



SOUTHEAST AURORA MAINTENANCE FACILITY PUBLIC IMPROVEMENT PLAN

SEPTEMBER 2020

For:

**Aurora Water
15151 E. Alameda Parkway
Aurora, CO 80012**

Prepared By:

**Calibre Engineering, Inc.
9090 S. Ridgeline Blvd. Suite 105
Highlands Ranch, CO 80129**

Contact: Brian Moss

303.339.5406

bkm@calibre.us.com

SOUTHEAST AURORA MAINTENANCE FACILITY
PUBLIC IMPROVEMENT PLAN

TABLE OF CONTENTS

SCOPE	3
A. PROJECT LOCATION AND DESCRIPTION	3
B. REFERENCES.....	3
C. PUBLIC IMPROVEMENTS	3
D. DEFERRAL REQUEST	5
E. CONCLUSIONS	6

APPENDICES

- A. Maps and Exhibits
- B. Referenced Reports

SOUTHEAST AURORA MAINTENANCE FACILITY

PUBLIC IMPROVEMENT PLAN

SCOPE

The purpose of this Public Improvement Plan (PIP) is to identify relevant infrastructure for the Southeast Aurora Maintenance (SEAM) Facility.

A. PROJECT LOCATION AND DESCRIPTION

- The SEAM facility is bounded on the north and east side by the Pronghorn Natural Area, to the south by East Quincy Avenue, and to the west by undeveloped land. The site is approximately 86 acres.
- The site is in the City of Aurora, Douglas County and State of Colorado. SEAM is in the Southwest Quarter of Section 1, Township 6 South, Range 66 West of the 6th Principal Meridian.
- Access to the proposed development is via East Quincy Avenue.
- Future improvements to East Quincy Avenue will include widening of the road to meet City of Aurora Standards for a six-lane arterial roadway. The improvements will include curb and gutter, a median with curb and gutter, and sidewalks. The typical section for the ultimate roadway section is included in Appendix A.
- This site is currently undeveloped land.
- Land uses for the SEAM facility will include municipal buildings, access roads, parking, and all other associated wet and dry utility infrastructure.
- See Vicinity Map located in Appendix A for reference.

B. REFERENCES

Additional documents used to prepare this report are as follows:

- *Aurora Water at SEAM Master Drainage Report 2020 Update, prepared by Calibre Engineering, Inc. dated June 2020.*
- *Master Drainage Report for Southeast Aurora Maintenance Facility (Pronghorn Natural Area and Open Space #01), prepared by Peak Civil Consultants dated April 2012, COA Approval Number 212034.*

C. PUBLIC IMPROVEMENTS

This site will consist of three Planning Areas (PA). This report will focus on the development of PA One since there are no proposed site plans for PAs Two and Three. The improvements listed below are necessary for the development of PA One.

- Existing East Quincy Avenue (Quincy) is currently a two-lane rural roadway. Quincy is the only access for the development. It is anticipated that only interim improvements will

SOUTHEAST AURORA MAINTENANCE FACILITY

PUBLIC IMPROVEMENT PLAN

be made to Quincy with the development of PA One. Access to PAs Two and Three will be provided by Quincy. The interim improvements will include left turn lanes on Quincy at both access points. Ultimately Quincy is planned to be a six-lane arterial. Future improvements will be designed and constructed as traffic warrants are met. The final plat will dedicate the necessary right-of-way for Quincy to accommodate the six-lane arterial roadway improvements.

- There will be two private access drives for PA One that will connect to Quincy. One access point located roughly in the middle of the site will mainly be for maintenance staff access. The easterly access drive is intended for public access. The access drives will circulate through the site and provide access to the parking areas and buildings.
- Wet and dry utility infrastructure will be extended to the site and the specific details are provided below.
- Drainage improvements to Baldwin Creek will include a 3'X5' box culvert within PA One as shown in the Master Drainage Addendum prepared by Calibre Engineering. There are no additional drainage improvement anticipated with the development of PAs Two and Three.
- PA One will be designed and constructed in 2020/2021. Wet and dry utilities will be designed to provide service to the five buildings that are proposed in this PA. Utility stubs will be provided for future PA developments. At this time there is not an anticipated design or construction schedule for PAs Two and Three.

Land Development

- PA one is approximately 43 acres of the total 86 acres. PA one is in the northern half of the site. PA two is approximately 20 acres and is in the south west half of the site. PA three is approximately 23 acres and is in the south east half of the site. See attached exhibit for reference.

Roadway Improvements

- The access drives will be private and will be 30-feet wide paved roads. The private road typical section is provided in Appendix A. A dedicated fire lane will be provided.
- Quincy widening will be limited to the addition of left turn lanes at both access points.
- The north half of the ultimate right-of-way (144-feet) will be dedicated with PA one.
- Access to all three PAs will be made via Quincy and the private drives.

Drainage Improvements

- The onsite drainage improvements will generally consist of storm sewer inlets to capture storm events and pipes to convey the flows to detention ponds.
- The Baldwin Creek improvements will generally consist of a culvert, headwalls and grading improvements to formalize the channel section as described in the master drainage report prepared by Calibre Engineering, Inc.

SOUTHEAST AURORA MAINTENANCE FACILITY

PUBLIC IMPROVEMENT PLAN

- Drainage improvements will be in general conformance with the City of Aurora standards and specifications.
- No drainage improvements for PAs Two and Three will be done at this time.

Water Improvements

- The water system will be in general conformance with the City of Aurora standards and specifications. There will be multiple connections made to the existing 30-inch water main on the west side of the property. The connection points are shown on the exhibit in Appendix A.
- Water service to all three PAs is provided with the existing 30-inch water main on the west side of the property.

Sanitary Sewer Improvements

- The sanitary sewer system will outfall into the SEAM interceptor sewer that is currently under design. The interceptor system is generally located along the eastern edge of the development. There will be multiple connections made to the interceptor line to minimize the amount of infrastructure needed and to minimize the depth of the system.
- Sewer service to all three PAs is provided by the construction of the SEAM interceptor.

Dry Utility Improvements

- Dry utility services that will be routed to each building include gas, electric and communication lines. Services for each utility will be necessary and provided to each building with PA One. Services will not be stubbed into PAs Two and Three.

D. DEFERRAL REQUEST

- On behalf of the Applicant, Calibre Engineering, Inc., submits this Deferral of Public Improvements to the City of Aurora for the ultimate roadway improvements on Quincy. The deferral request is in compliance with the criteria of Section 147-14(b)(1)(A through C). For a deferral to be granted by the Director of Public Works, the Director must determine that the installation of public improvements would:
 - a. Create a safety, drainage, traffic, or other hazard or be impractical.
 - b. Be impractical at the time of issuance of the Certificate of Occupancy because of the physical characteristics of the land.
 - c. Be more efficiently constructed at the time of development of adjacent parcels.

Quincy

- The City of Aurora (COA) has published the Aurora Southeast Area Transportation Study (SEATS) has identified this road ultimately as a major six-lane arterial roadway. The current condition is a two-lane highway.
- The Traffic Impact Study (TIS) prepared by Felsburg Holt and Ullevig (FHU) analyzed the current traffic volumes as well as the proposed volumes with the development of

SOUTHEAST AURORA MAINTENANCE FACILITY

PUBLIC IMPROVEMENT PLAN

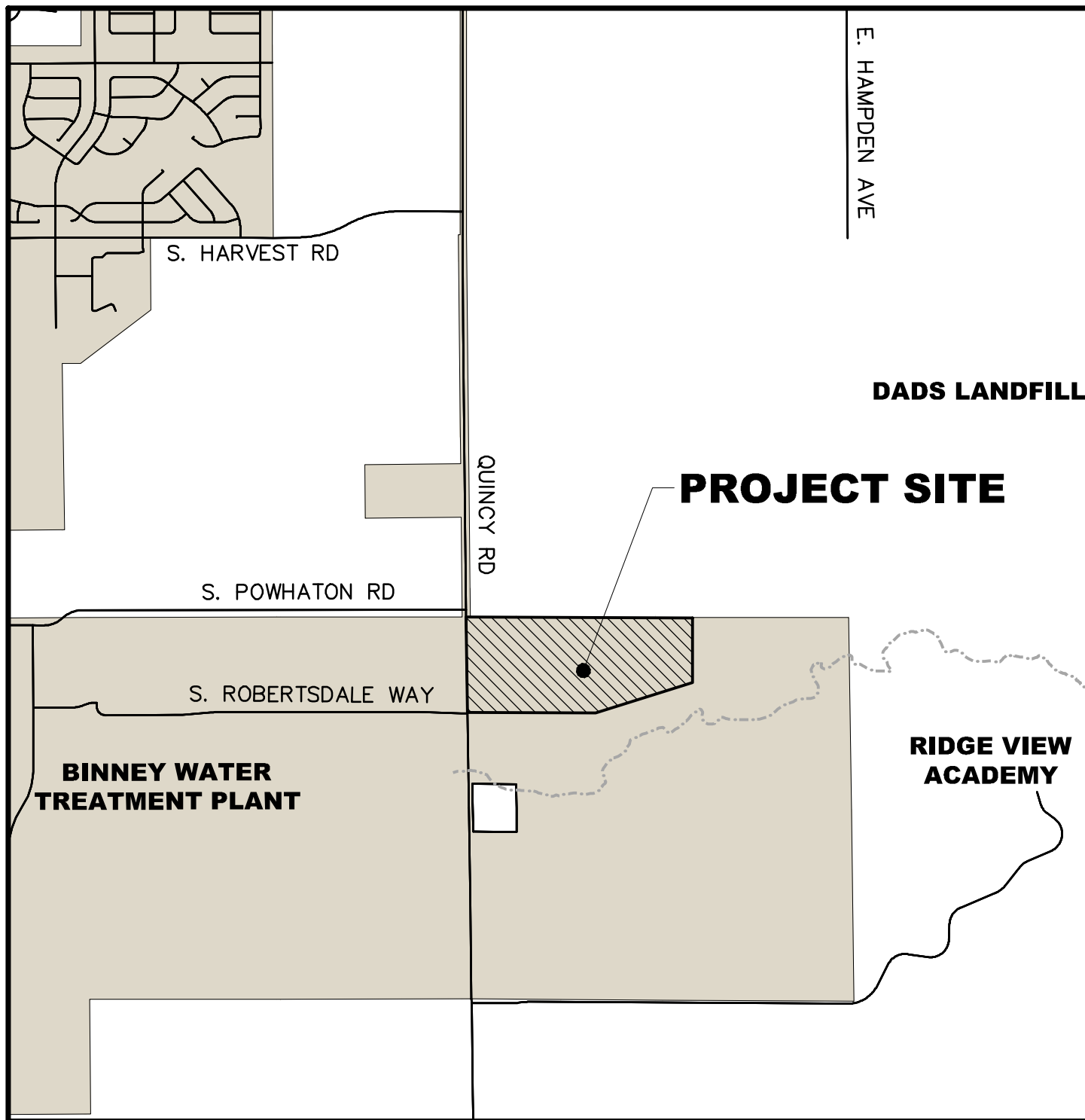
PA one. The results of the analysis recommend only left turn lanes be added to Quincy at this time. The traffic warrants are not met for a six-lane arterial and the proposed improvements would be more efficiently constructed when adjacent parcel develop or areas further east in this corridor are developed.

E. CONCLUSIONS

- This PIP was prepared to identify the infrastructure planning for the SEAM site.
- This site will construct the necessary utility infrastructure and access roads to support the City's maintenance facilities and provide for future development of the other two PAs.

**SOUTHEAST AURORA MAINTENANCE FACILITY
PUBLIC IMPROVEMENT PLAN**

APPENDIX A



VICINITY MAP
 SCALE: 1" = 2000'



Calibre

Calibre Engineering, Inc.
 9090 South Ridgeline Boulevard, Suite 105
 Highlands Ranch, CO 80129 (303) 730-0434
 www.calibre-engineering.com
 Construction Management Civil Engineering Surveying

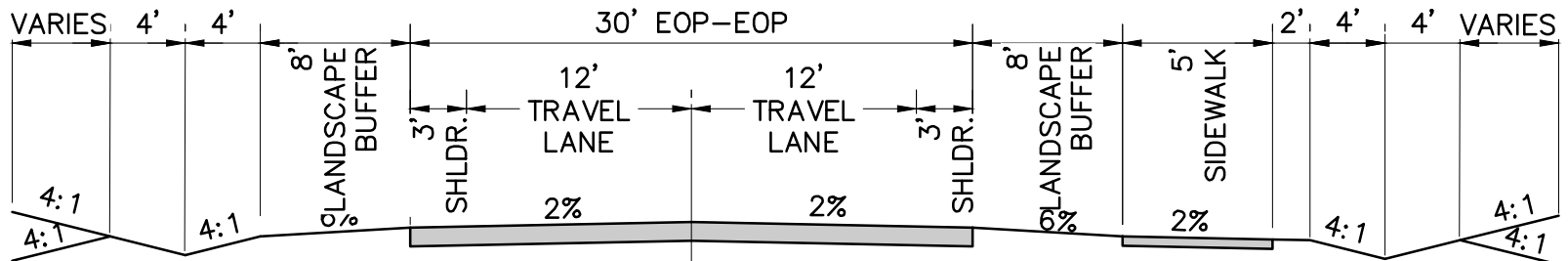
AURORA SEAM
 VICINITY MAP

Sheet
VM

Scale 1" = 2000'
 Date
 MAY 15, 2020

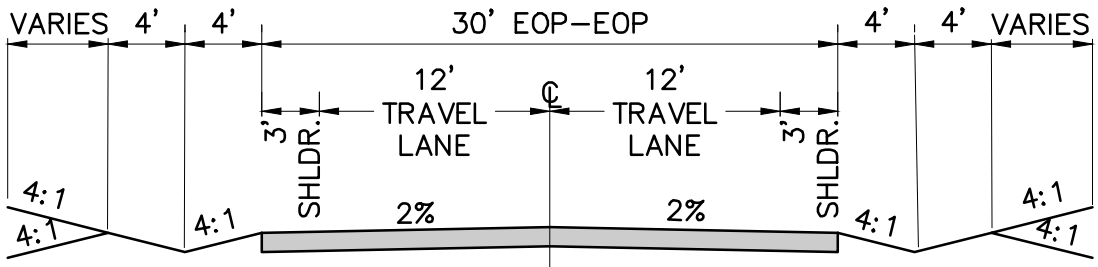
PLANNING AREA LEGEND

- MAINTENANCE ACCESS ROAD
- PUBLIC ACCESS ROAD
- PA 2
- PA 3
- EAST QUINCY AVENUE IMPROVEMENTS



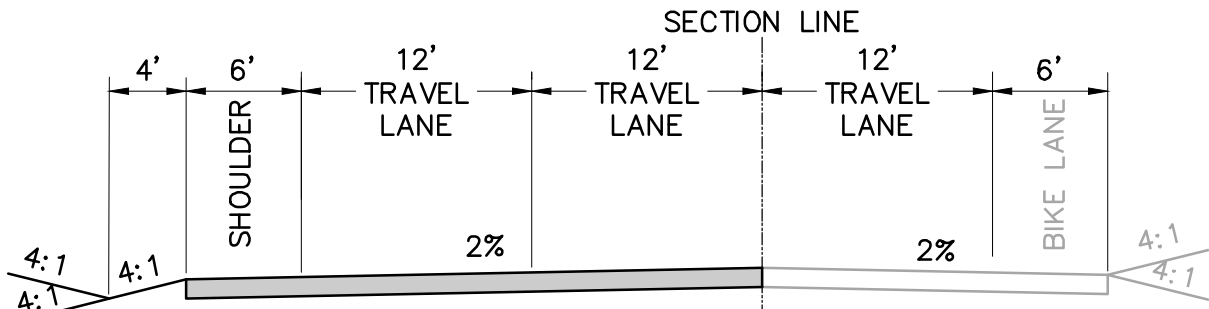
PUBLIC ACCESS ROAD

NTS
PRIVATE ROAD WITH DEDICATED FIRE LANES



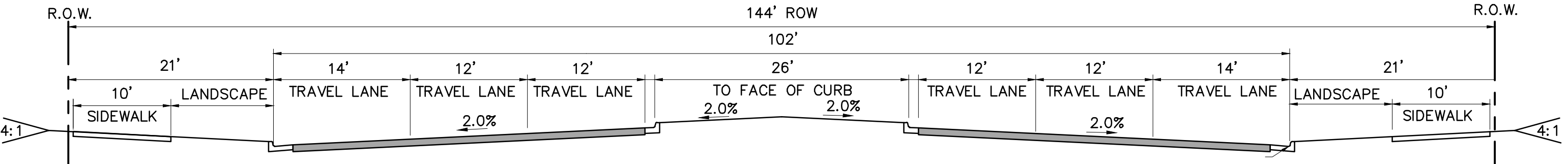
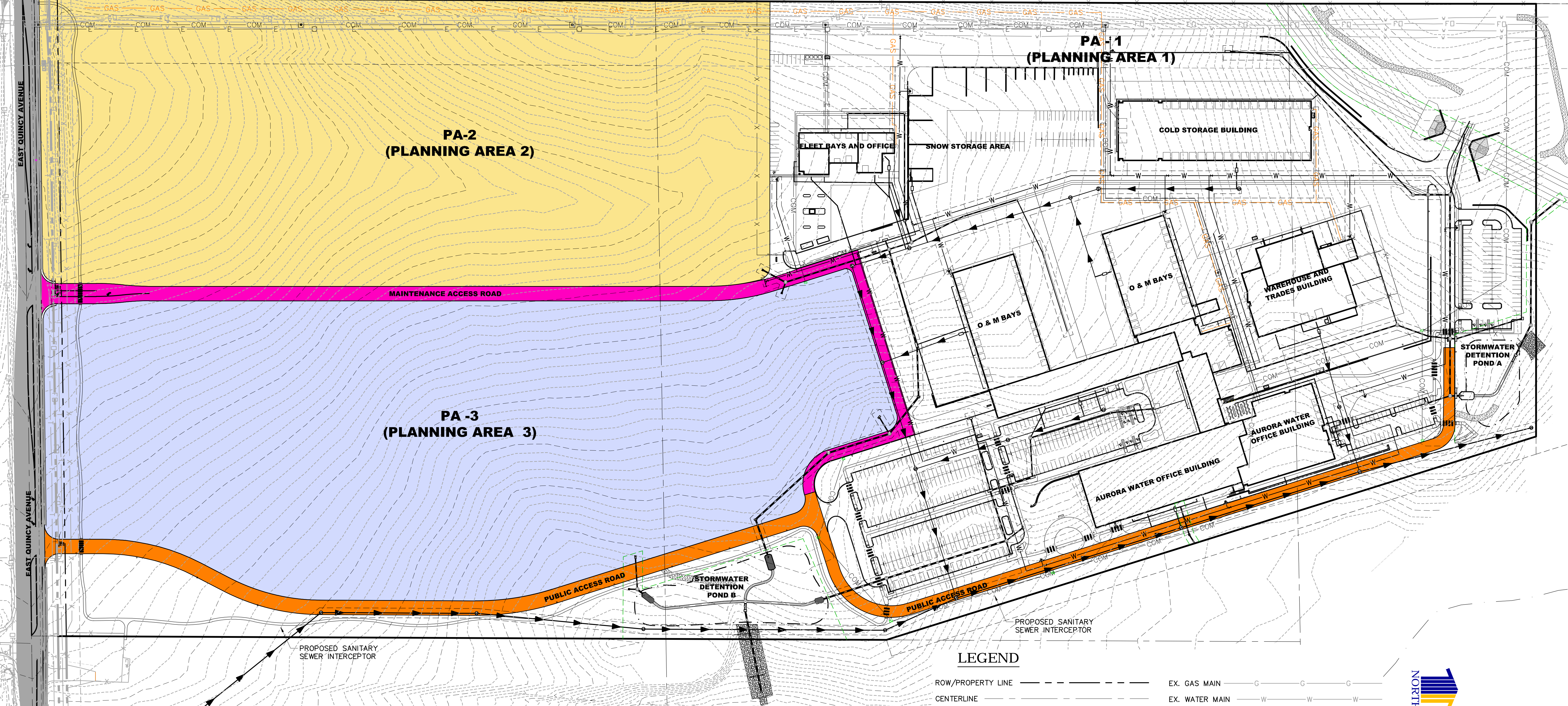
MAINTENANCE ACCESS ROAD

NTS
PRIVATE ROAD WITH DEDICATED FIRE LANES



EAST QUINCY AVENUE (INTERIM)

NTS

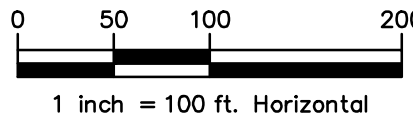


QUINCY AVENUE (SIX LANE ARTERIAL)

NTS

LEGEND

- | | | | |
|---------------------------|-------|---------------------------|---------|
| ROW/PROPERTY LINE | --- | EX. GAS MAIN | —G—G—G— |
| CENTERLINE | --- | EX. WATER MAIN | —W—W—W— |
| PROPERTY BOUNDARY | --- | EX. WATER VALVE | ⋈ |
| EASEMENT | --- | EX. FIRE HYDRANT | ⊕ |
| PROP. WATER MAIN | —W—W— | EX. SANITARY SEWERS | —S—S— |
| PROP. WATER VALVE | ⋈ | EX. STORM DRAIN | —D—D— |
| PROP. FIRE HYDRANT | ⊕ | EX. STORM DRAIN INLET | □ |
| PROP. SANITARY SEWER MAIN | —S—S— | EX. POWER POLE | —O—O— |
| PROP. STORM DRAIN | —D—D— | EX. UNDERGROUND ELECTRIC | —E—E— |
| PROP. STORM DRAIN INLET | □ | EX. UNDERGROUND TELEPHONE | —T—T— |
| | | EX. FENCE | —X—X—X— |



Calibre

Calibre Engineering, Inc.
9090 South Ridgeline Boulevard, Suite 105
Highlands Ranch, CO 80129 (303) 730-0434
www.calibre-engineering.com
Construction Management Civil Engineering Surveying