



The FDP amendment will not be approved by public works until the master drainage update is approved. Comments were provided 11/5 and no subsequent submittal has been made.

CVL Job No. 8.13.323701

AURORA, COLORADO

MURPHY CREEK EAST SUBDIVISION

AMENDMENT TO THE PUBLIC IMPROVEMENTS PLAN

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Appendix

E1 - Public Improvement Plan

Introduction

General Description

Murphy Creek East contains a total of approximately 170 acres. The project is a part of the larger Murphy Creek development and will be a combination of residential, school and park developments. The improved areas will include roadways, EURV/water quality ponds, drainage channels, parks and open space located throughout the development.

Scope of Work

The purpose of this Public Improvement Plan Amendment is to revise the Public Improvement Plan as part of the previously approved Framework Development Plan (FDP) (COA# 2001-7003-00). These revisions are specifically in regard to the infrastructure requirements for Filings 1 and 2 of the Murphy Creek East Subdivision. Filing numbers have been changed to Filing No. 1-4 per the Figure 1 Location Map on the following sheet.

Project Location

The Murphy Creek East development is located in Section 30, Township 4 South, Range 65 West of the 6th Principal Meridian, in the City of Aurora, Colorado. The project is bordered by E. Jewell Avenue on the north, and E. Yale Avenue on the south. S. Flatrock Trail (not built) will define the west boundary and S. Harvest Road (also not built), will define the easterly boundary.

Currently there are several filings developed north of Jewell Ave. Filing 7 is adjacent to the project on the west side of S. Flatrock Trail and is currently undeveloped. West of Filing 7 is an existing golf course. Between the project site and Harvest Road (to be developed as part of this project) is an unincorporated 210' PSCo right-of-way. To the south is the Denver Arapahoe Disposal Site (DADS) Landfill. The land east of the proposed S. Harvest Road is also undeveloped and currently being used for agricultural purposes. Figure-1 clearly depicts the project in context to the surrounding roadways and known developments.

There is existing storm, sanitary, and water located onsite from a previous development plan. Some of this infrastructure will be demolished/removed and/or abandoned along with the existing utility easements. Existing water shall remain with the exception of two water stubs from a previous plan. A demo sheet shall be included with the CSP submittal detailing aforementioned easements and utilities. Existing easement vacations shall be done by separate document as the Final Plat and Civil drawings move through the City of Aurora review process.

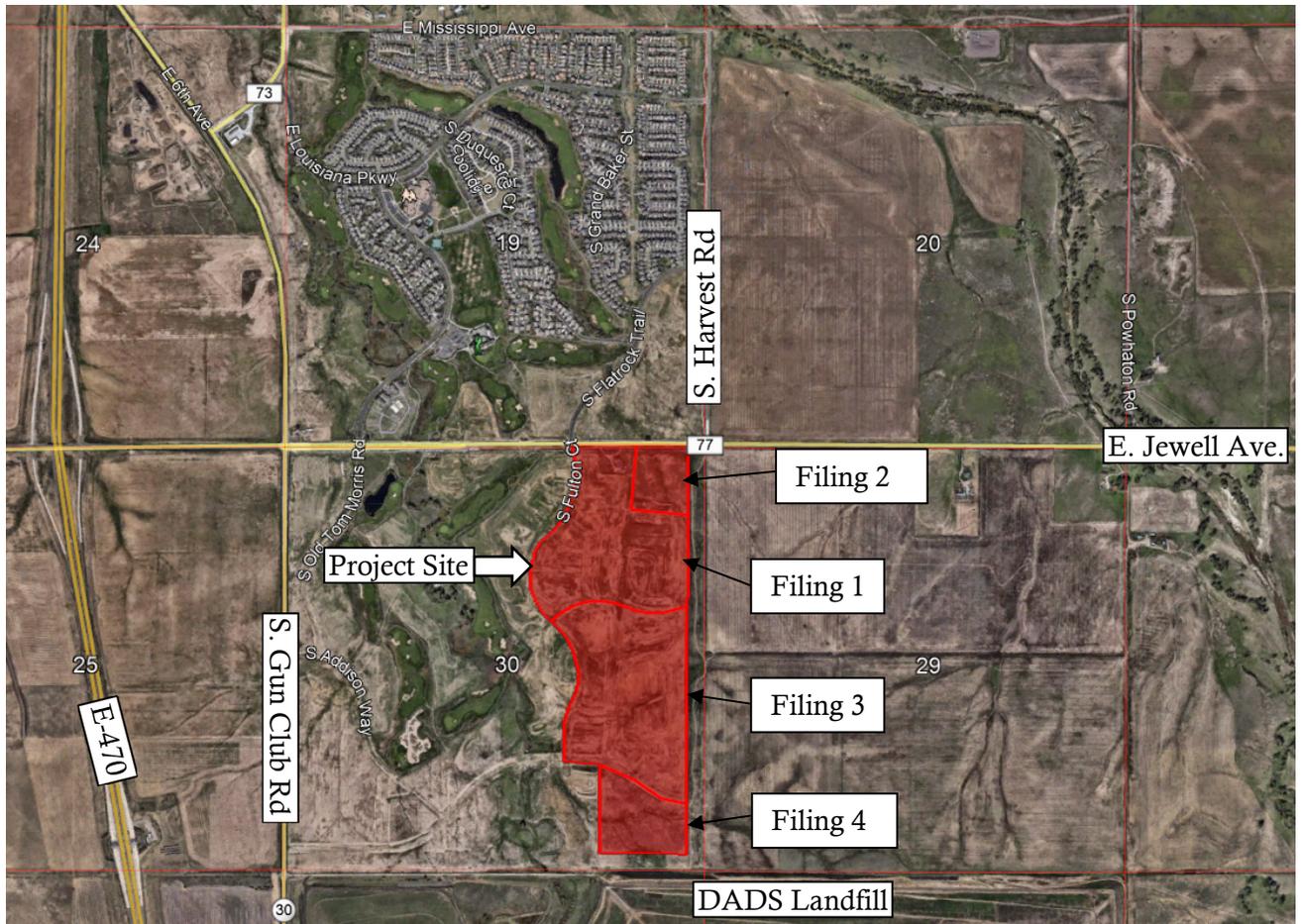


Figure 1 - Location Map

Phasing

The project site is planned to be completed in 2 separate phases. Phase 1 will consist of Filings 1 and 2, while Phase 2 will consist of Filings 3 and 4. Filing 1 is the northern portion of the site and is comprised of single family detached homes. It will be bounded by E. Jewell Ave to the north, E. Warren Place to the south, S. Flatrock Trail to the west and S. Harvest Road to the east.

Filing 2 will consist of the northeast 12.3 acres of the site and will be comprised of single family attached homes (townhomes). It will be bounded on the north by E. Jewell Ave, a private residence to the west, Filing 1 to the south and S. Harvest Road to the east.

Filing 3 is the southern portion of the site and will also consist of single family detached homes as well as a school and neighborhood park. It will be bounded by E. Warren Place to the north, E. Yale Ave to the south, S. Flatrock Trail to the west, and S. Harvest Road to the east.

Filing 4 will be a 20.0-acre parcel located south of Filing 3 on the south side of E. Yale Ave and will also consist of single family attached homes. It will be bounded by S. Harvest Road to the east and the Denver Arapahoe Disposal Site (DADS) to the south.

Public Improvements

Final Build Out

General

The roadway, water, sanitary sewer, and storm sewer alignments shown are preliminary and will be finalized in future CSP and construction drawing submittals. All utility and road design will be in compliance with the City of Aurora standards and will be subject to review and comment at the time of future CSP submittals. Each phase will have a minimum of two points of access to provide for life safety requirements. The Public Improvement Plan exhibit (E1 - Public Improvement Plan) within the Appendix of this report depicts how the project will be phased and shows a color-coded view of the proposed filings for the project. Sanitary and water infrastructure shall be located in all the streets, however only infrastructure required for water looping, and sanitary outfall points are shown on the included E1 exhibit.

Roadway System

Access to the site will be from E. Jewell Ave and S. Harvest Road via S. Flatrock Trail, E. Warren Place and E. Yale Ave. The south half of E. Jewell Road will be constructed from the intersection of S. Dequesne Court (not built) to the intersection of S. Harvest Road per the City of Aurora Standards and Specification for a 6-lane arterial road. The western half of S. Harvest Road will be constructed from E. Jewell Ave to E. Yale Ave. Full street sections will be constructed for S. Flatrock Trail, and E. Warren Place. Because E. Yale will only be servicing Filing 4 and a portion of Filing 3, a modified section of this road will be constructed from S. Harvest Road to the intersection of S. Flatrock Trail. The full section of E. Yale Ave may be constructed when the properties to the west and east are developed. Interior infrastructure will be constructed to ensure 2 points of access.

Per the traffic impact report (see reference 8), the intersection of E. Yale Ave. & S. Harvest Rd., along with the intersection of E. Yale Ave. & S. Flatrock Trail, are planned as roundabouts in the future. The interim condition will be stop condition intersections until it is deemed necessary to extend E. Yale Ave. to the west, S. Harvest Rd. to the south and/or E. Yale Ave. to the east. The design for these roundabouts shall be completed when a single leg of the roundabout is built, and a portion may be deferred, but shall be functional per City Traffic Engineering review. Auxiliary lane requirements can also be referenced in this traffic impact report.

Water Distribution System

Water will be supplied to the Murphy Creek East project by the existing 12", 8", and 16" mains located in S. Flatrock Trail, E. Warren Place and E. Yale Ave, respectively. An additional 12" main will be constructed in S. Harvest Road to provide looping between E. Atlantic Drive, E. Warren Place, and E. Yale Ave. Additional interior waterline construction will ensure a looped system with adequate pressure and supply. Stubs will be provided in E. Atlantic Drive, E. Warren Place, and E. Yale Ave. as required for the development to the east.

At the time of the CSP, any Phases that are equal to or greater than 12 residential units will require a looped water system and 2 points of access to on-site improvements. Per section 5.02.4 and 5.02.2 of the COA “Water, Sanitary Sewer and Storm Drainage Infrastructure Standards,” no more than one fire device (fire hydrant or fire suppression line) is allowed off a dead end water line extension and a maximum of 12 residential units are allowed to be served from a dead end water main. Where the interior of the site will be constructed in multiple phases, an interior phasing plan will be provided showing two points of access with a looped water supply to each phase of the development.

Sanitary Sewer System

Per the previously approved Master Utility Study, the project will be graded into two sanitary sewer drainage basins which will generally flow northwest connecting to the existing infrastructure north of E. Jewell Avenue. Additional offsite improvement will be required through Filing 7 to the west and Filing 2 to the north. Offsite flows from the development to the east will also be conveyed through this system and are discussed in more detail below. Stubs will be provided through Filing 2 and E. Yale Ave. as required for the development to the east.

Storm Drainage System

Storm runoff will be conveyed via street flow and pipes to ponds sized for the Excess Urban Runoff Volume (EURV). All ponds will release to pipes and/or channels that will drain to Murphy Creek or a tributary thereof. Offsite improvements will be required to convey flows to the north and west. These improvements are described below and will be coordinated with adjacent landowners. Filings 1,2,3,4, and 7 have been previously designed and approved to work together with shared water quality ponds. Sharing water quality pond infrastructure will minimize maintenance, and produce fewer points of discharge.

There are three offsite EURV ponds proposed to work in conjunction with the adjacent Murphy Creek Filing No. 7 development. Proposed drainage pattern mimics approved existing reports.

Offsite flows from the east will be routed through the site and any upstream detention will be the responsibility of the adjacent land owner developing that property. This is discussed in more detail below.

Parks and Open Space

All filings will contain common open space, and landscape buffers dispersed throughout. They are generally composed of landscape beds, manicured turf, and benches. Filings 1 and 3 will contain neighborhood parks, the largest of which will be a 5-acre park in Filing 3. There is a 50' gas easement that runs north to south through the middle of the site. This corridor is planned to have meandering trail system to connect the neighborhoods as easement restrictions allow.

Overall, more park and open space will be dedicated than required.

Text has been updated for clarification.

Filing 1 contains a pocket park (OS credit) not a neighborhood park. Please clarify.

Specific Filing Improvements

Overview

The initial access to the Murphy Creek East project will be from E. Jewell Ave via S. Flatrock Trail and E. Warren Place via S. Harvest Road. The south half of E. Jewell Road will be constructed from the intersection of S. Dequesne Court (not built) to the intersection of S. Harvest Road per the City of Aurora Standards and Specifications for a 6-lane arterial road. The full section of S. Flatrock Trail will be constructed to E. Warren Place. For this initial phase, a half section of E. Warren Place will be constructed from S. Flatrock Trail to S. Harvest Road. Likewise, it is anticipated that a half roadway section will be constructed for S. Harvest Road from E. Jewell Ave to E. Warren Place, the interim Harvest Road pavement section shall be 25', measured from edge of pavement to curb flow line.

The south half of E. Warren Place will be constructed with the development of Phase 2. Additionally, the west half of S. Harvest Road will be extended south to E. Yale Ave with this phase. The remaining east half of S. Harvest Road will be constructed when the adjacent property to the east is developed.

Any filing can be constructed at any time as long as the following are provided:

- Two points of access for life safety,
- A looped water system capable of supplying adequate fire flow and domestic service,
- A sanitary sewer system that connects to the City of Aurora sewer system,
- Water quality storage and conveyance to downstream facilities.

Filing 1

General

Proposed Roadways and wet utility alignments are shown on exhibit E1 - Public Improvement Plan. Filing 1 contains an area of approximately 64 acres.

The infrastructure necessary for the completion of this phase includes the construction of arterial, collector and local roadways, waterlines, sanitary sewer mains, storm sewers, drainage channels and EURV detention ponds.

Roadway System

This phase will include the construction of the west half of S. Harvest Road and the south half of E. Jewell Ave. The improvements to S. Harvest Road will be completed from E. Jewell Ave to E. Warren Place per the City of Aurora Standards and Specification for a 3-lane collector road.

The improvements to E. Jewell Ave will be completed from the intersection of S. Dequesne Court (not built) to the intersection of S. Harvest Road per the City of Aurora Standards and Specification for a 6-lane arterial road. Lanes will be temporarily striped off to work with the existing and interim intersection conditions.

The full section of S. Flatrock Trail will be constructed from E. Jewell Ave. to E. Warren Place. The full section of E. Warren Place will be constructed from S. Flatrock Trail to S. Harvest

Road. Internal roadways will be designed and constructed per the street type key and previously approved street sections included within the Appendix of this report. All roadways internal to the Filing 1 boundary shall be constructed to full width.

Water Distribution System

Water will be provided to Filing 1 by connecting to the existing 12” and 8” City of Aurora water lines in S. Flatrock Trail and E. Warren Place, respectively. Interior water lines will be constructed through local streets and looped internally as shown on Exhibit E1.

An 8” stub will be provided in S. Harvest Road from E. Atlantic Drive, and the existing stub in E. Warren Place will be extended across the half-section of S. Harvest Road for the development to the east. A 12” water line shall run between E. Atlantic and E. Yale in Harvest for looping and hydrant coverage.

Sanitary Sewer System

Filing 1 is included in Basin 2 per the previously approved Master Utility Study, see Reference 1, Master Utility Study for Murphy Creek Development. Sanitary sewer flows will be collected and conveyed through local and connector streets to an existing outfall in Filing 7 that crosses the golf course. Additional offsite improvements will be required to connect the pipe crossing the golf course to the existing infrastructure to the north. From there, flows will continue north through the existing Murphy Creek development.

Storm Drainage System

The storm water runoff from the northern portion of the site shall be conveyed west to an offsite water quality pond located on Filing 7 (Pond A). This pond will ultimately be a shared water quality pond between the two filings.

The central portions of Filing 1 will be routed through streets and piped systems to an EURV pond on the west side of the site (onsite adjacent to Flatrock). This pond will release to an existing pipe and swale that drains through Filing 7 (not built) to Murphy Creek.

The eastern portion of Filing 1 will drain through street flows and pipes to an Excess Urban Runoff Volume (EURV) pond in the new Filing 2 (onsite adjacent to Jewell). This pond will drain to the existing double 5’x5’ concrete box structure that crosses E. Jewell Ave. Additional offsite channel improvements will be required to the Murphy Creek drainage spur north of Jewell Ave. These improvements will be coordinated with the adjacent landowner and shall be constructed and maintained by the metro district.

A small portion of Filing 1 is piped west to Filing 7 water quality Pond B, this pond is also a shared pond and shall be built as a temporary pond until F7 develops.

The remaining southwestern portion of Filing 1 will be routed through street flow and pipe systems to swales that will run through Filing 7 and drain to another shared water quality pond (Pond C). These ponds ultimately drain into Murphy Creek.

The full storm sewer system will be constructed when Filing 7 is developed. Until then, private temporary swales will be constructed to convey runoff. These improvements are discussed in the previously approved Final Drainage Reports for Murphy Creek Filings 7, 8, and 9 (see references 3, 4 and 5). Offsite temporary ponds and swales shall be private and maintained by the Metropolitan District.

Offsite flows from the east will be conveyed through the site as necessary. Any detention required will be provided by the developer of that property.

Parks and Open Space

Filing 1 contains several proposed areas of Open Space, including trails and a neighborhood pocket park. This park located within Tract E will provide amenities for the adjacent neighborhoods. The main features of the park will include a toddler swing set, adult playground structure with a slide and nature play amenities, and a climbing feature. Additionally, the park will include bike racks, benches, trash receptacles, and tables.

Trigger for construction to be complete with 50% of Cos in Phase 1 (Filing 1).

removed.

Per conversation with City on 1/27/20, lighting will not be required.

Add security lighting

Good.

Filing 2

General

Filing 2 will be developed during Phase 1 with Filing 1. Roadway and wet utility alignments are shown on exhibit E1 - Public Improvement Plan. Filing 2 will contain an area of approximately 14 acres.

The infrastructure necessary for the completion of this phase includes the construction of arterial, collector and local roadways, waterlines, sanitary sewer mains, storm sewers, drainage channels and an EURV water quality pond.

Roadway System

It is anticipated that Filing 2 will be developed concurrently with Filing 1. If Filing 2 was to be developed before Filing 1, S. Harvest Road would need to be constructed to E. Asbury Drive to provide two points of access. S. Flatrock Trail would also need to be constructed to E. Atlantic Drive. E. Atlantic Drive would need to be constructed to connect S. Flatrock Trail to S. Harvest Road. The need for improvements to E. Jewell Ave would be dependent on traffic demand. It is possible that minimal improvements at the intersection of S. Harvest Road are all that would be required for the development of Filing 2.

Water Distribution System

Water will be provided to Filing 2 by connecting to the existing 12" and 8" City of Aurora water lines in S. Flatrock Trail and E. Warren Place, respectively. These connections will be made by installing water lines in E. Atlantic Dr. and S. Haleyville Way as shown on Exhibit E1.

An 8" stub will be provided in S. Harvest Road from E. Atlantic Drive, and the existing stub in E. Warren Place will be extended across the half-section of S. Harvest Road for the development to the east.

Sanitary Sewer System

Filing 2 sanitary sewer flows will be routed north through the existing 8" PVC pipe crossing E. Jewell Ave. Additional offsite improvements will be required on the north side of E. Jewell Ave to connect the existing crossing to the existing sanitary network in S. Flatrock Trail that continues north to E. Mississippi Ave.

An 8" stub will be provided east of Filing 2 through the XCEL ROW to S. Harvest Road for the future development to the east.

Storm Drainage System

Storm water runoff will be routed through street flow and piped systems to the proposed EURV pond in the northeast corner of Filing 2. This pond will release to the existing double 5'x5' box culvert that crosses E. Jewell Ave. Additional offsite channel improvements will be required to the existing tributary north of E. Jewell Ave. (See reference 3).

Offsite flows from the east will be conveyed through the site as necessary. Any detention required will be provided by the developer of that property.

Parks and Open Space

Filing 2 will contain open space, including public courtyards. Filings 1 and 2 are planned to be developed concurrently, so Filing 2 will be served by the neighborhood in Filing 1. There is a 50' gas easement that runs north to south through the middle of the site. This corridor is planned to have meandering trail system to connect the neighborhoods as gas easement requirements allow.

A small pocket park is planned within Tract S. This pocket park will contains open spaces for picnics and play, landscape plantings are planned on the edge of the pocket park. A trellis and seating area is planned in the middle of the pocket park.

Trigger for construction: Construction to be completed in Phase 1 (Filing 2).

This isn't on the FDP within filing 2? Is this the South Pocket Park? Match name within FDP for consistency.

Per conversation with City staff on 1/27/20 the addition in tract S has been clarified.

Filing 3

General

Roadway and wet utility alignments are shown on exhibit E1 - Public Improvement Plan. Filing 3 contains an area of approximately 76 acres. The infrastructure necessary for the completion of this phase includes the construction of arterial, collector, and local roadways, waterlines, sanitary sewers, storm sewers, drainage channels and EURV ponds.

Roadway System

If Filing 3 is developed before Filing 1, the south half of E. Warren Place will be built from S. Harvest Road to S. Flatrock Trail, measuring 25' from edge of pavement to curb and gutter flowline. The full section of S. Flatrock Trail will be built from E. Warren Place to E. Yale Ave. A modified section of E. Yale Ave will be constructed from S. Flatrock Trail to S. Harvest Road. The west half of S. Harvest Road will be constructed from E. Jewell Ave to E. Yale Ave. Improvements to E. Jewell Ave will be constructed per the traffic study as approved by the City of Aurora. The intersection at S. Flatrock Trail and E. Yale Ave. will be built as a 90 degree turn. If Filing No. 7 is constructed prior to Filing No. 3, F7 developer will be responsible for S Flatrock Trail roadway from E Warren to E. Yale.

Water Distribution System

Water for the site will be supplied by the existing 8", 12", and 16" lines in Warren, Flatrock, and Yale, respectively. A 12" water line will be installed in S. Harvest Road to connect the existing lines in Warren and Yale. The existing stub in E. Yale Ave. will be extended across the half-section of S. Harvest Road for the development to the east.

Sanitary Sewer System

Filing 3 sanitary sewer flows will be routed through local and connector streets in a westerly direction to the existing section of pipe that crosses S. Flatrock Trail. This existing section will be extended north through Filing 7 to the existing manhole on the east side of the golf course. There is an existing 12" pipe crossing the golf course that will be connected to the existing 12" line that crosses E. Jewell Ave. See Reference 1, Amendment to Master Utility Report for Murphy Creek. If not already installed, an 8" stub will be provided in S. Harvest Road from E. Yale Ave.

Storm Drainage System

Storm water runoff from the northern portion of Filing 3 and the southwestern portion of Filing 1 will be routed through street flow and piped systems to an onsite EURV pond located adjacent to E Jewell. Flows will be released to an existing box culvert under E Jewell. This box culvert and channel flow to Murphy Creek.

Storm water runoff from the remainder of Filing 3 will be routed south and west through street flow and piped systems to an EURV detention pond at the southwest corner of Filing 3. This pond release will be piped south via S. Flatrock Trail before releasing to an existing channel outfall located near S Flatrock and E Yale intersection and ultimately drain into Murphy Creek.

Filing 3 will contain both community open space and 2 neighborhood parks, one of which will be approximately 5 acres located adjacent to the proposed school site. There is a 50' gas easement that runs north to south through the middle of the site. This corridor is planned to have meandering trail system to connect the neighborhoods, amenities will be determined at the time of CSP submittal.

The future neighborhood park that is proposed to be within CSP 3 will be designed to be consistent with the type of Aurora for a neighborhood park. If

New section added to PIP.
Include a new section dedicated to the large neighborhood park.

Aurora Public Schools moves forward with a school facility, the proposed neighborhood park will be designed in conjunction with Aurora Public Schools.

Trigger for construction: Construction to be complete with 50% of Cos in Phase 2 (Filing 3 & 4) or at the start of construction for the school, whatever occurs first.

Filing 4

General

Roadway and wet utility alignments are shown on exhibit E1 - Public Improvement Plan. Filing 4 contains an area of approximately 22 acres.

The infrastructure necessary for the completion of this phase includes the construction of arterial, collector and local roadways, waterlines, sanitary sewers, and storm sewers.

Roadway System

The infrastructure necessary for the completion of this phase includes the construction of the west half of S. Harvest Road from E. Jewell Ave to E. Yale Ave. The south half of E. Yale Ave will be constructed from S. Harvest Road to S. Flatrock Trail. An internal loop road will be constructed to provide two points of access along E. Yale Ave.

Water Distribution System

Water will be supplied from the existing 16" PVC line in E. Yale Ave and an 8" loop will be constructed through the site. The existing 8" line in E. Warren Place will be connected to the existing 16" line in E. Yale Ave by a 12" line in S. Harvest Road to provide adequate redundancy. The existing stub in E. Yale Ave. will be extended across the half-section of S. Harvest Road for the development to the east.

Sanitary Sewer System

Filing 4 sanitary sewer flows will be routed west to the existing section of sanitary sewer in E. Yale Ave that runs north along S. Flatrock Trail. This section of sewer will need to be extended north through Filing 7 where it will connect to the existing golf course crossing. As noted above, this section will also need to be extended to the existing 12" sewer line that crosses E. Jewell Ave.

If not already installed, an 8" stub will be provided in S. Harvest Road from E. Yale Ave.

Storm Drainage System

Storm water runoff will be routed through street flow and piped systems to the EURV detention pond located at the low point of the area on the west side of the filing. The pond will release into an existing open channel that will route the flows to an existing at unbuilt E. Yale Ave. From there, the flows will be directed into Murphy Creek.

Parks and Open Space

Filings 3 and 4 are planned to be developed concurrently. Filing 4 will contain community open space and will be served by the neighborhood parks in Filing 3.

Life Safety

The developer is responsible for construction of all on-site and off-site infrastructure needed to establish two points of emergency access to the overall site and each internal phase of construction. This requirement includes, but is not limited to, the construction of any emergency crossing improvements, looped water supply and fire hydrants as required by the adopted fire code and city ordinances.

It is anticipated that this development will be serviced by Aurora Fire Station #15 at the northeast corner of E. Jewell Ave and S. Flatrock Trail.

A Whelen Warning System may be required for this site. Site selection can be determined by several different methods. In the past, the population density of the core of Aurora dictated site selection to insure overlapping or edge to edge coverage. New development in the city and future annexations into the city will require a different method of determining siren sites due to overlapping coverage, open spaces between developing areas, recreational sites and population densities. Murphy Creek East is proposing has a 10'X10' area of land east of the school (Filing 3) dedicated for this system. The chosen spot is on higher ground, and centrally located in the Murphy Creek East development.

Sound propagation from the WPS-2800-5 omni-directional siren is 70 dB at 3000 feet with the standard 50-foot towers per OSHA requirements. This does not take into account topography or obstructions such as buildings. Some overlap or at least edge-to-edge coverage is desirable, resulting in new sirens being placed 6000 feet or approximately 1.14 miles apart on flat ground.

In newly annexed/developing areas of the city, sirens should be sited on every ½ section of the ground (320 acres) or 6000 feet apart to provide edge-on-edge coverage. The placement of two sirens has been determined by the City of Aurora's Office of Emergency Preparedness to insure coverage is in line with our current outdoor warning system, and has been shown on the attached FDP Final Buildout and phased plan sheets. Contact the Office of Emergency Management at 303-739-7636 (phone), 303-326-8986 (fax), or email to afd_oem@auroragov.org with any questions.

Conclusion

This Amendment to the Public Improvement Plan report was prepared in order to outline the infrastructure improvements required Filings 1, 2, 3, and 4 of the Murphy Creek East development. As detailed in the above report, the development is anticipated to be completed in in four filings. Filings 1 and 2 will be developed sequentially, as will Filings 3 and 4.

References

1. **Master Utilities Report for Murphy Creek Development**, Costin Engineering Consultants, Inc. revised March 29, 2001 (COA# 201064)
2. **Amendment to the Master Utility Report for Murphy Creek Development**, CVL Consultants of Colorado, Inc., September 2018
3. **Final Drainage Report for Murphy Creek Subdivision Filing No. 8**, Peak Civil Consultants, revised September 2005 (COA# 205203)
4. **Final Drainage Report for Murphy Creek Subdivision Filing No. 9**, Peak Civil Consultants, revised June 2005 (COA# 205204)
5. **Final Drainage Report for Murphy Creek Metropolitan District (South of E. Jewell Avenue)**, Peak Civil Consultants, November 2005 (COA #205189)
6. **Murphy Creek Subdivision – Filing No. 8 &9 - Master Drainage Report**, CVL Consultants of Colorado, Inc., August 2018
7. **Murphy Creek East Framework Development Plan**, Norris Dullea. (COA# 2001-7003-00)
8. **Murphy Creek East Traffic Impact Analysis**, LSC Transportation Consultants, INC. (LSC# 181110)

APPENDIX

PUBLIC IMPROVEMENT PLAN

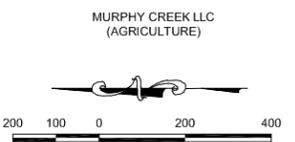
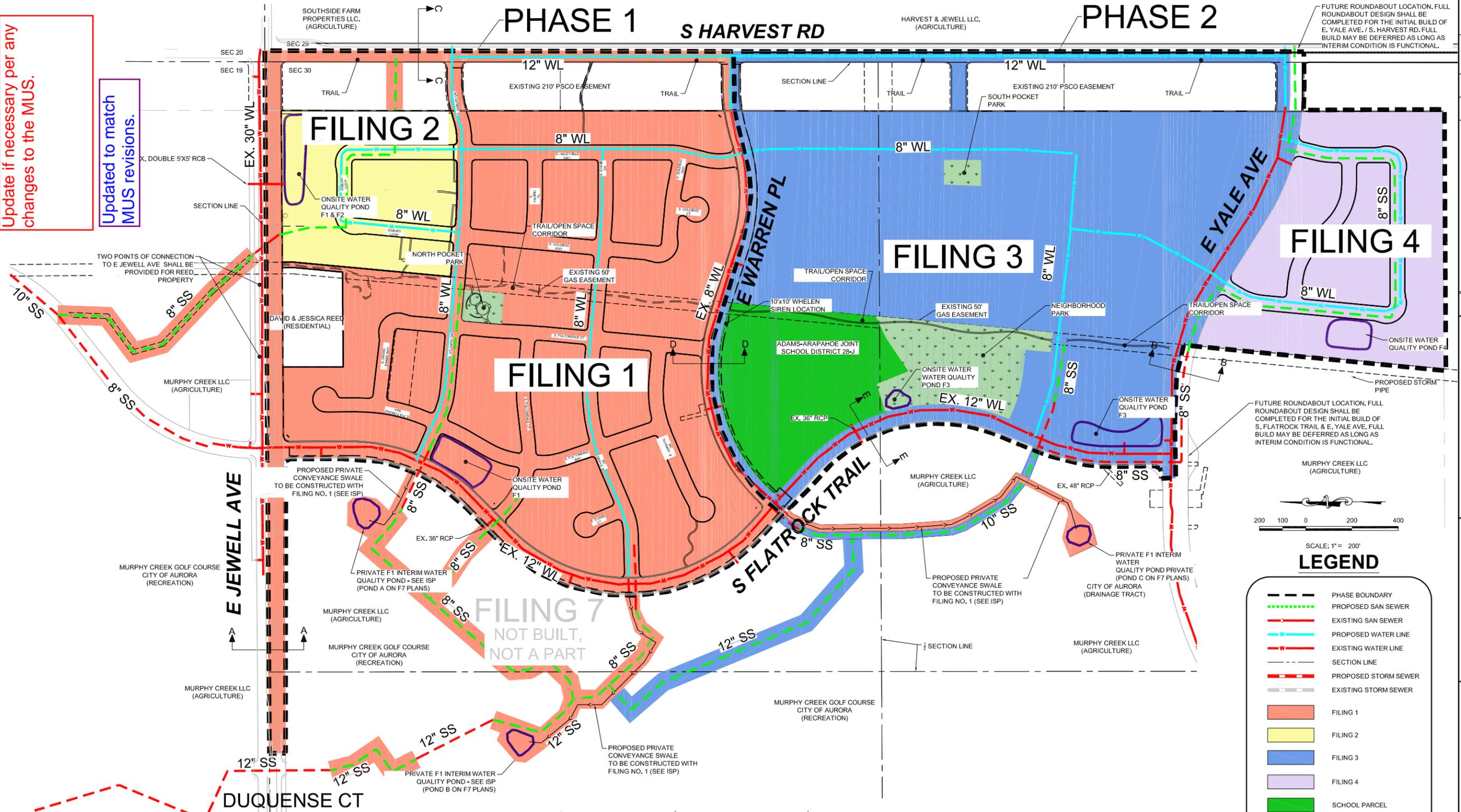
Update if necessary per any changes to the MUS.

Updated to match MUS revisions.

PHASE 1 S HARVEST RD

PHASE 2

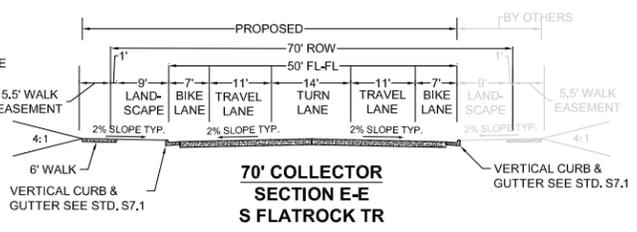
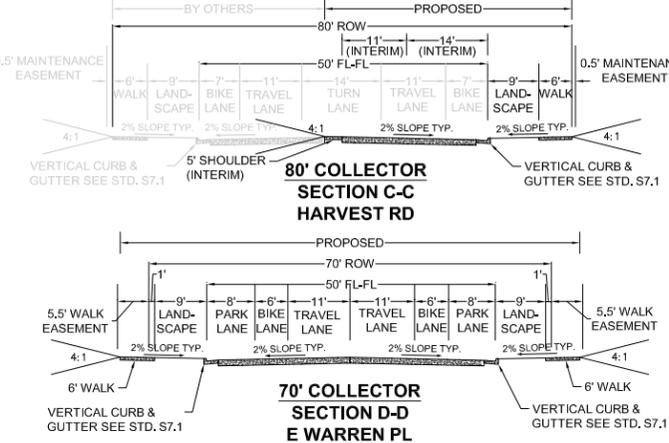
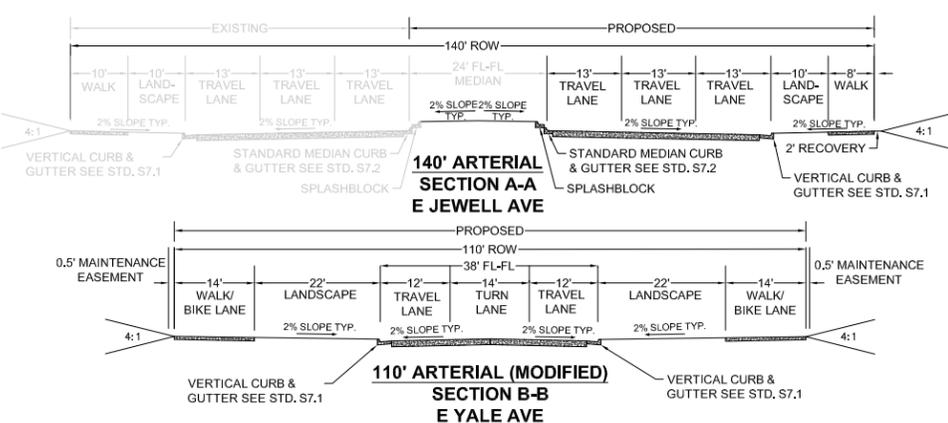
FUTURE ROUNDABOUT LOCATION. FULL ROUNDABOUT DESIGN SHALL BE COMPLETED FOR THE INITIAL BUILD OF E. YALE AVE. / S. HARVEST RD. FULL BUILD MAY BE DEFERRED AS LONG AS INTERIM CONDITION IS FUNCTIONAL.



LEGEND

- PHASE BOUNDARY
- PROPOSED SAN SEWER
- EXISTING SAN SEWER
- PROPOSED WATER LINE
- EXISTING WATER LINE
- SECTION LINE
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- FILING 1
- FILING 2
- FILING 3
- FILING 4
- SCHOOL PARCEL
- PARK/OPEN AREA
- WATER QUALITY POND

NOTES:
 1. ROAD ALIGNMENTS ARE PRELIMINARY AND WILL BE FINALIZED IN FUTURE CSP AND CONSTRUCTION DRAWING SUBMITTALS.
 2. UTILITY AND POND SIZES/LOCATIONS ARE PRELIMINARY AND APPROXIMATE AS SHOWN. THESE WILL BE FINALIZED IN FUTURE CSP AND CONSTRUCTION DRAWING SUBMITTALS.
 3. THE DEVELOPER IS RESPONSIBLE FOR CONSTRUCTION OF ALL ON-SITE AND OFF-SITE INFRASTRUCTURE NEEDED TO ESTABLISH TWO POINTS OF EMERGENCY ACCESS TO THE OVERALL SITE AND EACH INTERNAL PHASE OF CONSTRUCTION. THIS REQUIREMENT INCLUDES, BUT IS NOT LIMITED TO, THE CONSTRUCTION OF ANY EMERGENCY CROSSINGS IMPROVEMENTS, LOOPED WATER SUPPLY AND FIRE HYDRANTS AS REQUIRED BY THE ADOPTED FIRE CODE AND CITY ORDINANCES.



No.	Revisions	Date	Appr.	Date

10333 E. Dry Creek Rd Suite 204 Englewood, CO 80112 Tel: 720-482-4526 CIVILINC.NET
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CIVILINC CONSULTANTS

LENNAR CORPORATION 9751 S. WENDELL BLVD., SUITE 120 ENGLEWOOD, CO 80112 TEL: (303)-754-0600
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MURPHY CREEK EAST SUBDIVISION PUBLIC IMPROVEMENT PLAN
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SCALE: AS SHOWN	FILE NO: 8130323701
DRAWN BY: SCL	CHECKED BY: SJK
DATE: NOVEMBER 2019	DATE: NOVEMBER 2019

SHEET NUMBER	E1
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