES AND JOINTS
  2. CONCRETE PAVEMENT SHALL SLOPE TO DRAIN. SEE CIVIL DRAWINGS.
  3. SURFACE OF CONCRETE SHALL HAVE MEDIUM BROOM FINISH UNLESS OTHERWISE NOTED
  4. FOR 6" THICK CONCRETE, CONTRACTOR SHALL PROVIDE TOOL JOINT AND THEN PROVIDE SAW CUT JOINT (DIRECTLY OVER TOOLED JOINT) TO A DEPTH OF 1/3 CONCRETE THICKNESS, TYP.
  5. USE BROOM FINISH TO REMOVE TROWEL MARKINGS AT TOOLED JOINT LOCATIONS, TYP.

**1 TOOLED JOINT**  
 NTS USE THIS DETAIL FOR OUTDOOR CLASSROOM CONSTRUCTION ONLY

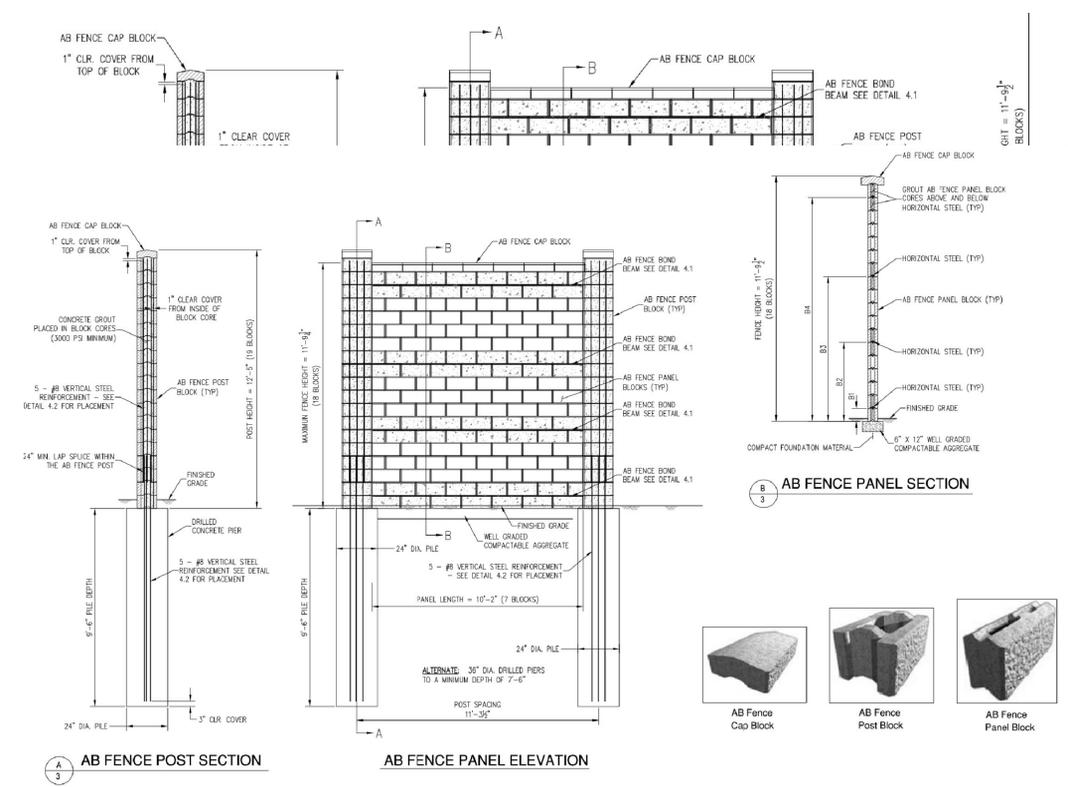


- NOTES:
1. PROVIDE 1/4" RADIUS EDGE AT EDGES AND JOINTS
  2. CONCRETE PAVEMENT SHALL SLOPE TO DRAIN. SEE CIVIL DRAWINGS.
  3. SURFACE OF COLORED CONCRETE SHALL HAVE MEDIUM BROOM FINISH UNLESS OTHERWISE NOTED

**2 EXPANSION JOINT**  
 NTS USE THIS DETAIL FOR OUTDOOR CLASSROOM CONSTRUCTION ONLY

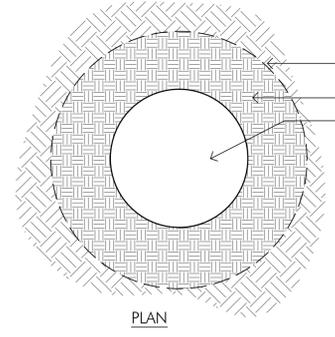


**OUTDOOR CLASSROOM SITE PLAN**  
 SCALE: 1" = 10'-0"

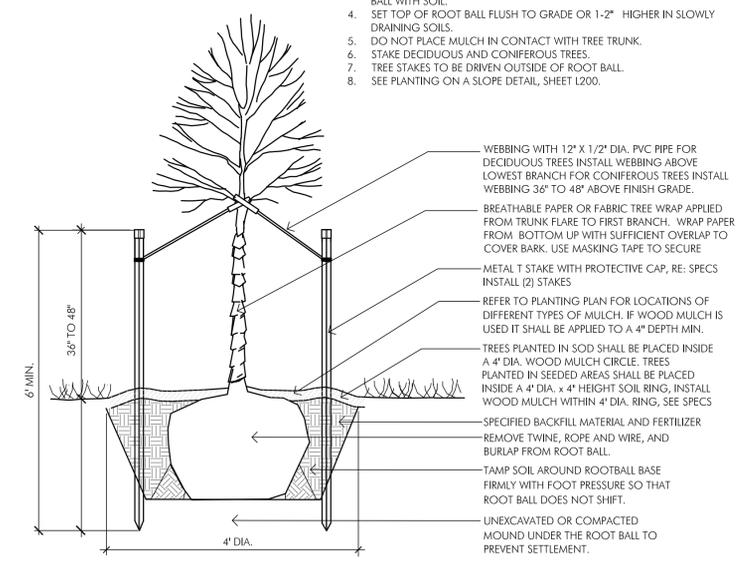


**12' TALL BLOCK WALL (NOT IN CONTRACT - FOR CITY REFERENCE ONLY)**  
 SCALE: NOT TO SCALE

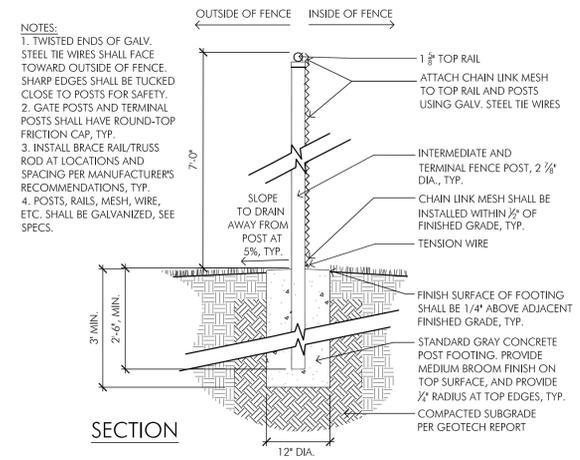
SECTIONS, ELEVATIONS, AND IMAGES ABOVE ARE REPRESENTATIVE OF TYPE OF WALL INTENDED TO BE INSTALLED AROUND SUBSTATION; IMAGES ABOVE TAKEN FROM PREVIOUS SUBSTATION PROJECT.



- GENERAL TREE PLANTING NOTES
1. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
  2. MARK NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE. TREES WHOSE NORTH ORIENTATION IS NOT CHANGED FROM THE NURSERY DO NOT NEED TO BE WRAPPED, EXCEPT TREES WITH VERY THIN BARK.
  3. EACH TREE SHALL BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
  4. SET TOP OF ROOT BALL FLUSH TO GRADE OR 1-2" HIGHER IN SLOWLY DRAINING SOILS.
  5. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.
  6. STAKE DECIDUOUS AND CONIFEROUS TREES.
  7. TREE STAKES TO BE DRIVEN OUTSIDE OF ROOT BALL.
  8. SEE PLANTING ON A SLOPE DETAIL, SHEET L200.

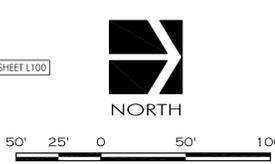


**3 DECIDUOUS TREE PLANTING**  
 SCALE: N.T.S.



**7' TALL CHAIN LINK FENCE (galvanized finish)**  
 (NOT IN CONTRACT - FOR CITY REFERENCE ONLY)  
 SCALE: 3/4" = 1'-0"

CALL UTILITY NOTIFICATION  
 CENTER OF COLORADO  
 811  
 CALL 2-BUSINESS DAYS IN ADVANCE  
 BEFORE YOU DIG, GRADE, OR EXCAVATE  
 FOR THE MARKING OF UNDERGROUND  
 MEMBER UTILITIES.



**bha** bha Architecture  
 1603 Oakridge Drive  
 Fort Collins, CO 80525  
 (970) 223-7577  
 fax: (970) 223-1827

NO.	BY	DATE	REVISIONS
1	JH	01/20/16	CITY RESUBMITTAL
2	JH	02/02/16	CITY RESUBMITTAL #2
3	JH	02/02/16	CITY RESUBMITTAL #3
4	JH	02/02/16	CITY RESUBMITTAL #4
5	JH	02/02/16	CITY RESUBMITTAL #5

The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

PREPARED FOR: CITY OF LOVELAND

**FOOTHILLS SOLAR PARK AND SUBSTATION**  
 LANDSCAPE, SITE DETAILS, HYDROZONE PLAN

DATE SUBMITTED: 01/12/2016

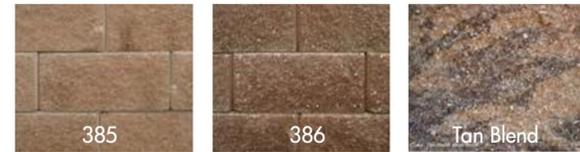
**PRELIMINARY PLANS**  
 NOT FOR CONSTRUCTION

SHEET NUMBER  
**L300**  
 OF 6 SHEETS

JOB NUMBER  
 U15009



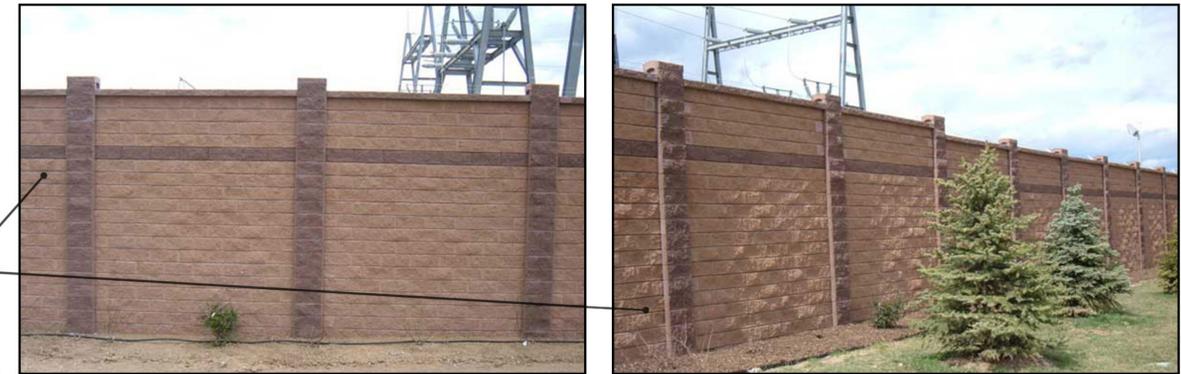
THE DESIGN INTENT OF THE SUBSTATION WALL IS TO COMPLEMENT THE COLOR OF THE MEHAFFEY PARK STONE (SHOWN IN THE TWO IMAGES ABOVE) USING COLORED CMU BLOCK. IN COLORADO, THE COLOR OPTIONS CURRENTLY AVAILABLE FROM THE WALL UNIT MANUFACTURER ARE SHOWN BELOW:



EDUCATIONAL SIGNAGE FOR FOOTHILLS SOLAR AND SUBSTATION PROJECT WILL MATCH SIGNAGE LOCATED IN ADJACENT MEHAFFEY PARK IN COLOR, FORM, AND STYLE (PICTURED ABOVE), ALTHOUGH CONTENT OF SIGNAGE WILL DIFFER. SEE LANDSCAPE PLANS FOR CONCEPTUAL LOCATIONS.



TYPICAL SOLAR PANEL COLOR, MATERIALS, AND LAYOUT WITHIN THE SOLAR PARK SHOWN IN PHOTOS ABOVE. FINAL COLORS, MATERIALS, AND LAYOUT TO BE DETERMINED WHEN CITY AWARDS 'SOLAR PANEL PROJECT' TO SOLAR PANEL MANUFACTURER/INSTALLER.



SUBSTATION WALL MATERIAL SHALL BE BLOCK WALL COMPRISED OF INDIVIDUAL WALL UNITS. COLOR SHALL BE EARTH TONES TO BLEND IN WITH ADJACENT LANDSCAPE AND UNIFY WITH WALL COLORS USED AT MEHAFFEY PARK. PHOTOS ABOVE ARE OF COMPARABLE SUBSTATION SEGMENTAL WALL, ALTHOUGH COLORS ABOVE HAVE NOTE BEEN SELECTED FOR FOOTHILLS SUBSTATION WALL.

SUBSTATION ELECTRICAL EQUIPMENT (GALVANIZED METAL IN COLOR).

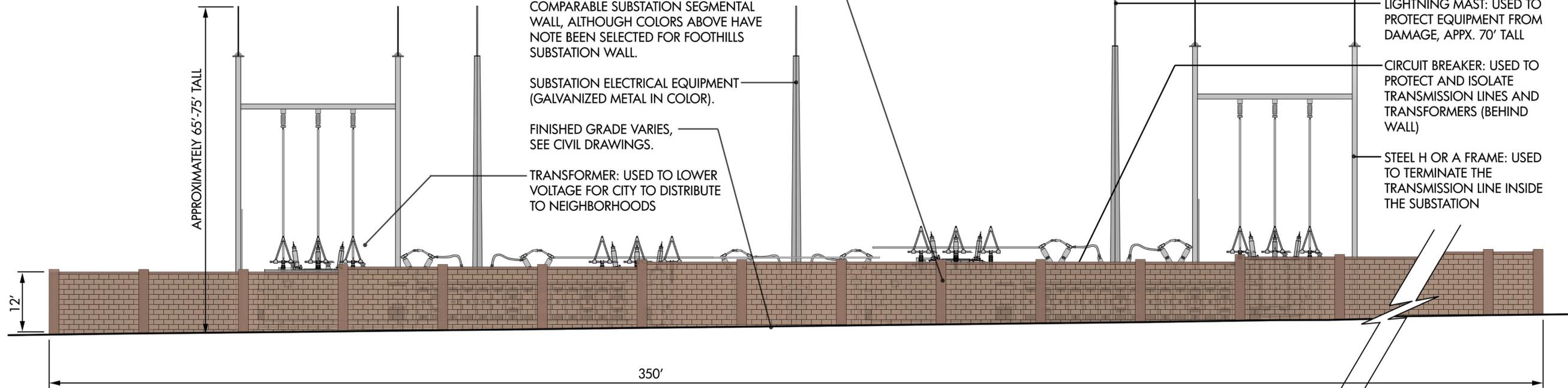
FINISHED GRADE VARIES, SEE CIVIL DRAWINGS.

TRANSFORMER: USED TO LOWER VOLTAGE FOR CITY TO DISTRIBUTE TO NEIGHBORHOODS

LIGHTNING MAST: USED TO PROTECT EQUIPMENT FROM DAMAGE, APPX. 70' TALL

CIRCUIT BREAKER: USED TO PROTECT AND ISOLATE TRANSMISSION LINES AND TRANSFORMERS (BEHIND WALL)

STEEL H OR A FRAME: USED TO TERMINATE THE TRANSMISSION LINE INSIDE THE SUBSTATION



### SUBSTATION ELEVATION LOOKING WEST

NOTE: BERM AND VEGETATIVE SCREENING INCLUDING DECIDUOUS SHADE TREES, ORNAMENTAL TREES, EVERGREEN TREES, AND SHRUBS NOT SHOWN FOR CLARITY. SEE LANDSCAPE DRAWINGS FOR SCREENING ADJACENT TO SUBSTATION.  
 -LIGHTING OF SOLAR FACILITY IS NOT ANTICIPATED AT THIS TIME, ALTHOUGH A SMALL GATE LIGHT MAY BE INCORPORATED.  
 -SOLAR FIELD LIGHTING WILL BE PROVIDED WITHIN SUBSTATION TO BE USED IF WORK IS PERFORMED AT NIGHT, WHICH SHOULD BE A RARE OCCURENCE. IF THE SECURITY SYSTEM IS ACTIVATED AS A RESULT OF TRESSPASSING, LIGHTING WILL COME ON.  
 -EXISTING TRANSMISSION LINE POLES ARE APPX. 110' TALL, AND A FEW NEW POLES WILL NEED TO BE ADDED BETWEEN THE SUBSTATION AND THE EXISTING TRANSMISSION LINE.

NO.	DATE	DESCRIPTION
1	03/09/2016	CITY RESUBMITTAL #1
2	02/11/2015	CITY RESUBMITTAL #2
3	01/04/2014	CITY RESUBMITTAL #3
4	01/12/2016	CITY RESUBMITTAL #4

This submittal represents these plans will not be approved for or table for until all changes to or use of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

## FOOTHILLS SOLAR PARK AND SUBSTATION ARCHITECTURAL ELEVATION

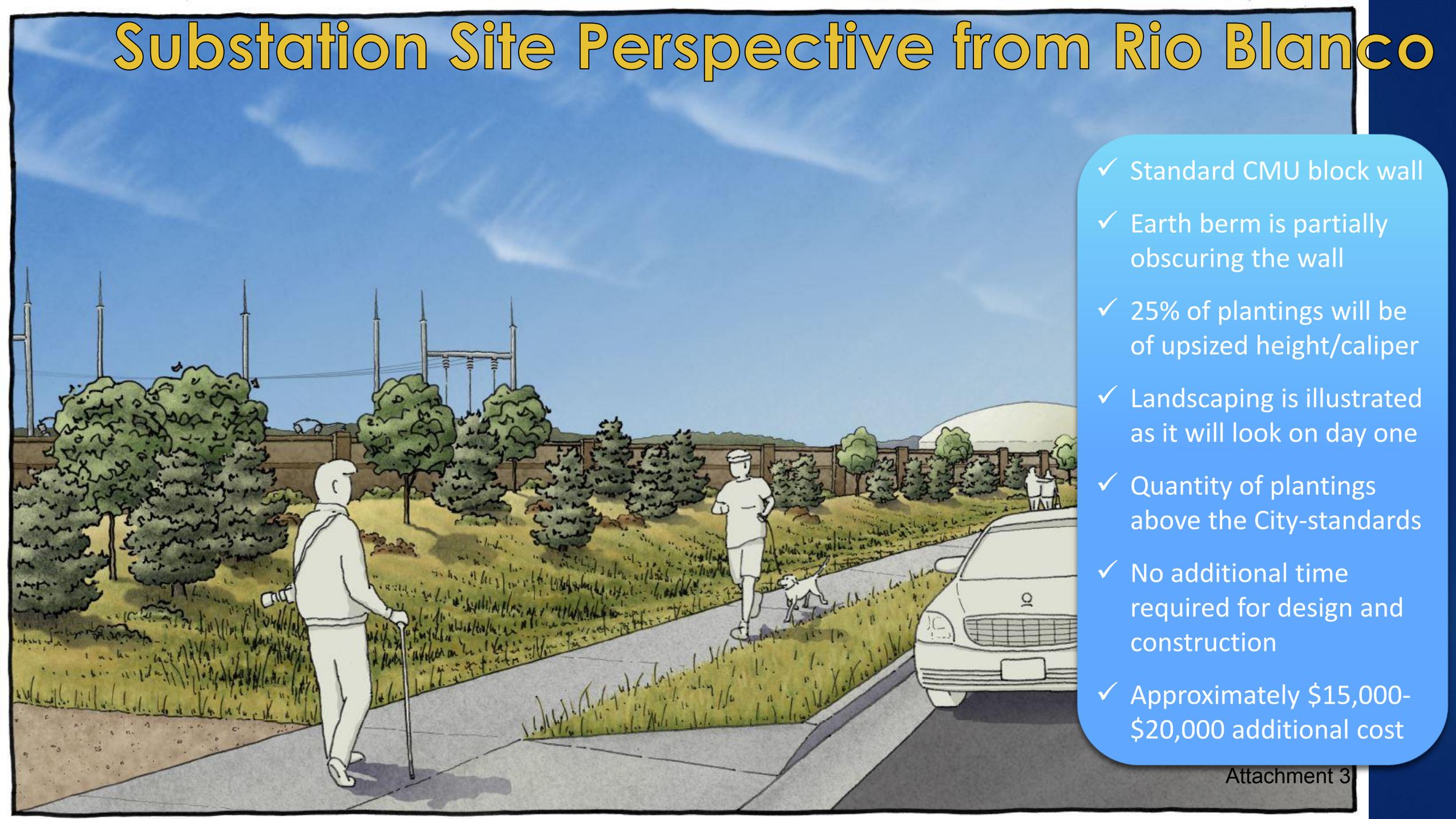
PRELIMINARY  
 PLANS  
 NOT FOR CONSTRUCTION

# Solar Perspective from W. 22<sup>nd</sup> Street and Rio Blanco

- ✓ 7 foot galvanized chain link fence
- ✓ Increased height of earth berm which is partially obscuring fence
- ✓ 25% of plantings will be of upsized height/caliper
- ✓ Landscaping is illustrated as it will look on day one
- ✓ Quantity of plantings above the City-standards
- ✓ No additional time required for design and construction
- ✓ Approximately \$20,000-\$30,000 additional cost

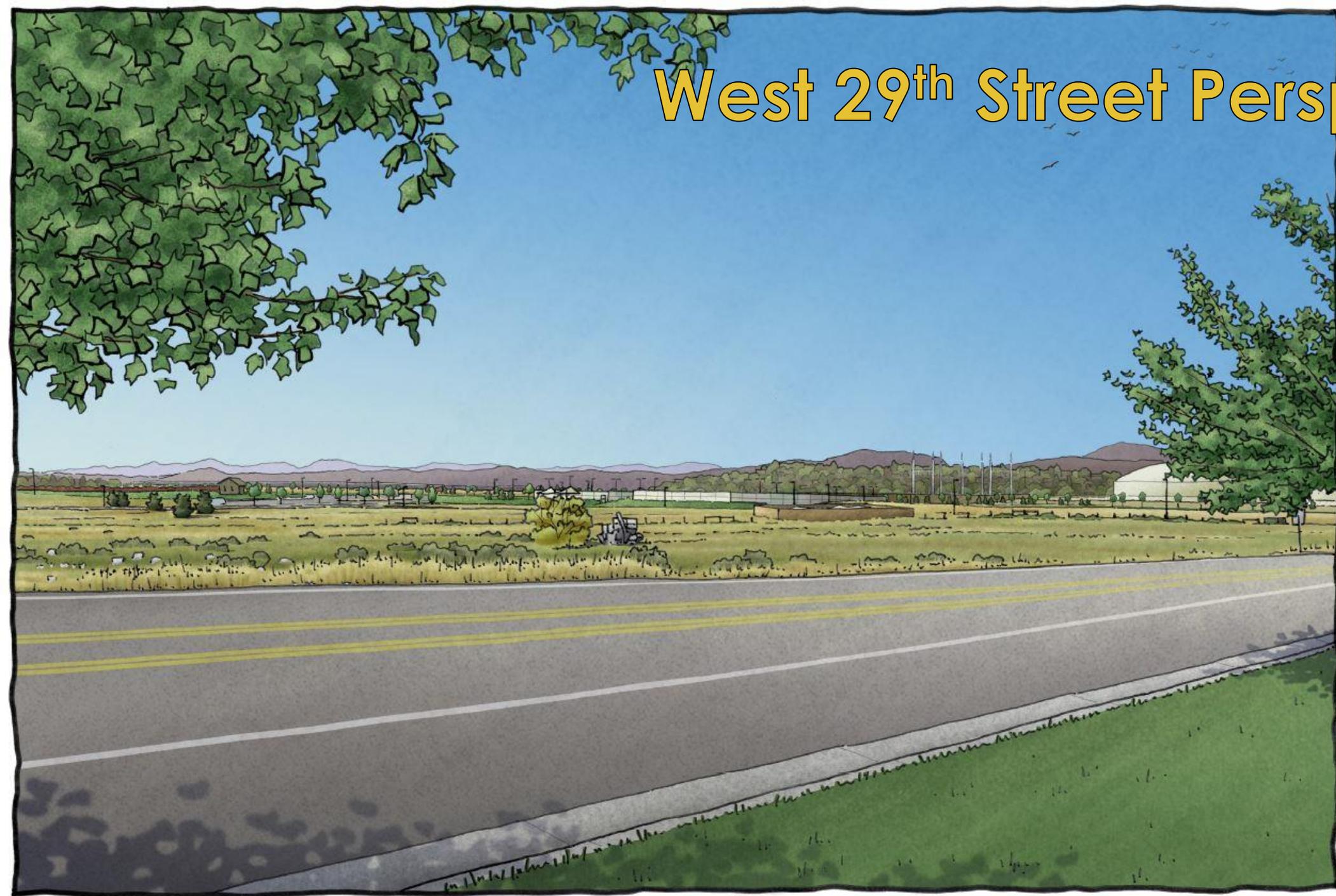


# Substation Site Perspective from Rio Blanco



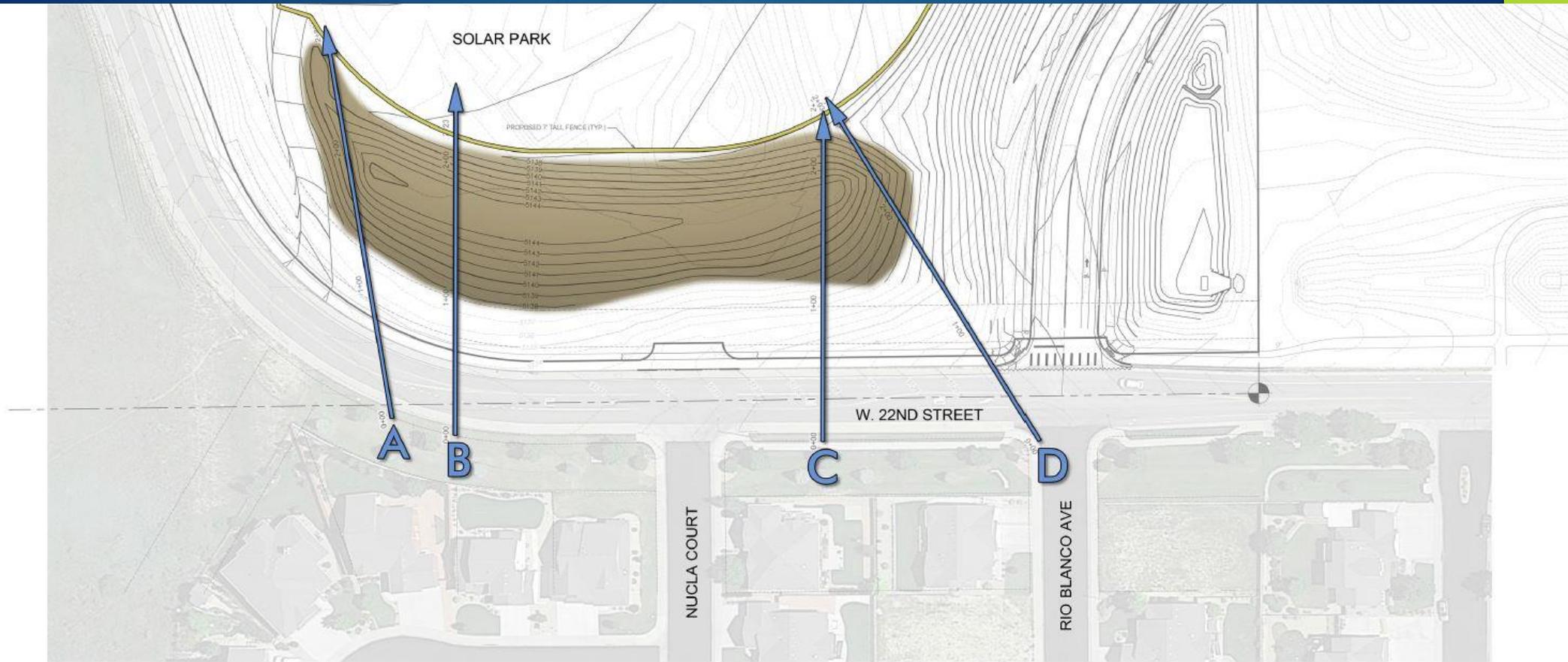
- ✓ Standard CMU block wall
- ✓ Earth berm is partially obscuring the wall
- ✓ 25% of plantings will be of upsized height/caliper
- ✓ Landscaping is illustrated as it will look on day one
- ✓ Quantity of plantings above the City-standards
- ✓ No additional time required for design and construction
- ✓ Approximately \$15,000-\$20,000 additional cost

# West 29<sup>th</sup> Street Perspective



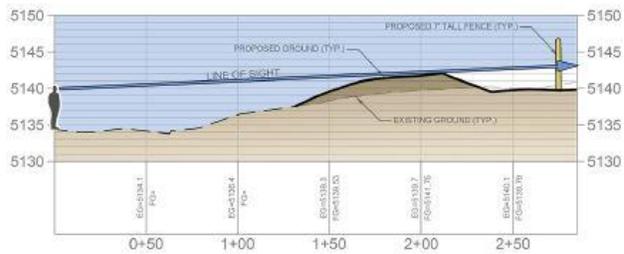
# Perspective from 22<sup>nd</sup> Street Southwest of Site





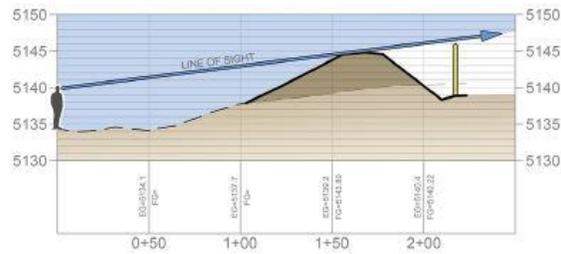
### Section A

(4:1 vertical exaggeration)



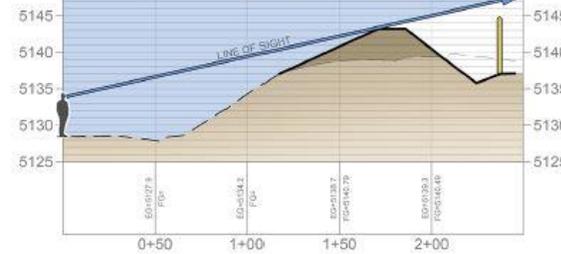
### Section B

(4:1 vertical exaggeration)



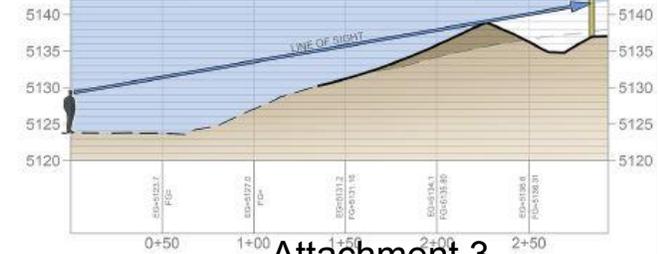
### Section C

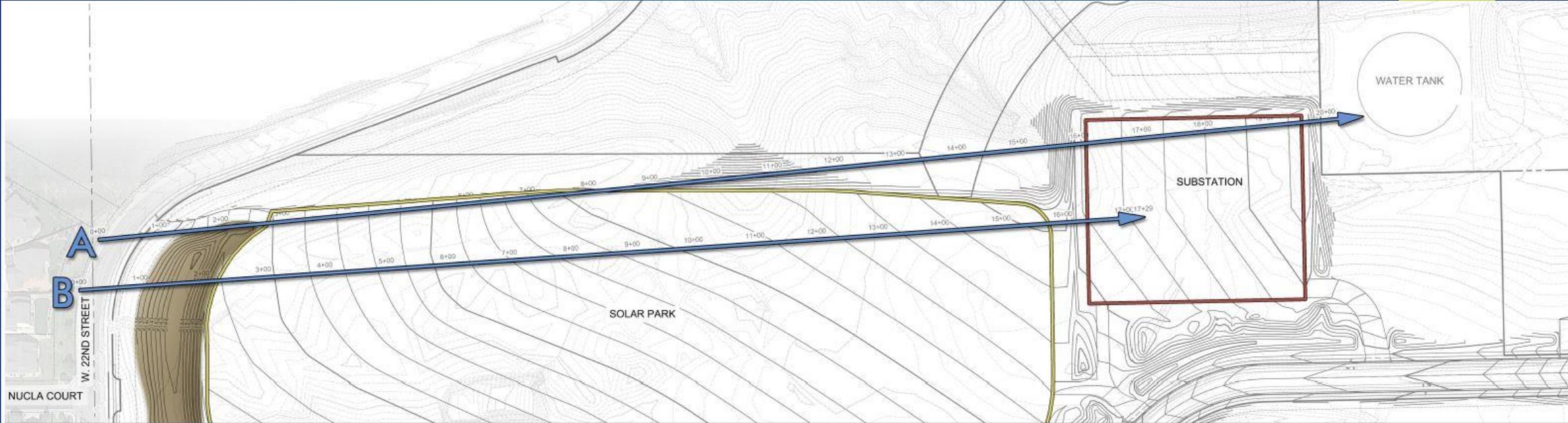
(4:1 vertical exaggeration)



### Section D

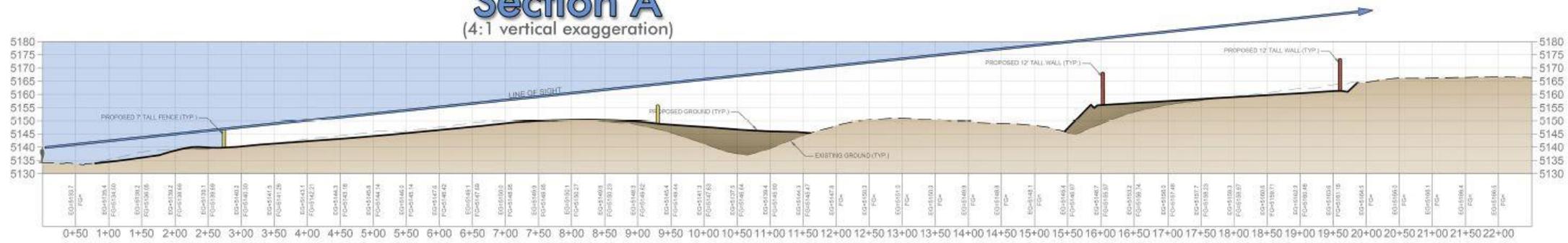
(4:1 vertical exaggeration)





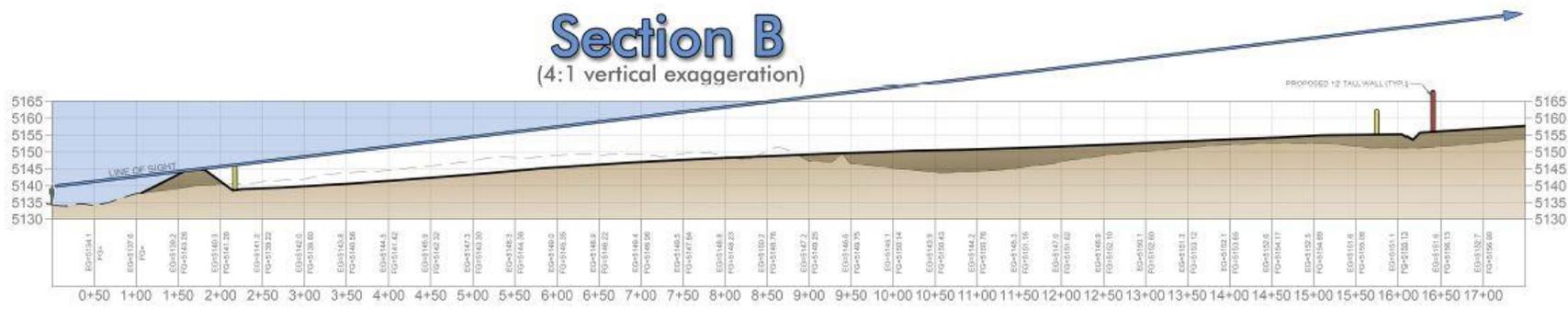
### Section A

(4:1 vertical exaggeration)



### Section B

(4:1 vertical exaggeration)



## Foothills Solar and Substation Neighborhood Meeting Notes

### December 17, 2015

1. Are there trees on the west of the substation
  - No. There is an existing utility easement for the water tank so it is a challenge to plant on that side of the substation.
2. Is there a fee for the appeal process?
  - The appeal fee to the Planning Commission of \$300 and a lesser fee to appeal to the Council. Anyone in attendance and who received the letter has a right to appeal. Planning Commission and Council can appeal this process. PC and Council did receive notice of this special review meeting.
3. How many PC or CC members does it take to appeal?
  - Two we believe.
4. How much water will be used to keep the landscaping alive?
  - Everything will have drip irrigation run to it. Most efficient way to irrigate. Planning to do an irrigation system directly adjacent to Rio Blanco and 22nd Street. This will be a permanent irrigation system which will help in drought periods.
5. How will an appeal affect the timeline for this process?
  - Some of our timelines take into account an appeal process
6. Why didn't you do visual line of site drawings from 29th Street
  - The difference we see is that 29th is more than 5 times farther away than 22nd Street
7. Still do not believe that the photo and rendering of the perspective from 29th is how it will really look.
  - The height of the water tank is 37 feet and the rendering for the substation wall is relative to that height.
8. Why don't you only fence the area of solar put in verses putting the chainlink fence
  - From our perspective it is more cost effective to put the fence in its permanent location from the beginning. We also believe this will prevent people from off-roading in the area where the future solar will be and ruining the native grasses that are planted.
9. Is there a possibility of doing wrought iron around the whole solar facility?
  - There is substantial cost difference between chainlink and wrought iron fencing. With the voting we performed that the citizens selected the chainlink and higher berm option.
10. As solar power has grown, communities have zones for solar. Why doesn't Loveland have a zone for solar?
  - We do not have that zone district and we do not believe the City is currently looking at that zone district for the future. We accomplish the zoning for utilities through this public process.
11. City bought the property before anyone could see what the plans were. There was no way then that CC was going to vote against it because the money was already spent.
12. I would rather have this than all the homes that were originally proposed for this site.
13. Originally I thought I would like the wrought iron fence but when I saw the renderings I realized I the berming and landscaping is a better option.
14. This this would be a great site for a Library or a Rec Center, don't like this plan
15. What is the durability of the solar panels
  - Solar panels were originally developed by NASA. These are silicone based materials covered in tempered glass. They are very durable. Namaste has thousands of modules that have sustained hail storms.

16. How many megawatts is the solar?
  - There is DC and AC current. This is a 2.2 MW AC current.
17. What's going through the lines along cascade
  - These are transmission lines. If you can image a reservoir verses a pipe size
18. We will not be installing additional transmission lines.
19. Will the power serve Drake?
  - We will still serve Drake but the solar generated energy will be distributed through our entire system.
20. What about reflectivity from the solar?
  - DIA has a very similar system. FAA regulations requires significant studies on reflectivity and there is not a high impact. These are much less reflective than a window.
21. What is the size of the panels?
  - Typical size is 3 feet by 5 feet depending on how many cells are in the module. Final height will be determined by the geotechnical report. Expecting the height to be 10 feet.
22. Is there an audible noise level from the solar?
  - No there is not
23. What about the lights that are on the substation along Taft? Will those be at this substation?
  - There will be LED downward facing streetlights along Rio Blanco. In the past substations have been designed for lights or lights are forgotten to be turned off. We will have controls in place in this substation to prevent lights running all night long. Probably won't be able to see these lights from Hunter's Run or Namaqua Hill. We will be able to light up the substation and have security lighting for when needed but those will not be on at all times.
24. Are there lightning rods on the substation?
  - Yes and they have to be a certain height to provide adequate protection to the equipment.
25. Since Mehaffey Park has been built there has been vandalism, especially to the landscaping.
  - We have been talking to the Director of Parks and Recreation. We are compiling a plan with the LPD to address vandalism and trespassing instances.

**From:** <[fburmont@gmail.com](mailto:fburmont@gmail.com)>

**Date:** January 15, 2016 at 3:50:38 PM MST

**To:** Gretchen Stanford <[Gretchen.Stanford@cityofloveland.org](mailto:Gretchen.Stanford@cityofloveland.org)>, Kerri Burchett <[Kerri.Burchett@cityofloveland.org](mailto:Kerri.Burchett@cityofloveland.org)>

**Cc:** Bill Thomas <[thomab1884@gmail.com](mailto:thomab1884@gmail.com)>, Marilyn Beery <[mrbeery2@yahoo.com](mailto:mrbeery2@yahoo.com)>, "Marty O'Brien" <[obrienas@frii.com](mailto:obrienas@frii.com)>, Michael Christiansen <[emailformichael@yahoo.com](mailto:emailformichael@yahoo.com)>, "[derrel.curtis@sandvik.com](mailto:derrel.curtis@sandvik.com)" <[derrel.curtis@sandvik.com](mailto:derrel.curtis@sandvik.com)>, Linda Aron <[lindaaron46@gmail.com](mailto:lindaaron46@gmail.com)>

**Subject: Re: Foothills Solar Park Rezoning Type 2 Permit**

Gretchen--

Thanks for your reply to my most recent email and a sincere "THANK YOU" for all of the time you, Kerri Burchett, and your staffs have spent conducting neighborhood meetings and considering my concerns and those of my neighbors in Meadowbrook Ridge.

Kerri did point out that on Page 3 of the site plan, attached to the Preliminary Findings, is a table of the landscaping materials with numbers and sizes specified. That does answer my request for more landscaping materials detail--thanks! :>)

Thanks, too, for your comments about the several neighborhood meetings and for all of the information presented on the project website.

Having attended each of those meetings, I was aware of the choices presented and the results of the voting on the three "packages". In hindsight, I wish we had had a fourth option on which to vote--the "best-of-all" (berm, enhanced landscaping and wrought iron fence). If I remember correctly, the combined cost for all three would have been less than the "art wall" option presented for the electric substation.

But the opportunity to vote on what the neighboring residents thought was most important is greatly appreciated.

And, thanks for considering my concerns about security for the solar panels. I won't debate that your staff and consultants think kids can climb a 7-foot high wrought iron fence. But I am sure that our aspiring local young artists, with a can or two of spray paint in their pockets, will appreciate the chain link fence a lot more than a wrought iron one.

Maybe the rattlesnakes on the inside will get them.

Gretchen, I still wish the City would be willing to spend the extra money to put in a wrought iron fence--at least on the 22nd Street and Rio Blanco Avenue sides of the solar park--for both security and "public image" reasons.

Now is the time to really make this infrastructure a really outstanding public amenity.

Thanks, again, for all you do for us!

Best regards,

Fred

Fred J. Burmont, CPA  
Certified Business Consultant  
(970) 590-8590  
[fburmont@gmail.com](mailto:fburmont@gmail.com)

**From:** [Gretchen Stanford](#)  
**Sent:** Tuesday, January 12, 2016 8:28 PM  
**To:** '[fburmont@gmail.com](mailto:fburmont@gmail.com)', [Kerri Burchett](#)  
**Cc:** [Bill Thomas](#), [Marilyn Beery](#), [Marty O'Brien](#), [Michael Christiansen](#),  
[derrel.curtis@sandvik.com](mailto:derrel.curtis@sandvik.com), [Linda Aron](#)

Good evening Fred,

I want you to know that staff has been taking your comments very seriously and we have been working hard on our end to complete our research. I am very sorry for the delay. Staff has very much enjoyed getting to know our customers in Meadowbrook Ridge, Hunters Run and Quail Run. We have done our best to listen and take the feedback seriously. Based on all of your neighbors feedback, we attempted to come up with three great options for the solar fencing. As you know, they were presented to all three HOAs and voted on by your neighbors in a fair manner. The vote gave staff clear direction on which option is your neighbors preference. As a reminder, this is how the voting results turned out for the solar portion of this project:

**Solar Options - HOA Voting Results**

	<b>1st Choice</b>	<b>2nd Choice</b>
<b>Option #1 -</b> Higher berm and more landscaping	75%	16%
<b>Option #2 -</b> Black wrought iron fence	17%	22%
<b>Option #3 -</b> Grey wrought iron fence	8%	63%
Total =	100%	100%

Security, appearance and public image were discussed at most, if not all, public meetings and I would like to address your additional concerns:

1. Security: Chain link fences are relatively easy to climb unless they have barbed wire or a canopy on top--and you have stated the proposed fence will have neither. – Staff and consultants do agree that wrought iron fencing is climbable as well. Staff is looking at making the chain link fence as less desirable to climb as possible while taking the appearance

into account. Also, as mentioned before, we are looking at several options for security around the solar facility.

2. Appearance: The fence will still be visible from both 22nd Street and Rio Blanco Avenue--both collector arterial streets. – If you could reference the [presentation](#) from the Meadowbrook Ridge HOA meeting, please refer to page 8. United Civil, the City’s consultant, has done a wonderful job enhancing the height of the berm as much as possible to cover the fence from the viewpoint on 22<sup>nd</sup> looking north. Also, BHA, the City’s consultant, has worked tirelessly to strategically place and minimize the viewpoint of the fence from 22<sup>nd</sup> looking north, increasing the quantity of plantings well above City standards and including 25% of the plantings to be upsized in caliper and height. As mentioned above, this is the option that was picked by the HOA voting that occurred in December.
3. Public Image: For the public and media, from the “outdoor classroom” the overall impression would be more desirable by looking through a wrought iron fence to see the “first-of-a-kind-FEMA-alternative-energy-project”--as compared to looking through a chain link fence. – Staff is very excited for this opportunity to share our facility with the public that is interested and we do not believe that the chosen chain link fence option will decrease the integrity of site.

Staff took a look at the Woodward site as you suggested and we also took a look at the RMCIT site that you suggested. We appreciate the suggestions on what type of fence you would like to see at the site as well as your idea of excluding the stone or brick columns. As far as the cost that you obtained during your research on wrought iron fencing, staff and our consultants have been doing our due diligence to compare the data. Most of the numbers you retrieved for the galvanized fencing were in line with the \$25/LF estimate we received. The wrought iron fence dollar amount from Pinon was pretty close to the \$127/LF that we have been quoting. However, there was some discrepancy on the dollar amount you received from Altitude. Please see the attached information that helped us understand the comparison. We do agree with you that you can purchase a cheaper wrought iron fence. However, we do believe that if we were to purchase a cheaper wrought iron fence than what we are proposing we would be sacrificing long term durability, coating systems, warranty and quality. Most importantly, the \$127/LF wrought iron fence and the \$25/LF galvanized chain link fence costs that were originally quoted at the HOA meetings, the costs that we still agree with, compare apples to apples for long term durability, coating systems, warranty and quality for the chain link fence compared to the wrought iron fence.

I truly hope that you agree with me that we are trying to come to an agreement with the residences that surround the property we purchase. Unfortunately, we understand that we are not going to make everyone happy. In conclusion, staff feels like we have clear direction to move forward with what was chosen by your neighbors.

Sincerely,

**Gretchen Stanford, EEM, KAM**  
**Customer Relations Manager**

**From:** [fburmont@gmail.com](mailto:fburmont@gmail.com) [<mailto:fburmont@gmail.com>]

**Sent:** Monday, January 11, 2016 4:10 PM

**To:** Kerri Burchett <[Kerri.Burchett@cityofloveland.org](mailto:Kerri.Burchett@cityofloveland.org)>; Gretchen Stanford

<[Gretchen.Stanford@cityofloveland.org](mailto:Gretchen.Stanford@cityofloveland.org)>

**Cc:** Bill Thomas <[thomab1884@gmail.com](mailto:thomab1884@gmail.com)>; Marilyn Beery <[mrbeery2@yahoo.com](mailto:mrbeery2@yahoo.com)>; Marty O'Brien <[obrienas@frii.com](mailto:obrienas@frii.com)>; Michael Christiansen <[emailformichael@yahoo.com](mailto:emailformichael@yahoo.com)>; [derrel.curtis@sandvik.com](mailto:derrel.curtis@sandvik.com);  
Linda Aron <[lindaaron46@gmail.com](mailto:lindaaron46@gmail.com)>

**Subject:** Re: Foothills Solar Park Rezoning Type 2 Permit

Kerri and Gretchen--

I see your "Preliminary Findings" for Special Review #915 still has a lack of details (numbers and sizes) of landscaping materials and a 7-foot high chain link fence around the proposed solar field.

Attached is a copy of my previous requests for consideration of landscaping details and a wrought iron (rather than "industrial-looking" chain link) fencing.

Since the final design will affect (favorably or adversely) all of the homes in Meadowbrook Ridge Subdivision--including my home--I respectfully request that you consider these two matters in drafting your "Final Findings" and specify the number and sizes of landscaping materials and wrought iron fencing, rather than chain link.

Thank you.

Fred

Fred J. Burmont  
3584 Parlin Street  
Loveland, CO 80538  
(970) 590-8590  
[fburmont@gmail.com](mailto:fburmont@gmail.com)

**From:** [Gretchen Stanford](mailto:Gretchen.Stanford@cityofloveland.org)  
**Sent:** Wednesday, December 23, 2015 1:43 PM  
**To:** '[fburmont@gmail.com](mailto:fburmont@gmail.com)'  
**Cc:** [Kerri Burchett](mailto:Kerri.Burchett)

Fred,

I appreciate the email, we are working on research and a response. Unfortunately with the holidays, it will take longer than expected. Please know that I will get back to you sometime in the first week of January.

Enjoy your Christmas and Happy New Year,

**Gretchen Stanford, EEM, KAM**  
**Customer Relations Manager**

**From:** [fburmont@gmail.com](mailto:fburmont@gmail.com) [<mailto:fburmont@gmail.com>]  
**Sent:** Friday, December 18, 2015 3:38 PM  
**To:** Gretchen Stanford <[Gretchen.Stanford@cityofloveland.org](mailto:Gretchen.Stanford@cityofloveland.org)>  
**Cc:** Kerri Burchett <[Kerri.Burchett@cityofloveland.org](mailto:Kerri.Burchett@cityofloveland.org)>  
**Subject:** Re: Foothills Solar Park Rezoning Type 2 Permit

Hey, Gretchen--

I appreciated the meeting last night and, in particular, the 75% preference for the “berms and additional landscaping” scenario.

However, I still would like to see a “less-industrial-looking” wrought iron fence than the galvanized chain link that is being proposed (along with the berms), for the following three reasons:

1. Security: Chain link fences are relatively easy to climb unless they have barbed wire or a canopy on top--and you have stated the proposed fence will have neither.
2. Appearance: The fence will still be visible from both 22nd Street and Rio Blanco Avenue--both collector arterial streets.
3. Public Image: For the public and media, from the “outdoor classroom” the overall impression would be more desirable by looking through a wrought iron fence to see the “first-of-a-kind-FEMA-alternative-energy-project”--as compared to looking through a chain link fence.

As a former City Director of Finance (City of Boulder and Manitou Springs), I sincerely appreciate the need to minimize the cost. However, a wrought iron fence with iron posts (rather than stone or brick posts) would be less--somewhere between \$90 and \$120 per foot, installed. With competitive bidding, the cost could very well come in at less than \$400-- compared to \$500 K-- for the estimated 3,500 lineal feet. (Still within the combined solar/substation cost estimates presented at the HOA meetings).

Since the second most popular choice of the several scenarios was for a wrought iron fence, incorporating all of the best features--berms, enhanced landscaping and iron fencing--would make a VERY favorable impression on a number of Meadowbrook Ridge, Quail Run and Hunters Run residents.

Thanks, again, for your good work on this project. We really do appreciate your sensitivity to the impact on our neighborhoods!

Fred

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**From:** [Gretchen Stanford](#)  
**Sent:** Monday, December 14, 2015 5:17 PM  
**To:** '[fburmont@gmail.com](mailto:fburmont@gmail.com)'  
**Cc:** [Kerri Burchett](#)

Fred,

I appreciate your comments on the meeting, I am really happy that you feel it went well. I appreciate your comments below. As a reminder there will be street parking along both sides of Rio Blanco Ave. There should be plenty of room for buses and the general public to pull off and park up and down the street. I have Jerod working on a cost estimate for the fence you suggested.

See you Thursday,

**Gretchen Stanford, EEM, KAM**  
**Customer Relations Manager**

**From:** [fburmont@gmail.com](mailto:fburmont@gmail.com) [<mailto:fburmont@gmail.com>]  
**Sent:** Friday, December 11, 2015 5:47 PM  
**To:** Gretchen Stanford <[Gretchen.Stanford@cityofloveland.org](mailto:Gretchen.Stanford@cityofloveland.org)>  
**Cc:** Kerri Burchett <[Kerri.Burchett@cityofloveland.org](mailto:Kerri.Burchett@cityofloveland.org)>  
**Subject:** Re: Foothills Solar Park Rezoning Type 2 Permit

Hey, Gretchen--

I wanted to send you this email as a big “THANK YOU!” to you and the entire Power Department team for your good help on the above-referenced project.

My neighbors here in Meadowbrook Ridge sincerely appreciate having an opportunity to discuss and vote on the several alternative landscaping and fencing scenarios. We are looking forward to the meeting next Thursday to learn the results of the voting.

This is a great opportunity for Loveland to present it’s best image.

After our MBRHOA Board meeting discussion last night, I had a couple of thoughts that I wanted to forward for your consideration:

1. The solar field will be of great educational interest to the public, and children in particular. When you design the extension of Rio Blanco Avenue, we suggest that the Power Department consider including a “pull-off” parking lane for two or three school buses and for the public to park without impeding the traffic on Rio Blanco. That lane

could also serve as a future public bus stop that might someday loop around from 29th to 22nd.

2. This is a "first-of-its-kind", ground-breaking alternative energy FEMA demonstration project that will attract national attention. Rather than have the public and media looking through an "industrial" chain link fence, is there any way that the fence could be wrought iron all around the solar field?

Obviously this would cost more, but if the project could afford the most expensive sub-station wall, the cost of a more attractive fence is still a small percentage of the total project cost (and a small percentage of the \$13.6 spent by the City of Loveland to make McAf Park such an attractive public amenity).

And .....a wrought iron fence is a lot more secure because it cannot be climbed like a chain link fence.

Perhaps by using metal posts (rather than brick or rock pillars) the cost could be minimized--and still be more attractive than chain link. Good examples are the wrought iron fences all around the Center for Innovation & Technology (formerly the HP plant) and the Thompson School District headquarters--both on Taft just north of 14th Street SW.

Future homeowners in the undeveloped areas to the west will appreciate not seeing an industrial-looking complex at the top of the ridge--just as we sincerely appreciate your sensitivity to our concerns from the north and south sides.

Thanks, again, for working with us in Meadowbrook Ridge.

Best regards,

Fred

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**From:** [Gretchen Stanford](#)  
**Sent:** Monday, December 7, 2015 1:59 PM  
**To:** '[fburmont@gmail.com](mailto:fburmont@gmail.com)'  
**Cc:** [Kerri Burchett](#)

Fred,

Thank you for your email and I am very glad that you stopped by last week for the Hunters Run

meeting. Yes, we will have much more detail at the special review meeting when we will have our final proposal.

Thank you for your interest in this project,

**Gretchen Stanford, EEM, KAM**  
**Customer Relations Manager**

**From:** [fburmont@gmail.com](mailto:fburmont@gmail.com) [<mailto:fburmont@gmail.com>]  
**Sent:** Monday, December 07, 2015 12:19 PM  
**To:** Gretchen Stanford <[Gretchen.Stanford@cityofloveland.org](mailto:Gretchen.Stanford@cityofloveland.org)>  
**Cc:** Kerri Burchett <[Kerri.Burchett@cityofloveland.org](mailto:Kerri.Burchett@cityofloveland.org)>  
**Subject:** Foothills Solar Park Rezoning Type 2 Permit

Hey, Grethen--

Thanks for your good work on the several conceptual alternatives for landscaping and fencing for the above-referenced rezoning and related Type 2 Development Permit.

I missed your presentation at the Hunters Run neighborhood meeting last week, so you may have presented more specifics than what we discussed-- and I did get to see on the six artist's renderings.

For the final Public Meeting on December 17th, I would like to see more specifics as to the number and sizes (caliper or height) of landscaping materials and location, length and height of fences (and whether or not there will be barbed or razor wire on top) noted on the site plan.

Thanks, again.

Fred

Fred J. Burmont  
Certified Business Consultant  
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Hello Kerri,

Before I pass along my comments on the Foothills Solar/Substation project (and before the final findings report is issued) I want to say you and everyone else involved in the outreach part have done a fine job. It's a tricky situation – the city rezoning to allow its own project. I appreciate your effort.

I do, however (still), have some observations/comments that I hope will be part of the record. Here goes:

Firstly, the special use provision, in this case, flies in the face of good zoning/land use practice. When I bought our home in Hunters Run, I looked at the city's Master Land Use Plan and understood that there would be residential development to the west, southwest and north. While I argued against the proposed density, drainage problems and traffic impact of that housing (even going the appeal route regarding the Hunters Run West Project), never in a million years would I have thought that a semi-industrial utility complex would be built there.

It will simply, in my view, be incompatible with the surrounding residential community.

And Mahaffey Park. After years of delay, a beautiful park that opened last August will be abutting a walled-in bunch of electrical towers, transformers and high-voltage lines – if this project proceeds as planned.

Loveland property owners should be protected, by clear zoning rules, against this sort of end-around via special use. I did what I thought was due diligence before making the investment of home ownership. A utility up on the ridge didn't even cross my mind.

Secondly, the potential appeal situation has become murky and disturbing (it has become more complex since my Hunters Run West go-round).

And might even be a reason to appeal the appeal.

Oddly and sadly enough. And for the record, I'm not considering any legal remedy. I just wanted to have my say.

Seeking clarification on the process, I asked City Attorney Tami Yellico (via e-mail) how it all worked. One thing I was trying to do was explore my options by taking the temperature of the Planning Commission and City Council about potential appeal from those vantages. If an appeal was a dead-end, I didn't want to waste the city's or my time.

The reply I received back was a shock. She wrote (1/7): "Based on the related zoning change before the Planning Commission late last year and your statement that you are considering an appeal of the special review, the members of the City Council and Planning Commission cannot discuss the special review with constituents or the applicant to maintain a neutral position on the matter."

That is with no appeal filed – my appointed and elected city representatives – CANNOT talk with me.

I promptly asked for a citation or even a logical argument why that was, and the next day received a reply from Moses Garcia. Who handles the legal angle for the Planning Commission.

He wrote: "The city attorney's office advises member of City Council or Planning Commission not to engage the parties (constituents, citizens or the applicant) regarding the subject matter of a pending appeal of a matter that is highly likely to be the subject of an appeal ..."

There's a huge difference between "cannot" and "advises" not. Which is right?

Beyond that, if the city attorney's "cannot" interpretation is correct, there's a chilling effect. Ie. Not letting a citizen/constituent (not sure what the difference is) to just talk to his/her elected or appointed representatives. What makes this situation even more ludicrous – from a common sense view – is that if I could talk to planning commissioners or council members I might conclude the effort itself was not worth the effort. Like trying to herd cats.

Finally, there are other options. The Boedecker Lake site for the substation. Build the solar farm on the Foothills site. And build a northwest library and/or a rec center on the rest of the land. Both solar powered.

That, I do believe, would be the highest and best use of our community resources. And a really beautiful piece of land.

Thank you, Kerri, for all you do.

Best,  
Tony B.