

STUDY SESSION AGENDA

CITY COUNCIL CITY OF WHEAT RIDGE, COLORADO

7500 W. 29th Ave.
Wheat Ridge CO

November 19, 2018

6:30 p.m.

Individuals with disabilities are encouraged to participate in all public meetings sponsored by the City of Wheat Ridge. Call Sara Spaulding, Public Information Officer 303-235-2877 at least one week in advance of a meeting if you are interested in participating and need inclusion assistance.

Citizen Comment on Agenda Items

1. Ward Station Street Improvements
2. Sloan's Lake FEMA Mapping
3. Staff Report(s)
4. Elected Officials' Report(s)

ADJOURNMENT



Memorandum

TO: Patrick Goff, City Manager

THROUGH: Kenneth Johnstone, AICP, Community Development Director

FROM: Mark Westberg, Project Supervisor

DATE: November 19, 2018

SUBJECT: Wheat Ridge · Ward TOD Area Street Update

ISSUE:

Improvements to 52nd Avenue, Ridge Road and Tabor Street have been identified and prioritized as infrastructure projects for the Wheat Ridge Ward station area, to be funded, in part, with proceeds from the voter approved 2E bond funds. Input is needed on whether 52nd Avenue should be improved and extended east of Tabor Street to connect to Arvada. Council direction is also needed as to whether an unimproved area along Ridge Road west of Parfet Street should be included with the station area improvements.

BACKGROUND:

The Wheat Ridge · Ward Station planning area is one of four projects in the City's *Investing 4 the Future* bond program which is benefitting from \$12 million from the voter-approved, temporary ½-cent sales and use tax rate increase.

Extensive visioning and planning has been done on the Wheat Ridge · Ward Station planning area. Numerous Council updates and actions have occurred at various stages in this process. Council was most recently updated on June 4, 2018 on the status of the Wheat Ridge · Ward Station planning area and on private developments in the area.

Earlier this year, the City Managers of Arvada and Wheat Ridge along with the County Manager of Jefferson County signed a memorandum of understanding (MOU) agreeing to coordinate and cooperate on designing and funding mutually beneficial road improvements in the area surrounding the Wheat Ridge · Ward station area. Discussions between the staffs of the jurisdictions have been ongoing concerning an intergovernmental agreement (IGA) that outlines cost-sharing and other arrangements for the shared infrastructure improvements

The following potential projects have long been identified as infrastructure priorities in the station area:

- Improvements to W. 52nd Avenue from Ward Road to the City boundary east of Simms Street including improvements to multimodal facilities and to the intersection at Ward Road.

- Improvements to Ridge Road from Tabor Street to the City boundary east of Simms Street including improvements to multimodal facilities
- Improvements to Tabor Street between Ridge Road and 52nd Avenue including improvements to multimodal facilities
- Improvements to Ridge Road between Ward Road and the station including improvements to multimodal facilities
- A pedestrian bridge from the station over the rail lines to the south to 49th Place
- A linear park with multimodal facilities connecting the station via the pedestrian bridge to the I-70 Frontage Road South

In August, Council approved a contract with Short Elliot Hendrickson, Inc. (SEH) to prepare construction drawings for the above projects. Staff has since authorized the first three task orders for the following projects:

- Task Order #1 – 52nd Avenue (from Ward Road to the City boundary east of Simms Street)
- Task Order #2 – Ridge Road (from Tabor Street to the City boundary east of Simms Street)
- Task Order #3 – Tabor Street between Ridge Road and 52nd Avenue

SEH is currently working on conceptual plans for the three streets which will be submitted for review later this month. Draft copies of the conceptual plans are included as Attachment 1.

Several of the identified projects will require acquisition of additional right-of-way (ROW) or easements in order to be completed. The firm HDR was recently selected by the City's established procurement process to perform the required professional services. The selection process included review by an evaluation committee of proposals in response to a request for qualifications submitted by three (3) firms. Staff is currently negotiating with HDR to finalize the scope and fees for the anticipated work expected for the first two task orders for the following locations:

- Task Order #1 – 52nd Avenue (from Tabor Street to the City boundary east of Simms Street)
- Task Order #2 – Ridge Road (from Tabor Street to the City boundary east of Simms Street)

Staff expects to complete the negotiations and bring a contract to Council for approval at the December 10, 2018 regular meeting.

Task orders will be issued for each of the tasks and services and will be billed on an hourly basis, and only for the services actually completed. Additional task orders, including the expected tasks and estimated fees, will be negotiated and brought back to Council for approval as additional acquisition needs are identified.

52nd Avenue East of Tabor Street

The existing ROW for 52nd Avenue east of Tabor Street is narrow, only 35 feet wide, to Simms Street. East of Simms Street the existing ROW narrows to 5 feet wide. The proposed street

section has been kept to the minimum width possible at around 40 feet. Between Tabor Street and Simms Street, around four to eight feet of additional ROW is needed, as shown in Detail Map A in Attachment 2.

Because some of the existing improvements on the five properties on the south side of 52nd Avenue are within a few feet of the ROW, staff is proposing to acquire the needed ROW, just a few feet, from the three properties on the north side of 52nd Avenue.

East of Simms Street, there is also some dispute regarding the ownership and/or use of the 30 feet of property that was previously City ROW. The City Attorney feels that this issue can be resolved, which would be done during the ROW acquisition process for this portion of the project.

A somewhat bigger issue that needs to be decided first is whether 52nd Avenue should be extended east of Simms Street to connect to the proposed Haskins Station project in Arvada. This project has received preliminary approval from Arvada City Council for 477 units of various housing types. As approved, this road extension would eventually connect to existing 54th Avenue in Arvada and would function as a collector street in both jurisdictions. A vicinity map showing the overall area is shown in Attachment 2.

Staff feels this is a critical street connection that needs to be made and is working with our consultant on a traffic study that further demonstrates the need for the connection. There is only one (1) traffic signal on Ward Road north of the railroad crossing which is located at 52nd Avenue. Staff from both cities believe that much of the traffic east of Simms that wants to access Ward Road will do so using the signal at 52nd Avenue.

Within each jurisdiction, 52nd Avenue is designated as a collector street. Without the extension of 52nd Avenue to the east, staff is concerned that the local streets in the existing neighborhoods between Tabor and Simms Streets will be adversely impacted by traffic from Ridge Road trying to reach the traffic signal at 52nd Avenue and Ward Road. Specifically, it is likely that traffic would come west on Ridge Road and cut through Swadley and Simms Streets to access 52nd Street and to reach the traffic signal at Ward Road.

The neighborhood north of 52nd Avenue along Tabor Street has also expressed concern about traffic using their local streets to access Ward Road to the north. Staff feels that the extension of 52nd Avenue will encourage traffic that might otherwise use Tabor Street to access 52nd Avenue from Ridge Road to continue to the west on 52nd Avenue rather than continuing north on Tabor Street.

Action: Staff is seeking direction from Council to proceed with the necessary steps for the design, ROW acquisition, and construction of W. 52nd Avenue east of Simms to the City boundary.

Ridge Road Multi-Modal Facilities

Public improvements, including multi-modal facilities, are currently proposed or have recently been completed along Ridge Road between Ward Road and Independence Street, except at two locations. Both Wheat Ridge and Arvada have been requiring, and will continue to require

improvements when adjacent parcels have redeveloped. In addition, Arvada closed several gaps in the multi-modal facilities east of Miller Street adjacent to existing neighborhoods. The multi-modal improvements were constructed on the north side of Ridge Road within existing ROW.

As noted earlier, the segment of Ridge Road that is east of Tabor Street to the City boundary east of Simms Street is one of the projects that is being designed. This segment will have a somewhat narrower cross-section compared to what is eventually planned for most of Ridge Road. The center turn lane is being omitted in order to reduce the amount of ROW that is needed from the five properties on the north side of Ridge Road. The additional ROW that is anticipated to be required is between 12 and 15 feet.

One of the remaining gaps is west of Miller Street. This gap is over 600 feet long, and is complicated by the lack of ROW along with a regional drainage ditch adjacent to Ridge Road. The adjacent property is mostly undeveloped, owned by the State, and is a potential development parcel. As such, it is recommended that improvements at this location wait until development of the property. This would best manage relocation of the regional drainage ditch.

The other gap, west of Parfet Street, is over 300 feet long, and is adjacent to two single family properties, see Detail Map B in Attachment 2. Similar to the approach used at other locations adjacent to existing development, staff would like to investigate doing a City project at this time since both the design and ROW consultants are under contract for similar work associated with the segment of Ridge Road east of Tabor Street. One of the houses is just over 20 feet away from the existing ROW, so a reduced street section will likely be used at this location.

Action: Staff is seeking direction from Council to proceed with the necessary steps for design, ROW acquisition, and construction of Ridge Road west of Parfet Street.

Next Steps

Staff has proposed the following next steps for this project if consensus is reached from City Council to proceed with the recommended projects:

- ROW acquisition consultant contract awarded – December 2018
- JeffCo/Arvada IGA finalized – December 2018 thru January 2019
- Construction plan preparation – January 2018 thru April 2019
- Public outreach – January 2019 thru February 2019
 - Meet with small group of property owners that are adjacent to each street, up to five separate groups
 - Host public meeting with JeffCo/Arvada staff to present preliminary plans to the public for input
- Street width designation – February 2019
- ROW deeds and pre-acquisition – January 2019 thru February 2019
- ROW acquisition – March 2019 thru May 2019
- Bidding and contract award – June 2019 thru July 2019
- Construction – August 2019 thru Spring 2020

RECOMMENDATION:

Staff recommends that 52nd Avenue be improved and extended east of Tabor Street to the City boundary west of Simms Street to connect to the improvements that will be completed by the Haskins Station development to the east in Arvada.

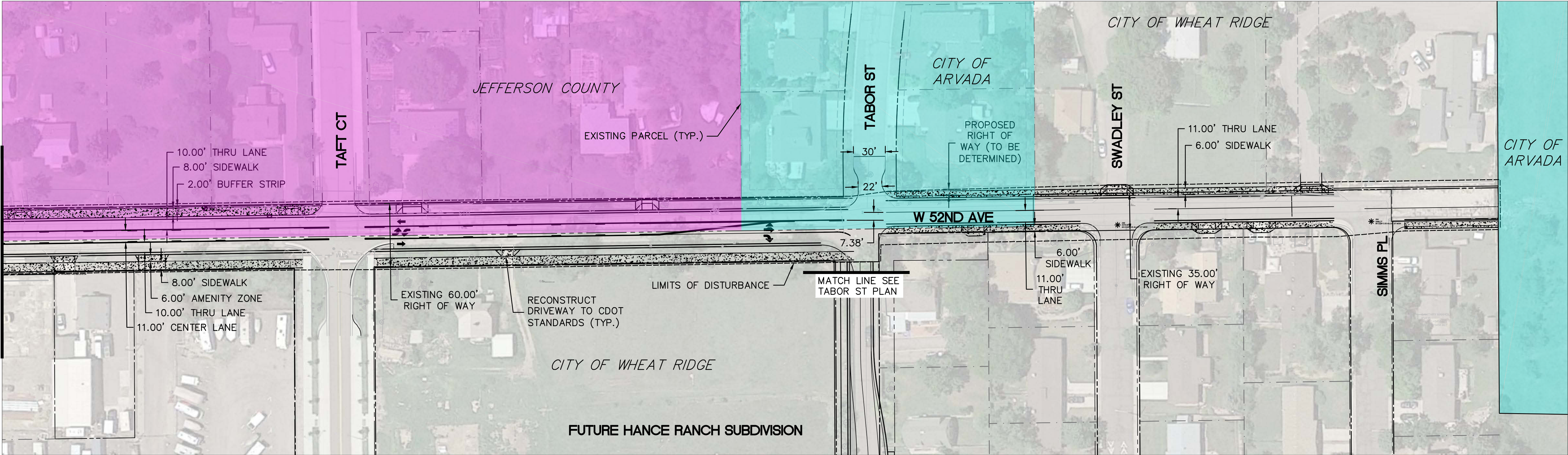
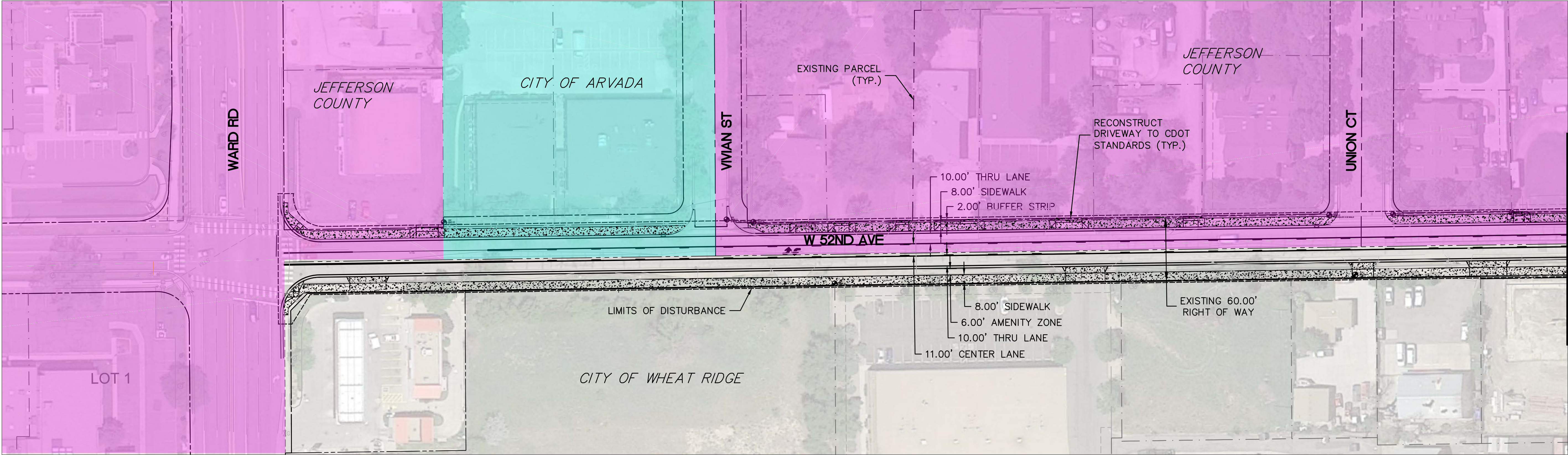
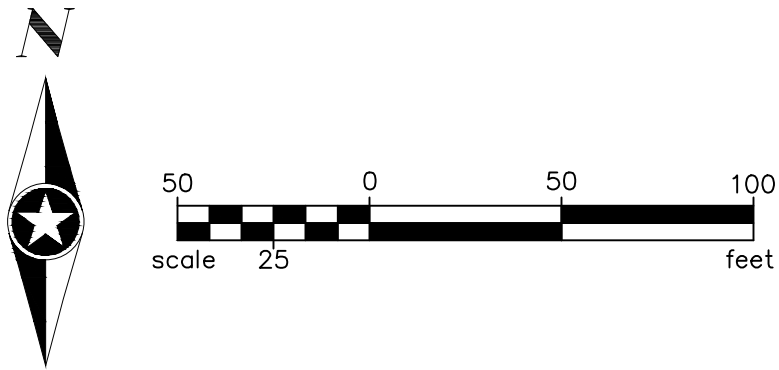
Staff also recommends that the feasibility of closing the gap in multimodal improvements on Ridge Road west of Parfet Street be investigated by completing conceptual design and determining the ROW needs.

Staff is requesting direction from Council on proceeding with the necessary steps for design, ROW acquisition, and construction of the aforementioned streets – 52nd Avenue and Ridge Road.

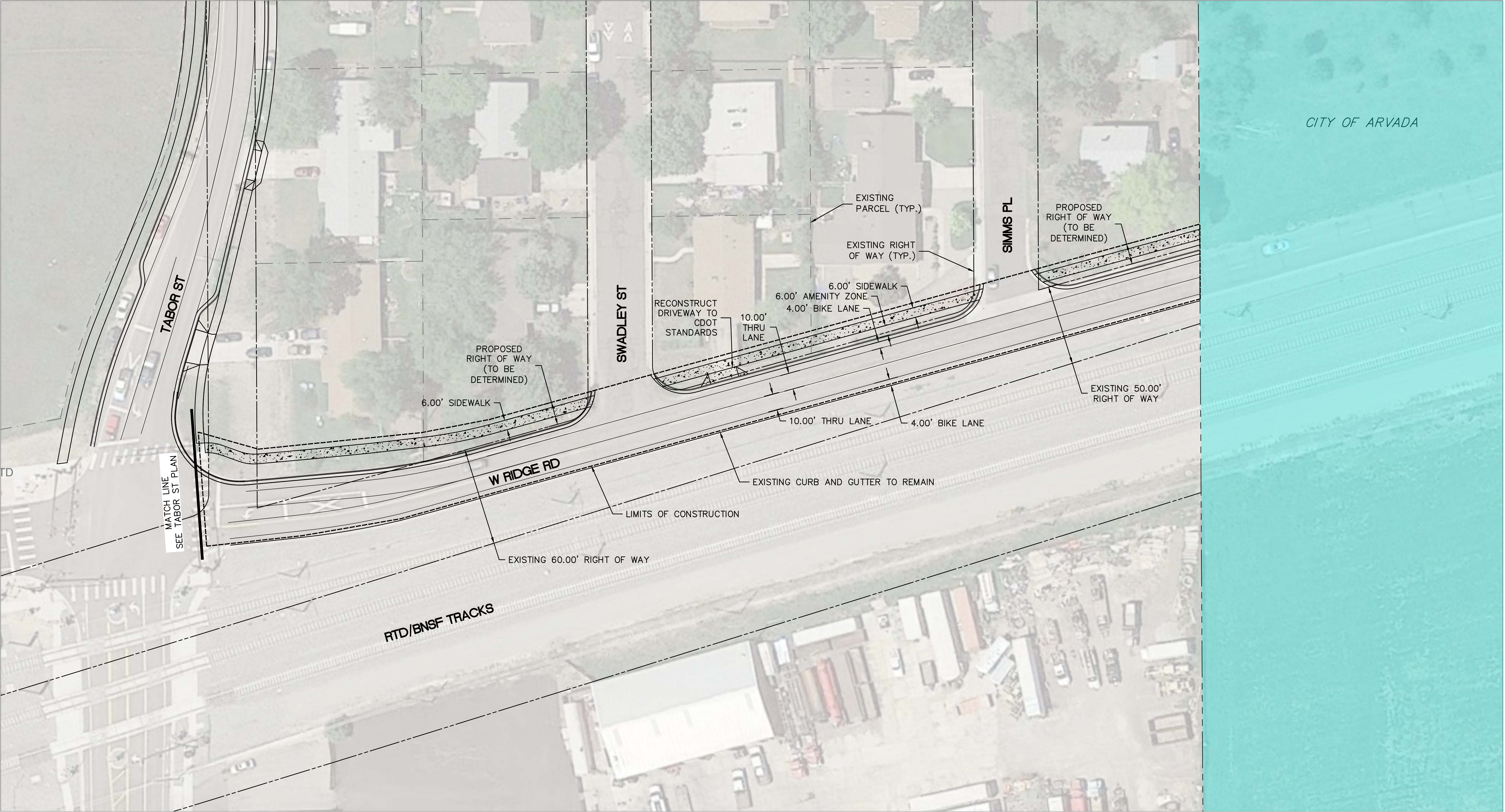
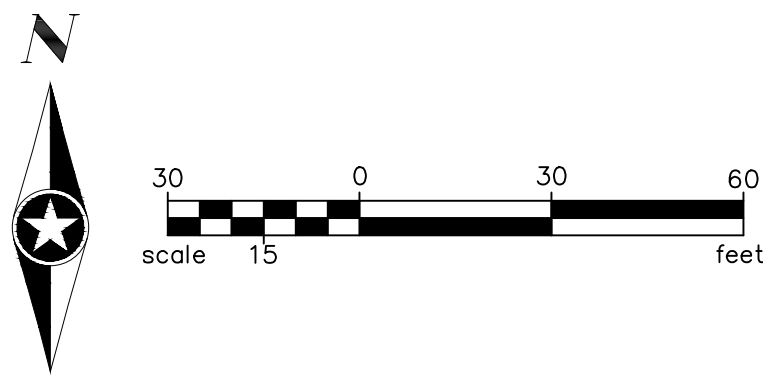
ATTACHMENT:

1. Draft Conceptual Street Plans
2. Project Location Map

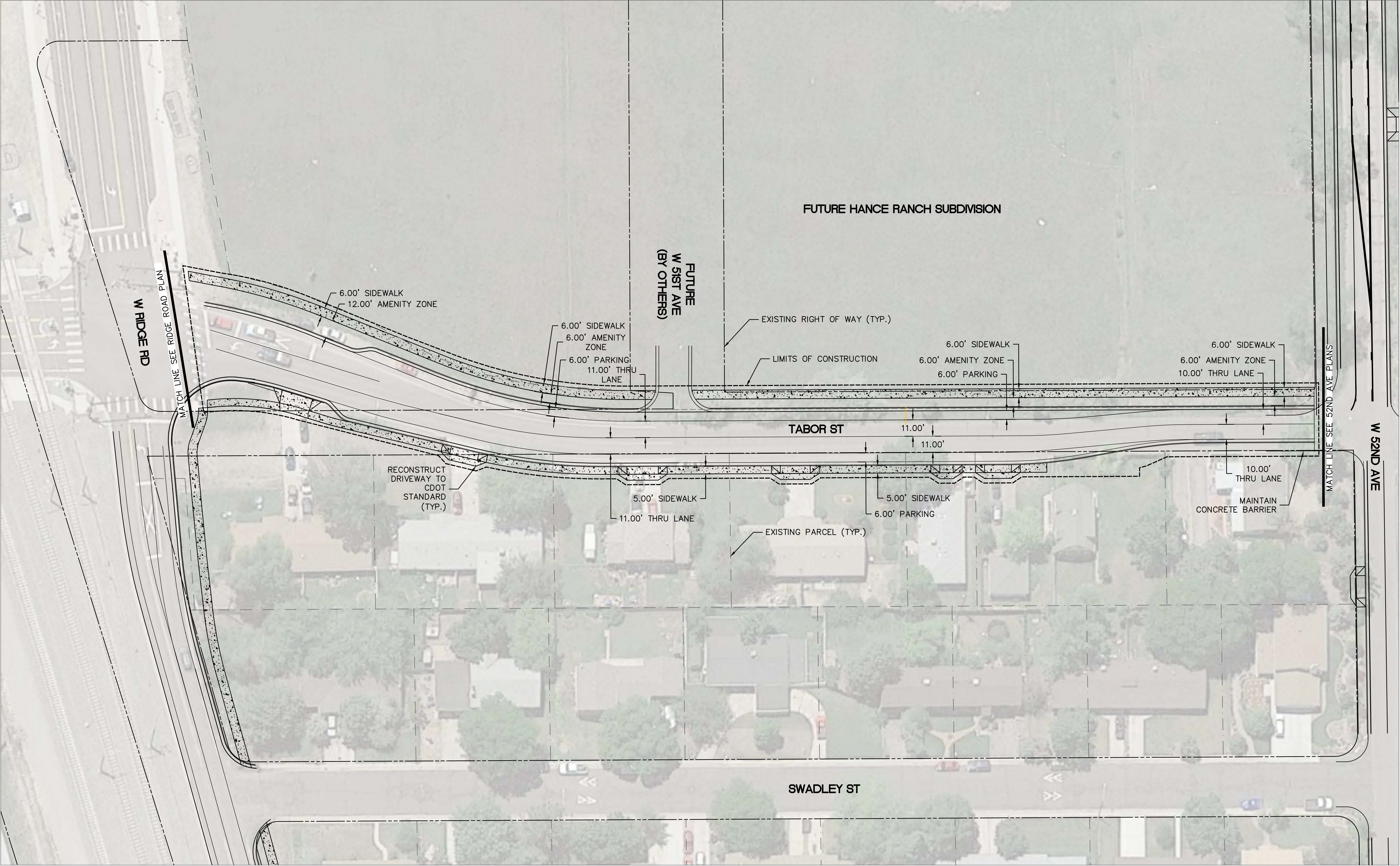
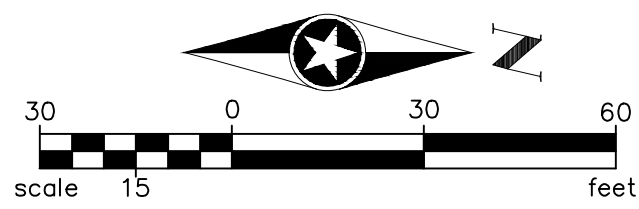
PROPOSED 52ND AVENUE CONCEPT LAYOUT



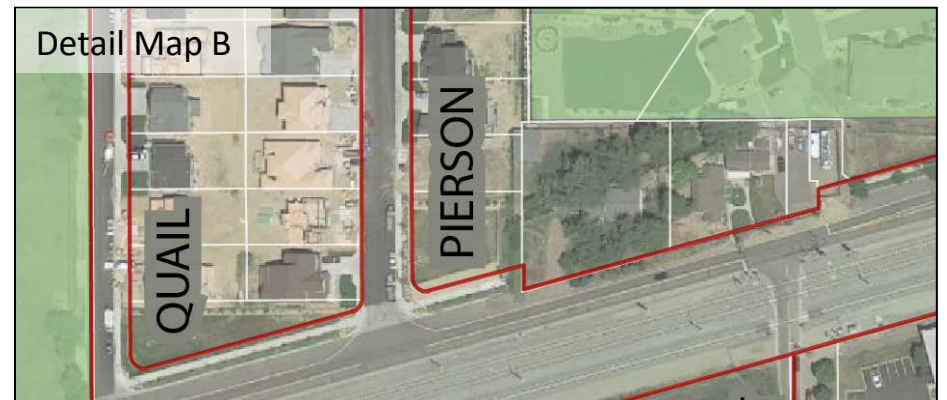
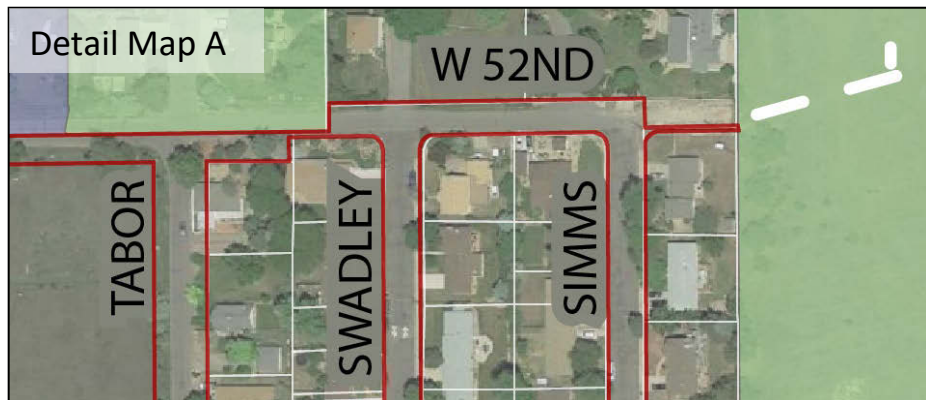
PROPOSED RIDGE ROAD CONCEPT LAYOUT



PROPOSED TABOR STREET CONCEPT LAYOUT



PROJECT LOCATION MAP





Memorandum

TO: Patrick Goff, City Manager

THROUGH: Scott Brink, Director of Public Works

FROM: Mark Westberg, Project Supervisor

DATE: November 19, 2018

SUBJECT: Sloan's Lake Floodplain Options

ISSUE:

Urban Drainage and Flood Control District (UDFCD) needs to know if the City wants the areas identified in the recently completed Flood Hazard Area Delineation (FHAD) for the Sloan's Lake Basin to be included in the planned update to the official FEMA Flood Insurance Rate Maps (FIRM) floodplain maps.

BACKGROUND:

UDFCD, along with the Cities of Wheat Ridge, Lakewood, and Edgewater and the City and County of Denver, has been working since early 2016 to update the FHAD and master plan for the Sloan's Lake Basin that was completed in 1977. Because of the many changes within the Basin and in floodplain modeling that have occurred since 1977, the existing FHAD and master plan are out of date. An up-to-date FHAD and master plan are necessary to provide guidance to minimize damage from flooding. This is done by properly planning potential improvements, both public and private, and effectively regulating identified flood prone areas.

The first step was to update the hydrology, which determines the peak flows at various locations in the Basin. The hydrology update incorporated many of the modeling changes as well as the land use changes within the Basin. The next step was to update the hydraulics based on the many improvements that have been implemented by all of the jurisdictions from the 1977 master plan. This information, as well as more accurate and updated topography were then used to update the FHAD.

The study then evaluated several possible improvements that could be done within the Basin to further minimize damage due to flooding. Consideration was given to costs, existing and proposed land use, existing and proposed drainage systems, known drainage or flooding problems, known or anticipated erosion problems, and right-of-way needs. Schematic alternative plans were developed so that comparisons between the alternatives could be made.

No new projects were identified in the updated master plan within the City of Wheat Ridge. This is largely due to the fact that all of the storm sewer projects that were recommended in the 1977 master plan were previously constructed by the City. In addition, the 29th Avenue storm sewer

project that was completed a few years ago largely mitigated the known minor storm flooding issues in the southeast portion of the City. That project utilized an abandoned water main in 29th Avenue and the detention pond at the Richards-Hart Estate to reduce the flooding that was occurring south of 29th Avenue east of Fenton Street.

The resulting master plan can be utilized by the other jurisdictions to plan future improvements, including the locations, alignments, and sizing of storm sewers, channels, and detention/retention basins, and other facilities and appurtenances needed to provide efficient stormwater management for the Basin.

Updated Sloan's Lake FHAD

Even though a FHAD has existed for the Sloan's Lake Basin since 1977, the City has not regulated the flood hazard areas because they were not included in the FIRM, like Clear Creek and Lena Gulch. Cities can choose to regulate flood hazard areas outside of the FIRM and many local jurisdictions do. Denver calls them Potential Inundation Areas (PIA).

During recent evaluations of the City's floodplain program, staff explored the option of regulating the flood hazard areas identified in the 1977 FHAD, but realized that those areas might not accurately reflect current conditions. With an updated FHAD that more accurately represents the flood hazards, the City can choose to regulate those areas in the following ways:

1. No Action – The City can continue to regulate the identified flood hazard areas the same as other areas of the City where flood hazards have not been identified, so no flood related regulation.
2. Adopt FHAD as a City regulated floodplain similar to Denver's PIA – The City can choose to regulate the identified flood hazard areas the same as the flood hazard areas on the FIRM.
3. Adopt FHAD as a FEMA regulated floodplain or FIRM – The City can choose to have the identified flood hazard areas added to the FIRM.

The implications of the three options are summarized on Attachment 1 and are discussed below.

Flood Hazard Notification

Notification of the potential for flooding is an important component of a well-managed floodplain program. Properties on a FHAD and FIRM receive an annual mailing from UDFCD that warns them that they are within an area of potential flooding. As a part of its public outreach, the City also does an annual mailing to all properties on a FIRM. If the FHAD is adopted as a PIA, then the City mailing would be expanded to include the areas identified in the PIA. Under No Action, the City mailing could be modified and expanded to include areas that are only in a FHAD to warn of the flooding risk, but without any regulation.

When there is a federally backed loan involved, buyers of properties on a FIRM are also notified at the time of purchase of the need to obtain mandatory flood insurance. In addition, for properties on a FIRM, the State requires that sellers notify buyers of the flood risk. The City also requires that landlords notify tenants of the flood risk if the property is on the FIRM. If the FHAD is adopted as a PIA, then the State and City notifications, but not the federal notification, requirements would apply.

Flood Insurance Requirement

Properties on a FIRM are required to purchase flood insurance if they have a federally backed loan. For all other properties, the flood insurance is voluntary. While often seen as a burden and an unwanted expense, flood insurance provides important coverage for damage that is caused by flooding. Buildings in an identified flood hazard area are nine times more likely to suffer flood damage than damage from a fire. Over the life of a 30-year mortgage, a building in an identified flood hazard area has a 26% chance of receiving flood damage.

Without this coverage, flood damaged buildings might not be fixed and could fall into disrepair or be deemed uninhabitable. The City might then be required to mitigate or otherwise have to deal with the blighted structure, especially if several properties are adversely affected by flooding and necessary repairs are not made.

Flood Insurance Rates

Flood insurance rates for properties that are not on the FIRM are typically around \$500 annually since the properties are seen as low risk of flooding and receive a preferred risk rate. This would still be true for properties on a FHAD or PIA that are not on the FIRM.

Flood insurance rates for properties on a FIRM are based on the apparent flood risk. This is determined by comparing the lowest floor elevation of the building with the base flood elevation (BFE). The flood risk and therefore the full risk rate for buildings above the BFE are less than those that are below the BFE. A difference of a foot or two either direction has a big impact on the full risk rates.

Since the flood depths on the FHAD are fairly shallow, most of the 62 buildings that are on the FHAD, are likely around or above the BFE. For those buildings, the full risk rate for the mandatory flood insurance would be less than \$1,500 annually. However, four of the buildings are garden level with the lowest floor a few feet below the BFE. For those buildings, the full risk rates would likely be between \$5,000 and \$10,000 annually. In addition, 18 buildings have basements which would result in the full risk rates likely exceeding \$20,000 annually.

Because the City's portion of the Basin would be a newly mapped area, the flood insurance rates would all start near the preferred rate of around \$500 annually, but would increase rapidly. The rates would increase by at least 18% annually until the full risk rate is reached. The rate would double in five years, would be five times higher in 10 years, and 12 times higher in 15 years. Rental properties would increase by 25% annually, which would triple the rate in five years, would be nine times higher in 10 years, and 28 times higher in 15 years.

Floodplain Regulations

The purpose of the City's floodplain regulations is to decrease the risk of flood damage to improvements that are proposed by property owners. Properties that are only on a FHAD would not be subject to the protections offered by those regulations. Properties that are included on a PIA or a FIRM would receive the additional protections resulting from being subject to the City's floodplain regulations.

Community Rating System (CRS) Program

The CRS recognizes communities that have well managed floodplain programs by offering a discount on the flood insurance rates for property owners on a FIRM. Properties that are not on a FIRM do not receive the discount because of receiving the preferred risk rate. The City is currently a Class 5 community resulting in a 25% discount.

Regulating flood prone properties that are outside of the FIRM would result in a slight increase in total points since the program gives points for going beyond what is required. However, adding the properties to the FIRM might result in a slight decrease in points because it would increase the number of building in the FIRM by 62 and also increase the amount of non-open space in the FIRM by 21 acres. Several calculations are based on ratios related to the number of buildings and the amount of open space versus total floodplain area.

Scheduling

UDFCD is working with FEMA to include updating the FIRM for the Sloan's Lake Basin in FEMA's 2019 work plan, since areas of Denver, Lakewood, and Edgewater are already in the FIRM. UDFCD needs to know quickly if the City wants their flood hazard areas in the FHAD included in the updated FIRM. The other options do not have any deadlines.

RECOMMENDATION:

Staff recommends that the flood hazard areas shown on the FHAD be regulated to provide the protections to property owners that our floodplain regulations provide. However, due to the future high cost of flood insurance for properties that are garden level or have basements, staff does not recommend that the areas shown on the FHAD be added to the FIRM.

Staff recommends adopting the flood hazard areas as PIA as soon as the Colorado Water Conservation Board (CWCB) adopts the FHAD at the State level and UDFCD then officially adopts the FHAD. The CWCB and UDFCD should be adopting the FHAD in the next couple of months, at which time staff would proceed with the necessary public outreach and scheduling the necessary meetings and public hearing to adopt the FHAD as a PIA early next year.

ATTACHMENT:

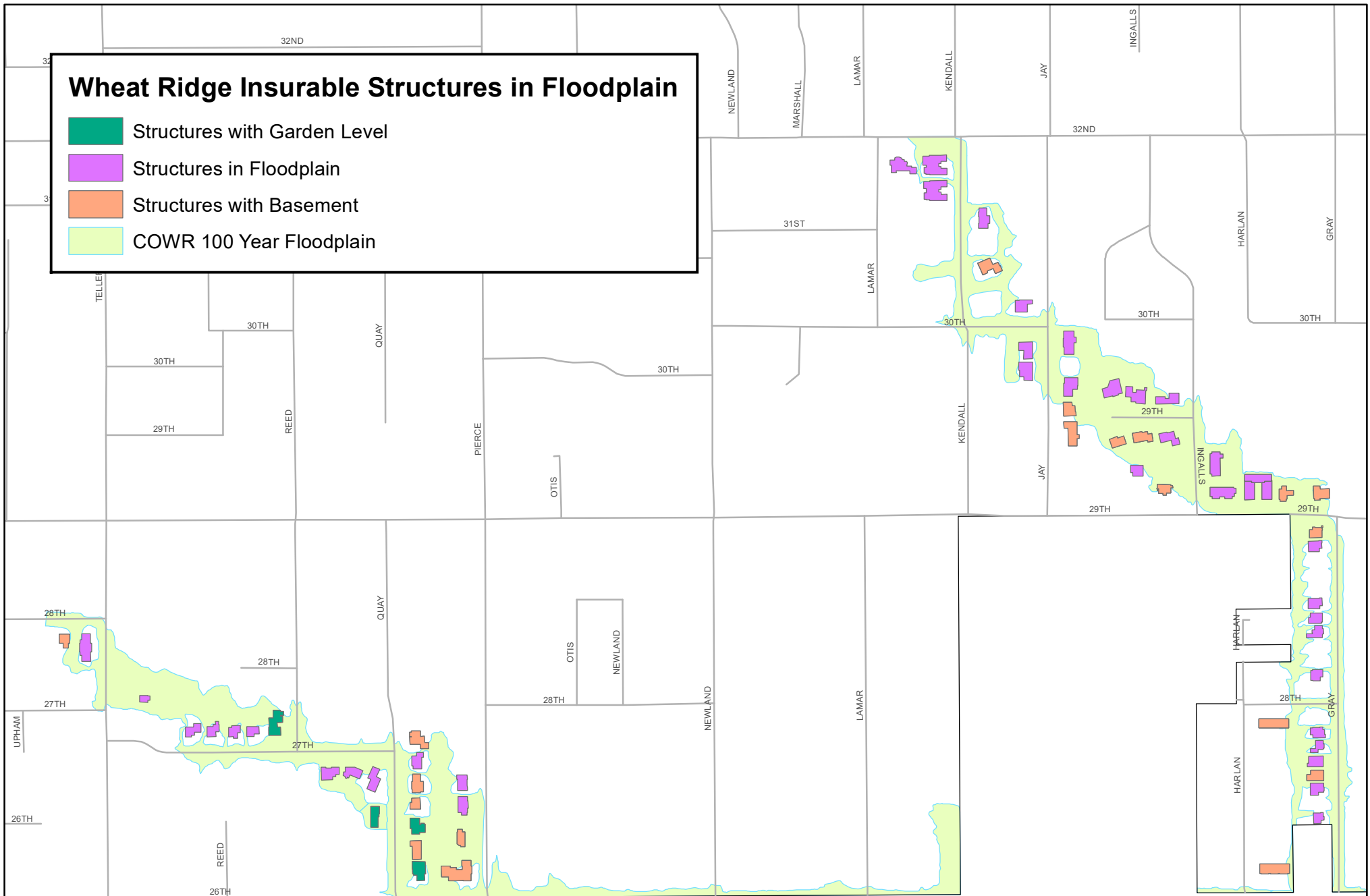
1. Floodplain Adoption Comparison Table
2. Wheat Ridge Insurable Structures in the Floodplain

FHAD Adoption Comparison Table

	No Action	Pro	Con	Adopt as City Floodplain, PIA	Pro	Con	Adopt as FEMA Floodplain, FIRM	Pro	Con
Flood Hazard Notification	UDFCD annual mailing informing of potential flooding, could be added to City mailing		X	UDFCD + City annual mailing + State or City requirement to disclose floodplain status during real estate transactions		X	UDFCD + City annual mailing + State or City disclosure + notification during federally backed loan transactions	X	
Flood Insurance Requirement	Voluntary		X	Voluntary		X	Mandatory if federally backed loan	X	
Flood Insurance Rates	< \$500/year	X		< \$500/year	X		Most < \$1,500/year, if garden level > \$5,000/year, if basement then > \$20,000/year		X
Floodplain Regulations	None		X	City Code	X		City Code	X	
CRS Program	No changes			Gain points for regulating outside official floodplain	X		Reduction in points due to additional structures in floodplain and non-open space floodplain		X

Wheat Ridge Insurable Structures in Floodplain

- Structures with Garden Level
- Structures in Floodplain
- Structures with Basement
- COWR 100 Year Floodplain



100 Year Floodplain in COWR= 21.139449 Square Acres

ATTACHMENT 2

