

Appendix C9.

# Water Quality





# C9. Water Quality Technical Memorandum

June 2023

Project Number: NHPP 006A-06

Subaccount Number: 22922

The following project information can be found in **Attachment A** Project Information:

- Introduction and Background
- Project Study Area
- Purpose and Need
- Proposed Action Description

## Federal/Local Regulations and Policies

This memorandum has been prepared to evaluate potential impacts to water quality by the Proposed Action and No Action in accordance with the following federal, state and local regulations and policies.

- Clean Water Act (Section 401 and Section 402) - The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into navigable waters. It provides the statutory basis for the National Pollutant Discharge Elimination System (NPDES) permit program and the basic structure for regulating the discharge of pollutants into waters of the US.
- Safe Drinking Water Act (40 Code of Federal Regulations [CFR] Parts 141-143) - The Safe Drinking Water Act (SDWA) protects public health by regulating the nation's public drinking water supply and protecting drinking water and its sources. Commerce City and (Colorado Department of Transportation) CDOT are stakeholders in the Colorado Source Water Assessment and Protection (SWAP) program mandated by the SDWA.
- Erosion and Sediment Control on Highway Construction Projects (25 CFR 650 Subpart B) - Highways funded in whole or in part by Federal Highway Administration (FHWA) must be designed, constructed and operated according to standards minimizing erosion and sediment damage to the highway and adjacent properties and abating pollution of surface and groundwater resources.
- Colorado Water Quality Control Act (Colorado Revised Statutes [CRS] Title 25, Article 8) - The U.S. Environmental Protection Agency (EPA) has delegated authority for enforcement of the CWA and SDWA to the Colorado Department of Public Health and Environment (CDPHE). The Colorado Water Quality Control Act (CWQCA) protects and maximizes the beneficial uses of state waters and regulates water quality (CDPHE-WQCC, 2017a). Under this authority, the CWQCA was passed, and the Water Quality



Control Commission (WQCC) was created to provide regulations to be implemented by CDPHE to keep Colorado in compliance with the CWA.

The CDPHE is the regulatory arm of the EPA for the CWA and SDWA. CDPHE passed the CWQCA with the authority derived from the EPA. The WQCC was created to enforce regulations that are to be implemented by the CDPHE to keep Colorado in compliance with the CWA.

## Water Quality Governing Regulations

Polluted stormwater runoff is commonly transported via municipal separate storm sewer systems (MS4) into nearby rivers and streams. Under the CWA Amendments, the EPA developed Stormwater Phase I and Phase II Regulations which established an MS4 program that manages and regulates stormwater impacts on water quality. The MS4 stormwater management program is intended to improve the Nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into the storm sewer systems.

The Colorado stormwater NPDES permit program is referred to as the Colorado Discharge Permit System (CDPS). The WQCC division regulates sources of pollution from pipes and drains (that do not include runoff from agricultural fields) that flow directly from qualifying municipalities to state waters via two types of permits: individual permits (large entities that need their own permit to cover the work they do) and General Phase II permits.

This project has overlapping MS4 permits, CDOT's individual permit and Commerce City's Statewide General Permit. CDOT is regulated by a Phase I MS4 permit (COS-000005) that covers state and interstate highways and their rights-of-way within urbanized boundaries, as defined by CDPHE. Commerce City is regulated by Statewide standard MS4 General Permit (COR090000). The applicability of these permits to Post-Construction Stormwater Management for the project are described below.

## Post-Construction Stormwater Management

### CDOT Individual MS4 Permit Requirements

CDOT's **Permanent Water Quality (PWQ) Manual**, updated June 30, 2021, provides CDOT's PWQ Program requirements. In accordance with Section 16.2.2.4.2. **Applicability, Triggers and Area Treated** of **CDOT's Drainage Design Manual**, Permanent Water Quality (PWQ) Control Measures (CMs) are generally required on a project if it first meets all of the following conditions:

- It is located inside the CDOT MS4 area; and
- It disturbs more than one acre, including staging areas; and
- It increases impervious surface by 20% or more
- If these three conditions are met plus one of the following conditions, PWQ CMs are required for the project:
  - It drains to a 303(d) listed segment for a CDOT Pollutant of Concern (303(d) Trigger); or



- It drains to the Cherry Creek Reservoir (Cherry Creek Trigger); or
- It is part of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (EA/EIS Trigger).

### **Commerce City General MS4 Permit Requirements**

Commerce City requires post-construction stormwater control measures in new development and redevelopment for any activity resulting in, or contributing to, a total disturbed area greater than one acre. Note that per the General Permit, the following sites may be excluded from the implementation of post-construction stormwater management:

- Pavement Management: Sites, or portions of sites, for the rehabilitation, maintenance, and reconstruction of roadway pavement.
- Roadway Redevelopment: Redevelopment sites for existing roadways, when one of the following criteria is met:
  - The site adds less than one acre of paved area per mile of roadway to an existing roadway, or
  - The site does not add more than 8.25 feet of paved width at any location to the existing roadway.

## **Existing Conditions**

### **Watershed**

Overall, the proposed Vasquez Boulevard I-270 to 64<sup>th</sup> Avenue project lies within the South Platte River Basin and, more specifically, within the Sand Creek and the South Platte watersheds. Runoff from most of the project area is conveyed via overland and storm drain systems towards the north and the west, eventually reaching the South Platte River. The South Platte River generally flows southwest to northeast, originating at the continental divide near Fairplay, Colorado and flowing east to Chatfield Reservoir before travelling northeast through the greater Denver area.

Runoff from a small portion of the south end of the project area (approximately 1000 feet south of 60<sup>th</sup> Avenue), generally flows west and south via a combination of surface flow and storm drains under I-270 before draining into Sand Creek. Proposed improvements beyond signing and striping are not anticipated in this area, therefore stormwater mitigation efforts are not needed for this area at this time. Sand Creek largely flows southeast to northwest. It originates just north of Buckley Air Force Base in Aurora, Colorado where Coal Creek and Murphy Creek combine to form Sand Creek. Sand Creek flows into the South Platte River about one mile west of the project site.

There are five existing ponds that receive some flow from the project area. A pond facility exists north of the project area at 69<sup>th</sup> Avenue and Vasquez Boulevard. This facility is not gravity fed and requires a pump; it receives runoff from a small portion of the improvements



north of 64<sup>th</sup> Avenue. Fairfax Park, located northeast of the project area, has a detention pond. This pond receives flows from a storm drain system which collects runoff from portions of Vasquez Boulevard and 62<sup>nd</sup> Avenue. This pond detains flows up to a 10-year storm event and does not provide water quality treatment. The Fairfax Pond is maintained by Commerce City. On the west side of Vasquez Boulevard, there are two ponds within or adjacent to the project area that are owned and maintained by private properties. The pond on the 6011 Dexter Street property, or Dollar Tree property, is currently an extended detention basin that provides water quality treatment for runoff from the property. The ponds on the 4850 60<sup>th</sup> Avenue property, or the “walled ponds,” are detention facilities. The walled ponds will be shifted to accommodate the proposed roadway but will not treat nor detain any flows from the project.

Lastly, an existing small detention facility on the southwest quadrant receives runoff from the project area. This pond is privately owned by the 5901 Dexter Street parcel.

## WQCC Stream Classifications

The WQCC has divided and defined all Colorado water bodies into various segments and classified them as defined in the **Integrated Water Quality Monitoring & Assessment Report** (CDPHE, 2022). Based on this document, the project lies in the South Platte River Basin and the stormwater from within the project limits drains to two stream segments, Sand Creek segment COSPUS16i\_B and South Platte River segment COSPUS15\_C.

The WQCC regulations pertinent to surface water quality and to the project study area include Regulations 31 and 38:

- WQCC Regulation 31: The Basic Standards and Methodologies for Surface Water establishes beneficial use categories together with basic standards, an antidegradation rule and numeric tables that define the conditions generally necessary to maintain and attain such beneficial uses.
- Regulation 38: Classifications and Numeric Standards for the South Platte River Basin, Laramie River Basin, Republican River Basin and Smoky Hill River Basin establishes classifications and numeric standards for the river basin the project area is tributary to.

Additionally, water bodies that are impaired or identified for monitoring and evaluation are listed in WQCC Regulation 93: **Colorado’s Section 303(d) List of Impaired Waters and Monitoring and Evaluation List**.

[Table 1](#) summarizes each stream segment’s beneficial use classifications, attainment status and 303(d) and the Monitoring and Evaluation List. According to CDOT’s Phase 1 MS4 permit, “roadway pollutants of concern” include total suspended solids, cadmium, chromium, copper, iron, lead, magnesium, manganese, zinc, inorganic nitrogen, total phosphorus, chloride, sodium, oil and grease. Therefore, neither stream segment contains any CDOT roadway pollutants of concern.



**Table 1: Stream Segment Classifications and Water Quality (WQ) Standards**

Stream	Segment	Description	Designated Beneficial Uses and Attainment	303(D) and Monitoring & Evaluation Listings	Contains CDOT Roadway Pollutant of Concern?
Sand Creek	COSPUS16i_B	Mainstem Sand Creek from the confluence with Westerly Creek to the confluence with the South Platte River.	Agriculture - fully supporting Aquatic Life - not supported Recreational - not supported	303(d): E. coli; Se-D (2016)	No
South Platte River	COSPUS15_C	Mainstem of the South Platte River from Sand Creek, to 180 meters below 120th Ave.	Agriculture - fully supporting Aquatic Life - TMDL Recreational - TMDL Water Supply - fully supporting	M&E: Temp (2018)	No

## Groundwater

According to the Environmental Testing performed by Vivid Engineering Group and summarized in a letter dated March 16, 2023, ground water levels in the proximity of the proposed storm system varied from approximately nine to 15 feet below ground surface. Therefore, it is anticipated that groundwater will likely not be encountered for proposed drainage systems and proposed water quality ponds. Groundwater may be encountered during construction of other project elements such as traffic signal caissons. A geotechnical investigation along with a hazardous material assessment of the site soils is to be finalized once all the borings for the project are performed. This section will be updated when the finalized report is submitted.



# Impacts

## Proposed Action

### Direct Impacts

As illustrated in [Table 2](#) below, implementation of the Proposed Action will result in an increase of impervious area. The project site is classified as a “Redevelopment” site, which is already substantially developed with 35% or more of existing imperviousness. Along highways, the majority of pollutants are generated by vehicle traffic. The impervious surfaces concentrate the pollutants and transport them in stormwater runoff. Thus, the anticipated increase in the impervious surface will increase runoff and will result in degradation of water quality due to contaminant runoff from roadway pollutants if not treated.

**Table 2: Impervious Increase Summary**

	Impervious Area (acre)	Percent Increase	Comments
Existing Condition	17.7	-	Existing roadway impervious area only
Proposed Condition	20.5	-	Proposed and existing roadway impervious area only
Impervious Change	+ 2.8	16%	

Implementation of the Proposed Action will require Permanent Water Quality (PWQ) control measures to meet Local MS4 permitting requirements which are triggered by the addition of over an acre of paved area to the existing roadway. These facilities will most likely require Permanent Easements (PE) and/or Right of Way (ROW) acquisition. State MS4 permitting requirements are not triggered by the Proposed Action since the improvements result in less than a 20% imperviousness increase.

### Construction Impacts

Potential water quality impacts during construction of the proposed action include:

- Soil disturbance which could be washed into the storm drain system and discharged into drainageways.
- Vehicle tracking/carrying sediment onto the roadway.
- Concrete wash-out potential which can be conveyed into the drainageways.



- Accidental spills from construction equipment and staging areas, including oil or lubricant leaks.
- Caisson installations for traffic signals and utility improvements all have the potential of encountering groundwater. Exposure of the groundwater could potentially lead to degradation of groundwater quality through spills and/or leaks of potentially harmful materials.

### Summary of Impacts

[Table 3](#) below summarizes the direct and construction impacts with implementation of the proposed action.

**Table 3: Summary of Proposed Action Impacts**

Resource	Context	Impacts from Proposed Action
Water Quality	<ul style="list-style-type: none"> <li>• Stormwater runoff from construction</li> <li>• Increased imperviousness</li> <li>• Long-term erosion impacts from soil disturbance that occurred during construction</li> </ul>	<p><u>Permanent Impacts:</u> Increase in impervious area raises concentration of pollutants from vehicle traffic, increases stormwater runoff and the transport of pollutants resulting in water quality degradation.</p> <p><u>Temporary Impacts:</u> Construction activity would degrade water quality due to erosion and sedimentation. Construction activity would degrade water quality through spills of potentially harmful materials.</p>
Groundwater	<ul style="list-style-type: none"> <li>• Dewatering</li> </ul>	<p><u>Permanent Impacts:</u> Unknown at this time</p> <p><u>Temporary Impacts:</u> Construction excavation could expose groundwater leading to degradation of groundwater quality through spills/leaks of potentially harmful materials.</p>
Property/Land	<ul style="list-style-type: none"> <li>• Construction of PWQ outside of existing ROW</li> </ul>	<p><u>Permanent Impacts:</u> Acquisition of property for PWQ facilities</p> <p><u>Temporary Impacts:</u> Temporary Construction Easements required for installation of PWQ facilities</p>

### No Action





No Action would leave Vasquez Boulevard as it currently is configured and would not provide any improvements beyond typical maintenance activities. The roadway would remain the same, with three southbound lanes and three northbound lanes separated by a raised median. There would be no changes to the intersection of 60<sup>th</sup> Avenue, Parkway Drive and Vasquez Boulevard. As part of the No Action, proposed roads west of Vasquez Boulevard would not be constructed. As part of US 6, normal maintenance of Vasquez Boulevard would continue to be performed by CDOT per C.R.S. 43-2-135 Division of Authority over Streets and Stormdrains. This includes the current discharge of stormwater into Sand Creek and the South Platte River.

## Mitigation

This project triggers Commerce City MS4 permit requirements but does not trigger CDOT MS4 permit requirements. Therefore, the project will require Post-Construction Stormwater Management Control Measures for Commerce City that meet the “base design standard” for redevelopment.

Currently, three potential permanent water quality (PWQ) facilities are being considered to provide the required PWQ CMs ([Figure 1](#)). Coordination with Commerce City has been ongoing; specifically, WQ meetings occurred on January 6, 2022, August 29, 2022, January 13, 2023 and May 10, 2023. Commerce City's MS4 requirements are met to the extent of practicable. Further evaluation of permanent water quality volumes provided by the proposed facilities will be evaluated during the next phase of design. The facilities' potential locations were selected based on historical flow patterns, where project runoff can be collected to gravity drain with proposed storm sewer infrastructure, and where existing or proposed ROW allows for construction ([Figure 1](#)). At the next submittal, hazmat information will be available to verify that the selected PWQ locations do not overlap contaminated areas.

- Northeast of 62nd Avenue and Vasquez Boulevard: In cooperation with the Greyhound Park Redevelopment, a proposed water quality and detention pond will be utilized for treatment of runoff from 62nd Avenue and Vasquez Boulevard.
- Clermont Street - North of 60th Avenue: A proposed infiltration pond will be considered to treat runoff from the new proposed roads. This pond will be an alteration of the existing extended detention pond currently owned by the Dollar Tree store. The use of this pond is pending confirmation from the property owner.
- Clermont Street - South of 60<sup>th</sup> Avenue: A proposed infiltration pond will be considered to treat runoff from the new proposed roads and provide detention to replace the functionality of the existing pond owned by 5901 Dexter Street parcel which is getting displaced due to the proposed roadway.

Implementation of the Proposed Action would improve water quality due to the design including the potential installation of two new infiltration basins. Since there are no existing storm drain systems in the area of the Clermont Street proposed facilities, water quality treatment options are limited to infiltration. [Figure 1](#) below references the potential proposed pond locations.

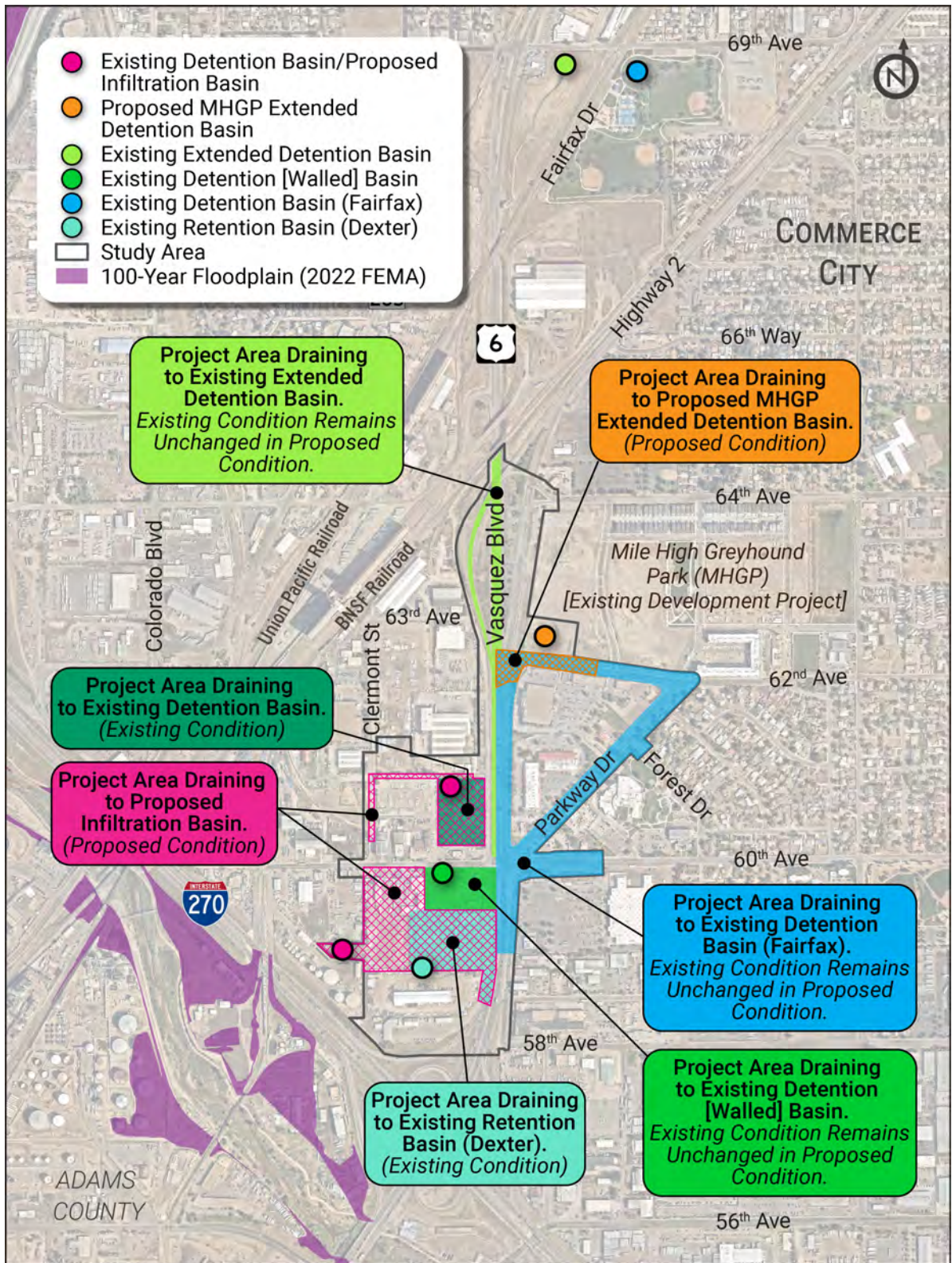


Estimated ROW acquisition for Clermont Street - North of 60<sup>th</sup> Avenue Pond is approximately the footprint of the existing pond in addition to the grassy area directly south of the existing pond. Estimated ROW acquisition for Clermont Street - South of 60<sup>th</sup> Avenue Pond is the portion of the existing property west of the proposed roadway (the jut-out of the property). [Figure 1](#) shows a rough outline of each pond described above. Commerce City will obtain the ROW for both water quality ponds and will own and maintain the facilities. Water quality ponds are in the preliminary stages of design, so precise ROW impacts will be identified when PWQ design is advanced in future project phases.

Every effort will be made to minimize permanent and temporary impacts to water quality as a result of the Proposed Action. The recommended mitigation measures that will be implemented for the Proposed Action temporary and direct impacts are summarized in [Table 4](#).



Figure 1: PWQ/New Development Redevelopment







**Table 4: Mitigation**

Impact	Mitigation Measures	Phase that Mitigation Would be Implemented
Temporary Construction Impacts - Increased sediment runoff from roadway construction	A Stormwater Management Plan (SWMP) will be developed for the Project Area to address construction activities. Additionally, a Colorado Discharge Permit System (CDPS) Stormwater Construction Permit (SCP) will be obtained from CDPHE and control measures (CMs)/best management practices (BMPs) will be used to mitigate both short-term and long-term impacts to water bodies as a result of construction.	During Construction
Temporary Construction Impacts - Spills	The Proposed Action will comply with State regulations and a Spill Response Plan will be prepared and will address spill prevention, containment, and spill clean-up during construction. Construction vehicles and equipment will be maintained.	During construction
Temporary Construction Impact - Dewatering	If necessary, a Construction Dewatering Permit will be obtained from the State by the contractor.	During Construction
Increased Impervious Surface/Redevelopment	Permanent water quality infiltration basins will potentially be constructed to treat runoff from the project area. These facilities will provide water quality treatment to meet the needs of the increase in impervious surface. They will be designed to meet the current requirements of Commerce City’s MS4 permit. These facilities will be owned, maintained and operated by Commerce City. Additionally, in cooperation with the Greyhound Park Redevelopment, a proposed water quality and detention pond will be utilized for treatment of project runoff. This facility will be owned, maintained and operated by MHGP.	Post Construction



## Required Permits

The following permits and/or actions could be required as part of the Proposed Action:

- A water quality report will be submitted by the project design team documenting compliance with CDOT's and Commerce City's MS4 permits.
- A Colorado Discharge Permit System (CDPS) Permit, which includes the preparation of a SWMP, will be required to protect State waters and ensure the quality of stormwater runoff on any construction activity that disturbs at least one acre of land. This Permit from CDPHE's Water Quality Control Division will be obtained prior to construction.
- A Construction Dewatering Operations Permit, if groundwater were to be discharged from an excavation to any waters of the State, will be obtained by CDOT or the contractor.

## References

Colorado Department of Public Health & Environment (CDPHE), **Integrated Water Quality Monitory & Assessment Report**, 2022

CDPHE WQCC, Regulation 31: The Basic Standards and Methodologies for Surface Water.

CDPHE WQCC, Regulation 38: Classifications and Numeric Standards for the South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin.

CDPHE WQCC, Regulation 93: Colorado's Section 303(d) List of Impaired Waters and Monitoring and Evaluation List.

City of Commerce City, Storm Drainage Design and Technical Criteria Manual, 1989

Colorado Department of Transportation (CDOT), **Drainage Design Manual Chapter 16 Permanent Water Quality**, June 30, 2021.



## Acronyms and Abbreviations

BMP	Best Management Practices
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CDPS	Colorado Discharge Permit System
CM	Control Measures
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
MS4	Municipal Separate Storm Sewer Systems
NPDES	National Pollutant Discharge Elimination System
PWQ	Permanent Water Quality
ROW	Right-of-Way
SCP	Stormwater Construction Permit
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
US 6	U.S. Highway 6
WQ	Water Quality
WQCC	Water Quality Control Commission

**Attachment A.**

# **Project Information**



# Attachment A:

## Project Information

June 2023

Project Number: NHPP 006A-06

Subaccount number: 22922

## Introduction and Background

The Vasquez Boulevard (United States Route 6 [US 6]) I-270 to 64<sup>th</sup> Avenue project (Project) is located within the limits of the City of Commerce City (Commerce City) in Adams County. The Colorado Department of Transportation (CDOT), in cooperation with the Federal Highway Administration (FHWA) and local agencies including Adams County, the City of Commerce City, City and County of Denver, Denver Regional Council of Governments (DRCOG) and the Regional Transportation District (RTD), conducted a Planning and Environmental Linkages (PEL) study in 2018. The Vasquez Boulevard PEL study provided a framework for the implementation of transportation improvements along the corridor between 52<sup>nd</sup> Avenue and 64<sup>th</sup> Avenue and along I-270 for a ½-mile north and south of the I-270/Vasquez Boulevard interchange. The Project falls within the limits of the PEL study and is now following the NEPA process to prepare an Environmental Assessment to identify a preferred alternative based on the needs identified in the PEL.

The PEL study identified long-term transportation improvements and evaluated potential projects that could be implemented with available funding as near-term improvements. Potential near-term improvements were identified to improve operations, safety, and connectivity along Vasquez Boulevard, focusing on the Vasquez Boulevard/60<sup>th</sup> Avenue and Vasquez Boulevard/62<sup>nd</sup> Avenue intersections. Transportation Improvement Program (TIP) funding, state funding and other sources were obtained for this current Project to construct these near-term improvements along Vasquez Boulevard.

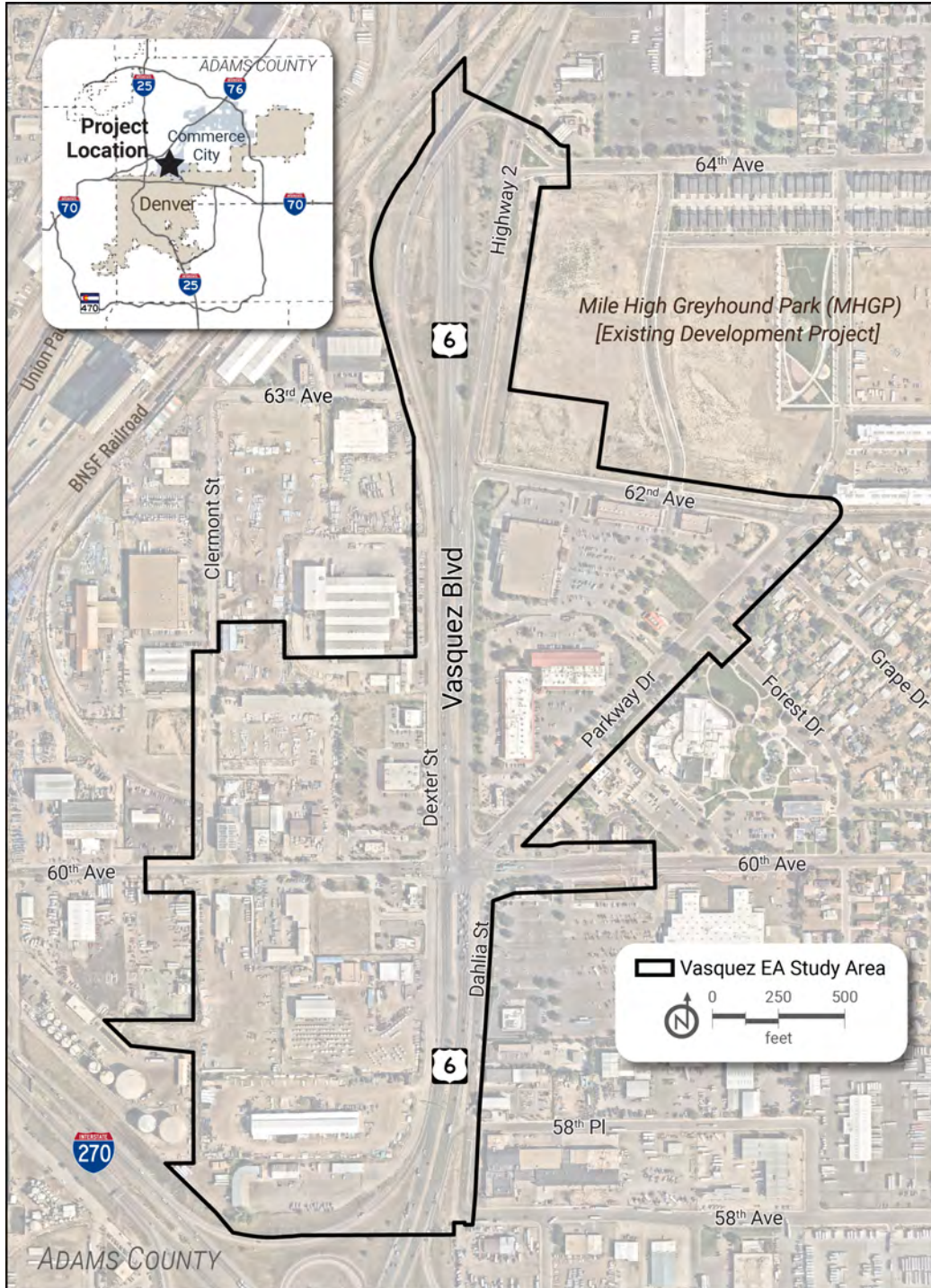
## Study Area

The study area extends along Vasquez Boulevard from 58<sup>th</sup> Avenue (just north of the I-270 interchange) north to the BNSF Railroad bridge. West of Vasquez Boulevard, the study area extends to Clermont Street, between the on-ramp to I-270 and just north of 60<sup>th</sup> Avenue. East of Vasquez Boulevard, the study area includes Parkway Drive, 60<sup>th</sup> Avenue and 62<sup>nd</sup> Avenue. The study area also includes proposed drainage work to an existing water quality pond within the Mile High Greyhound Park (MHGP) property at the corner of 62<sup>nd</sup> Avenue and Highway 2. Some environmental resources evaluated for the NEPA process may have a slightly different study area depending on specific resource requirements.





Figure 1: Project Study Area





## Purpose and Need

The purpose of the Vasquez Boulevard I-270 to 64<sup>th</sup> Avenue Project is to address the following needs:

- improve operations for vehicles and freight;
- improve safety;
- improve multimodal connections.

## Proposed Action

The Proposed Action includes improvements at the Vasquez Boulevard/60<sup>th</sup> and Vasquez Boulevard/62<sup>nd</sup> intersections, as well as the local street network and multimodal facilities, as shown in [Figure 2](#).

### Vasquez Boulevard/60th Avenue

The Proposed Action includes the elements listed below for the Vasquez Boulevard/60<sup>th</sup> Avenue intersection:

- Only right turn movements to northbound Vasquez Boulevard from Parkway Drive. No access to other roads.
  - All inbound movements to Parkway Drive remain open as they exist now.
- All inbound movements from Vasquez Boulevard/60<sup>th</sup> to frontage roads remain as they exist now, but outbound movements are restricted.
  - Right turn only from southeast frontage road and all in movements allowed (all movements remain as they exist)
  - Right turn only from northwest frontage road and all in movements allowed (in movements remain as they exist)
  - No movement out from southwest frontage road and all in movements allowed (in movements remain as they exist)
- Two new local road connections to Clermont Street west of Vasquez Boulevard provide full access between frontage roads and 60<sup>th</sup> Avenue.
- Driveways on 60<sup>th</sup> Avenue, Parkway Drive and frontage roads remain as currently structures or have minor changes
- Restriping of existing crosswalks and new pedestrian refuges improve safety and accessibility of pedestrian infrastructure
- Corner curb bulb-outs would be added at the Parkway/Forest intersection as a deterrent to drivers who may think Forest Drive is an alternate route to 60<sup>th</sup> Avenue. The bulb-outs and crosswalk will provide visual indication of Forest Drive as a neighborhood street.



## Vasquez Boulevard/62<sup>nd</sup> Avenue

The Proposed Action includes the elements listed below for the Vasquez Boulevard/62<sup>nd</sup> intersection:

- New traffic signal required at 62<sup>nd</sup> Avenue with the Vasquez Boulevard/60<sup>th</sup> Avenue intersection improvements to provide movements restricted from Parkway Drive to Vasquez Boulevard.
- Traffic signal provides full access to/from 62<sup>nd</sup> Avenue and Vasquez Boulevard/Highway 2.
- Southbound Highway 2 off ramp remains in existing configuration.
- Southbound traffic on Vasquez Boulevard and the Highway 2 off ramp have continuous green time without stopping at the signal for 62<sup>nd</sup> Avenue traffic.

## Vasquez Boulevard Improvements

In addition to the improvements at the Vasquez Boulevard/60<sup>th</sup> Avenue and 62<sup>nd</sup> Avenue intersections, a portion of Vasquez Boulevard will be reconstructed. The southbound lanes of Vasquez Boulevard will remain as they currently exist (12-foot travel lanes; roadway width varies from 24-feet to 60-feet). Northbound Vasquez Boulevard will be widened a maximum of two feet between 60<sup>th</sup> Avenue and 62<sup>nd</sup> Avenue and a maximum of 20 feet north of 62<sup>nd</sup> Avenue, and the existing median will be modified to add left turn lanes into and out of the new 62<sup>nd</sup> Avenue intersection. A 10-foot detached multi-use path will be constructed along the eastern side of Vasquez Boulevard, between 60<sup>th</sup> Avenue and 62<sup>nd</sup> Avenue.

## Local Road Connections

New local roadway connections west of Vasquez Boulevard are part of the Project to enhance the local circulation and pedestrian and bicyclist connectivity of the local street network. The new roadways are two-lane, two-way local roads with the potential for direct property driveway access as approved by Commerce City.





Figure 2: Proposed Action

