Community & Economic
Development Department
www.adcogov.org

ADAMS COUNTY
COLORADO

4430 South Adams County Parkway
1st Floor, Suite W2000
Brighton, CO 80601-8204
PHONE 720.523.6800
FAX 720.523.6998

Re-submittal Form

Case Name/ Number: DTI Trucks Zone Change / PRC2022-00010 / EGR2022-00041

Case Manager: Brayan Marin

Re-submitted Items:

- [X] Development Plan/ Site Plan
- [X] Plat
- [ ] Parking/ Landscape Plan
- [X] Engineering Documents / EGR2022-00041
- [X] Subdivision Improvements Agreement (Microsoft Word version)
- [X] Other: Response to all comments

* **All re-submittals must have this cover sheet and a cover letter addressing review comments.**

Please note the re-submittal review period is 21 days.

The cover letter must include the following information:

- Restate each comment that requires a response
- Provide a response below the comment with a description of the revisions
- Identify any additional changes made to the original document

For County Use Only:

Date Accepted:

Staff (accepting intake):

Resubmittal Active: Engineering, Environmental, Planner, ROW, Colorado

Division of Water Resources, City of Thornton

Community & Economic
Development Department
www.adcogov.org

ADAMS COUNTY
COLORADO

4430 South Adams County Parkway
1st Floor, Suite W2000
Brighton, CO 80601-8204
PHONE 720.523.6800
FAX 720.523.6998

REZONING (Zoning Map Amendment)

Application submittals must include all documents on this checklist as well as this page. Please use the reference guide (pg. 2) included in this packet for more information on each submittal item.

All applications shall be submitted electronically to epermitcenter@adcogov.org. If the submittal is too large to email as an attachment, the application may be sent as an unlocked OneDrive link. Alternatively, the application may be delivered on a flash drive to the One-Stop Customer Service Center. All documents should be combined in a single PDF. Once a complete application has been received, fees will be invoiced and payable online at https://permits.adcogov.org/CitizenAccess/.

- [x] 1. Development Application Form (pg. 4)
- [x] 2. Application Fees (see table)
- [x] 3. Written Explanation of the Project
- [x] 4. Site Plan Showing Proposed Development, including:
    a. Proposed Building Envelope
    b. Parking Areas
    c. Site Access
    d. Landscape Areas
- [x] 5. Trip Generation Letter
- [x] 6. Preliminary Drainage Analysis
- [ ] 7. Neighborhood Meeting Summary
- [x] 8. Proof of Ownership (warranty deed or title policy)
- [x] 9. Proof of Water and Sewer Services
- [x] 10. Legal Description
- [x] 11. Certificate of Taxes Paid
- [ ] 12. Certificate of Notice to Mineral Estate Owners/and Lessees (pg. 6)
- [ ] 13. Certificate of Surface Development (pg. 7)

Applications Fees	Amount	Due
Application	$1,500	After complete application received
Tri-County Health	$210 (public utilities -TCHD Level 2) $360 (individual septic -TCHD Level 3)	After complete application received

Rezoning Guide to Development Application Submittal

All development application submittals shall comprise of one (1) electronic copy (emailed or delivered on a USB). **Application submittals that do not conform to these guidelines shall not be accepted.**

---

3. Written Explanation of the Project:

- A clear and concise, yet thorough, description of the proposal. Please include, if applicable, timeframe, purpose of project, and improvements that will be made to the site

4. Site Plan Showing Proposed Development:

- A detailed drawing of existing and proposed improvements
- Including:
  - Streets, roads, and intersections
  - Driveways, access points, and parking areas
  - Existing and proposed structures, wells, and septic systems,
  - Easements, utility lines, and no build or hazardous areas
  - Scale, north arrow, and date of preparation
- An Improvement Location Certificate or Survey may be required during the official review

5. Trip Generation Letter:

- Shall be determined based upon the methodologies of the most current, Institute of Transportation Engineers (ITE) Trip Generation Manual for the weekday AM peak hour and weekday PM peak hour

6. Preliminary Drainage Analysis:

- A general narrative discussing the pertinent drainage characteristics and problems, and proposed drainage characteristics if the subdivision is approved

7. Neighborhood Meeting Summary:

- Please refer to Section 2-01-02 of the Adams County Development Standards and Regulations for the specific requirements regarding time, location, and notice
- A written summary shall be prepared including the materials submittal presented at the meeting, any issues identified at the meeting, and how those issues have been addressed

8. Proof of Ownership:

- A deed may be found in the Office of the Clerk and Recorder
- A title commitment is prepared by a professional title company

9. Proof of Water:

- Public utilities-A written statement from the appropriate water district indicating that they will provide service to the property **OR** a copy of a current bill from the service provider
- Private utilities- Well permit(s) information can be obtained from the Colorado State Division of Water Resources at (303) 866-3587

Proof of Sewer:

- Public utilities-A written statement from the appropriate sanitation district indicating that they will provide service to the property **OR** a copy of a current bill from the service provider
- Private utilities-A written statement from Tri-County Health indicating the viability of obtaining Onsite Wastewater Treatment Systems

10. Legal Description:

- Geographical description used to locate and identify a property
- Visit http://gisapp.adcogov.org/quicksearch/ to find the legal description for your property

11. Certificate of Taxes Paid:

- All taxes on the subject property must be paid in full. Please contact the Adams County Treasurer's Office
- Or http://adcogov.org/index.aspx?NID=812

12. and 13. Certificate of Notice to Mineral Estate Owners/ Certificate of Surface Development:

- The State of Colorado requires notification to mineral rights owners of applications for surface development (i.e. zoning, plats, etc.)
- Mineral or Surface right owners may be found in the title commitment for the subject property
- You may also search the Office of the Clerk and Recorder for any recorded deeds, easements, or other documents.

Community & Economic
Development Department
www.adcogov.org

ADAMS COUNTY
COLORADO

4430 South Adams County Parkway
1st Floor, Suite W2000
Brighton, CO 80601-8204
PHONE 720.523.6800
FAX 720.523.6998

Application Type:

☐ Conceptual Review	☐ Preliminary PUD	☐ Temporary Use
☐ Subdivision, Preliminary	☐ Final PUD	☐ Variance
☐ Subdivision, Final	☐ Rezone	☐ Conditional Use
☒ Plat Correction/ Vacation	☐ Special Use	☐ Other: _____

PROJECT NAME: DTI Trucks at 8100 Steele St. Rezone

APPLICANT

Name(s): Jon Spencer Phone #: 303-794-4727 x205

Address: 2009 W Littleton Blvd, #300

City, State, Zip: Littleton, CO 80120

2nd Phone #: Email: jon@sterlingdesignassociates.com

OWNER

Name(s): Todd Carlson, Tony Douglas Phone #: 720-360-4022

Address: 8080 Steele St

City, State, Zip: Denver, CO 80229

2nd Phone #: 303-524-3820 Email: todd@dtitrucks.com, tony@dtitrucks.com

---

TECHNICAL REPRESENTATIVE (Consultant, Engineer, Surveyor, Architect, etc.)

Name: Jon Spencer Phone #: 303-794-4727 x.205

Address: 2009 W. Littleton Blvd, #300

City, State, Zip: Littleton, CO 80120

2nd Phone #: Email: jon@sterlingdesignassociates.com

DESCRIPTION OF SITE

Address:	8100 Steel St
City, State, Zip:	Denver, CO 80229
Area (acres or square feet):	1.945 acres
Tax Assessor Parcel Number	0171925000017
Existing Zoning:	A-3
Existing Land Use:	industrial
Proposed Land Use:	industrial, I-2

Have you attended a Conceptual Review? YES [x] NO [ ]

If Yes, please list PRE#: 2021-00105

I hereby certify that I am making this application as owner of the above described property or acting under the authority of the owner (attached authorization, if not owner). I am familiar with all pertinent requirements, procedures, and fees of the County. I understand that the Application Review Fee is non-refundable. All statements made on this form and additional application materials are true to the best of my knowledge and belief.

Name: Tony Douglas Date: 7/18/2022

Owner's Printed Name

Name: Tony Douglas

Owner's Signature

CERTIFICATION OF NOTICE TO MINERAL ESTATE OWNERS

I/We, _____
(the "Applicant") by signing below, hereby declare and certify as follows:

With respect to the property located at:
Physical Address: _____
Legal Description: _____
_____
Parcel #(s): _____

(PLEASE CHECK ONE):

_____ On the _____ day of _____, 20____, which is not less than thirty days before the initial public hearing, notice of application for surface development was provided to mineral estate owners pursuant to section 24-65.5-103 of the Colorado Revised Statutes;

or

_____ I/We have searched the records of the Adams County Tax Assessor and the Adams County Clerk and Recorder for the above identified parcel and have found that no mineral estate owner is identified therein.

Date: _____ Applicant: _____

By: _____
Print Name: _____
Address: _____
_____

STATE OF COLORADO)
)
COUNTY OF ADAMS)

Subscribed and sworn to before me this _____day of _____, 20___, by _____.

Witness my hand and official seal.

My Commission expires: _____ _____
Notary Public

After Recording Return To:

Name and Address of Person Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department with all applicable land use applications.

APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT, PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b)

I/We, _____, (the "Applicant") by signing below, hereby declare and certify as follows:

Concerning the property located at:

Physical Address: _____

Legal Description: _____

_____

Parcel #(s): _____

With respect to qualifying surface developments, that (PLEASE CHECK ONE):

_____ No mineral estate owner has entered an appearance or filed an objection to the proposed application for development within thirty days after the initial public hearing on the application; or

_____ The Applicant and any mineral estate owners who have filed an objection to the proposed application for development or have otherwise filed an entry of appearance in the initial public hearing regarding such application no later than thirty days following the initial public hearing on the application have executed a surface use agreement related to the property included in the application for development, the provisions of which have been incorporated into the application for development or are evidenced by a memorandum or otherwise recorded in the records of the clerk and recorder of the county in which the property is located so as to provide notice to transferees of the Applicant, who shall be bound by such surface use agreements; or

_____ The application for development provides:

(i) Access to mineral operations, surface facilities, flowlines, and pipelines in support of such operations existing when the final public hearing on the application for development is held by means of public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements;

(ii) An oil and gas operations area and existing well site locations in accordance with section 24-65.5-103.5 of the Colorado Revised Statutes; and

(iii) That the deposit for incremental drilling costs described in section 24-65.5-103.7 of the Colorado Revised Statutes has been made.

Date: _____ Applicant: _____

After Recording Return To:

By: _____

Print Name: _____

Address: _____

_____

STATE OF COLORADO)
)
COUNTY OF ADAMS)

Subscribed and sworn to before me this _____day of _____, 20___, by _____.

Witness my hand and official seal.

My Commission expires: _____ _____
Notary Public

Name and Address of Person Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department within thirty days after the initial public hearing on all applicable land use applications.

APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT, PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b)

I, _____ (the "Applicant") by signing below, hereby declare and certify as follows concerning the property located at:

Physical Address:

Legal Description:_____

Parcel # (s): _____

With respect to qualifying surface developments:

Access to existing and proposed mineral operations, surface facilities, flowlines, and pipelines in support of such existing and proposed operations for oil and gas exploration and production, including provisions for public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements, were provided for in a "_____" area as recorded in Reception # _____ on _____.

Date: _____ Applicant: _____
By: _____
_____
Address: _____

STATE OF COLORADO)
)
COUNTY OF ADAMS)

Subscribed and sworn to before me this _____day of _____, 20___, by _____.

Witness my hand and official seal.

My Commission expires: _____ _____
Notary Public

After Recording Return To: *Name and Address of Person Preparing Legal Description:*

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department with all applicable land use applications.

Sterling Design Associates, llc
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS

Comment Response

Date: 12.08.22

To: Brayan Marin, Adams County Planning

From: Jon Spencer

RE: PRC2022-000010 & EGR2022-00041 DTI Trucks- 1st Review Comment Response

Thank you for the review of the DTI submittal packages for the Rezone, Subdivision, and Civil Construction Plans. The following are responses to the first round review comments.

PLN01: Per the Welby Plan Future Land Use Map, the designated parcels intended for rezoning have a Mixed-Use Employment designation which is NOT consistent with the proposed I-2 zoning that the applicant is proposing. Mixed Use employment encompasses the following zoning designations: Commercial-4 (C-4), Commercial-5(C-5) and Industrial-1 (I-1). By rezoning the property in accordance with the Welby neighborhood, plan, the northern section of the property could be used as office space while providing a buffer between the industrial use of the property and the residential use that is directly north of the property. – While we acknowledge the Welby Plan, the parcel in question was at that time a part of the City of Thornton and functioned as an access easement. It was not formally included in the Plan. The proposed I-2 zoning and industrial use is consistent with the surrounding uses including the A-3 zoned property directly adjacent to the north. While it is zoned A-3, it is used as a concrete contractor's yard and there is no residential component even though that is an allowed use.

Welby Plan Table 4-A Mixed Use Employment-Characteristics & Uses Primary lists "light manufacturing" as a use. The stated purpose of this district is to "Accommodate a range of employment uses with a mix of supporting uses to serve employment needs, increase employment and contribute to the tax base".

DTI is a thriving business providing employment and taxes. It has both sales and manufacturing on the same property similar to the "beehive concept" outlined in the Welby Plan. While the form might not be exactly as outlined this is an ideal business for this area. While we understand the suggestion to provide office use on the north property, the business has an office that is not that old and does not plan to build any new buildings on the north property.

Steele Street not a main corridor. It is conveniently located to other industrial and highways. An I-2 designation would not detract from the goals set forth in the Comprehensive Plan or Welby Plan. Zoning directly to the south west and north is I-2 as well. This is a pocket of I-2. Allowing an I-2 designation for this small portion would maintain continuity for this business and property owner and would not change this area or adversely affect the surrounding neighborhood. It will not create additional traffic, nuisance odors, noise, or other undesired effects.

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

However, based on the project's narrative submitted by the applicant, outdoor storage is proposed on the north of the site of the property. Per County Code, Outdoor Storage is allowed in I-1 properties through a conditional use permit. This is an option that would allow applicant to rezone the property to a zoning that is consistent with the Welby plan and would still meet the needs of what is envisioned for the site. Please note that this would not affect the proposed consolidation of the lots regardless of the zoning designation. – Noted. Per the previous description the ownership would still like to pursue the I-2 zoning. Having a single property with two zoning designations creates confusion as to where exactly on the property the user can provide what services or have whatever storage options.

Outdoor storage in excess of 100% of the building area is what is desired as no building proposed and limiting to 25% would create a hardship for this business. Area is needed to store components such as truck beds and to provide parking of transport vehicles and for vehicle sales.

PLN02: According to applicant project explanation, the site is 1.945 AC. Per Chapter 3, Section 3-07 for dimensional requirements, I-2 lots must have a minimum lot size of 2 acres. This issue could be resolved if applicant decided to move forward with a rezoning to I-1 as the minimum acreage on the property will only need to be one acre. – This property was relinquished by the City of Thornton and the owner purchased it with the intent of adding it to the existing property. The owner is proposing to include this property within the overall subdivision, Steele Street Industrial Filing No. 3 in order to meet the minimum lot size requirements.

PLN03: While the current make-up of the area is industrial, any new development will need to adhere to the future land uses that are envisioned in the Welby neighborhood plan. The I-2 zoning designation does not meet the vision of the plan. – While we understand the future vision for this land, it is and has been functioning as an industrial area. The business has a solid operation and intends to maintain their business if they can secure the I-2 zoning which is prevalent in the surrounding properties except for the one directly to the north which is zoned A-3, but used as an industrial yard by a concrete contractor. The proposed land use is compatible in this area.

PLN04: Due to the proximity to residential/Agricultural uses north of the property, applicant will need to provide a landscape buffer yard width of fifteen (15) foot with three (3) trees per sixty linear feet and six (6) foot sight obscuring fence or wall located on the interior line of the bufferyard. A formal landscape plan will need to be submitted at the time of any new development on the site to review compliance with this requirement. – Noted. A landscape plan is included in this submittal. Trees are shown as required. The fence however is shown on the north property line. Placing a fence at the south of the bufferyard would create a "hallway" between the north property and this property and become a maintenance nightmare. We do not feel this is the intent of the Code to create such a condition.

PLN05: Provide a site plan explaining how the site will work once the lots are combined, as part of this site plan, make sure to include the proposed vehicle alleys and the proposed drainage site of the property. – A site plan has been included with this submittal. This area will be used as open area with no designated vehicle alleys. There are no on-site improvements proposed at this time except for the required 15' landscape buffer. Existing drainage patterns will remain as shown in the Drainage Map in the Drainage Report.

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

PLN06: Please provide a letter from your water utility provider showing that the expansion will not have any adverse impact to the water supply to the property. – A Will Serve letter from North Washington Water and Sanitation District has been included again with this submittal.

PLN07: Please review all outside comments as some agencies require clarification on the proposed use, water supply, drainage, easements, etc. – Noted. Responses to outside referral comments are included with this letter.

PLN08: Per Sec 5-05-05 Parkland Dedication Requirements, The Parkland dedication (PLD) Cash-in-lieu for this subdivision project is as follows:
If the property is rezoned as an I-1 property, the Cash in Lieu would be $25,366.16
If the property is rezoned as an I-2 property, the Cash in Lieu would be $21,626.03
- Noted. The owner(s) would like to proceed with the I-2 designation.

ENG1: A trip generation analysis and a preliminary drainage letter will be required to be completed and submitted for review and approval during the rezoning process. – A trip generation analysis and preliminary drainage letter are included with this submittal.

ENG2: FIRM #08001C0602H. Not in floodplain. A floodplain use permit will not be required. – Noted.

ENG3: The applicant shall be aware that the property is in a MS4 permitted area. The disturbed area of the site will exceed 1 acre, therefore, in addition to the detailed engineering design and analysis required at construction, the applicant shall also be responsible to prepare the SWMP plan using the Adams County ESC Template, and obtain both a County SWQ Permit and State Permit COR-040000.
- Noted. An SWMP will be prepared as required.

ENG4: The applicant plans to subdivide the property. In a subdivision case, the developer should know that prior to scheduling the final plat/FDP BOCC hearing, the developer is required to submit for review and receive approval of all construction documents (construction plans and reports). Construction documents shall include, at a minimum, onsite and public improvements construction plans, drainage report, traffic impact study. Before final approval of the construction plans, the applicant shall enter into a Subdivision Improvement Agreement (SIA) with the county and provide a security bond for all public improvements. All construction documents must meet the requirements of the Adams County Development Standards and Regulations. The developer shall submit to the Adams County Development Review Engineering division the following: Engineering Review Application, Engineering Review Fee, and construction documents including the SIA. – Noted. Public Improvement Construction plans, Drainage Report, and Traffic Study are included with this submittal. An SIA is included however final Public Improvement Costs will be included following formal review of the proposed.

ENG5: The public improvements will include drainage facilities, streets, curb, gutter, and sidewalk.
- The required items are included in the attached plans.

ENG6: Prior to the issuance of any construction or building permits, the developer shall enter into a Subdivision Improvements Agreement (SIA) with the County and provide a security bond for all public improvements. – A Draft SIA is included.

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

ENG7: No building permits will be issued until all public improvements have been constructed, inspected and preliminarily accepted by the Adams County Public Works Dept. - Noted

ENG8: The developer is responsible for the repair or replacement of any broken or damaged section of curb gutter and sidewalk. - Noted

ENG9: (Received via email from Mr. LaBrie on 10/24/2022) Adams County Development Engineering received some late comments from the Construction Management Department that need to be added as notes and/or details to the civil design plans. Those comments are as follows:

1.) *Detectable Warning bricks are not acceptable. Please provide cast iron detectable warning plates.*
2.) *4500 PSI Concrete with fiber mesh will be required. All concrete will be poured monolithically.*
3.) *Please provide a "Sidewalk Ends" sign at the north end of construction.*
4.) *Although the concrete details have been provided, we need to see a Typical Asphalt Patch detail, showing thickness on the design plans.*

- The above notes have been added to the plans.

ROW1: Steele Street is classified as an industrial local street. As such it should have a half right-of-way width of 30 feet. It appears that the half right-of-way width of 30 feet, adjacent to this property, has not been dedicated to Adams County. If the rezoning is approved and the applicant decides to developed the property, the applicant will be required to dedicate 30 half feet of additional right-of-way along Steele Street to support any new development. – A ROW dedication is shown in the attached plans.

ROW2: Right-of-way Dedication Process - The services of a licensed Professional Land Surveyor should be secured to create the legal description and exhibit of the right-of-way dedication. For additional information on dedication document specifics and process please go to http://www.adcogov.org/documents/adams-county-easement-or-right-way-dedication-packet- Noted

ROW3: A preliminary and final plat are required, the applicant shall secure the services of a licensed Professional Land Surveyor to create the plat. The plat is required to support the subdivision process. The right of way dedication can be completed through the platting process. – A Preliminary Plat is included with this submittal.

Please note that the following comments will only apply once a new building permit is requested for this property

ENV1: Applicant should perform truck and repair maintenance on concrete pad. A description of truck types and equipment repair and maintenance operations, locations on site where this would take place, and a plan for the handling of fluids, used oil and material storage should be provided upon application of rezoning. – Noted.

ENV2: All hydraulic fluids, oils and other pollutant sources should be stored within covered area and in secondary containment. – Noted.

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

ENV3: Applicant will be required to implement dust control measures to prevent off-site impacts from truck movement on non-paved surfaces. – Noted.

ENV4: Applicant should limit engine idling to the maximum extent feasible for vehicles at their location to mitigate air quality and odor impacts to surrounding properties. – Noted.

Please note that the following comments will only apply once a new building permit is requested for this property

BSD1: Building permits would be required for each structure. Engineered plans will be required to obtain permits. – Noted.

BSD2: Applicant should refer to commercial and industrial submittal requirements. Here is a link for your reference:
https://epermits.adcogov.org/sites/default/files/Commercial_Industrial%20Submittal%20Requirements_20_0.pdf – Noted.

BSD3: Current adopted codes are the 2018 International Building Codes and the 2017 National Electrical Code. -Noted.

BSD4: Applicant should contact Fire Department for their requirements. This is a separate permit, review, and inspection with your local fire department - Noted.

Outside Referral Agencies:

City of Thornton Comments:
INFRASTRUCTURE ENGINEERING
Civil Engineer (Rachelle Plas, 720-977-6239)
1. How is Detention and Water Quality being handled for this site? There cannot be an increase in discharge to the ditch along the east side of this site. – Noted. Existing drainage is unchanged as there are no proposed on-site improvements. Should improvements be proposed they will be routed to the existing pond at the south end of the existing property.

Colorado Division of Water Resources:
State Engineer's Office Opinion:

This office has no comments in regards to the rezoning of the subject property. In regards to the subdivision of the subject property, pursuant to Section 30-28-136(1)(h)(I), C.R.S., the State Engineer's Office has not received enough information to render an opinion regarding the adequacy of the proposed water supply. Prior to further review the applicant must provide the following:
1. Provide a water supply plan that clearly defines the proposed development's water demands. – A Will Serve letter is included with the submittal.

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

2. Provide information to clarify if the District is committed to serve the property. – See previous response.
3. The applicant must clarify if the existing well operated under permit no. 122381 will be plugged and abandoned prior to subdivision approval or if the well will be re-permitted pursuant to a court approved augmentation plan. If the well will be operated pursuant to a court approved augmentation plan then evidence that such plan has been obtained must be provided. – The existing well will be abandoned.

Colorado Geological Survey:
The proposed plat represents a reduction in density. The site does not contain steep slopes, is not undermined, and no geologic hazards or unusual geotechnical constraints are present that would preclude the proposed lot consolidation and rezone. CGS therefore has no objection to approval of PRC2022-00010. – Noted, thank you.

Lumen:
LUMEN Local/National facilities are under review by our LUMEN Field Engineer(s). Currently, the estimated completion date of review is 09/23/2022. – Noted.

Colorado Department of Transportation:
We have reviewed the referral for PRC2022-00010 at 8100 Steele St, rezoning and subdividing property. This project is off of the State Highway system and we have no comments. - Thank you

Regional Transportation District:
The RTD has no exceptions with this plan- Thank you

Xcel Energy:
No issues or concerns from Xcel Energy. - Thank you

Tri-County Health:
Community design to support walking and bicycling Because chronic diseases related to physical inactivity and obesity now rank among the country's greatest public health risks, TCHD encourages community designs that make it easy for people to include regular physical activity, such as walking and bicycling, in their daily routines. Because research shows that the way we design our communities can encourage regular physical activity, TCHD strongly supports community plans that incorporate pedestrian and bicycle amenities that support the use of a broader pedestrian and bicycle network. Increasing multi-modal transportation has additional co-benefits including improved air quality, which can reduce contributions to climate change and exposure to pollutants associated with a number of health problems including asthma, lung cancer, and heart disease. TCHD commends the applicant for extending the sidewalk across the west side of the property. – Noted. Public sidewalks are being added to continue the accessibility along Steele St.

There were a couple of emails from area residents expressing concern over traffic, unimproved ROW, and lack of agricultural land. We also received a direct call from an area resident inquiring about the proposed zoning impact and traffic. These comments are acknowledged.

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

Sterling Design Associates, llc
CIVIL ENGINEERS - LANDSCAPE ARCHITECTS

The proposed I-2 zoning designation would not create additional traffic. ROW dedication along with landscaping is proposed along Steele St. Unfortunately agriculture is not the land owners line of business and it is unlikely this land will be used in that manner.

We look forward to your feedback and working with you to develop an exceptional project for DTI Trucks and Adams County.

Sincerely,

Jonathan Spencer, PLA
On Behalf of Sterling Design Associates, LLC

Jay M. Newell, PE
Wayne T. Sterling, RLA, LEED AP

2009 W. Littleton Blvd. #300
Littleton, CO 80120

303.794.4727 ph
www.SterlingDesignAssociates.com

Commenting Division: ROW Review 2nd Review

Name of Reviewer: David Dittmer

Date: 12/29/2022
Email:

Resubmittal Required
1. Legal Description must match that of the title reports. The one from Land Title covers 3 parcels, and the one from Empire Title covers only the smaller of the two m/b parcels. I didn't find any other report/commitment that brings this one in.
Response: The legal descriptions DO match the referenced title commitments; 1) Land Title Commitment No. ABC70764012 pertains to Parcels 3 and 4, being Lots 2A & 3A, Steele Street Industrial Park Filing No. 2 and Lot 4, Steele Street Industrial Park; 2) Empire Title North, LLC Commitment No. 203083 pertains to Parcel 2, located in the S1/2SE1/4 of Section 25; and 3) Stewart Title Guaranty Company Policy No. O-9301-004519184 pertains to Parcel 1, located in the SW1/4SE1/4 of Section 25.

2. All title reports/commitments must provide usable hyperlinks to all cited documents that work. Land Title report the links don't work, and Empire didn't provide this at all, but instead provided an abstract of title. This report must use hyperlinks.

3. You are combining five lots into one (PURPOSE STATEMENT) so you have laid out a LOT, not Lots.
Response: Added a purpose statement, as requested.

4. Type Todd Carlson's name under the signature line for the owner, and provide MEMBER after ITS. Within the Notary Affirmation Todd's name needs to be typed out with his title and for the LLC
Response: Will verify the information of who will sign on behalf of DTI and add it to the plat, as requested.

5. No abbreviations within the title.
Response: Revised title, as requested.

6. Minor Subdivision Plats are heard by the Planning Commission and the Board of County Commissioners and is not administratively approved. Signature blocks/ approval blocks should be in the following order:

Owner
Lien Holder if applicable
Surveyor
Planning Commission
Board of County Commissioners
County Attorney
Clerk and Recorder
Response: Revised the order of the signature blocks, as requested.

7. No incomplete document citations will be accepted. A citation as C0736571 is not searchable in the public records of Adams County without the date of recording. The "C" dictates what follows the year recorded. All references need to be revised accordingly.
Response: This is the recording information as stamped on the face of the document. The index numbers used for the clerk and recorder's records search web site are not the reception numbers and are not

referenced on the documents themselves. Revised labels to state the reception no and clerk & record's index no or the book/page.

8. Need to show the lot lines being vacated by the plat and stated and what subdivision they were in. This will be like a watermark on the sheet or ghosted
Response: Added another sheet to show the boundary lines of the individual parcels, as requested.

9. If the plat is within the SW4SE4 of Section 25 the title should reflect this if you are going to place the aliquot descriptive on the plat.
Response: Revised the labels to match, as requested.

10. Revise the line weight on the interior of the area of ROW being dedicated. It isn't a boundary line at this time and should be a parcel line. the dedication area as shown in correct.
Response: This portion will be dedicated to the city and the east line will be the exterior boundary line of the new lot. No Change Made.

11. Pending engineering review any storm water detention facilities can be dedicated by this plat if required along with access to these facilities. They will be within an easement, and dedicated to the county.

12. Add the case number to the top right-hand corner of all sheets.
Response: Added the case number, as requested.

13. Revise all Years provided for the signatory's
Response: Revised the years to reflect 2023, as requested.

14. See plat comments provided

Response: Added Case No., as requested.

PLT2022-00032

Case No: PLT2022-XXXXX

STEELE STREET INDUSTRIAL PARK FILING NO. 3

A REPLAT OF LOT 4, STEELE STREET INDUSTRIAL PARK, LOT 2A & 3A, STEELE STREET INDUSTRIAL PARK FILING NO. 2 AND A PORTION OF THE SE1/4 OF SECTION 25, LOCATED WITHIN THE SE1/4 OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P. M., COUNTY OF ADAMS, STATE OF COLORADO

SHEET 1 OF 2

CERTIFICATE OF DEDICATION AND OWNERSHIP:

KNOW ALL MEN BY THESE PRESENTS THAT DTI HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY, BEING THE SOLE OWNER OF THE FOLLOWING DESCRIBED TRACTS OF LAND:

PARCEL 1:

BEGINNING AT A POINT 15 RODS SOUTH OF THE NORTHWEST CORNER OF THE SW 1/4 OF SE 1/4 OF SECTIO[Not found in a title report provided]ST; THENCE RUNNING EAST AT RIGHT ANGLE[S] OF SAID SE 1/4 ABOVE MENTIONED, 320 FEET; THENCE SOUTH AT RIGHT ANGLES A DISTANCE OF 130 FEET; THENCE RUNNING WEST AT RIGHT ANGLES A DISTANCE OF 320 FEET; THENCE RUNNING NORTH AT RIGHT ANGLES A DISTANCE OF 130 FEET TO BEGINNING, EXCEPT COUNTY ROAD OFF WEST SIDE THEREOF; COUNTY OF ADAMS, STATE OF COLORADO.

PARCEL 2:

A TRACT OR PARCEL OF LAND IN THE S 1/2 SE 1/4 OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, IN ADAMS COUNTY, COLORADO SAID TRACT OR PARCEL BEING MOR[This lot is covered by the title commitment provided by Empire Title]OWS:

BEGINNING AT A POINT ON THE[ ]SEC. 25 T. 2S. R 68 W. FROM WHICH POINT THE S [ ]OUTH A DISTANCE OF 887.6 FEET; THENCE S. 89°5[ ]NCE N. 34°44' E., A DISTANCE OF 158.0 FEET; THENCE S. 89°53' E., A DISTANCE OF 237.1 FEET MORE OR LESS TO THE WESTERLY LINE OF PARCEL NO. 1; THENCE N. 09°27' E. SAID WESTERLY LINE A DISTANCE OF 40.5 FEET MORE OR LESS TO THE NORTH LINE OF PARCEL 1; THENCE N. 89°53' W. ALONG SAID NORTH LINE EXTENDED, A DISTANCE OF 413.6 FEET; THENCE SOUTH, A DISTANCE OF 130.00 FEET; THENCE N. 89°53' W. A DISTANCE OF 320.0 FEET TO THE NORTH AND SOUTH CENTERLINE OF SAID SEC. 25; THENCE SOUTH ALONG THE NORTH AND SOUTH CENTERLINE OF SAID SEC. 25 A DISTANCE OF 40.0 FEET, MORE OR LESS TO THE POINT OF BEGINNING SUBJECT TO ANY ROADWAY ON THE WEST SIDE OF THE PARCEL.

PARCEL 3:

LOTS 2A AND 3A, STEELE STREET INDUSTRIAL PARK FILING NO. 2, COUNTY OF ADAMS, STATE OF COLORADO.

PARCEL 4:

LOT 4, STEELE STREET INDUSTRIAL P[covered by the Land Title Commitment]OF COLORADO.

CONTAINING 386,752 SQUARE FEET OR 8.879 ACRES, MORE OR LESS.

HAS BY THESE PRESENTS LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS AND EASEMENTS AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF STEELE STREET INDUSTRIAL PARK FILING NO. 3, A SUBDIVISION IN THE COUNTY OF ADAMS, STATE OF COLORADO.

SAME INTO A LOT

Response: Revised dedication statement, as requested.

THE UNDERSIGNED DOES HEREBY DEDICATE, GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AND RIGHTS-OF-WAY AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENTS TO ADAMS COUNTY AND/OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUIT CLAIM ALL OR ANY SUCH PUBLIC EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.

THERETO THIS ___ DAY OF _____, 2022

Response: Revised the year, as requested.

OWNER: DTI HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY.

BY:_____ ITS:_____

Todd Carlson

Member

STATE O[ ]_____)
)SS
COUNTY OF _____)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D. 2022, BY_____ AS _____ OF DTI HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY.

Response: Revised the year, as requested.

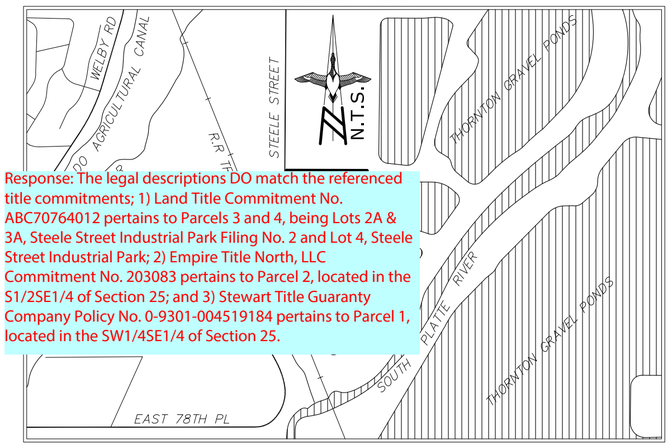
WITNESS MY HAND AN[ ]

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

By recorded Statement of Authority as recorded at Reception No: 2021000034332 Todd Carlson as Member has signatory privileges.
The Notary Affirmation needs to have this information typed out instead of left bland
BY TODD CARLSON AS MEMBER OF DTI HOLDINGS, LLC

VICINITY MAP



Response: The legal descriptions DO match the referenced title commitments; 1) Land Title Commitment No. ABC70764012 pertains to Parcels 3 and 4, being Lots 2A & 3A, Steele Street Industrial Park Filing No. 2 and Lot 4, Steele Street Industrial Park; 2) Empire Title North, LLC Commitment No. 203083 pertains to Parcel 2, located in the S1/2SE1/4 of Section 25; and 3) Stewart Title Guaranty Company Policy No. 0-9301-004519184 pertains to Parcel 1, located in the SW1/4SE1/4 of Section 25.

PURPOSE STATEMENT

Response: Added purpose statement, as requested

GENERAL NOTES:

1. THIS PROPERTY IS NOT LOCATED WITHIN THE 100-YEAR FLOODPLAIN AS SHOWN ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR ADAMS COUNTY COLORADO MAP NUMBER 08001C0602H, DATED MARCH 5, 2007 AND MAP NUMBER 08001C0604H, DATED MARCH 5, 2007.
2. NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.
3. BEARINGS ARE BASED ON THE WEST LINE OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., PER THE PLAT OF STEELE STREET INDUSTRIAL PARK FILING NO. 2 RECORDED JUNE 24, 2015 AT RECEPTION NO. 2015000049316 IN THE OFFICE OF THE CLERK AND RECORDER FOR THE COUNTY OF ADAMS, STATE OF COLORADO, WHICH BEARS SOUTH 00°10'46" WEST (NAD 83), BETWEEN THE FOUND MONUMENTS AS SHOWN AND DESCRIBED HEREON.
4. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY ALTURA LAND CONSULTANTS, LLC TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL TITLE INFORMATION OF RECORD, ALTURA LAND CONSULTANTS, LLC RELIED UPON THE OWNER'S POLICY NO. O-9301-004519184, ISSUED BY STEWART TITLE GUARANTEE COMPANY, HAVING A DATE OF POLICY OF MARCH 6, 2018; COMMITMENT FOR TITLE INSURANCE NO. 203083, ISSUED BY EMPIRE TITLE NORTH, LLC, HAVING AN EFFECTIVE DATE OF MARCH 18, 2022; AND COMMITMENT FOR TITLE INSURANCE NO. ABC70764012, ISSUED BY LAND TITLE GUARANTEE COMPANY, HAVING AN EFFECTIVE DATE OF MARCH 1, 2022.
5. THE LINEAL UNITS OF MEASURE SHOWN ON THIS PLAT ARE BASED UPON THE U.S. SURVEY FOOT. METER TO U.S. SURVEY FOOT - 1m = 0.3048006096 U.S. SURVEY FOOT.
6. ALL EASEMENTS WITHIN THE BOUNDARY OF THIS SUBDIVISION THAT WERE PREVIOUSLY GRANTED BY THE PLAT OF STEELE STREET INDUSTRIAL PARK AND THE PLAT OF STEELE STREET INDUSTRIAL PARK FILING NO. 2 REMAIN, EXCEPT AS IDENTIFIED ON THIS PLAT.
7. RESTRICTING ACCESS RIGHTS ACROSS THE RIGHT-OF-WAY LINES OF MAJOR HIGHWAYS, PARKWAYS, STREETS, OR FREEWAYS WHERE REQUIRED AS A CONDITION OF APPROVAL.
8. THE POLICY OF THE COUNTY REQUIRES THAT MAINTENANCE ACCESS SHALL BE PROVIDED FOR ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION DEVELOPMENT AGREEMENT. SHOULD THE OWNER(S) FAIL TO MAINTAIN SAID FACILITIES, THE COUNTY SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE CAST WILL BE ASSESSED TO THE PROPERTY OWNER(S).

Response: Revised signature block, as requested.

COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT APPROVAL:

APPROVED BY THE ADAMS COUNTY COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT THIS ___ DAY OF _____, 2022.

_____
PLANNING AND DEVELOPMENT MANAGER

Response: Removed Community & Economic Development signature block, as requested.

SURVEYOR'S CERTIFICATE:

I, JESUS A. LUGO, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS P[ ]OR UNDER MY DIRECT SUPERVISION ON THE 7TH DAY OF JULY, 2022, AN[ ]NYING MAP ACCURATELY AND PROPERLY SHOWS SAID SUBDIVISION.

Response: Revised the year, as requested.

SIGNED THIS ____ DAY OF _____, 2022.

_____,
LICENSED PROFESSIONAL LAND SURVEYOR

REGISTRATION NUMBER 38081

Due to the dedications contained herein, this plat will be heard by the Planning Commission and the Board of County Commissioners.
The order of appearance for signatures:
Owner
Surveyor
Planning Commission
Board of County commissioners
Clerk and Recorder

Response: Revised the order of the signature blocks, as requested.

LAND USE TABLE:

GROSS ACREAGE	
NET ACREAGE	
NUMBER OF LOTS	1
NUMBER OF TRACTS	0
NET ACREAGE FOR PUBLIC STREETS	0.156±

SHEET INDEX:

SHEET 1	COVER SHEET
SHEET 2	FINAL BOUNDARY & EASEMENT DETAIL

PLANNING COMMISSION APPROVAL

RECOMMENDED FOR APPROVAL BY THE ADAMS COUNTY PLANNING COMMISSION THIS _____ DAY OF _____ A.D. 202_

_____
CHAIR

BOARD OF COUNTY COMMISSIONERS' APPROVAL

APPROVED BY THE ADAMS COUNTY BOARD OF COUNTY COMMISSIONERS THIS _____ DAY OF _____ A.D. 202_

_____
CHAIR

ADAMS COUNTY ATTORNEY'S OFFICE

_____
APPROVED AS TO FORM

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN MY OFFICE ON THE _____ DAY OF _____, 2022, AT _____ O'CLOCK __. M.,

RECEPTION NO. _____

CLERK AND RECORDER _____

Response: Revised the year, as requested.

BY _____
DEPUTY

ALTURA LAND CONSULTANTS
6551 South Tucson Way Phone: (720)488-1303
Unit C, Centennial, CO 80112

PREPARATION DATE	JULY 8, 2022

SHEET 1 OF 2

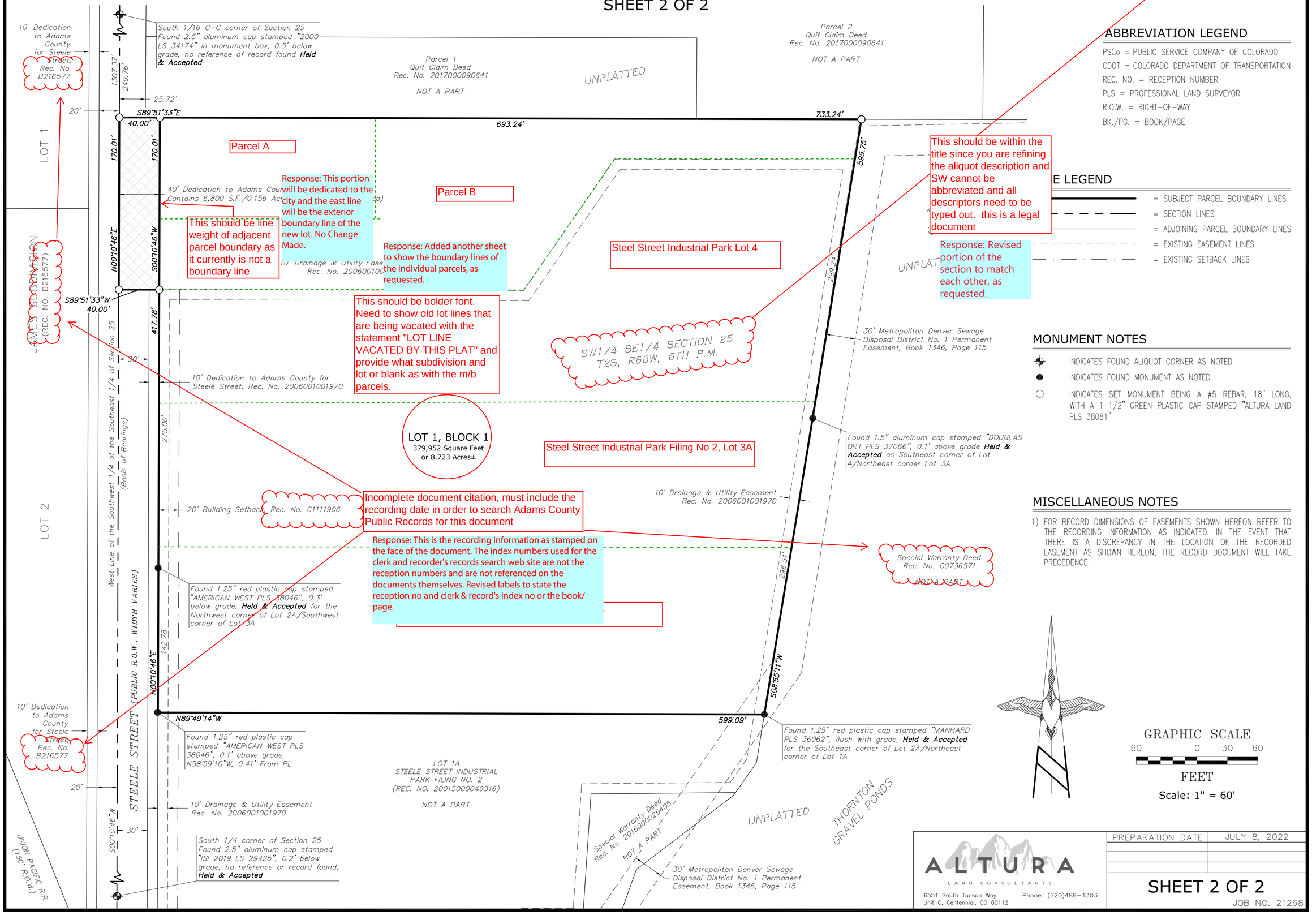
JOB NO. 21189

Case No: PLT2022-XXXXX

STEELE STREET INDUSTRIAL PARK FILING NO. 3

A REPLAT OF LOT 4, STEELE STREET INDUSTRIAL PARK, LOT 2A & 3A, STEELE STREET INDUSTRIAL PARK FILING NO. 2 AND A PORTION OF THE SE1/4 OF SECTION 25, LOCATED WITHIN THE SE1/4 OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P. M., COUNTY OF ADAMS, STATE OF COLORADO

SHEET 2 OF 2



ABBREVIATION LEGEND

PSCo = PUBLIC SERVICE COMPANY OF COLORADO
CDOT = COLORADO DEPARTMENT OF TRANSPORTATION
REC. NO. = RECEPTION NUMBER
PLS = PROFESSIONAL LAND SURVEYOR
R.O.W. = RIGHT-OF-WAY
BK./PG. = BOOK/PAGE

This should be within the title since you are refining the aliquot description and SW cannot be abbreviated and all descriptors need to be typed out. this is a legal document

Response: Revised portion of the section to match each other, as requested.

E LEGEND

= SUBJECT PARCEL BOUNDARY LINES
= SECTION LINES
= ADJOINING PARCEL BOUNDARY LINES
= EXISTING EASEMENT LINES
= EXISTING SETBACK LINES

MONUMENT NOTES

- INDICATES FOUND ALIQUOT CORNER AS NOTED
- INDICATES FOUND MONUMENT AS NOTED
- INDICATES SET MONUMENT BEING A #5 REBAR, 18" LONG, WITH A 1 1/2" GREEN PLASTIC CAP STAMPED "ALTURA LAND PLS 38081"

MISCELLANEOUS NOTES

1) FOR RECORD DIMENSIONS OF EASEMENTS SHOWN HEREON REFER TO THE RECORDING INFORMATION AS INDICATED. IN THE EVENT THAT THERE IS A DISCREPANCY IN THE LOCATION OF THE RECORDED EASEMENT AS SHOWN HEREON, THE RECORD DOCUMENT WILL TAKE PRECEDENCE.

GRAPHIC SCALE
60 0 30 60
FEET
Scale: 1" = 60'

ALTURA LAND CONSULTANTS
6551 South Tucson Way Unit C, Centennial, CO 80112
Phone: (720)488-1303

PREPARATION DATE	JULY 8, 2022

SHEET 2 OF 2

JOB NO. 21268

Name: Lot 1, Blk 1_07.08.22

North: 1733551.7566' East: 3159469.9106'

Segment #1 : Line

Course: S89.5133E (dms) Length: 693.24'

North: 1733550.0526' East: 3160163.1485'

Segment #2 : Line

Course: S09.1619W (dms) Length: 595.75'

North: 1732962.0862' East: 3160067.1610'

Segment #3 : Line

Course: N89.4914W (dms) Length: 599.09'

North: 1732963.9625' East: 3159468.0739'

Segment #4 : Line

Course: N00.1046E (dms) Length: 417.78'

North: 1733381.7404' East: 3159469.3823'

Segment #5 : Line

Course: N00.1046E (dms) Length: 170.01'

North: 1733551.7496' East: 3159469.9148'

Perimeter: 2475.87' Area: 379952 Sq. Ft.

Error Closure: 0.0081 Course: S30.5237E (dms)

Error North: -0.00695 East: 0.00416

Precision 1: 305662.96

****

Name: ROW Dedication_07.08.22

North: 1733551.8549' East: 3159429.9126'

Segment #1 : Line

Course: S89.5133E (dms) Length: 40.00'

North: 1733551.7565' East: 3159469.9124'

Segment #2 : Line

Course: S00.1046W (dms) Length: 170.01'

North: 1733381.7474' East: 3159469.3800'

Segment #3 : Line

Course: N89.5133W (dms) Length: 40.00'

North: 1733381.8457' East: 3159429.3801'

Segment #4 : Line

Course: N00.1046E (dms) Length: 170.01'

North: 1733551.8549' East: 3159429.9126'

Perimeter: 420.01' Area: 6800 Sq. Ft.

Error Closure: 0.0000 Course: N00.0000E (dms)

Error North: 0.00000 East: 0.00000

Precision 1: 420020000.00

North Washington Street Water and Sanitation District

3172 E. 78th Avenue, Denver, CO 80229 303 - 288 - 6664

To Whom It May Concern:

Dear Sir/Madame:

The North Washington Street Water and Sanitation District ("District") provides the following in response to your request for water and sanitary sewer service dated December 2, 2021 related to the property located at 8100 Steele Street.("Property"). The District can provide water and sewer service to the Property based on conditions set forth herein. The following are general requirements for water and sanitary sewer service. The District Rules and Regulations and the standards and requirements of Denver Water and Metro Wastewater Reclamation District must be complied with as an on-going condition of service.

The subject Property is understood to be entirely within the service and boundary area of the District based on your assertions. The District makes no representation or warranty in regard to the Property boundaries and applicant is responsible for verification of same. If the Property is outside of the District's boundaries, applicant is responsible for undertaking and paying all costs to include the Property within the District's boundaries. Treatment of sewage generated within the District is provided by the Metro Wastewater Reclamation District. Treatment and provision of water within the District is provided by Denver Water. Conditions for water and sanitary service from the District include meeting the requirements contained herein and payment of all fees and costs as provided in District's Rules and Regulations along with those of Denver Water and Metro Wastewater Reclamation District. Timing of water and sanitary availability is subject to further coordinated by the District.

Water and Sanitary availability are subject to review and acceptance of design documents from owner/developer of the Property, by the District. Appropriate right-of-way easements and agreements are required for all water and sanitary sewer extensions. Jurisdictional coordination, approvals, permitting, license agreements and easements are to be completed prior to acceptance of plans. All costs associated with collection and distribution system improvements required to serve the Property are the responsibility of the owner/developer including guarantee of improvements and warranty periods.

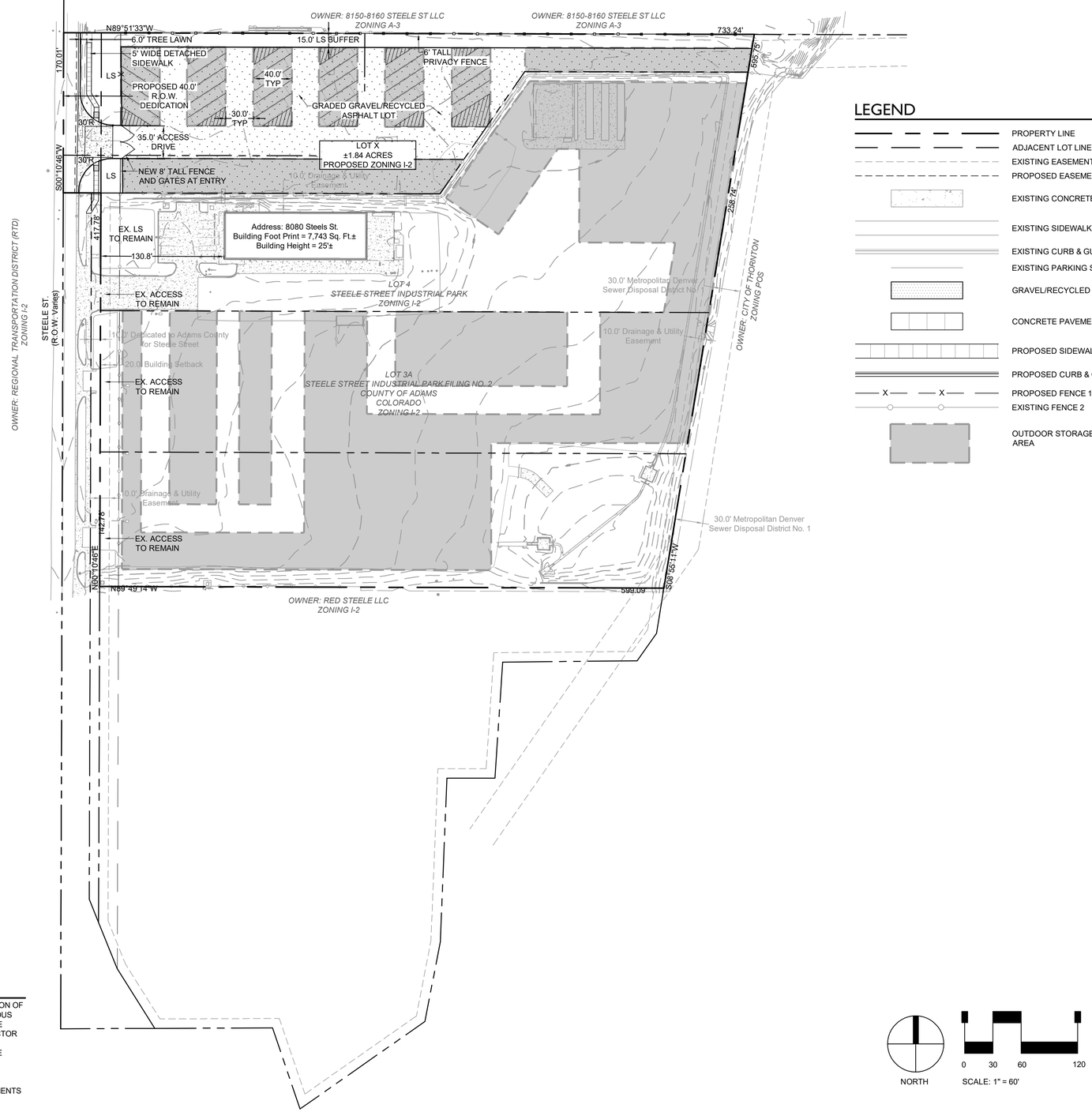
Receipt of service is also subject to all costs being paid by owner/developer for engineering, reviews, construction, observation, and inspections at the then current rate fee structure established by the District, including establishing an imprest account with the District as a deposit for such accounts. Please be aware that proper tap connection and development fees are required to be paid, at the most recent fee schedule, prior to connection to the District main.

Mike DeMattee,
District Manager

DTI TRUCKS

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN CITY OF DENVER, COUNTY OF ADAMS

SITE PLAN



LEGEND

- PROPERTY LINE
- ADJACENT LOT LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING CONCRETE
- EXISTING SIDEWALK
- EXISTING CURB & GUTTER
- EXISTING PARKING STRIPING
- GRAVEL/RECYCLED ASPHALT
- CONCRETE PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CURB & GUTTER
- PROPOSED FENCE 1
- EXISTING FENCE 2
- OUTDOOR STORAGE/PARKING AREA

NORTH

0 30 60 120

SCALE: 1" = 60'

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

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.

STERLING DESIGN ASSOCIATES
Civil Engineers | Landscape Architects
2009 W. Littleton Blvd. #300 Littleton, CO 80120
303.794.4727 | www.SterlingDesignAssociates.com

PRELIMINARY
NOT FOR CONSTRUCTION

STERLING DESIGN ASSOCIATES, LLC

ISSUES & REVISIONS

NO.: 1	DATE:	BY:
DESCRIPTION:		
NO.: 2	DATE: -	BY: -
DESCRIPTION: -		
NO.: 3	DATE: -	BY: -
DESCRIPTION: -		
NO.: 4	DATE: -	BY: -
DESCRIPTION: -		
NO.: 5	DATE: -	BY: -
DESCRIPTION: -		
NO.: 6	DATE: -	BY: -
DESCRIPTION: -		

DATE: **03/05/2022**
SCALE:
PROJECT MANAGER:
PROJECT NO.: -
DRAWN BY:
DRAWING FILE: -

PROJECT:

DTI TRUCKS
8100 STEELE ST.
DENVER, CO 80229

CLIENT:

DTI TRUCKS
8080 STEELE ST.
DENVER, CO 80229

TEL: (720) 360-4022

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

1 OF 1 **-**

SITE DEVELOPMENT CONSTRUCTION PLANS
DTI TRUCKS

SITUATED IN THE SOUTHEAST 1/4 OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST
OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO.

LEGAL DESCRIPTION

LOT 1, BLOCK 1, STEEL STREET INDUSTRIAL PARK FILING NO. 3, LOCATED WITHIN THE SE 1/4 OF SECTION 25, T2S, R68W OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO.

BASIS OF BEARING

BEARINGS ARE BASED ON THE WEST LINE OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M, PER THE PLAT OF STEELE STREET INDUSTRIAL PARK FILING NO. 2 RECORDED JUNE 24, 2015 AT RECEPTION NO. 2015000049316 IN THE OFFICE OF THE CLERK AND RECORDER FOR THE COUNTY OF ADAMS, STATE OF COLORADO, WHICH BEARS SOUTH 00°10'46" WEST (NAD 83).

BENCHMARK

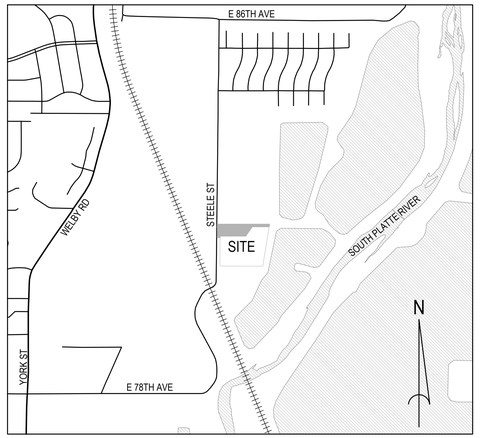
NGS BENCHMARK "E 392"

LOCATED AT THE JUNCTION OF THE UNION PACIFIC RAILROAD AND EAST 72ND AVENUE, 219.8 FEET NORTHEAST OF THE CENTERLINE OF THE AVENUE, 28.2 FEET SOUTHEAST OF THE NEAR RAIL.

ELEVATION = 5133.10 FEET (NAVD 1988)

CONCRETE NOTE

4500 PSI CONCRETE WITH FIBER MESH WILL BE REQUIRED. ALL CONCRETE WILL BE POURED MONOLITHICALLY.



VICINITY MAP
SCALE: 1" = 1000'

SHEET INDEX

GENERAL NOTES:

1. TOPOGRAPHIC MAPPING AS OF 02/14/21 PREPARED BY ALTURA LAND CONSULTANTS. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN HE SHALL, AT HIS EXPENSE, HAVE NEW MAPPING PREPARED BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR ACCEPTANCE AND APPROVAL.
2. CONTRACTOR SHALL REFER TO THE GRADING, EROSION AND SEDIMENT CONTROL (GESC) PLAN FOR ADDITIONAL REQUIREMENTS. NO WORK SHALL OCCUR UNTIL THE BMPs DEPICTED ON THE GESC HAVE BEEN INSTALLED AND ARE APPROVED BY THE CITY. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE GENERAL PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
3. EXISTING CONTOURS ARE SHOWN AT 1-FOOT INTERVALS; PROPOSED OVERLOT CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
4. ALL EARTHWORK, GRADING, OVERLOT GRADING, BACKFILLING, FILLING, EXCAVATION, COMPACTION, PAVEMENT, AND FLATWORK SHALL BE IN CONFORMANCE WITH THE GEOTECHNICAL REPORT PREPARED BY _____. THE CONTRACTOR IS REQUIRED TO HAVE A SIGNED AND SEALED COPY OF THE REPORT AT THE SITE AT ALL TIMES. DURING CONSTRUCTION, IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED. THE GEOTECHNICAL ENGINEER SHALL BE CONTACTED BY THE CONTRACTOR FOR RECOMMENDATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR:
   a. VERIFYING ALL UTILITIES, WHETHER SHOWN OR NOT SHOWN, AND NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION. ALL UTILITIES TO REMAIN (MANHOLES, VALVE COVERS, CLEANOUTS, VAULTS, BOXES, ETC.) SHALL BE PROTECTED FROM DAMAGE AND ADJUSTED TO FINAL GRADE.
   b. PREPARING ANY TRAFFIC CONTROL PLANS, AS MAY BE REQUIRED TO PERFORM THE WORK, AND PROVIDING ALL NECESSARY TRAFFIC CONTROL (SIGNS, BARRICADES,FLAGMEN, LIGHTS, ETC) IN ACCORDANCE WITH THE MUTCD, CURRENT EDITION, AS REQUIRED FOR THE WORK. THE PLAN FOR TRAFFIC CONTROL SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO COMMENCING ANY WORK IN THE RIGHTS-OF-WAY.
   c. OBTAINING ALL NECESSARY PERMITS AND APPROVALS REQUIRED TO PERFORM THE WORK AND TO OBTAIN A COPY OF ALL APPLICABLE CODES, LICENSES, SPECIFICATIONS, AND STANDARDS NECESSARY TO PERFORM THE WORK, AND BE FAMILIAR WITH THEIR CONTENTS PRIOR TO COMMENCING ANY WORK.
   d. KEEPING ONE COPY OF THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR TO VERIFY WITH PROJECT ENGINEER THE LATEST REVISION DATE OF THE APPROVED CONSTRUCTION PLANS.
   e. COORDINATING PRIOR TO CONSTRUCTION WITH THE GEOTECHNICAL ENGINEER, THE COUNTY, AND UTILITY AND STORMWATER DISTRICT INSPECTORS TO IDENTIFY PROJECT INSPECTION AND TESTING REQUIREMENTS.
   f. KEEPING TRACK OF ALL APPROVED DEVIATIONS FROM THE PLANS AND PROVIDING THE PROJECT ENGINEER WITH AS-BUILT DRAWINGS OF ALL IMPROVEMENTS REQUIRED FOR THE WORK.
   g. COMPLYING WITH COUNTY GENERAL REQUIREMENTS, STANDARDS, AND SPECIFICATIONS.
   h. PROVIDING AS-BUILT DRAWINGS OF CONSTRUCTED UTILITIES UPON COMPLETION OF THE WORK.

OWNER

DTI HOLDINGS LLC
8955 WEST 44TH AVENUE
WHEAT RIDGE, CO 80033
303-524-3820

CIVIL ENGINEER

PERCEPTION DESIGN GROUP, INC.
6901 SOUTH PIERCE STREET, SUITE 315,
LITTLETON, CO 80128
303-232-8088
CONTACT: JERRY DAVIDSON, PE

DEVELOPER

COMMERCIAL BUILDING SERVICES
7561 SOUTH GRANT STREET, SUITE A-4
LITTLETON, CO 80122
303-730-3001
CONTACT: DAVID SPRATLEN

SURVEYOR

ALTURA LAND CONSULTANTS
6950 SOUTH TUSCON WAY, UNIT C
CENTENNIAL, CO 80112
720-488-1303
CONTACT: JESUS A. LUGO, PLS

ADAMS COUNTY

DEVELOPMENT SERVICES DIVISION
4430 SOUTH ADAMS COUNTY PARKWAY
1ST FLOOR, SUITE W2000B
BRIGHTON, CO 80601
720-523-6824

LANDSCAPE ARCHITECT

STERLING DESIGN ASSOCIATES, LLC
2009 WEST LITTLETON BOULEVARD, SUITE 300
LITTLETON, CO 80210
303-794-4727
CONTACT: JON SPENCER, PLA

LEGEND

	PROPERTY LINE	6260	EXISTING CONTOUR
LS	PROPOSED LANDSCAPED AREA	59	PROPOSED CONTOUR
	PROPOSED SIDEWALK	59.40	PROPOSED SPOT ELEVATION
		59.40	EXISTING SPOT ELEVATION
	PROPOSED HANDICAP RAMP	FL	FLOWLINE ELEVATION
		TC	TOP OF CURB ELEVATION
	PROPOSED SITE SIGNAGE	SW	SIDEWALK ELEVATION
		HP	HIGH POINT ELEVATION
	EXISTING CURB AND GUTTER	LP	LOW POINT ELEVATION
	PROPOSED CURB AND GUTTER WITH SPILL PAN	E/T/G/FO	EXISTING ELECTRIC/ TELEPHONE/GAS/FIBER LINE
	PROPOSED CURB AND GUTTER WITH CATCH PAN	ST 18"RCP	EXISTING STORM SEWER WITH MANHOLE
	PROPOSED ASPHALT PAVEMENT	S 8"SAN	EXISTING SANITARY SEWER WITH MANHOLE
	SAWCUT LINE	W	EXISTING WATERLINE WITH HYDRANT
	EASEMENT		

ADA NOTES:

ALL HANDICAP SPACES SHALL BE PAINTED AND SIGNED IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.

THE FOLLOWING CRITERIA SHALL APPLY TO ALL CONSTRUCTION WITHIN THE LIMITS OF THIS PROJECT.

A. THE MAXIMUM CROSS SLOPE OF ANY SIDEWALK OR PEDESTRIAN ACCESS ROUTE SHALL BE 2.0%. THE SLOPE SHALL BE MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL.

B. SIDEWALKS AND PEDESTRIAN ACCESS ROUTES SHALL HAVE A MAXIMUM GRADE OF 5.0 PERCENT MEASURED IN THE DIRECTION OF TRAVEL. SIDEWALKS OR PEDESTRIAN ACCESS ROUTES WHICH ARE DESIGNATED AS RAMPS MAY HAVE A MAXIMUM SLOPE OF 8.0 PERCENT FOR A MAXIMUM RISE OF 30 INCHES. A 5-FOOT BY 5-FOOT PAD (2.0 PERCENT MAXIMUM SLOPE IN ANY DIRECTION) SHALL BE CONSTRUCTED AT THE BOTTOM AND TOP OF ANY RAMP.

C. ALL HANDICAP RAMPS SHALL HAVE A MAXIMUM SLOPE OF 8.0 PERCENT MEASURED IN THE DIRECTION OF TRAVEL. FLARED SIDES SHALL NOT BE CONSIDERED ACCESSIBLE AND ARE NOT TO BE INCLUDED IN THE DIRECTION OF TRAVEL. A 5-FOOT BY 5-FOOT AREA (2 PERCENT MAXIMUM SLOPE IN ANY DIRECTION) SHALL BE PROVIDED AT THE BOTTOM AND TOP OF ALL HANDICAP RAMPS. THE TRAVEL PORTION OF ALL RAMPS SHALL HAVE COLORED RAMPS.

D. THE GRADE IN A HANDICAP PARKING SPACE SHALL NOT EXCEED 2.0 PERCENT IN ANY DIRECTION. ALL HANDICAP PARKING SPACES SHALL HAVE AN ACCESSIBLE ROUTE TO THE BUILDING ENTRY AS SHOWN ON THE DRAWINGS.

PERCEPTION
DESIGN GROUP, INC.
6901 SOUTH PIERCE STREET, SUITE 315 LITTLETON, CO 80128 303.232.8088
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

DATE	DESCRIPTION	REVISIONS
12/08/22	CITY COMMENTS	
07/07/22	INITIAL SUBMITTAL	

COVER SHEET

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET
C0.00

GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE CITY AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS. ALL REFERENCES TO PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE PLANS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, AND RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

3. UTILITY TRENCHES ARE TO BE SLOPED OR BRACED AND SHEETED AS NECESSARY TO FURNISH SAFE WORKING CONDITIONS FOR THE WORKMEN AND THE PROTECTION OF OTHER UTILITIES IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL HEALTH AND SAFETY RULES AND REGULATIONS.

4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS AND TO COORDINATE SUCH RELOCATIONS WITH THE APPROPRIATE UTILITY PROVIDER AND ALL AFFECTED PARTIES.

5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITY COMPANY/DISTRICT TO OBTAIN TEMPORARY POWER, TELEPHONE, AND WATER SERVICE DURING CONSTRUCTION. ALL COST FOR TEMPORARY SERVICES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

6. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE CITY AND ALL UTILITY COMPANIES/DISTRICTS INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL UTILITY RELOCATIONS, WHETHER SHOWN OR NOT SHOWN ON THE PLANS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

9. THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION FENCE PRIOR TO, AND THROUGHOUT CONSTRUCTION.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK AND INSPECTIONS AS REQUIRED BY THE CITY, STATE, OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH INSPECTION.

11. THE CONTRACTOR SHALL NOTIFY THE CITY AND LOCAL UTILITY COMPANIES/DISTRICTS AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.

12. THE CONTRACTOR SHALL NOTIFY THE CITY AND LOCAL UTILITY COMPANIES/DITRICTS AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.

14. INCLUDED IN THIS PACKAGE IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN IN THIS SET OF CONSTRUCTION DRAWINGS. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.

    COORDINATES PROVIDED ON THE DRAWING SHALL BE VERIFIED. ANY WORK DONE INCORRECTLY BASED UPON THE PROVIDED COORDINATES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND FIXED AT HIS OWN EXPENSE.

16. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO THE REQUIRED FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTIRCT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

17. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER, JERRY DAVIDSON AT 303-232-8088 IMMEDIATELY.

18. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL USE BENCHMARKS AND DATUMS SHOWN HEREON TO SET PROJECT BENCHMARK(S), BY RUNNING A LEVEL LOOP BETWEEN AT LEAST TWO BENCHMARKS, AND SHALL PROVIDE SURVEY NOTES OF SUCH TO PROJECT ENGINEER PRIOR TO COMMENCING CONSTRUCTION.

19. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

20. THE CONTRACTOR SHALL VERIFY ALL POINTS OF CONNECTION TO BUILDING UTILITIES BOTH HORIZONTAL AND VERTICAL PRIOR TO BEGINNING CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER AND ARCHITECT FOR RESOLUTION.

SITE/GRADING GENERAL NOTES

1. CONTOURS SHOWN REPRESENT FINISHED ELEVATIONS. ADJUSTMENT TO SUBGRADE FOR ALL STRUCTURES (IE PAVING, SIDEWALKS, SLABS, ETC) IS THE RESPONSIBILITY OF THE CONTRACTOR. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.

2. EXISTING SPOT ELEVATIONS AT MATCH POINTS WERE DERIVED FROM CONTOURS PROVIDED WITH THE SITE MAPPING AND ARE ANTICIPATED TO BE +/- AND SHALL BE VERIFIED PRIOR TO ANY CONSTRUCTION. ANY DEVIATION SHALL BE REPORTED TO THE ENGINEER.

3. PRIOR TO PLACING ANY CONCRETE CURB, GUTTER, PANS, AND ACCESSIBLE RAMPS, THE FORMWORK ELEVATIONS SHALL BE VERIFIED TO MEET ADA GRADE REQUIREMENTS. ANY WORK THAT DOES NOT COMPLY WITH THIS REQUIREMENT AND IS PLACED IN ERROR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. NO PROPOSED LANDSCAPED SLOPE SHALL EXCEED 3H:1V, OR AS SPECIFIED OTHERWISE BY LOCAL CODE.

5. [DELETED]

6. ALL LANDSCAPED AREAS ARE TO BE CONDITIONED PER THE REQUIREMENTS OF THE LANDSCAPE PLANS. ALL DISTURBED AREAS THAT ARE NOT DESIGNATED TO BE PAVED SHALL BE LANDSCAPED OR SEEDED ACCORDING TO THE LANDSCAPE PLAN(S) AND GRADING, EROSION AND SEDIMENT CONTROL PLAN(S).

7. ALL PROPOSED SPOT ELEVATIONS ARE FLOWLINE ELEVATIONS UNLESS OTHERWISE NOTED. SPOT ELEVATIONS TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. CONTRACTOR SHALL NOTIFY ENGINEER OF SPOT ELEVATIONS WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS AND SPECIFIC PROFILE DATA SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND GUTTER AND UTILITIES. THE CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.

8. ASPHALT GRADES SHALL NOT BE LESS THAN 1.80% IN THE DIRECTION OF FLOW OVER ADA ROUTES AND PARKING STALLS, AND SHALL NOT BE LESS THAN 2.00% IN ALL OTHER AREAS; CURB AND GUTTER AND CONCRETE PAN GRADES SHALL NOT BE LESS THAN 0.50% IN THE DIRECTION OF FLOW. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG ALL CURBS. PAVEMENT OR CURBS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. GRADES ON ADA PARKING STALLS AND ACCESSIBLE ROUTES SHALL NOT BE LESS THAN 1.8%.

9. HANDICAP PARKING STALLS SHALL BE PAINTED AND SIGNED IN ACCORDANCE WITH CURRENT ADA STANDARDS AND REGULATIONS AND THE DETAIL DRAWINGS.

10. HANDICAP RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA STANDARDS AND REGULATIONS.

11. THE FOLLOWING IS APPLICABLE TO ALL CONSTRUCTION WITHIN THE LIMITS OF THIS PROJECT:

    a. THE MAXIMUM CROSS SLOPE OF ANY SIDEWALK OR PEDESTRIAN ACCESS ROUTE SHALL BE 2.0%. THE SLOPE SHALL BE MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL.

    b. THE GRADE OF HANDICAP PARKING STALLS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. HANDICAP PARKING SHALL HAVE AN ACCESSIBLE ROUTE TO THE BUILDING ENTRY AS SHOWN ON THE DRAWINGS.

    c. HANDICAP ACCESSIBLE ROUTES SHALL HAVE A MAXIMUM LONGITUDINAL GRADE OF 5.0%. ACCESSIBLE ROUTES EXCEEDING 5.0% SHALL BE CONSTRUCTED WITH RAMPS AND HAND RAILS HAVING A MAXIMUM SLOPE OF 8.33% FOR A MAXIMUM RISE OF 30 INCHES. A 5-FOOT BY 5-FOOT LANDING PAD (WITH A 2 PERCENT MAXIMUM SLOPE IN ANY DIRECTION) SHALL BE CONSTRUCTED AT THE BOTTOM AND TOP OF ALL RAMP.

12. PRIOR TO PLACEMENT OF CURB AND PAVEMENT CONTRACTOR SHALL VERIFY COMPLIANCE WITH ADA STANDARDS.

13. IF DURING THE GRADING AND CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER, JERRY DAVIDSON AT 303-232-8088 IMMEDIATELY.

14. ALL GRATES, MANHOLE RIMS, VALVE BOXES, VALVE COVERS, CLEANOUTS, AND VAULT OR BOX COVERS SHALL BE ADJUSTED TO "AS CONSTRUCTED" FINISHED GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

15. ALL CONCRETE PAVEMENT, CONCRETE FLATWORK, CONCRETE STRUCTURES, AND CONCRETE UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE MATERIAL RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY ____.

16. CONCRETE PAVEMENT JOINTS SHALL MEET THE REQUIREMENTS OF CDOT STANDARDS AND SPECIFICATIONS, AND CDOT STANDARD PLAN NO. M-412-1, UNLESS NOTED OTHERWISE.

17. ALL SIGNING AND STRIPING WILL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL CODES.

18. REFER TO ARCHITECTURAL PLANS FOR BUILDING SIGNAGE LOCATIONS.

19. CONTRACTOR SHALL COORDINATE SIGNAGE PERMIT, INSTALLATION, AND SPECIFICATIONS WITH OWNER AND SIGNAGE MANUFACTURER.

20. DELETED.

21. REFER TO THE SITE PLAN FOR EXTENT OF PAVEMENT AND REFER TO GEOTECHNICAL REPORT (PREPARED SPECIFICALLY FOR THIS SITE) FOR PAVEMENT SECTIONS AND SPECIFICATIONS.

22. GRADES WITHIN ASPHALT PAVING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF THE DESIGN GRADE. HOWEVER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG CURBS. CURBS OR PAVEMENT AREAS WHICH DO NOT PROVIDE PROPER DRAINAGE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

23. THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL LANDSCAPED AND PAVED AREAS. SEE REQUIREMENTS IN THE GEOTECHNICAL REPORT PREPARED BY _____.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

25. IF ANY EXISTING STRUCTURES, SIDEWALK, AND/OR CURB AND GUTTER MODIFIED OR TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER PRIOR TO PROJECT CLOSE OUT.

26. THE CONTRACTOR SHALL PROTECT THE PROJECT BENCHMARK(S) THROUGHOUT CONSTRUCTION AND SET ADDITIONAL PROJECT BENCHMARKS AS NECESSARY TO MAINTAIN VERTICAL CONTROL THROUGHOUT THE DURATION OF THE PROJECT.

27. THE CONTRACTOR SHALL INSPECT AND REPAIR EXISTING DRAINAGE STRUCTURES AS NEEDED, AND CLEAN OUT EXISTING PIPES TO REMOVE ALL SILT AND DEBRIS.

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

THE TYPE, SIZE, LOCATION, AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ON THE SITE, AND OFFSITE IN WORK AREAS. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO DATE OF CONSTRUCTION. FOR INFORMATION CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) – 1- 800-922-1987. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.

PERCEPTION
DESIGN GROUP, INC.
6901 SOUTH PIERCE STREET, SUITE 315 LITTLETON, CO 80128 303.232.8088
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

	DATE	DESCRIPTION
1	07/07/22	INITIAL SUBMITTAL
2	12/08/22	CITY COMMENTS

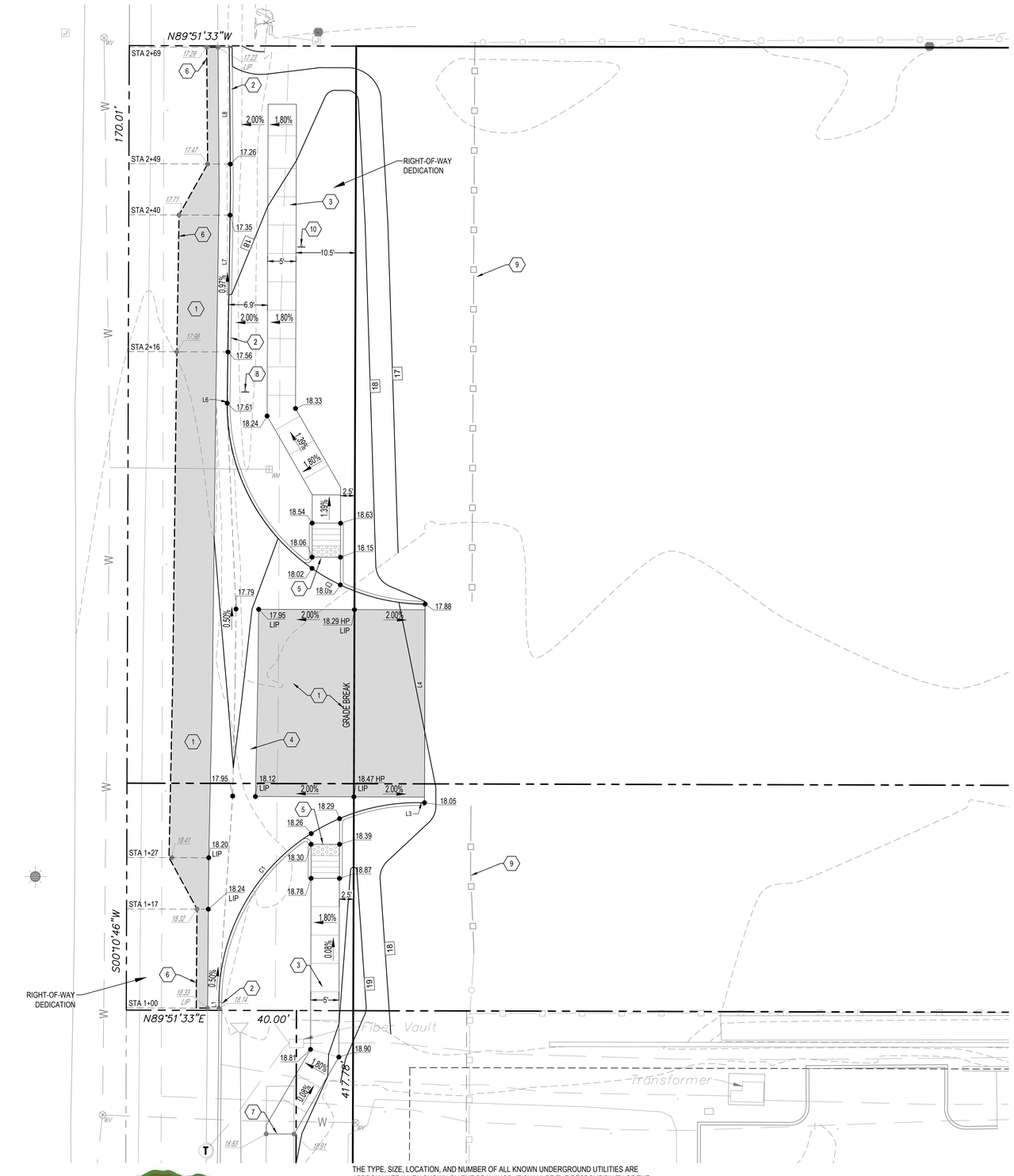
REVISIONS

GENERAL NOTES

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

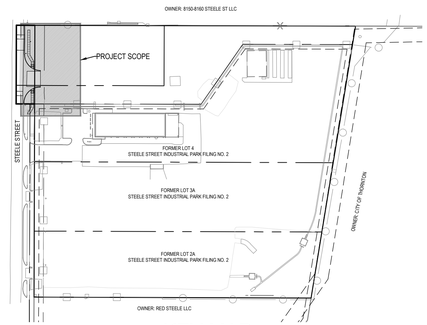
Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET
C0.01



CONSTRUCTION NOTES

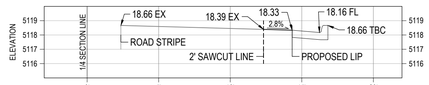
1. CONSTRUCT HEAVY DUTY ASPHALT PAVEMENT, MATCH DEPTH OF EXISTING PUBLIC ROAD PAVEMENT.
2. CONSTRUCT VERTICAL CURB WITH 2' GUTTER. SEE DETAIL FOR "VERTICAL CURB & GUTTER" ON SHEET C9.11.
3. CONSTRUCT 5' CONCRETE SIDEWALK. SEE DETAIL FOR "DETACHED WALK OR DRIVE TIE-IN" AND "CONTROL JOINT" ON SHEET C9.11.
4. CONSTRUCT 8' WIDE CROSSPAN. SEE DETAIL ON SHEET C9.11.
5. CONSTRUCT CURB RAMP WITH DETECTABLE WARNING. SEE DETAIL FOR "PARALLEL CURB RAMP (TYPE B)" ON SHEET 9.10.
6. SAWCUT PAVEMENT AS SHOWN, 2' AND 7' OFF PROPOSED CONCRETE LIP. DISPOSE OF OFF SITE. PATCH BACK WITH SAME DEPTH.
7. SAWCUT SIDEWALK AT LEAST 8.5' FROM THE END OF THE EXISTING WALK TO THE NEXT JOINT AND MATCH EXISTING SIDEWALK.
8. RELOCATE / REPLACE EXISTING SPEED LIMIT (R2-1) SIGN. SEE DETAIL ON SHEET 9.11.
9. CONSTRUCT STEEL PICKET FENCE. MATCH FENCE ON ADJACENT LOT SOUTH.
10. INSTALL SIDEWALK ENDS SIGN. SEE DETAIL ON SHEET 9.11.



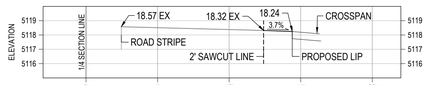
KEY MAP

Parcel Line and Curve Table

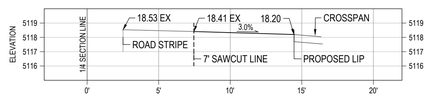
Line #/Curve #	Length	Bearing/Delta	Radius
C1	54.81'	89°43'44"	35.00
C2	55.30'	90°31'11"	35.00
L1	1.50	N0°27'02"E	
L3	1.11	S89°49'14"E	
L4	35.00	N0°10'46"E	
L6	0.57	N0°41'57"E	
L7	36.92	N0°53'59"E	
L8	25.25	N0°27'27"W	



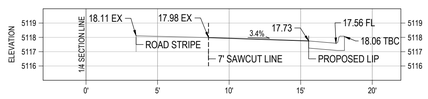
SOUTHERN TIE-IN (STA 1+00.0)



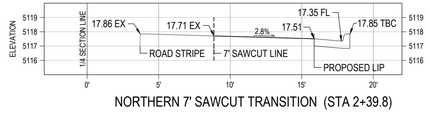
SOUTHERN 2' SAWCUT TRANSITION (STA 1+17.4)



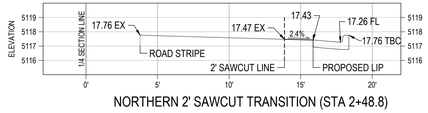
SOUTHERN 7' SAWCUT TRANSITION (STA 1+26.5)



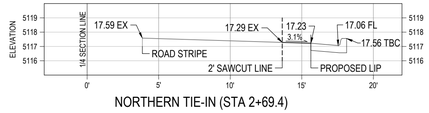
CURB LINE GRADE BREAK (STA 2+15.7)



NORTHERN 7' SAWCUT TRANSITION (STA 2+39.8)



NORTHERN 2' SAWCUT TRANSITION (STA 2+48.8)



NORTHERN TIE-IN (STA 2+69.4)

BENCHMARK

NGS BENCHMARK "E 392"

LOCATED AT THE JUNCTION OF THE UNION PACIFIC RAILROAD AND EAST 72ND AVENUE, 219.8 FEET NORTHEAST OF THE CENTERLINE OF THE AVENUE, 28.2 FEET SOUTHEAST OF THE NEAR RAIL.

ELEVATION = 5133.10 FEET (NAVD 1988)

GRAPHIC SCALE

10 0 5 10 20

1 INCH = 10 FEET

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

THE TYPE, SIZE, LOCATION, AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ON THE SITE, AND OFFSITE IN WORK AREAS. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO DATE OF CONSTRUCTION. FOR INFORMATION CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) – 1- 800-922-1987. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.

PERCEPTION DESIGN GROUP, INC.
6991 SOUTH PIERCE STREET, SUITE 315, LITTLETON, CO 80128 303.233.6888
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

REVISIONS		
DESCRIPTION	DATE	
INITIAL SUBMITTAL	07/07/22	
CITY COMMENTS	12/08/22	

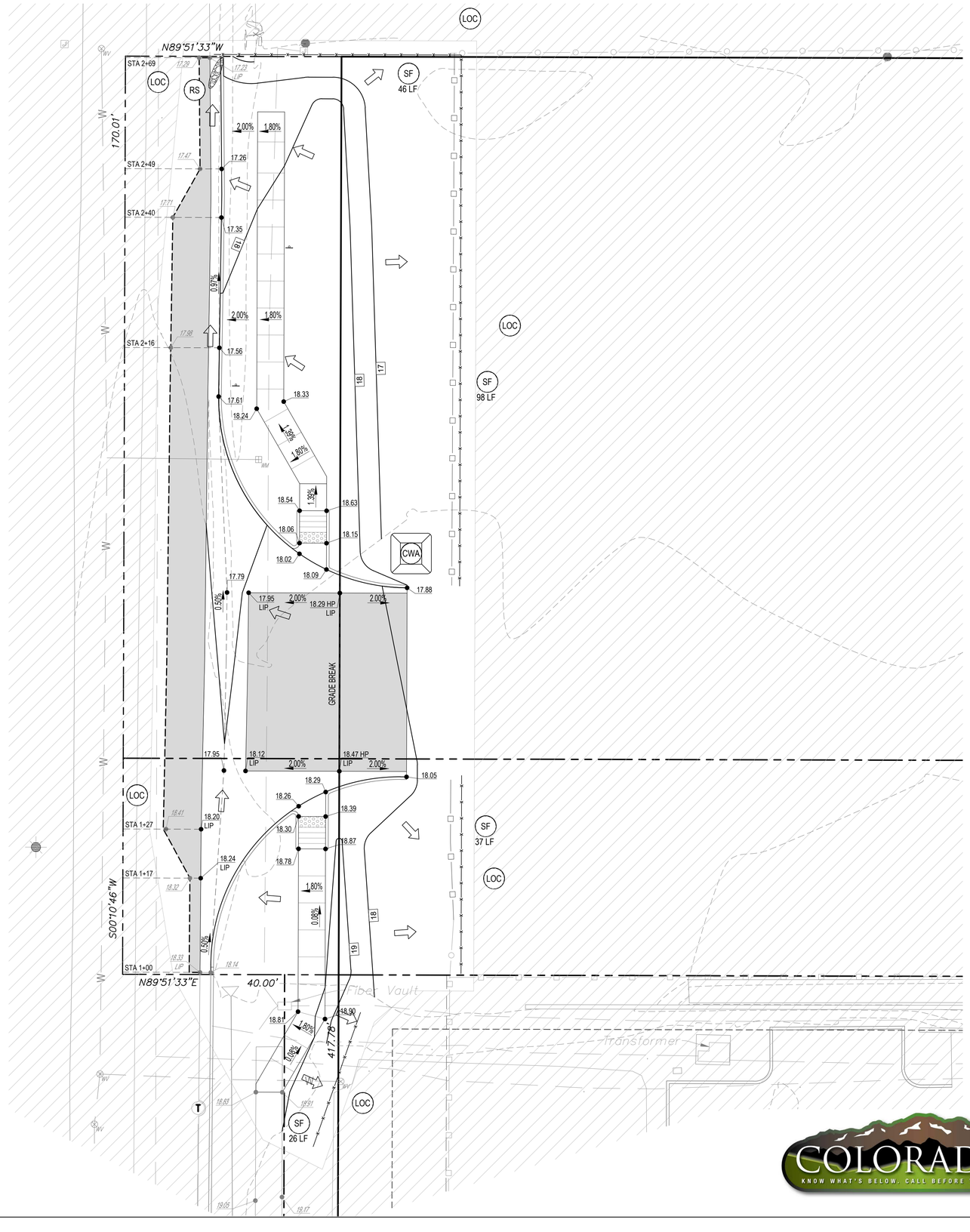
SITE AND GRADING PLAN

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET

C3.10



LEGEND

- SF — SILT FENCE — SEE DETAIL ON SHEET C5.90
- CWA — CONCRETE WASHOUT AREA — SEE DETAIL ON SHEET C5.91
- RS — ROCK SOCK — SEE DETAIL ON SHEET C5.91
- UN-DISTURBED AREA / DISTURBED AREA — LOC — LIMITS OF CONSTRUCTION
- FLOW DIRECTION

BENCHMARK

NGS BENCHMARK "E 392"

LOCATED AT THE JUNCTION OF THE UNION PACIFIC RAILROAD AND EAST 72ND AVENUE, 219.8 FEET NORTHEAST OF THE CENTERLINE OF THE AVENUE, 28.2 FEET SOUTHEAST OF THE NEAR RAIL.

ELEVATION = 5133.10 FEET (NAVD 1988)

NOTE: ELEVATIONS SHOWN ARE FLOWLINE UNLESS DESIGNATED OTHERWISE.

COLORADO 811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

THE TYPE, SIZE, LOCATION, AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ON THE SITE, AND OFFSITE IN WORK AREAS. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO DATE OF CONSTRUCTION. FOR INFORMATION CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) – 1- 800-922-1987. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.

GRAPHIC SCALE

10 0 5 10 20

1 INCH = 10 FEET

PERCEPTION DESIGN GROUP, INC.
6901 SOUTH PIERCE STREET, SUITE 315 · LITTLETON, CO 80128 · 303.233.6868
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

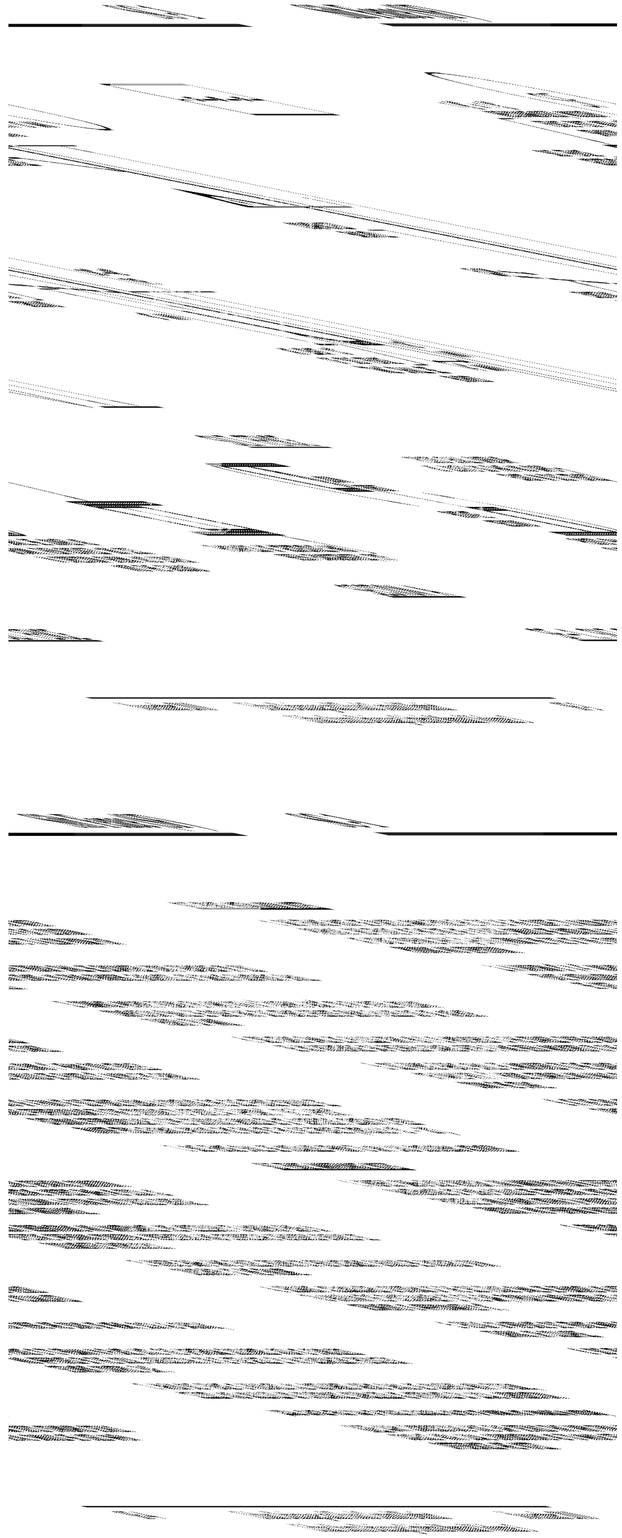
DATE	DESCRIPTION	REVISIONS
07/07/22	INITIAL SUBMITTAL	
12/08/22	CITY COMMENTS	

EROSION CONTROL PLAN

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET
C5.10



PERCEPTION
DESIGN GROUP, INC.
6991 SOUTH PIERCE STREET, SUITE 315, LITTLETON, CO 80128 303.233.6888
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

	DATE	DESCRIPTION
1	12/08/22	CITY COMMENTS
0	07/07/22	INITIAL SUBMITTAL

REVISIONS

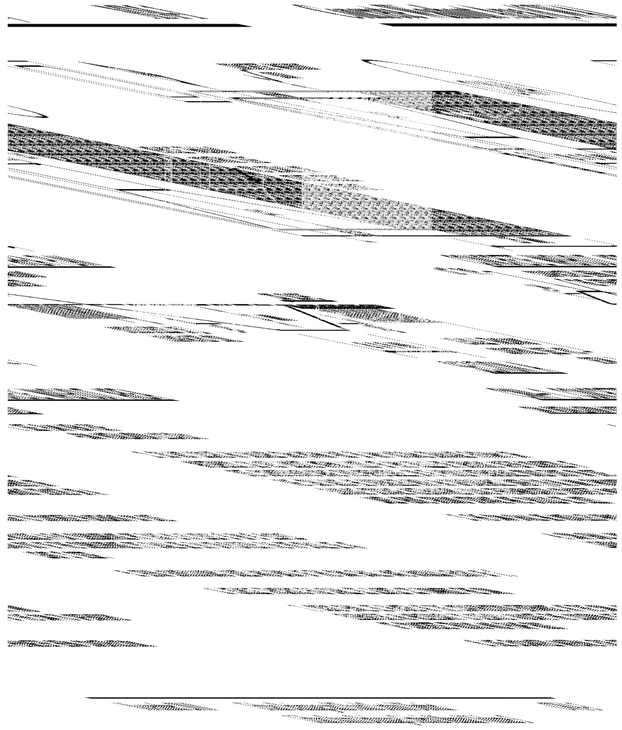
EROSION CONTROL DETAILS

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET

C5.90



PERCEPTION
DESIGN GROUP, INC.
6991 SOUTH PIERCE STREET | SUITE 315 | LITTLETON, CO 80128 | 303.233.6868
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

	DATE	DESCRIPTION
1	12/08/22	CITY COMMENTS
0	07/07/22	INITIAL SUBMITTAL

REVISIONS

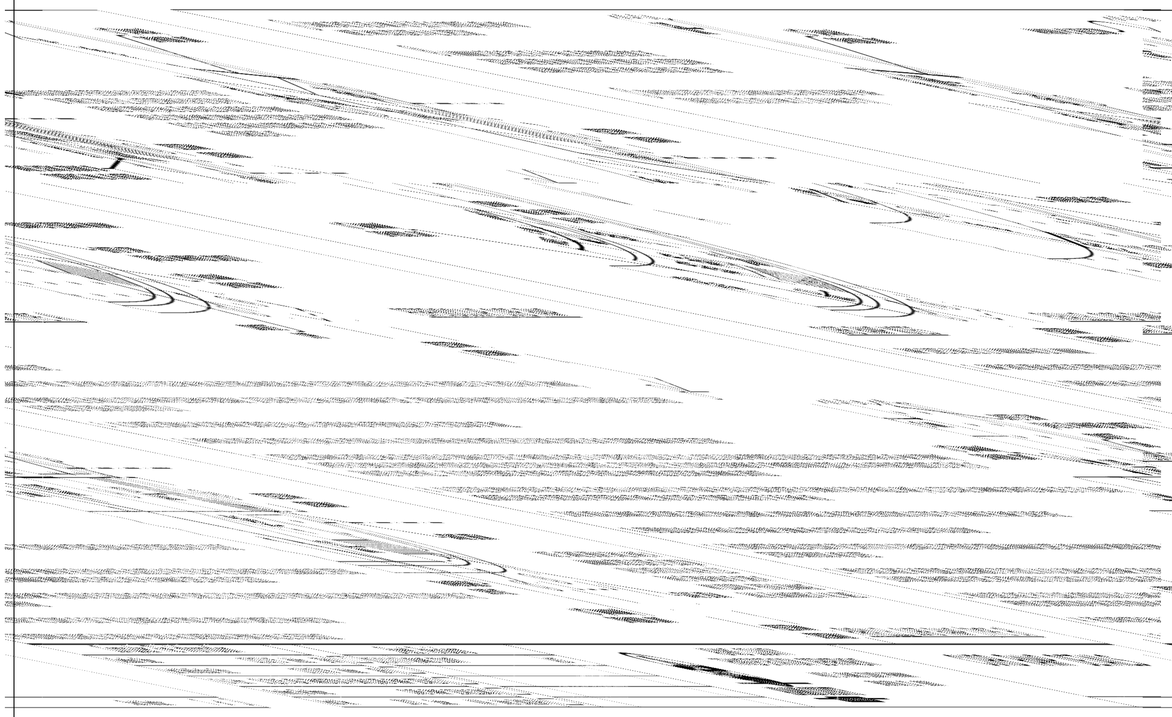
EROSION CONTROL DETAILS

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

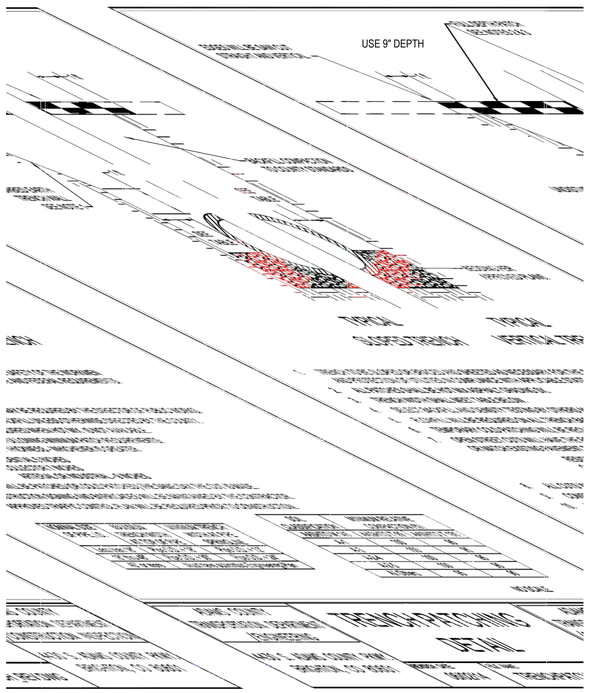
Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET

C5.91



PAVEMENT PATCH BACK - IGNORE TRENCH PORTION



DETECTABLE WARNINGG NOTE

DETECTABLE WARNING BRICKS ARE NOT ACCEPTABLE. PROVIDE CAST IRON DETECTABLE WARNING PLATES.

CONCRETE NOTE

4500 PSI CONCRETE WITH FIBER MESH WILL BE REQUIRED. ALL CONCRETE WILL BE POURED MONOLITHICALLY.

PERCEPTION
DESIGN GROUP, INC.
6991 SOUTH PIERCE STREET | SUITE 315 | LITTLETON, CO 80128 | 303.224.9888
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

	DATE	DESCRIPTION
1	12/08/22	CITY COMMENTS
0	07/07/22	INITIAL SUBMITTAL

REVISIONS

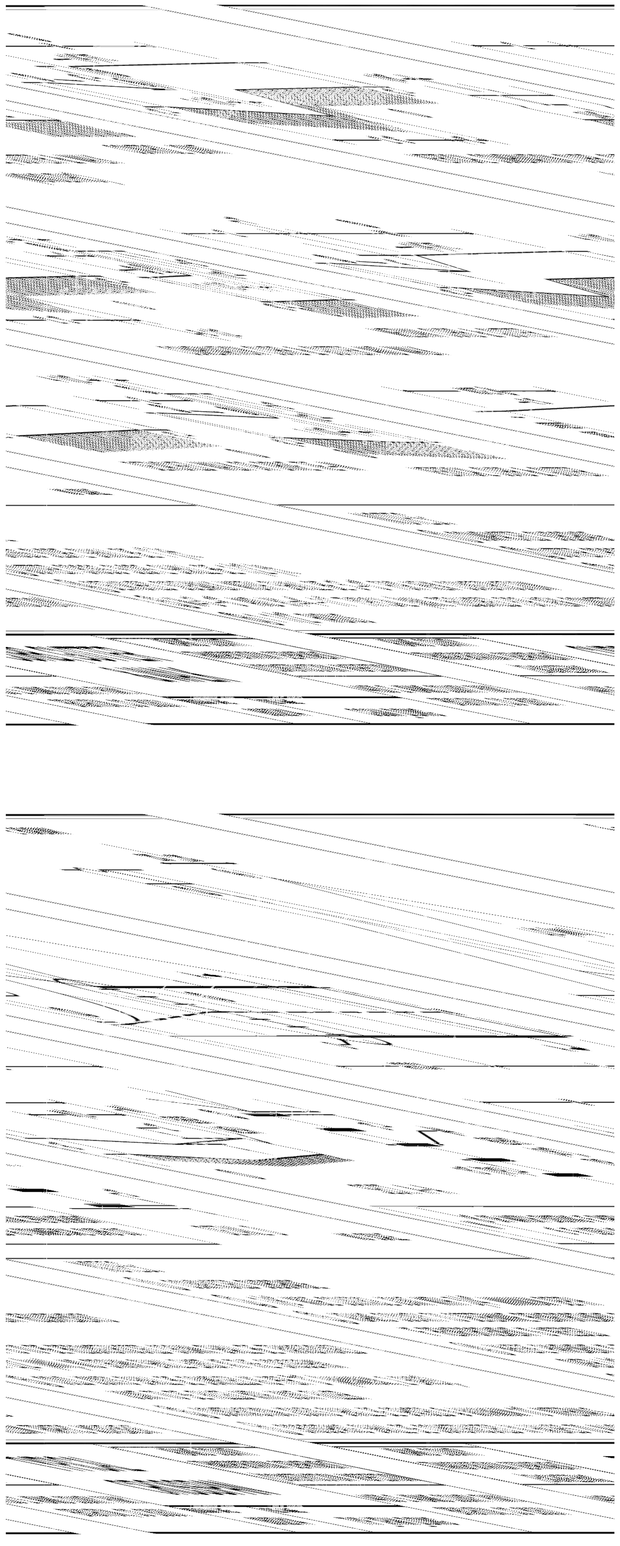
CONSTRUCTION DETAILS

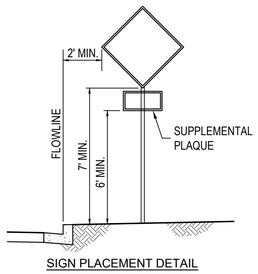
DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

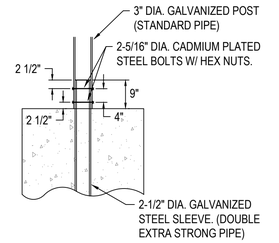
SHEET

C9.10





SIGN PLACEMENT DETAIL



BASE DETAIL IN LAWN OR LANDSCAPED AREAS

R8-31

PROVIDE TRAFFIC CONTROL SIGNS COMPLYING WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S MANUAL "UNIFORM TRAFFIC CONTROL DEVICES", AND LOCAL CODES.

SITE SIGNAGE DETAILS

NOT TO SCALE

PERCEPTION
DESIGN GROUP, INC.
6901 SOUTH PIERCE STREET, SUITE 315 · LITTLETON, CO 80128 · 303.233.6888
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

DATE	DESCRIPTION
12/08/22	CITY COMMENTS
07/07/22	INITIAL SUBMITTAL

REVISIONS

CONSTRUCTION DETAILS

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET

C9.11

FINAL DRAINAGE REPORT
DTI TRUCKS

PREPARED FOR:

DTI HOLDINGS LLC
8955 W 44TH AVE
WHEAT RIDGE, CO 80033

6901 SOUTH PIERCE STREET, SUITE 315
LITTLETON, CO 80128
CONTACT: JERRY W. DAVIDSON, P.E.
(303) 232-8088

JOB #2022-013

MAY 11, 2023

ENGINEER'S STATEMENT

I hereby attest that this report for the Final drainage design of DTI Trucks, was prepared by me, or under my direct supervision, in accordance with the provisions of the *Weld County Engineering and Construction Guidelines* for the responsible parties thereof.

_____

Jerry W. Davidson, P.E.
Colorado Registration No. 30226
For and on behalf of Perception Design Group, Inc.

Table of Contents

Table of Contents (cont'd)

List of Tables

List of Figures

List of Appendices

Section 1: GENERAL LOCATION & DESCRIPTION

1.1 Purpose

The purpose of this report is to analyze the DTI Trucks property in its present condition to determine the adequacy of the existing on-site detention facility. This report serves as an addendum to the original approved report for the property entitled “Final Drainage Report For DTI Holdings LLC 8040 Steele Street Lots 2A, 3A, 4 Steele Street Industrial Park Filing No. 2 Part Of SW ¼ SE ¼ SEC 25, T2S, R68W Adams County Colorado” prepared by Western Engineering Consultants (WEC), Inc, LLC and dated December 30, 2015.

1.2 Site Location

The DTI Trucks project shown on Figure 1, is located in an unincorporated part of Adams County. The Project Site is currently developed with a building and parking lot used for commercial truck sales and service. The site is bounded to the south by industrial development, to the east by a reservoir, to the north by industrial development and to the west by Steele Street.

The project consists of Lot 1, Block 1, Steele Street Industrial Park Filing No. 3, a parcel located in the Southeast ¼ of Section 25, Township 2 South, Range 68 West of the 6th P.M., Adams County, Colorado. Lot 1 indicated above includes the original lots 2A, and 3A of Steele Street Industrial Park Filing No. 2 and Lot 4 of Steele Street Industrial Park referenced in the original report as well as two additional parcels north of Lot 4.

Figure 1: Vicinity Map (not to scale)

1.3 Description of Property

The site is developed with unpaved parking areas used for vehicle storage as well as paved portions and a building. Minimal landscaped areas are present. Site access is from curb cuts on Steele Street.

1.4 Existing Conditions

The Site encompasses approximately 8.7± acres of developed property. Existing topography has a gradual gradient from northwest to southeast. There is a drainage gutter that runs north-south along the east property line which accepts site runoff and conveys it southerly to the existing detention facility at the southeast corner of the site. The entirety of the site lies within flood zone X.

1.4.1 Soil Types

Natural Resource Conservation Service (NRCS) depict the Site soils to be in hydrological soils group A and C, Table 1 and Figure 2. Soil type C is noted by the NRCS as being well drained when wetted.

Map Unit Symbol	Hydrological Soils Group	Percent of AOI
NuA	C	97%
Tc	A	3%

Table 1: **Hydrological Soil Group Summary** (Courtesy NRCS Web Soil Survey Website)

Figure 2: **NRCS Soil Map** (Courtesy NRCS Web Soil Survey Website)

1.4.2 Existing Irrigation and Major Drainage

There are no known wetlands, irrigation facilities or jurisdictional waters on the site. The site is traversed by a drainage channel along the south property line. The ultimate receiving water is the South Platte River located to the east of the project site.

1.4.3 Existing Drainage

Direct runoff from the site drains by overland sheet flow generally from northwest to southeast to a channel running parallel to the eastern property line. There is an existing detention and water quality facility at the southeast corner of the site.

1.4.4 History of Flooding

The entirety of the site lies within flood zone X.

Section 2: MAJOR DRAINAGE BASINS & SUB-BASINS

2.1 Major Basin

The Project Site is not traversed by a major drainage way. The ultimate receiving water is the South Platte River located to the east of the project site.

The Project Site is shown on Flood Insurance Rate Maps (FIRM) 08001C0602H, Effective March 5, 2007, and 08001C0604H, Effective March 5, 2007 Figure 3. The site is shown to be in Zone X Flood Areas on this FIRM map. Zone X Flood Areas are “Areas of Minimal Flood Hazard”.

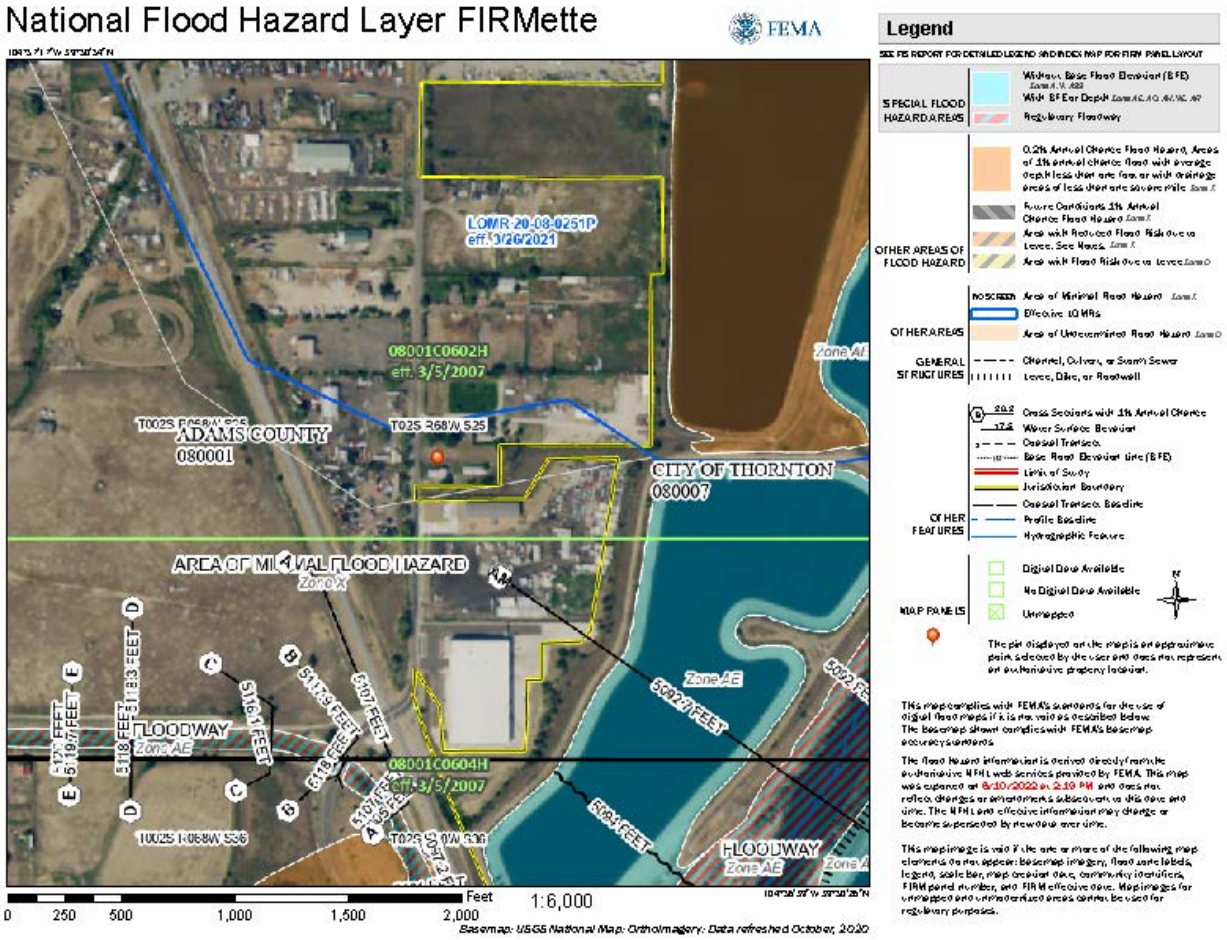


Figure 3: FIRM Map, Panel 08001C0602H, Effective March 5, 2007 (Courtesy FEMA)

Direct Runoff in the major basin drains from the southwest to northeast.

The basin in the area of the project is developed with a mixed use of residential, commercial, and industrial land. Predominate land use in the vicinity of the site is industrial development.

2.2 Sub-Basins

As previously indicated direct runoff from the site drains by overland sheet flow from the northwest to the southeast and discharges into the existing detention basin. The existing site is analyzed as a single basin with limits defined more or less by the property line and designated as DEV for “developed site”. The developed site is analyzed as a single basin used to quantify detention and water quality requirements for the site as a whole.

Section 3: DRAINAGE DESIGN CRITERIA

3.1 Regulations

Onsite drainage design will adhere to Adams County Development Standards and Regulations and Urban Storm Drainage Criteria Manual. Proposed drainage concepts and patterns will adhere to existing drainage patterns.

3.2 Hydrologic Criteria

As the purpose of this report is to analyze existing detention and water quality improvements only, detailed runoff calculations are not needed. The site is divided into areas of various ground cover to determine site imperviousness for detention calculations.

Table 6.3 Recommended Percent Impervious Values and Table 6-5 Runoff Coefficients, from MHFD Volume I standards were referenced to determine Site drainage hydrology with the following deviation. Large portions of the site are compacted gravel / roadbase. MHFD Table calls for 40% imperviousness for this material. In our experience, there is a potential for greater imperviousness for this material when heavily compacted. As such, a value of 80% is selected which also matches suggested imperviousness for light industrial areas.

Sub- Basin	Percent Impervious (%)	Runoff Coefficient 5-year	Runoff Coefficient 100-year
DEV	73.47 %	0.64	0.78

Table 2: **Percent Impervious & Runoff Coefficients**

3.3 Hydraulic Criteria

There is no proposed storm sewer on the site.

3.4 Detention Criteria

The criteria used for detention and water quality analysis is the MHFD Full Spectrum method as presented on the MHFD Detention v4-06 spreadsheet. Rainfall data location is selected as Commerce City Civic Center as the closest available location.

3.5 Waivers

No waivers are requested as part of this analysis.

Section 4: DRAINAGE FACILITY DESIGN

4.1 Detention and Water Quality Analysis

The original approved WEC report calls for detention and water quality provision for basins L2A1, L2A2, L3A, and L4 as illustrated on the WEC Developed Drainage Plan. The report indicates that 6.88 acres are tributary to the detention facility with an imperviousness of 76.0%. WEC calculations indicate that a total detention and water quality volume required is 44,447 cubic feet which includes 50% water quality volume.

The current site analysis is presented in a single basin noted as DEV. This basin includes basins L2A1, L2A2, L3A, and L4 from the WEC study as well as additional area to the north added to the property via re-plat. Land area currently tributary to the existing pond is 8.49 acers at 73.47% impervious. When entered into the MHFD spreadsheet, required 100 year volume is 42,907 cubic feet. As-built pond volume provided at overflow is 50,618 cubic feet. Additional volume is not added for water quality per MHFD recommendations. In order to bring the existing pond into full compliance, a new orifice plate is required to control outfalls to required rates.

Section 5: CONCLUSIONS

The existing pond has adequate volume for the current site conditions. A new orifice plate is required to bring the release rates into compliance with current requirements. The project was analyzed in accordance with Mile High Flood District's criteria.

Table of Contents (cont'd)

References

1. *Adams County Development Standards and Regulations.*
2. *Urban Storm Drainage Criteria Manual, Vol. 1 and Vol. 2*, Mile High Flood District, 2016.
3. *Urban Storm Drainage Criteria Manual, Vol. 3*, Mile High Flood District, November 2010.
4. *US Department of Agriculture Web Soil Survey*, Custom Soil Resource Report Larimer County Area, Colorado.
5. *Federal Emergency Management Agency, Firmett Web Service, Flood Insurance Rate Map*
6. *Final Drainage Report for DTI Holdings LLC*, Western Engineering Consultants (WEC), Inc, LLC and dated December 30, 2015

Appendix A: HYDROLOGY

Table 6-3. Recommended percentage imperviousness values

Land Use or Surface Characteristics	Percentage Imperviousness (%)
Business:	
Downtown Areas	95
Suburban Areas	75
Residential lots (lot area only)**:**	
Single-family	
2.5 acres or larger	12
0.75 – 2.5 acres	20
0.25 – 0.75 acres	30
0.25 acres or less	45
Apartments	75
Industrial:	
Light areas	80
Heavy areas	90
Parks, cemeteries	10
Playgrounds	25
Schools	55
Railroad yard areas	50
Undeveloped Areas:	
Historic flow analysis	2
Greenbelts, agricultural	2
Off-site flow analysis (when land use not defined)	45
Streets:	
Paved	100
Gravel (packed)	40
Drive and walks	90
Roofs	90
Lawns, sandy soil	2
Lawns, clayey soil	2

Table 6-5. Runoff coefficients, *c* (continued)

Total or Effective % Impervious	NRCS Hydrologic Soil Group C						
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	500-Year
2%	0.01	0.05	0.15	0.33	0.40	0.49	0.59
5%	0.03	0.08	0.17	0.35	0.42	0.5	0.6
10%	0.06	0.12	0.21	0.37	0.44	0.52	0.62
15%	0.1	0.16	0.24	0.4	0.47	0.55	0.64
20%	0.14	0.2	0.28	0.43	0.49	0.57	0.65
25%	0.18	0.24	0.32	0.46	0.52	0.59	0.67
30%	0.22	0.28	0.35	0.49	0.54	0.61	0.68
35%	0.26	0.32	0.39	0.51	0.57	0.63	0.7
40%	0.3	0.36	0.43	0.54	0.59	0.65	0.71
45%	0.34	0.4	0.46	0.57	0.62	0.67	0.73
50%	0.38	0.44	0.5	0.6	0.64	0.69	0.75
55%	0.43	0.48	0.54	0.63	0.66	0.71	0.76
60%	0.47	0.52	0.57	0.65	0.69	0.73	0.78
65%	0.51	0.56	0.61	0.68	0.71	0.75	0.79
70%	0.56	0.61	0.65	0.71	0.74	0.77	0.81
75%	0.6	0.65	0.68	0.74	0.76	0.79	0.82
80%	0.65	0.69	0.72	0.77	0.79	0.81	0.84
85%	0.7	0.73	0.76	0.79	0.81	0.83	0.86
90%	0.74	0.77	0.79	0.82	0.84	0.85	0.87
95%	0.79	0.81	0.83	0.85	0.86	0.87	0.89
100%	0.83	0.85	0.87	0.88	0.89	0.89	0.9

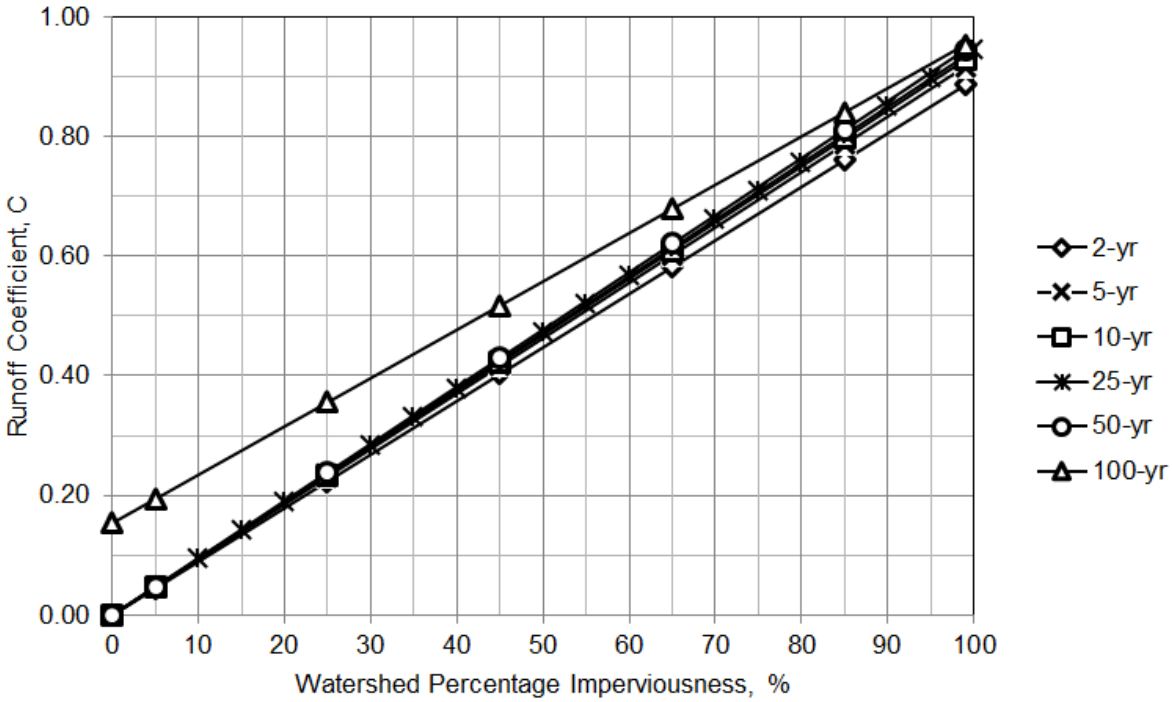


Figure 6-1. Runoff coefficient vs. watershed imperviousness NRCS HSG A

Perception Design Group, Inc.
6901 South Pierce Street, Suite 315
Littleton, Colorado 80128
(303) 232-8088 Fax (303) 232-5255

Designed by: JWD
Date: 12-May-23
Job Number: 2022-013

Project: DTI Trucks

COMPOSITE RUNOFF COEFFICIENTS

	ROOF		ROADBASE		PAVEMENT		LANDSCAPING				
Catchment	Area (Ac.)	C	Area (Ac.)	C	Area (Ac.)	C	Area (Ac.)	C	Composite C	Catchment Area (Ac.)	Imperviousness
	Imperviousness = 90%	0.90	Imperviousness = 80%	0.80	Imperviousness = 100%	1.00	Imperviousness = 2%	0.02			
Developed Site (5-Year)	**0.22**	**0.77**	**6.45**	**0.69**	**0.86**	**0.85**	**0.96**	**0.05**	**0.64**	**8.49**	
Developed Site (100-Year)	**0.22**	**0.85**	**6.45**	**0.81**	**0.86**	**0.89**	**0.96**	**0.49**	**0.78**	**8.49**	**73.47%**

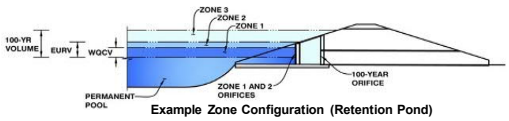
Appendix B: DETENTION AND WATER QUALITY

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.06 (July 2022)

Project: DTI Trucks

Basin ID: Entire Site



Example Zone Configuration (Retention Pond)

Watershed Information

Selected BMP Type =	EDB	
Watershed Area =	8.49	acres
Watershed Length =	780	ft
Watershed Length to Centroid =	390	ft
Watershed Slope =	0.010	ft/ft
Watershed Imperviousness =	73.47%	percent
Percentage Hydrologic Soil Group A =	3.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	97.0%	percent
Target WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depths =	Commerce City - Civic Center	

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

		Optional User Overrides	
Water Quality Capture Volume (WQCV) =	0.206		acre-feet
Excess Urban Runoff Volume (EURV) =	0.614		acre-feet
2-yr Runoff Volume (P1 = 0.84 in.) =	0.396		inches
5-yr Runoff Volume (P1 = 1.12 in.) =	0.566		inches
10-yr Runoff Volume (P1 = 1.37 in.) =	0.734		inches
25-yr Runoff Volume (P1 = 1.75 in.) =	1.019		inches
50-yr Runoff Volume (P1 = 2.08 in.) =	1.256		inches
100-yr Runoff Volume (P1 = 2.43 in.) =	1.522		inches
500-yr Runoff Volume (P1 = 3.35 in.) =	2.194		inches
Approximate 2-yr Detention Volume =	0.387		acre-feet
Approximate 5-yr Detention Volume =	0.565		acre-feet
Approximate 10-yr Detention Volume =	0.680		acre-feet
Approximate 25-yr Detention Volume =	0.811		acre-feet
Approximate 50-yr Detention Volume =	0.881		acre-feet
Approximate 100-yr Detention Volume =	0.985		acre-feet

Define Zones and Basin Geometry

Zone 1 Volume (WQCV) =	0.206	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.408	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2) =	0.370	acre-feet
Total Detention Basin Volume =	0.985	acre-feet
Initial Surcharge Volume (ISV) =	user	ft^3
Initial Surcharge Depth (ISD) =	user	ft
Total Available Detention Depth (H_{total}) =	user	ft
Depth of Trickle Channel (H_{TC}) =	user	ft
Slope of Trickle Channel (S_{TC}) =	user	ft/ft
Slopes of Main Basin Sides (S_{main}) =	user	H:V
Basin Length-to-Width Ratio ($R_{L/W}$) =	user	

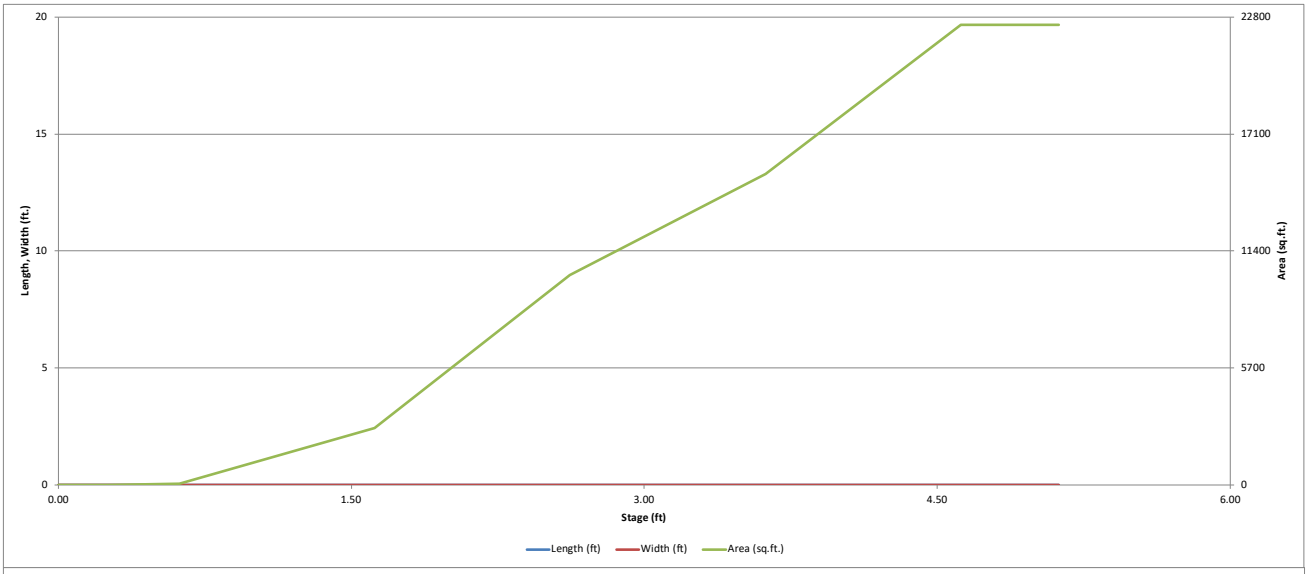
Initial Surcharge Area (A_{ISV}) =	user	ft^2
Surcharge Volume Length (L_{ISV}) =	user	ft
Surcharge Volume Width (W_{ISV}) =	user	ft
Depth of Basin Floor (H_{FLOOR}) =	user	ft
Length of Basin Floor (L_{FLOOR}) =	user	ft
Width of Basin Floor (W_{FLOOR}) =	user	ft
Area of Basin Floor (A_{FLOOR}) =	user	ft^2
Volume of Basin Floor (V_{FLOOR}) =	user	ft^3
Depth of Main Basin (H_{MAIN}) =	user	ft
Length of Main Basin (L_{MAIN}) =	user	ft
Width of Main Basin (W_{MAIN}) =	user	ft
Area of Main Basin (A_{MAIN}) =	user	ft^2
Volume of Main Basin (V_{MAIN}) =	user	ft^3
Calculated Total Basin Volume (V_{total}) =	**user**	acre-feet

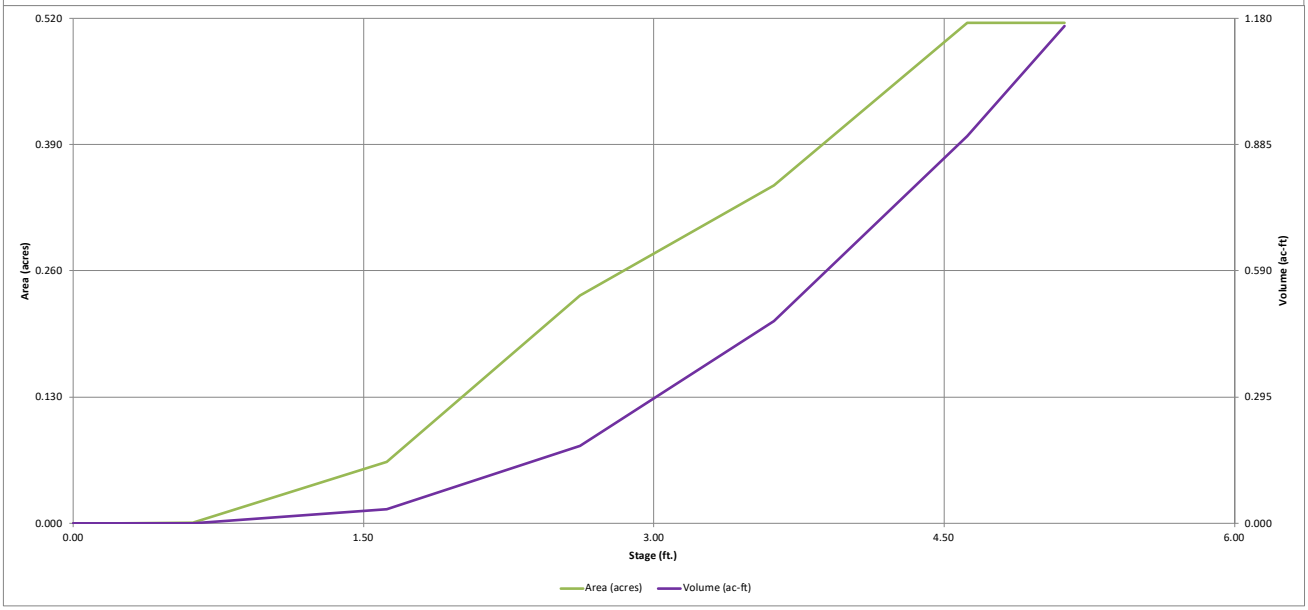
Depth Increment = ft

Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft^2)	Optional Override Area (ft^2)	Area (acre)	Volume (ft^3)	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	0	0.000		
Plan 5106.63	--	0.25	--	--	--	0	0.000	0	0.000
Plan 5107	--	0.62	--	--	--	34	0.001	6	0.000
Plan 5108	--	1.62	--	--	--	2,765	0.063	1,406	0.032
Plan 5109	--	2.62	--	--	--	10,219	0.235	7,898	0.181
Plan 5110	--	3.62	--	--	--	15,166	0.348	20,590	0.473
Plan 5111	--	4.62	--	--	--	22,449	0.515	39,398	0.904
Plan 5111.5	--	5.12	--	--	--	22,449	0.515	50,622	1.162

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.06 (July 2022)



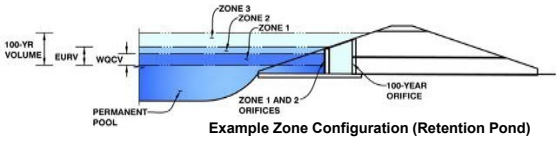


DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)

Project: **DTI Trucks**

Basin ID: **Entire Site**



Example Zone Configuration (Retention Pond)

	Estimated Stage (ft)	Estimated Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	2.73	0.206	Orifice Plate
Zone 2 (EURV)	4.00	0.408	Orifice Plate
Zone 3 (100-year)	4.78	0.370	Weir&Pipe (Restrict)
Total (all zones)		0.985	

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth =	N/A	ft (distance below the filtration media surface)	Underdrain Orifice Area =	N/A	ft^2
Underdrain Orifice Diameter =	N/A	inches	Underdrain Orifice Centroid =	N/A	feet

Calculated Parameters for Underdrain

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Centroid of Lowest Orifice =	0.00	ft (relative to basin bottom at Stage = 0 ft)	WQ Orifice Area per Row =	N/A	ft^2
Depth at top of Zone using Orifice Plate =	4.00	ft (relative to basin bottom at Stage = 0 ft)	Elliptical Half-Width =	N/A	feet
Orifice Plate: Orifice Vertical Spacing =	N/A	inches	Elliptical Slot Centroid =	N/A	feet
Orifice Plate: Orifice Area per Row =	N/A	sq. inches	Elliptical Slot Area =	N/A	ft^2

Calculated Parameters for Plate

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	1.33	2.67					
Orifice Area (sq. inches)	0.79	0.79	1.77					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

	Not Selected	Not Selected			Not Selected	Not Selected	
Invert of Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)	Vertical Orifice Area =	N/A	N/A	ft^2
Depth at top of Zone using Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)	Vertical Orifice Centroid =	N/A	N/A	feet
Vertical Orifice Diameter =	N/A	N/A	inches				

Calculated Parameters for Vertical Orifice

User Input: Overflow Weir (Dropbox with Flat or Sloped Grate and Outlet Pipe OR Rectangular/Trapezoidal Weir and No Outlet Pipe)

	Zone 3 Weir	Not Selected			Zone 3 Weir	Not Selected	
Overflow Weir Front Edge Height, Ho =	4.00	N/A	ft (relative to basin bottom at Stage = 0 ft)	Height of Grate Upper Edge, H_t =		N/A	feet
Overflow Weir Front Edge Length =	4.00	N/A	feet	Overflow Weir Slope Length =		N/A	feet
Overflow Weir Grate Slope =		N/A	H:V	Grate Open Area / 100-yr Orifice Area =		N/A	
Horiz. Length of Weir Sides =	4.00	N/A	feet	Overflow Grate Open Area w/o Debris =		N/A	ft^2
Overflow Grate Type =		N/A		Overflow Grate Open Area w/ Debris =		N/A	ft^2
Debris Clogging % =	0%	N/A	%				

Calculated Parameters for Overflow Weir

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

	Zone 3 Restrictor	Not Selected			Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	0.00	N/A	ft (distance below basin bottom at Stage = 0 ft)	Outlet Orifice Area =	0.68	N/A	ft^2
Outlet Pipe Diameter =	30.00	N/A	inches	Outlet Orifice Centroid =	0.29	N/A	feet
Restrictor Plate Height Above Pipe Invert =	5.88		inches	Half-Central Angle of Restrictor Plate on Pipe =	0.92	N/A	radians

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate

User Input: Emergency Spillway (Rectangular or Trapezoidal)

Spillway Invert Stage=		ft (relative to basin bottom at Stage = 0 ft)	Spillway Design Flow Depth=	feet
Spillway Crest Length =		feet	Stage at Top of Freeboard =	feet
Spillway End Slopes =		H:V	Basin Area at Top of Freeboard =	acres
Freeboard above Max Water Surface =		feet	Basin Volume at Top of Freeboard =	acre-ft

Calculated Parameters for Spillway

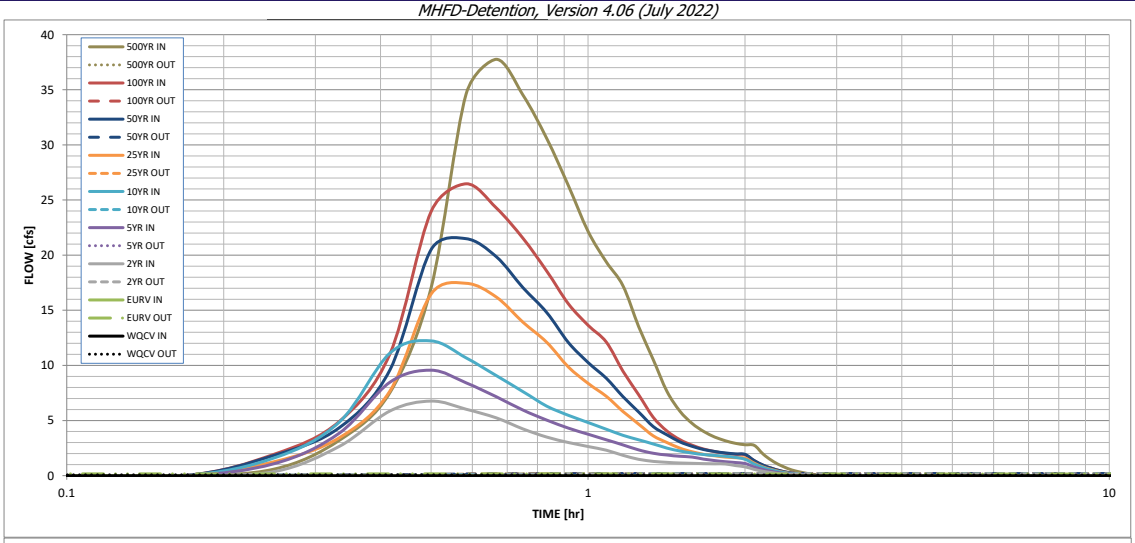
Routed Hydrograph Results

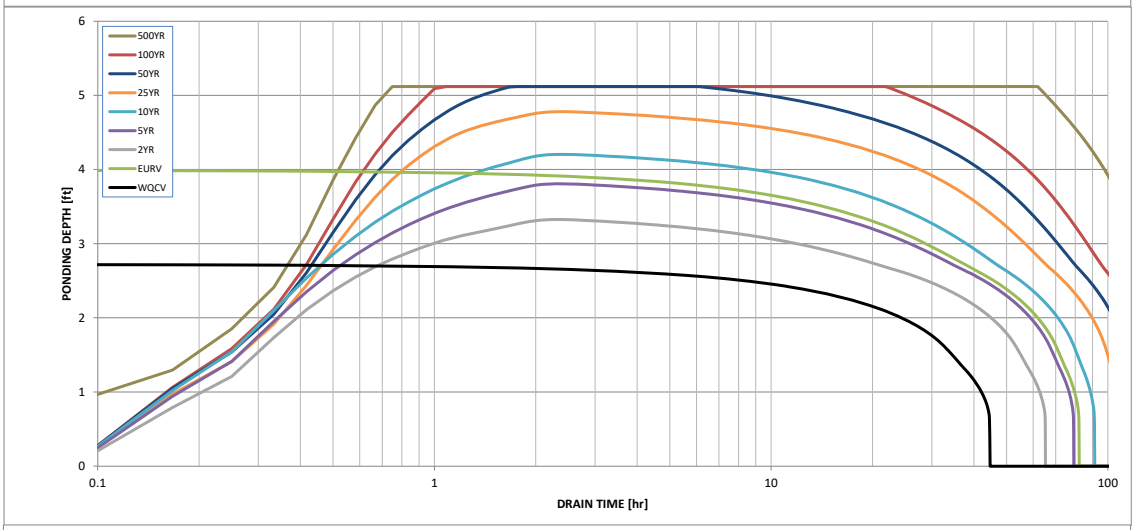
The user can override the default CUHP hydrographs and runoff volumes by entering new values in the Inflow Hydrographs table (Columns W through AF).

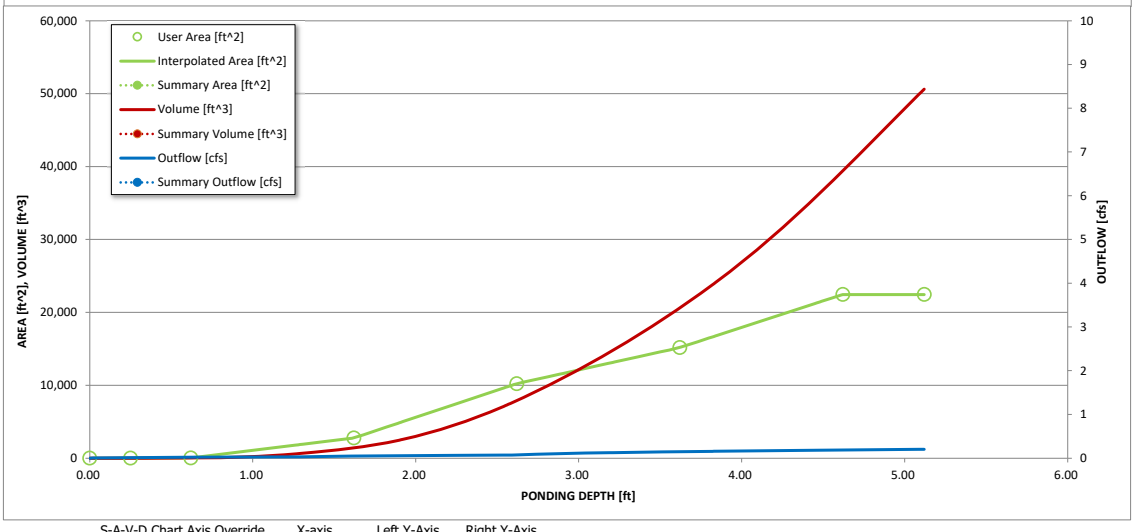
Design Storm Return Period =	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One-Hour Rainfall Depth (in) =	N/A	N/A	0.84	1.12	1.37	1.75	2.08	2.43	3.35
CUHP Runoff Volume (acre-ft) =	0.206	0.614	0.396	0.566	0.734	1.019	1.256	1.522	2.194
Inflow Hydrograph Volume (acre-ft) =	N/A	N/A	0.396	0.566	0.734	1.019	1.256	1.522	2.194
CUHP Predevelopment Peak Q (cfs) =	N/A	N/A	0.1	0.8	2.2	5.6	7.9	10.8	17.2
OPTIONAL Override Predevelopment Peak Q (cfs) =	N/A	N/A							
Predevelopment Unit Peak Flow, q (cfs/acre) =	N/A	N/A	0.01	0.10	0.26	0.66	0.93	1.27	2.03
Peak Inflow Q (cfs) =	N/A	N/A	6.8	9.6	12.2	17.5	21.5	26.5	37.8
Peak Outflow Q (cfs) =	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	0.2	0.1	0.0	0.0	0.0	0.0
Structure Controlling Flow =	Plate	Plate	Plate	Plate	Plate	Plate	N/A	N/A	N/A
Max Velocity through Grate 1 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	42	74	60	72	82	98	111	>120	>120
Time to Drain 99% of Inflow Volume (hours) =	**44**	79	63	76	88	105	119	>120	>120
Maximum Ponding Depth (ft) =	2.73	4.00	3.33	3.81	4.21	4.78	5.12	5.12	5.12
Area at Maximum Ponding Depth (acres) =	0.25	0.41	0.31	0.38	0.45	0.52	0.52	0.52	0.52
Maximum Volume Stored (acre-ft) =	0.208	0.617	0.373	0.538	0.703	0.987	1.162	1.162	1.162

DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)







S-A-V-D Chart Axis Override	X-axis	Left Y-Axis	Right Y-Axis
minimum bound			
maximum bound			

DETENTION BASIN OUTLET STRUCTURE DESIGN

Outflow Hydrograph Workbook Filename:

Inflow Hydrographs

The user can override the calculated inflow hydrographs from this workbook with inflow hydrographs developed in a separate program.

	SOURCE	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP
Time Interval	TIME	WQCV [cfs]	EURV [cfs]	2 Year [cfs]	5 Year [cfs]	10 Year [cfs]	25 Year [cfs]	50 Year [cfs]	100 Year [cfs]	500 Year [cfs]
5.00 min	0:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
	0:15:00	0.00	0.00	0.37	1.09	1.61	1.28	1.86	1.95	3.21
	0:20:00	0.00	0.00	2.67	3.87	4.87	3.45	4.36	4.93	7.54
	0:25:00	0.00	0.00	5.88	8.48	11.12	7.69	9.61	11.05	17.10
	0:30:00	0.00	0.00	6.77	9.57	12.23	16.49	20.52	23.98	34.61
	0:35:00	0.00	0.00	6.03	8.42	10.69	17.46	21.50	26.47	37.76
	0:40:00	0.00	0.00	5.24	7.16	9.07	16.20	19.86	24.28	34.54
	0:45:00	0.00	0.00	4.25	5.95	7.63	13.92	17.06	21.54	30.58
	0:50:00	0.00	0.00	3.50	5.04	6.31	12.10	14.80	18.55	26.31
	0:55:00	0.00	0.00	3.02	4.32	5.47	9.87	12.08	15.59	22.16
	1:00:00	0.00	0.00	2.65	3.77	4.83	8.38	10.27	13.65	19.40
	1:05:00	0.00	0.00	2.31	3.26	4.21	7.20	8.84	12.12	17.23
	1:10:00	0.00	0.00	1.85	2.80	3.67	5.83	7.18	9.49	13.54
	1:15:00	0.00	0.00	1.50	2.34	3.26	4.69	5.78	7.35	10.54
	1:20:00	0.00	0.00	1.31	2.04	2.89	3.62	4.47	5.31	7.65
	1:25:00	0.00	0.00	1.21	1.87	2.51	3.01	3.71	4.05	5.86
	1:30:00	0.00	0.00	1.15	1.77	2.24	2.50	3.08	3.27	4.74
	1:35:00	0.00	0.00	1.12	1.69	2.05	2.17	2.66	2.77	4.01
	1:40:00	0.00	0.00	1.10	1.51	1.92	1.94	2.38	2.42	3.51
	1:45:00	0.00	0.00	1.08	1.37	1.83	1.80	2.20	2.19	3.18
	1:50:00	0.00	0.00	1.07	1.27	1.76	1.70	2.07	2.03	2.94
	1:55:00	0.00	0.00	0.92	1.20	1.67	1.63	1.98	1.93	2.80
	2:00:00	0.00	0.00	0.81	1.11	1.50	1.59	1.93	1.90	2.75
	2:05:00	0.00	0.00	0.58	0.79	1.06	1.13	1.37	1.35	1.96
	2:10:00	0.00	0.00	0.40	0.55	0.74	0.80	0.96	0.96	1.38
	2:15:00	0.00	0.00	0.28	0.38	0.51	0.55	0.67	0.67	0.97
	2:20:00	0.00	0.00	0.19	0.25	0.35	0.37	0.45	0.45	0.65
	2:25:00	0.00	0.00	0.12	0.16	0.23	0.25	0.30	0.30	0.43
	2:30:00	0.00	0.00	0.07	0.11	0.15	0.16	0.20	0.20	0.28
	2:35:00	0.00	0.00	0.04	0.06	0.08	0.10	0.12	0.12	0.17
	2:40:00	0.00	0.00	0.02	0.03	0.04	0.05	0.06	0.06	0.08
	2:45:00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03
	2:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)

Summary Stage-Area-Volume-Discharge Relationships

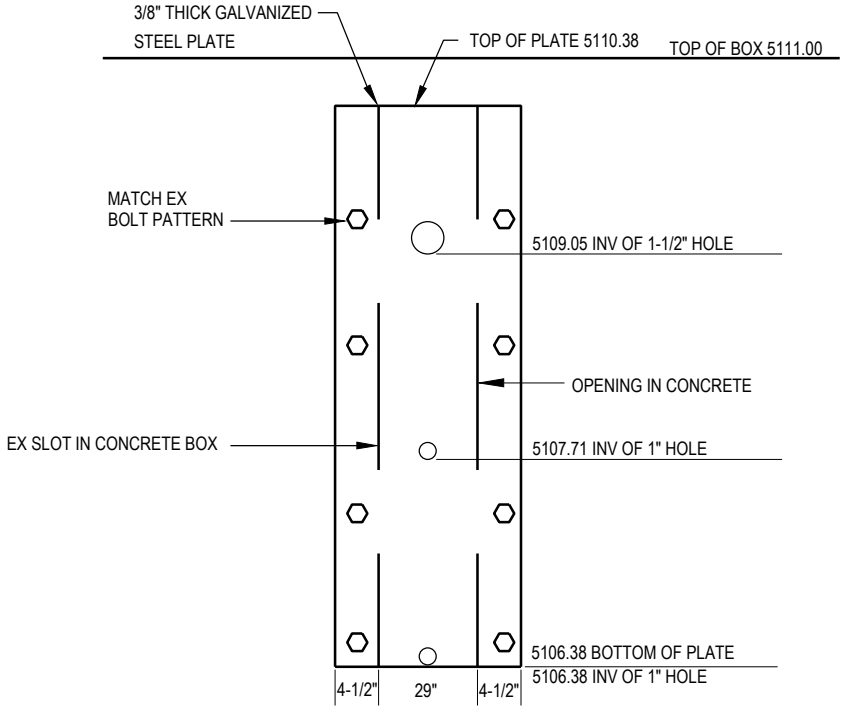
The user can create a summary S-A-V-D by entering the desired stage increments and the remainder of the table will populate automatically.

The user should graphically compare the summary S-A-V-D table to the full S-A-V-D table in the chart to confirm it captures all key transition points.

Stage - Storage Description	Stage [ft]	Area [ft ^{2}]	Area [acres]	Volume [ft ^{3}]	Volume [ac-ft]	Total Outflow [cfs]

For best results, include the stages of all grade slope changes (e.g. ISV and Floor) from the S-A-V table on Sheet 'Basin'.

Also include the inverts of all outlets (e.g. vertical orifice, overflow grate, and spillway, where applicable).



ORIFICE PLATE

REPLACE EXISTING PLATE
ON INSIDE OF OUTLET STRUCTURE BOX

Appendix C: FIRM AND SOILS DATA

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC- 3, #9202
1315 East- West Highway
Silver Spring, MD 20910- 3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was provided by the Adams County and Commerce City GIS departments. The coordinate system used for the production of the digital FIRM is Universe Transverse Mercator, Zone 13N, referenced to North American Datum of 1983 and the GRS 80 spheroid, Western Hemisphere.

This map reflects more detailed and up- to- date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de- annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

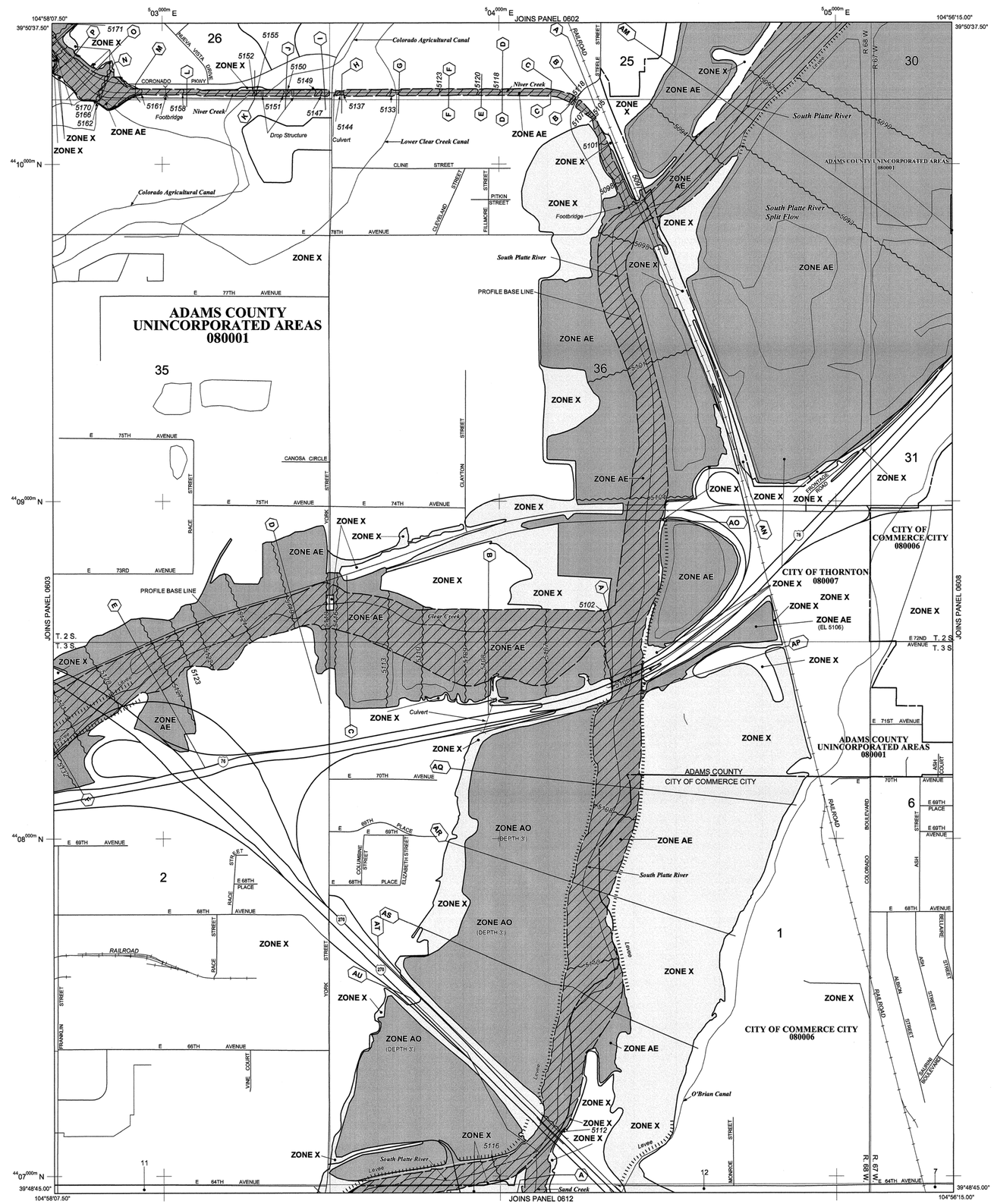
Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1- 800- 358- 9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report,* and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1- 800- 358- 9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1- 877- FEMA MAP** (1- 877- 336- 2627) or visit the FEMA website at http://www.fema.gov/.

This digital Flood Insurance Rate Map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner agreements with FEMA to produce this digital FIRM.

Additional flood hazard information and resources are available from local communities, the Colorado Water Conservation Board, and the Urban Drainage and Flood Control District.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 (EL 987) — Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000mN — 1000-meter Universal Transverse Mercator grid ticks, zone 13
- 6000000 M — 5000-foot grid ticks: Alabama State Plane coordinate system, east zone (FIPSZONE 0101), Transverse Mercator
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
August 16, 1995
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 5, 2007 - to update map format.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1- 800- 638- 6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0604H

FIRM
FLOOD INSURANCE RATE MAP
ADAMS COUNTY, COLORADO
AND INCORPORATED AREAS

PANEL 604 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ADAMS COUNTY	080001	0604	H
COMMERCE CITY, CITY OF	080006	0604	H
THORNTON, CITY OF	080007	0604	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
08001C0604H

MAP REVISED
MARCH 5, 2007

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC- 3, #9202
1315 East- West Highway
Silver Spring, MD 20910- 3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was provided by the Adams County and Commerce City GIS departments. The coordinate system used for the production of the digital FIRM is Universe Transverse Mercator, Zone 13N, referenced to North American Datum of 1983 and the GRS 80 spheroid, Western Hemisphere.

This map reflects more detailed and up- to- date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de- annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1- 800- 358- 9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report*, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1- 800- 358- 9620 and its website at http://www.msc.fema.gov/.

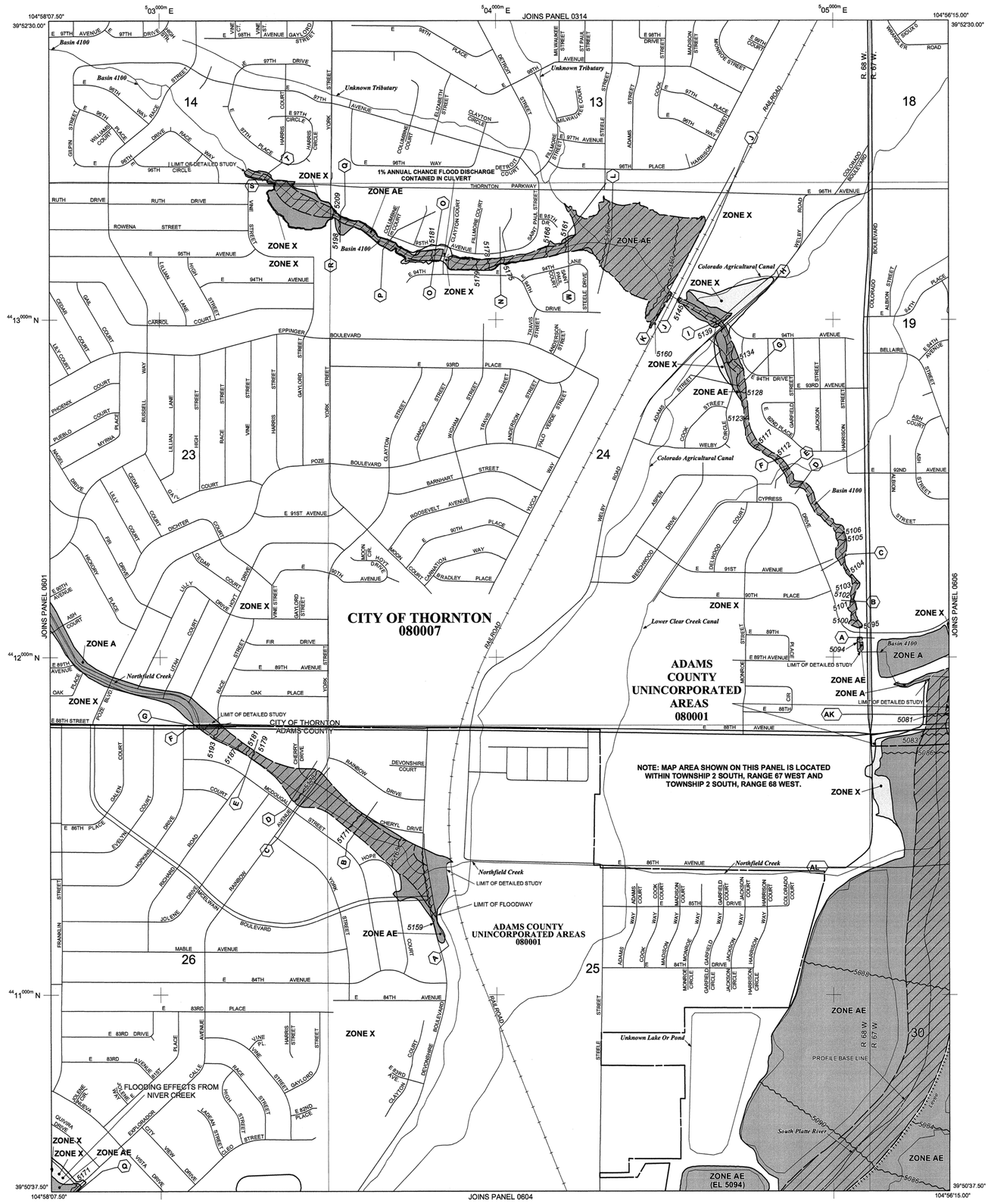
If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1- 877- FEMA MAP** (1- 877- 336- 2627) or visit the FEMA website at http://www.fema.gov/.

This digital Flood Insurance Rate Map (FIRM) was produced through a cooperative partnership between the State of Colorado Water Conservation Board, the Urban Drainage and Flood Control District, and the Federal Emergency Management Agency (FEMA). The State of Colorado Water Conservation Board and the Urban Drainage and Flood Control District have implemented a long-term approach of floodplain management to reduce the costs associated with flooding. As part of this effort, both the State of Colorado and the Urban Drainage and Flood Control District have joined in Cooperating Technical Partner agreements with FEMA to produce this digital FIRM.

Additional flood hazard information and resources are available from local communities, the Colorado Water Conservation Board, and the Urban Drainage and Flood Control District.

COLORADO WATER CONSERVATION BOARD STATE OF COLORADO 1879 1937

URBAN DRAINAGE AND FLOOD CONTROL DISTRICT



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513 — Base Flood Elevation line and value; elevation in feet*
(EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

A — A Cross section line
23 — 23 Transect line
97°07'30", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4275000mN 1000-meter Universal Transverse Mercator grid ticks, zone 13
6000000 M 5000-foot grid ticks: Alabama State Plane coordinate system, east zone (FIPSZONE 0101), Transverse Mercator
DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
August 16, 1995
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 5, 2007 - to update map format.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1- 800- 638- 6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0602H

FIRM
FLOOD INSURANCE RATE MAP
ADAMS COUNTY, COLORADO
AND INCORPORATED AREAS

PANEL 602 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ADAMS COUNTY	080001	0602	H
THORNTON, CITY OF	080007	0602	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
08001C0602H
MAP REVISED
MARCH 5, 2007

Federal Emergency Management Agency

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Adams County Area, Parts of Adams and Denver Counties, Colorado

May 11, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,520 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County Area, Parts of Adams and Denver Counties, Colorado
Survey Area Data: Version 19, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 1, 2020—Jun 12, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NuA	Nunn clay loam, 0 to 1 percent slopes	8.1	96.9%
Tc	Terrace escarpments	0.3	3.1%
Totals for Area of Interest		**8.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Adams County Area, Parts of Adams and Denver Counties, Colorado

NuA—Nunn clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2tlng
Elevation: 4,100 to 5,700 feet
Mean annual precipitation: 14 to 15 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 135 to 152 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Nunn and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nunn

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Pleistocene aged alluvium and/or eolian deposits

Typical profile

Ap - 0 to 6 inches: clay loam
Bt1 - 6 to 10 inches: clay loam
Bt2 - 10 to 26 inches: clay loam
Btk - 26 to 31 inches: clay loam
Bk1 - 31 to 47 inches: loam
Bk2 - 47 to 80 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 7 percent
Maximum salinity: Nonsaline (0.1 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 0.5
Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R067BY042CO - Clayey Plains
Hydric soil rating: No

Minor Components

Heldt

Percent of map unit: 10 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY042CO - Clayey Plains
Hydric soil rating: No

Wages

Percent of map unit: 5 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Tc—Terrace escarpments

Map Unit Setting

National map unit symbol: 34ws
Elevation: 4,400 to 5,500 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 120 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Terrace escarpments: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Terrace Escarpments

Setting

Landform: Terraces
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 3 inches: gravelly sand
H2 - 3 to 60 inches: gravelly sand

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: R067BY063CO - Gravel Breaks
Hydric soil rating: No

Minor Components

Dacono

Percent of map unit: 5 percent
Hydric soil rating: No

Vona

Percent of map unit: 5 percent
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

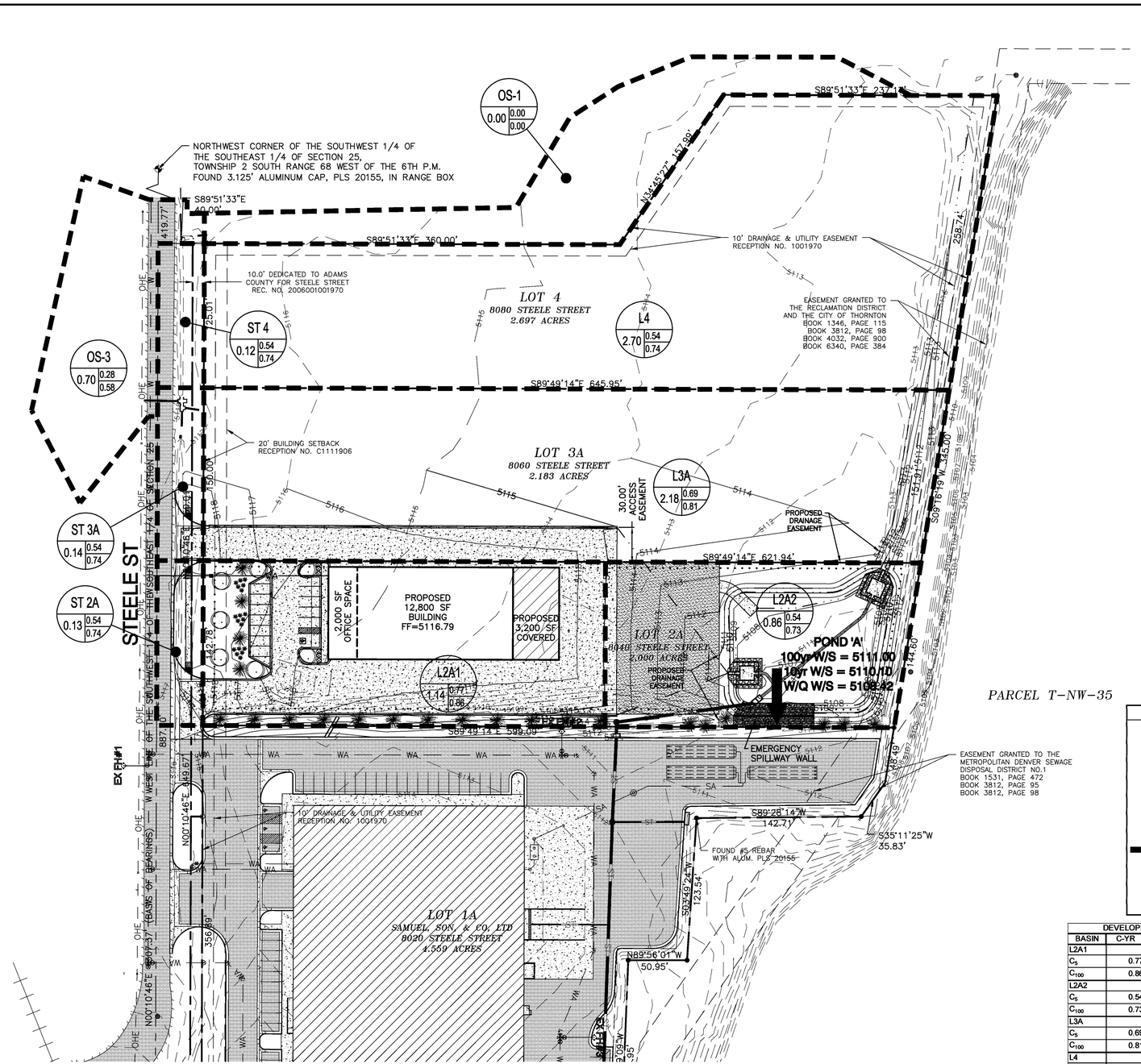
United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

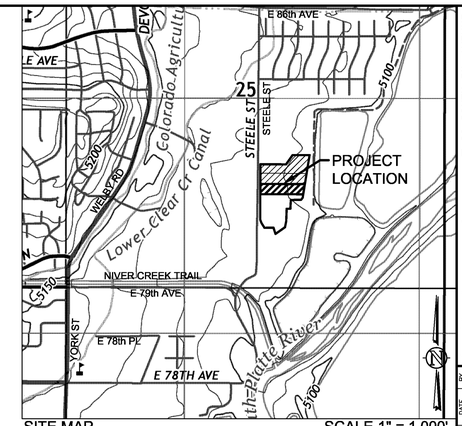
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix D: DRAINAGE MAP





SITE MAP SCALE 1" = 1,000'

LOCATION, SXX, TXS, RXXW, 6th P.M.
SHOWN VICINITY MAP TAKEN FROM USGS QUAD MAP - COMMERCE CITY 39104-G8

PARCEL T-NW-35

50 25 0 50 100
FULL SCALE: 1" = 50'
HALF SCALE: 1" = 100'

DEVELOPED DRAINAGE LEGEND

B1 — SUB-BASIN DESIGNATION
3.20 — AREA IN ACRES
0.58 — C5
0.88 — C100
EXISTING DRAINAGE PATTERN
DEVELOPED BASIN
PROPOSED DRAINAGE PATTERN
2 — DESIGN POINT

NOTES

THIS PLAN IS INTENDED AS THE DEVELOPED DRAINAGE PLAN FOR DTI TRUCKS PROJECT.

ALL IMPROVEMENTS ARE PROPOSED UNLESS NOTED AS EXISTING.

IT IS THE OWNER AND/OR THE CONTRACTOR'S RESPONSIBILITY TO ATTAIN ALL APPROPRIATE PERMITS AND REVIEW APPROVALS FROM THE STATE OF COLORADO AND ADAMS COUNTY RESPECTIVELY.

SEE "MINOR SUBDIVISION PLAT – STEELE STREET INDUSTRIAL PARK FILING NO.2" COMPLETED BY MANHARD CONSULTING – DATE RECORDED JUNE 24, 2015.

PROJECT BENCHMARK: ADAMS COUNTY 3.25" ALUMINUM SURVEY MARK DISK "STAMPED 95.0247 1995 2S68W S36". LOCATION: STATION IS LOCATED NORTHEAST OF THE INTERSECTION OF EAST 78TH AVENUE AND YORK STREET SOUTH OF AN ADAMS COUNTY PARK, SOUTH OF THE INTERSECTION OF NIVER CREEK AND STEELE STREET, 450± SOUTH OF THE CENTER LINE OF STEELE STREET 232.5' SOUTHEAST OF A CONCRETE HEADWALL 25.1' EAST OF THE CENTER LINE OF A SIDEWALK, AND 25.4' WEST OF THE UNION PACIFIC RAILROAD TRACKS. ELEVATION= 5103.13' (NGVD88).

SITE BENCHMARK #1: SOUTH 1/4 CORNER OF SECTION 25, NORTH 1/4 CORNER OF SECTION 36, TOWNSHIP 2 SOUTH RANGE 68 WEST OF THE 6TH P.M. FOUND 3.125" ALUMINUM CAP, PLS 20155, ELEVATION = 5113.52 (NGVD88).

SITE BENCHMARK #2: NORTHEAST CORNER OF LOT 4, FOUND #5 REBAR WITH PLASTIC CAP STAMPED PLS 24968, ELEVATION = 5112.28 (NGVD88).

ANY REFERENCE TO EASEMENTS, SURVEY POINTS, OR EXISTING UTILITIES AND FEATURES ARE BASED SOLELY FROM SURVEY INFORMATION PROVIDED BY OTHERS – SPECIFICALLY PER SAME SURVEY NOTED ABOVE.

NOT ALL UNCC UTILITY LOCATES HAVE BEEN PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITIES ARE LOCATED AND SURVEY PROVIDED TO THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION DRAWING RELEASE.

SYMBOL LEGEND

45 DEG BEND
22.5 DEG BEND
RESTRAINED PLUG
RESTRAINED TEE
WATER METER
PARKING COUNT (4)
RESTRAINED CROSS
FIRE HYDRANT
RESTRAINED WATER VALVE
CURB STOP
SPEED BUMP
SPILL CURB
PROPOSED CONCRETE
EXISTING CONCRETE
PROPOSED ASPHALT
EXISTING ASPHALT

LINETYPE LEGEND

LOT / PROPERTY LINE
SECTION LINE
RIGHT OF WAY LINE
EASEMENT
GRID LINE
BUILDING SETBACK
100yr FLOODPLAIN 2015 SURVEY
EXISTING SWALE
TO BE ABANDONED LOT LINE
EXISTING BUILDING, CURB
EDGE of ASPHALT
CHAINLINK FENCE
WIRE FENCE
POND WQ W/S
EXISTING OVERHEAD ELEC
EXISTING ELECTRICAL LINE
EXISTING STORM LINE
EXISTING SANITARY LINE
EXISTING WATER LINE
EXISTING GAS LINE
EXISTING FIBER OPTIC LINE
EXISTING TELEPHONE LINE
PROPOSED SWALE
PROPOSED SANITARY LINE
PROPOSED SANITARY SERVICE
PROPOSED STORM LINE
PROPOSED WATER LINE
PROPOSED WATER SERVICE
PROPOSED FIRE PROTECTION LINE
PROPOSED GAS LINE
PROPOSED ELECTRIC LINE
PROPOSED TELEPHONE LINE
100yr FLOODPLAIN THIS PROJECT

DEVELOPED RUNOFF TABLE (8040 Steele Street - DTI Trucks)

BASIN	C-YR	I	A	CIA(YR-DEVELOPED)	cfs	DESIGN POINT
L2A1						
C_5	0.77	3.70	1.142	3.24	cfs	1
C_{100}	0.86	7.06	1.142	6.97	cfs	1
L2A2						
C_5	0.54	4.55	0.859	2.11	cfs	2
C_{100}	0.73	8.69	0.859	5.45	cfs	2
L3A						
C_5	0.69	3.55	2.183	5.35	cfs	3
C_{100}	0.81	6.78	2.183	12.07	cfs	3
L4						
C_5	0.54	3.37	2.697	4.92	cfs	4
C_{100}	0.74	6.43	2.697	12.84	cfs	4
ST 2A						
C_5	0.54	4.82	0.131	0.34	cfs	5
C_{100}	0.74	9.19	0.131	0.89	cfs	5
ST 3A						
C_5	0.54	4.94	0.138	0.37	cfs	6
C_{100}	0.74	9.42	0.138	0.96	cfs	6
ST 4						
C_5	0.54	5.01	0.115	0.31	cfs	7
C_{100}	0.74	9.56	0.115	0.81	cfs	7

DTI HOLDINGS, LLC
CONTACT:
TODD CARLSON & TONY DOUGLAS
8855 W. 44th AVE
WHEAT RIDGE, CO 80033
(303)524-3820

20 SOUTH 5th AVENUE
BRIGHTON, CO 80601
www.westernec.com
email@westernec.com
(303) 913-7341
FAX (720) 294-1330
Western Engineering Consultants, inc LLC

No.	REVISION	DATE	BY
0	INITIAL RELEASE	12/30/15	DPS

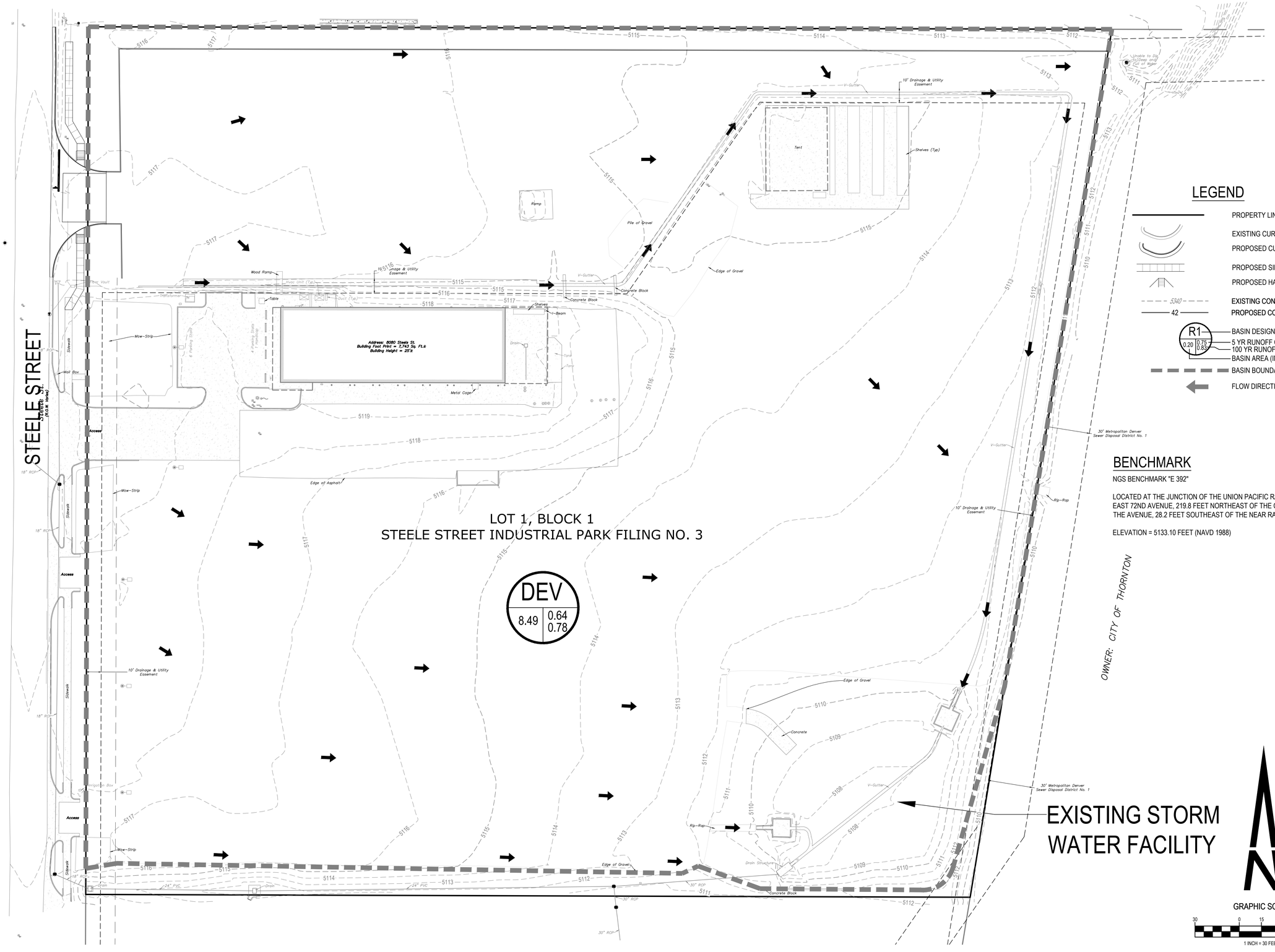
DEVELOPED DRAINAGE PLAN
DTI TRUCKS
8040 STEELE ST., DENVER
ADAMS COUNTY, COLORADO

Dig Safely.
CALL UNCC
THREE WORKING DAYS BEFORE YOU DIG
1-800-922-1987
www.uncc.org
UTILITY NOTIFICATION CENTER OF COLORADO

COLORADO REGISTERED CHARLES F. CORK 33802 12/30/15 PROFESSIONAL ENGINEER
ONLY VALID FOR CONSTRUCTION IF SEAL & ORIGINAL SIGNATURE ARE ON EACH SHEET

INITIAL PLAN RELEASE:12/30/15
DESIGNED BY: CFC
DRAWN BY: CFC
CHECKED BY: CFC
PROJECT NO. 01-0170.003.00
DOC CON # 0012-DEVDRNG
SHEET 12 OF 28

T:\0170_003_00-CENTER LAND PROPERTIES-80th & STEELE\Dwg\CDs\0170-003-WEC-CDS.dwg, 12-DEVDRNG, 12/30/2015 4:56:18 PM, XEROX KIP PLT.pc3



LEGEND

- PROPERTY LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPOSED SIDEWALK
- PROPOSED HANDICAP RAMP
- 5340 — EXISTING CONTOUR
- 42 — PROPOSED CONTOUR
- R1 (0.20 | 0.75 | 0.83) — BASIN DESIGNATION; 5 YR RUNOFF COEFFICIENT; 100 YR RUNOFF COEFFICIENT; BASIN AREA (IN ACRES)
- BASIN BOUNDARY LINE
- FLOW DIRECTION

BENCHMARK

NGS BENCHMARK "E 392"

LOCATED AT THE JUNCTION OF THE UNION PACIFIC RAILROAD AND EAST 72ND AVENUE, 219.8 FEET NORTHEAST OF THE CENTERLINE OF THE AVENUE, 28.2 FEET SOUTHEAST OF THE NEAR RAIL.

ELEVATION = 5133.10 FEET (NAVD 1988)

PERCEPTION
DESIGN GROUP, INC.
6991 SOUTH PIERCE STREET, SUITE 315 LITTLETON, CO 80128 303.233.6888
WWW.PERCEPTIONDESIGNGROUP.COM

PREPARED UNDER THE DIRECT SUPERVISION OF
JERRY W. DAVIDSON, P.E.
COLORADO REG # 30226
FOR AND ON BEHALF OF
PERCEPTION DESIGN GROUP, INC.

DATE	DESCRIPTION
05/15/23	INITIAL SUBMITTAL

REVISIONS

DRAINAGE MAP

DTI TRUCKS
LOT1, BLOCK 1, STEELE STREET INDUSTRIAL PARK FILING NO. 3
PARCEL IN THE SE 1/4 OF SEC 25, T2S, R68W 6TH P.M.
COUNTY OF ADAMS, STATE OF COLORADO

Design By:	JWD
Approved By:	JWD
Project No.:	2022-013
Date:	06-15-2022

SHEET
1

Development Agreement
8100 Steele Street
Steele Street Industrial Park Filing No.3
Case No. PRC2022-00010

SUBDIVISION IMPROVEMENTS AGREEMENT

THIS AGREEMENT is made and entered into this "X" day of December, 2022, between DTI Holdings LLC, a Colorado corporation qualified to do business in Colorado ("Developer"), whose address is 8955 W. 44th Ave, Wheat Ridge, CO 80033-3001, and the Board of County Commissioners of the County of Adams, State of Colorado ("County"), whose address is 4430 S. Adams County Parkway, Brighton, CO 80601.

WITNESSETH:

WHEREAS, Developer is the owner of real property in the County of Adams, State of Colorado, as described in Exhibit "A" attached hereto, and by this reference made a part hereof.

WHEREAS, it is provided by resolution of the Board of County Commissioners, County of Adams, that where designated the Developer shall have entered into a written agreement with the County to install public and/or private improvements, and to deed land for public purposes or right-of-way.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise, covenant, and agree as follows:

1. **Engineering Services**. Developer shall furnish, at its own expense, all engineering and other services in connection with the design and construction of the improvements described and detailed on Exhibit "B" attached hereto, and by this reference made a part hereof ("Improvements").

2. **Drawings and Estimates**. The Developer shall furnish drawings and cost estimates for all improvements described and detailed on Exhibit "B" for approval by the County. Upon request, the Developer shall furnish one set of reproducible "as built" drawings and a final statement of construction costs to the County.

3. **Construction**. Developer shall furnish and construct, at its own expense and in accordance with drawings and materials approved by the County, the improvements described and detailed on Exhibit "B".

4. **Time for Completion**. Improvements shall be completed according to the terms of this agreement within "construction completion date" appearing in Exhibit "B". The Director of Community and Economic Development Department may for good cause grant extension of time for completion of any part or all of improvements appearing on said Exhibit "B". Any extension greater than 180 days may be approved only by the Board of County Commissioners. All extensions of time shall be in written form only.

5. **Warranties of Developer.** Developer warrants that the Improvements shall be installed in good workmanlike manner and in substantial compliance with the Plans and requirements of this Agreement and shall be substantially free of defects in materials and workmanship. These warranties of Developer shall remain in effect until Preliminary Acceptance of the improvements by the County.

6. **Guarantee of Compliance**. Developer shall furnish to the County a cash escrow deposit or other acceptable collateral, releasable only by the County, to guarantee compliance with this agreement. Said collateral shall be in the amount of $37,280.20, including twenty percent (20%) to cover administration and five percent (5%) per year for the term of the Agreement to cover inflation. Upon approval of the final plat, completion of said improvements constructed according to the terms of this agreement, and preliminary acceptance by the Director of Public Works in accordance with section 5-02-05-01 of the County's Development Standards and Regulations, the collateral shall be released. Completion of said improvements shall be determined solely by the County, and a reasonable part of said collateral, up to 20%, may be retained to guarantee maintenance of public improvements for a period of one year from the date of preliminary acceptance.

Collateral shall be furnished in the amount required and in a form acceptable to the Board of County Commissioners prior to final plat approval. No building permits shall be issued until the final plat has been approved and the improvements described in Exhibit "B" have been preliminarily accepted by the Department of Public Works.

7. **Acceptance and Maintenance of Public Improvements**. All improvements designated "public" on Exhibit "B" shall be public facilities and become the property of the County or other public agencies upon acceptance. During the period of one year from and after the acceptance of public improvements, the Developer shall, at its own expense, make all needed repairs or replacement due to defective materials or workmanship which, in the opinion of the County, becomes necessary. If, within ten days of written notice to the Developer from the County requesting such repairs or replacements, the Developer has not undertaken with due diligence to make the same, the County may make such repairs or replacements at the Developer's expense. In the case of an emergency such written notice may be waived.

8. **Successors and Assigns**. This agreement shall be binding upon the heirs, executors, personal representatives, successors, and assigns of the Developer, and shall be deemed a covenant running with the real property as described in Exhibit "A" attached hereto.

9. **Improvements and Dedication**. The undersigned Developer hereby agrees to provide the following improvements, and to dedicate described property.

   A. **Improvements**. Designate separately each public and private improvement.

      Public Improvements:

      (General description of construction.) See Exhibit "B" for description, estimated quantities and estimated construction costs.

      The improvements shall be constructed in accordance with all County requirements and specifications in accordance with the approved plans and time schedule as indicated in Exhibit "B".

   B. **Public dedication of land for right-of-way purposes or other public purpose**. Upon approval of this agreement by the Board of County Commissioners, the Developer hereby agrees to convey by warranty deed to the County of Adams the following described land for right-of-way or other public purposes:

      (General description of right-of-way).

10. **Default by Developer.** A default by the Developer shall exist if (a) Developer fails to construct the Subdivision Improvements in substantial compliance with the Plans and the other requirements of this Agreement; (b) Developer fails to complete construction of the Improvements by the Completion Date provided herein as the same may be extended; (c) Developer fails to cure any noncompliance specified in any written notice of noncompliance within a reasonable time after receipt of the notice of noncompliance; (d) Developer otherwise breaches or fails to comply with any obligation of Developer under this Agreement.

    A. **Remedies of County**. If the County, after notice, determines that a default by Developer exists, and if Developer fails to cure such default within the time specified by the County, the County shall be entitled to (a) make a draw on the collateral for the amount reasonably determined by the County to be necessary to cure the default in a manner consistent with the approved Plans up to the face amount of the Collateral; and (b) sue the Developer for recovery of any amount necessary to cure the default over and above the amount available in the Collateral provided.

B. **County Right to Completion of Subdivision Improvements.** The right of the County to complete or cause completion of the Improvements as herein provided shall include the following rights:

a. The County shall have the right to complete the Subdivision Improvements, in substantial accordance with the plans, the estimated costs, and other requirements of this Agreement, either itself or by contract with a third party or by assignment of its rights to a successor developer who has acquired the Property by purchase, foreclosure, or otherwise. The County, any contractor under the County, or any such successor developer, their agents, subcontractors and employees shall have the non-exclusive right to enter upon the streets and easements shown on the final plat of the Subdivision and upon any part of the Subdivision owned by Developer for the purpose of completing the Improvements.

C. **Use of Funds by County.** Any funds obtained by the County through Collateral, or recovered by the County from Developer by suit or otherwise, shall be used by the County to pay the costs of completion of the Improvements substantially in accordance with the Plans and the other Requirements of this Agreement and to pay the reasonable costs and expenses of the County in connection with the default by Developer, including reasonable attorneys' fees.

Name/s
Developer

By: _____ By: _____
Name, Title Name, Title

The foregoing instrument was acknowledged before me this _____ day of _____, 20__, by _____.

My commission expires:_____

Address: _____ _____
_____ Notary Public

APPROVED BY resolution at the meeting of _____, 20__.

Collateral to guarantee compliance with this agreement and construction of public improvements shall be required in the amount of _____. No building permits shall be issued until said collateral is furnished in the amount required and in a form acceptable to the Board of County Commissioners.

ATTEST: BOARD OF COUNTY COMMISSIONERS
ADAMS COUNTY, COLORADO

_____ _____
Clerk of the Board Chair

EXHIBIT A

Legal Description: STEELE STREET INDUSTRIAL PARK FILING NO. 3

EXHIBIT B

Public Improvements: Steele Street

Description	Est. Quantity	Est. Unit Cost	Est. Construct. Cost
Asphalt pavement	93.8 Tons	87.50	$8,207.50
Curb & Gutter	175.5 Ln Ft	39.00	$6,844.50
Concrete Cross Pan	111.2 SY	90.00	$10,008.00
ADA Ramp	2 each	3,000.00	$6,000.00
5’ Wide Concrete Sidewalk	123.1 Ln Ft	42.00	$5,170.20
Street Sign	3 each	350.00	$1,050.00

Construction Completion Date: 1 year from approval

Initials or signature of Developer:_____

_____