

PUBLIC IMPROVEMENT PLAN NARRATIVE

ASPEN BUSINESS PARK

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WM: DCS21-4114

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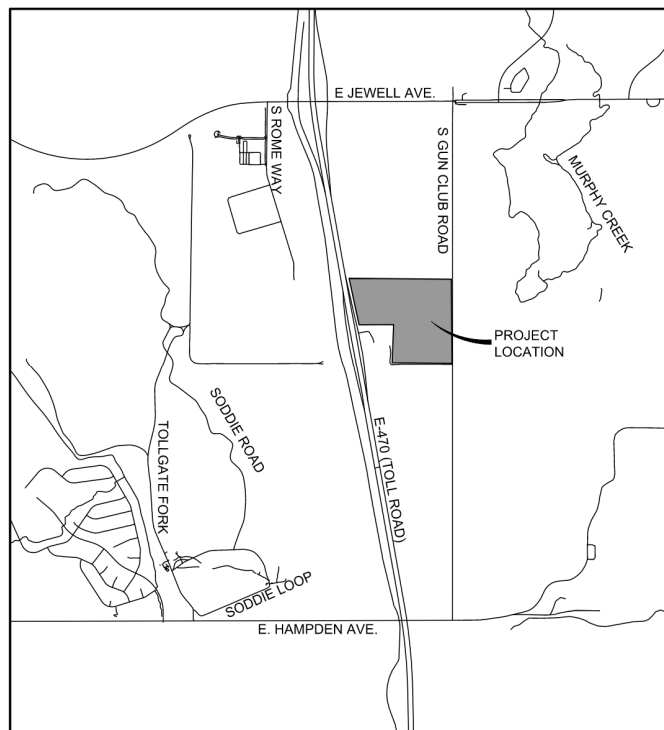
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Introduction

The Aspen Business Park development southwest corner of East Yale Avenue and Gun Club Road in Aurora, Colorado. The site is bounded by undeveloped land to the North, E-470 to the West, Gun Club Road to the East, and by undeveloped land to the South.



Vicinity Map

NTS

The light industrial development consists of 55 acres with proposed uses including warehouse and distribution. The following describes the general parameters of each planning area and the improvements necessary to service the planning areas independently. Each planning area will be required to meet Fire Life Safety requirements. The roadway network adjacent to the development will need to be evaluated when each planning area is developed.

General Development Parameters

Land Development

The Aspen Business Park development will be divided into 5 planning areas (PA1, PA2, PA3, PA4, PA5).

The requirements of development for the various planning areas will be detailed later in this narrative.

Roadway Improvements

The perimeter public improvements required for the development of Aspen Business Park include:

- Roadway improvements to Gun Club Road along the extents of the property to include construction of a half section with two additional paved travel lanes with a median and required acceleration and deceleration lanes at access points. Improvements to also include transitions from a 2 lane roadway section to 6 lane arterial section at the north and 6 lane arterial roadway section to 2 lane roadway section at the south.
- Intersection improvements at existing E. Yale Ave. and the Private Roadway site access points will be built when warranted.
- 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.

Roadways will be constructed to service the planning areas immediately adjacent, however roadways may be required to be constructed to provide both vehicular and fire life safety access to planning areas not immediately adjacent. The construction of half roadway sections will be reviewed during the development of planning areas on a case-by-case basis.

Table 2.
Recommended Traffic Volume Thresholds

ROADWAY CLASSIFICATION	NUMBER OF LANES EACH DIRECTION	RECOMMENDED DAILY TRAFFIC VOLUME LOS THRESHOLDS (VEHICLES PER DAY)		
		C	D ⁽²⁾	E
Collector	1	> 9,500 to 10,500	> 10,500 to 12,000	> 12,000 to 13,500
Minor Arterial	2	> 22,500 to 25,500	> 25,500 to 28,500	> 28,500 to 32,000
Minor Arterial ⁽¹⁾	3	>30,000 to 34,500	>34,500 to 38,500	>38,500 to 43,000
Major Arterial	2	> 30,000 to 36,000	> 36,000 to 40,000	> 40,000 to 45,000
Major Arterial	3	> 46,000 to 53,000	> 53,000 to 60,000	> 60,000 to 67,000
Major Arterial ⁽¹⁾	4	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000
Expressway	2	> 38,000 to 44,000	> 44,000 to 49,000	> 49,000 to 55,000
Expressway	3	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000

⁽¹⁾ System performance evaluation only.

⁽²⁾ LOS D threshold volumes used for development roadway planning consistent with traffic impact study guidelines.

Table 2 - ADT Thresholds Table per NEATS 2018 Update

The above table is the ADT thresholds table per the 2018 NEATS study update. The city of Aurora uses the NEATS to provide more insight into systems level multimodal transportation facility needs now and into the future. Existing and planned development in this area continues to evolve, and it is important for transportation infrastructure plans to reflect the projected area needs. It is used to determine when lane expansions are required for the phased boulevards within the project.

Gun Club Road, currently a two-lane road (120' ROW), will be transitioned to a six-lane arterial with a 144' right-of-way. At the North and South access points to the site from Gun Club Road, northbound left turn lanes will be constructed. At the two

northern site access points, southbound right-turn lanes will be constructed. The intersection of southern private drive and existing Yale Ave. will be signalized when warranted.

The internal private improvements for the Aspen Business Park industrial development include:

- The construction of two east-west private roads connecting drive accesses at the north and south, and an access drive at the center of the site.
- The construction of one private road in the north-south direction through the center of the site connecting to and terminating at the two east-west private roadways and also connecting to the central access drive.

Public and private roadways will be constructed to service the planning areas immediately adjacent, however, roadways may be required to be constructed to provide both vehicular and fire life safety access to planning areas not immediately adjacent.

Signal escrows will be required per the City of Aurora Signal Escrow Ordinance. Escrow will be assessed at the time of development of planning areas adjacent to signalized intersections. Aspen Business Park will be responsible for 50% escrow of the proposed traffic signal at the intersection of Future E. Yale Ave and the southern private access drive. The other two access points are not proposed to be signalized. Proposed roadway improvements shall be consistent with the approved Traffic Impact Study prepared by Fox Tuttle Transportation Group for the Aspen Business Park Development and approved with the Framework Development Plan.

Mobility Improvements

The Aspen Business Park Industrial development will provide internal site circulation to support walking or biking to public transit stops.

Drainage Improvements

The Aspen Business Park Development is within the Murphy Creek Watershed. The proposed development will comply with the drainage patterns outlined in the *Murphy Creek Outfall Systems Planning Alternatives Evaluation Report*.

2 local water quality and full spectrum detention ponds will be constructed to service the entirety of the Aspen Business Park development and any upstream basins within the Murphy Creek drainage basin. The detention basins will be designed COA standards. The water quality and detention basin associated with PA-4 will be fully constructed with the first planning area to be constructed. The water quality and detention basin associated with PA-5 will be fully constructed with PA-1. Site storm will capture previously detained flows from the E470 Toll Plaza and bypass those flows through the north detention pond. A 54" storm pipe will also be required to collect and convey from a 54" storm discharge pipe that conveys flows from the west side of E470.

Water Main Improvements

The Aspen Business Park Development will be serviced completely by the existing 24" water line within the multi-use utility easement that connects to the E-470 Toll Booth property on the West side of the property with two points of connection.

Watermains will be installed within Aspen Business Park to provide the necessary looped water main around each Planning Area to provide fire protection and domestic service for all buildings per the Master Utility Study. Each phase of development will be designed with a looped water supply.

Sanitary Sewer Improvements

The Aspen Business Park development will be serviced by the existing 36" Interceptor located along the west edge of E-470, north of Jewell. A proposed connection to the aforementioned main will be aligned from the proposed site north up the 470 MUE and West across E470 ROW to said connection to service Aspen Business Park.

A public sanitary main running north-south along the West side of E-470, within the multi-use utility easement, shall be constructed from the property limits to an existing manhole north of East Jewell Ave. The proposed public Sanitary line will extend beneath E-470 and tie into the existing interceptor to provide service to buildings within the site as well as other potential users along the alignment.

Specific Planning Area Improvement Descriptions

Planning Area 1 – Zone AD (20.39 Acres):

Prior to the development of PA 1 the following public improvements shall be designed and approved for construction:

- Gun Club Road public improvements from the southern property edge to the central proposed access point on the eastern side of the site, including a right turn lane just north of the PA.
- Private road in the east-west direction at the south end of the site connecting to the existing East Yale Ave. intersection. ½ signal escrow applies to this intersection.
- Secondary Emergency Accesses adjacent to the proposed development to provide multiple access points from Gun Club Rd.
- Domestic water connection and fire loop will be provided from the existing 24" water line within the multi-use utility easement that connects to the E-470 Toll Booth proper to service PA 1 and future planning areas adjacent.
- Installation of an 18" sanitary main from the site to the existing 36" sanitary interceptor on the West side of E-470. A proposed connection to the aforementioned main will be aligned from the proposed site north up Gun Club Road and West across City of Aurora property to said connection to service Aspen Business Park.
- Storm sewer to provide conveyance from the planning area to the onsite water quality and detention ponds and also conveyance of offsite flows from the West to the detention system.
- An onsite water quality and detention pond associated with PA-2 will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed. A second, southern pond associated with PA-5 will be constructed concurrently with PA-1 and will be designed to convey and control flows to the north detention pond. This pond will service a portion of PA-1.

Planning Area 2 – Zone AD (15.30 Acres):

Prior to the development of PA 2 the following public improvements shall be designed and approved for construction:

- Gun Club Road public improvements from the northern property edge to the central proposed access point on the eastern side of the site.
- Secondary Emergency Access roads adjacent to the proposed development to provide multiple access points from Gun Club Rd. The Northmost of these access points may be shared with the parcel to the North.
- Domestic water connection and fire loop will be provided from the existing 24" water line within the multi-use utility easement that connects to the E-470 Toll Booth proper to service PA 2 and future planning areas adjacent.
- Installation of an 18" sanitary main from the site to the existing 36" sanitary interceptor on the West side of E-470. A proposed connection to the aforementioned main will be aligned from the proposed site north up Gun Club Road and West across City of Aurora property to said connection to service Aspen Business Park.

- Storm sewer to provide conveyance from the planning area to the onsite water quality and detention ponds and also conveyance of offsite flows from the West to the detention system.
- An onsite water quality and detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed.

Planning Area 3 – Zone AD (14.02 Acres):

Prior to the development of PA 3 the following public improvements shall be designed and approved for construction:

- Gun Club Road public improvements from the southern property edge to the central proposed access point on the eastern side of the site.
- Private road in the east-west direction at the southern area of the site connecting to the Gun Club Rd.
- Secondary Emergency Access roads adjacent to the proposed development to provide multiple access points from Gun Club Rd. The Northmost of these access points may be shared with the parcel to the North.
- Domestic water connection and fire loop will be provided from the existing 24" water line within the multi-use utility easement that connects to the E-470 Toll Booth proper to service PA 3 and future planning areas adjacent.
- Installation of an 18" sanitary main from the site to the existing 36" sanitary interceptor on the West side of E-470. A proposed connection to the aforementioned main will be aligned from the proposed site north up Gun Club Road and West across City of Aurora property to said connection to service Aspen Business Park.
- Storm sewer to provide conveyance from the planning area to the onsite water quality and detention ponds and also conveyance of offsite flows from the West to the detention system.
- An onsite water quality and detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed.

Planning Area 4 – Zone AD (1.49 Acres):

With the development of the first PA the following public improvements shall be designed and approved for construction:

- An onsite water quality and detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed and designed to outfall east of Gun Club Rd to a historic drainage path.

Planning Area 5 – Zone AD (1.06 Acres):

With the development of the first PA the following public improvements shall be designed and approved for construction:

- An onsite detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The detention pond will be fully constructed with PA-1 and be designed to outfall north to the detention pond associated with PA-4.

Planning Area 6 – Zone AD (1.58 Acres):

With the development of PA-4 the following public improvements shall be designed and approved for construction:

- An open space area accounting for at least 2% of the total property shall be constructed within PA-4 & 5; this is outside the 100-year detention area. The open space area can include features such as: tables, seating, trails, or art installations. An onsite trail system will be constructed along the berm of the pond and will connect to the sidewalk along Gun Club Road and onsite sidewalk.

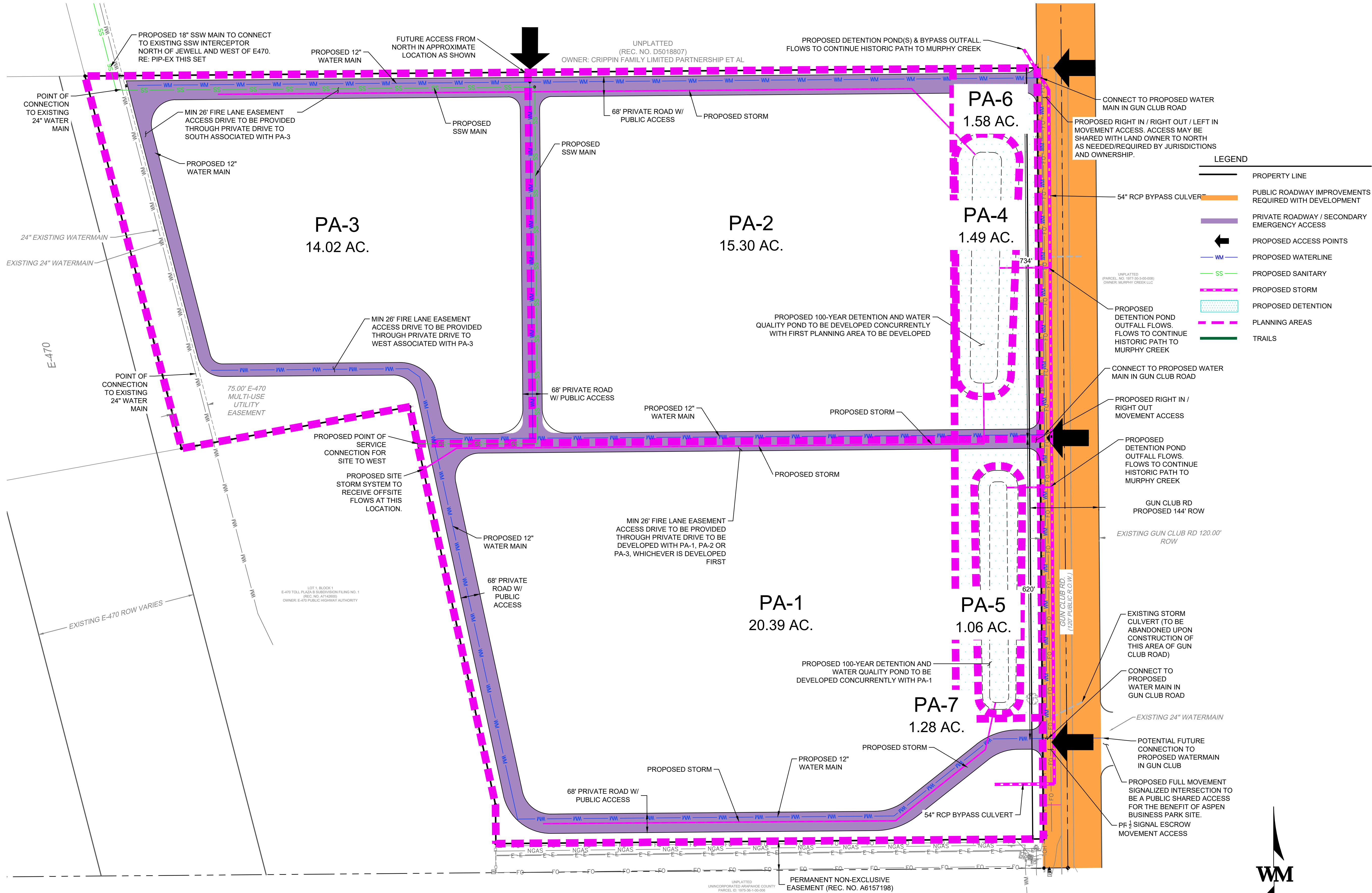
Planning Area 7 – Zone AD (1.28 Acres):

With the development of PA-5 the following public improvements shall be designed and approved for construction:

- An open space area accounting for at least 2% of the total property shall be constructed within PA-4 & 5; this is outside the 100-year detention area. The open space area can include features such as: tables, seating, trails, or art installations. An onsite trail system will be constructed along the berm of the pond and will connect to the sidewalk along Gun Club Road and onsite sidewalk.

MASTER PLAN ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



PUBLIC IMPROVEMENT PLAN

WARE MALCOMB
LEADING DESIGN FOR COMMERCIAL REAL ESTATE

DATE:	01.17.2022	03.11.2022	05.04.2022	07.01.2022	05.16.2023
SUBMITTAL NO.:	1ST SUBMITTAL	2ND SUBMITTAL	3RD SUBMITTAL	4TH SUBMITTAL	5TH SUBMITTAL

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.:	DCS21-4114
DRAWN BY:	JZ
CHECKED BY:	JKC

SHEET NO. & NAME:

SHEET NAME:

PIP-1

MASTER PLAN
ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

NOTES:

1.) WHELEN WARNING SYSTEM REQUIREMENTS: THE FEMA REQUIREMENT FOR OUTDOOR EMERGENCY WARNING SYSTEMS IS A 60-70 FOOT MONOPOLE TOWER USING AN ALERT SIREN. THE CITY OF AURORA USES THE WHELEN SIREN SYSTEM. THE LAND REQUIREMENT FOR THE TOWER IS A 10' X 10' EASEMENT. EACH SIREN COVERS APPROXIMATELY 3,000 RADIAL FEET AT 70 DB AND IS TYPICALLY SPACED ONE SIREN PER SQUARE MILE. IN NEWLY ANNEXED/DEVELOPING AREAS OF THE CITY, SIRENS SHOULD BE SITED ON EVERY ½ SECTION OF GROUND (320 ACRES) OR 6000 FEET APART TO PROVIDE EDGE TO EDGE COVERAGE. THE EXACT PLACEMENT OF SIRENS WILL BE DETERMINED BY THE CITY OF AURORA'S OFFICE OF EMERGENCY MANAGEMENT TO INSURE THAT COORDINATED COVERAGE IS PROVIDED ON A SYSTEM-WIDE BASIS. FOR SPECIFIC QUESTIONS, THE OFFICE OF EMERGENCY MANAGEMENT CAN BE REACHED AT 303-739-7636 (PHONE), 303-326-8986 (FAX), OR (EMAIL) AFD_OEM@AURORAGOV.ORG.

2.) PER FIRE LIFE SAFETY, EACH PLANNING AREA IS REQUIRED TO HAVE (2) POINTS OF ACCESS AND A LOOPED WATER SUPPLY. FURTHERMORE, PER THE 2015 IFC, SECTION D104.3 IT STATES THAT WHERE (2) FIRE APPARATUS ACCESS ROADS ARE REQUIRED, THEY SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE HALF OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE LOT BEING SERVED, MEASURED IN A STRAIGHT LINE BETWEEN ACCESSES.

3.) AS EACH SUB-SITE OR PLANNING AREA IS DEVELOPED, THE SITES WILL MAINTAIN THE HISTORIC FLOW PATTERN VIA OVERLAND FLOW OR PRIVATE STORM SEWER INFRASTRUCTURE INTO THE PROPOSED DRAINAGE CHANNEL. STORMWATER DETENTION AND WATER QUALITY WILL BE PROVIDED FOR EACH PLANNING AREA WITHIN THE REGIONAL STORMWATER FACILITY TO BE INSTALLED DURING CONSTRUCTION OF FIRST PLANNING AREA AND ONSITE WATER QUALITY POND.

4.) THE PIP HAS BEEN PREPARED IN COORDINATION WTH THE TRAFFIC IMPACT STUDY PREPARED BY FELSBURG HOLT & ULLEVIG PREPARED FOR THE ASPEN BUSINESS PARK.

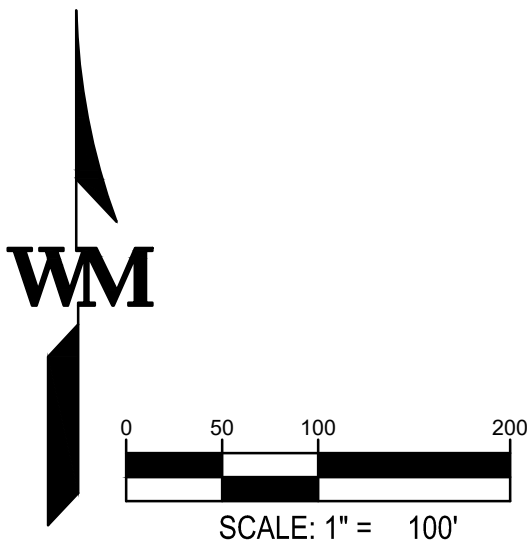
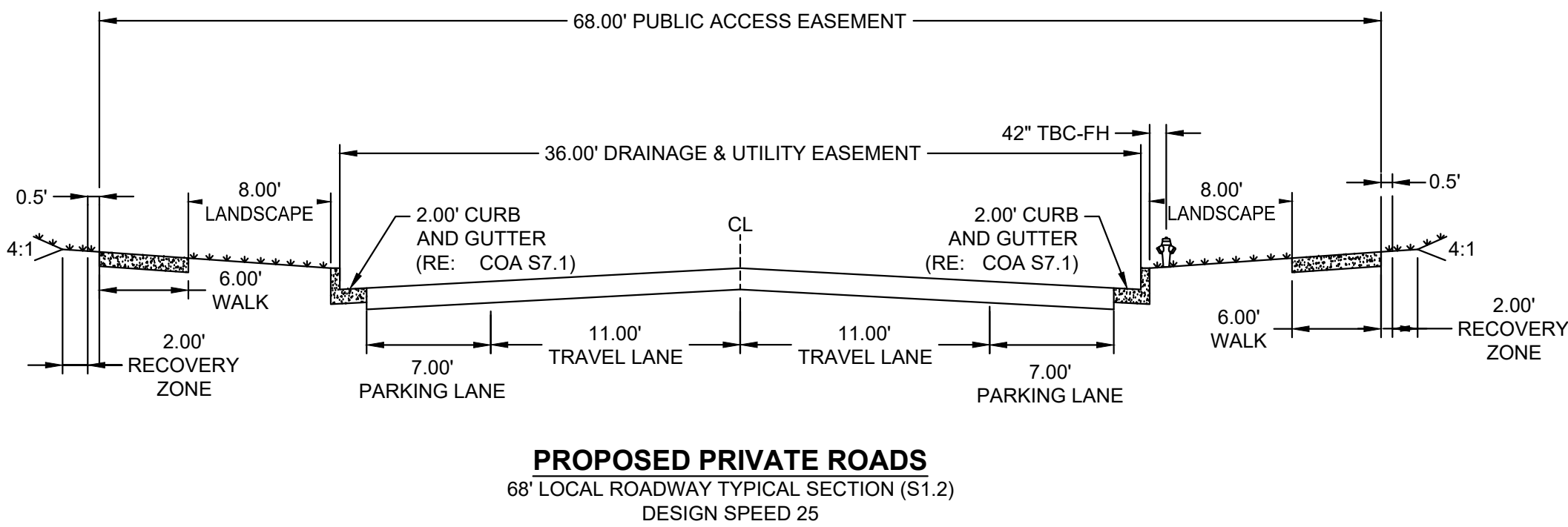
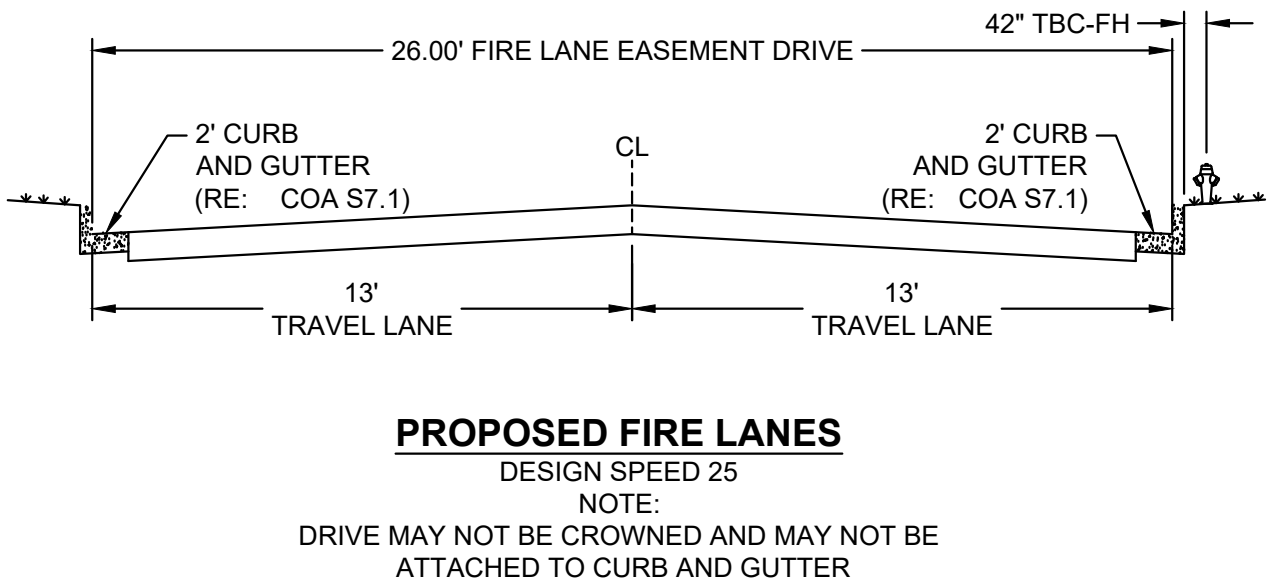
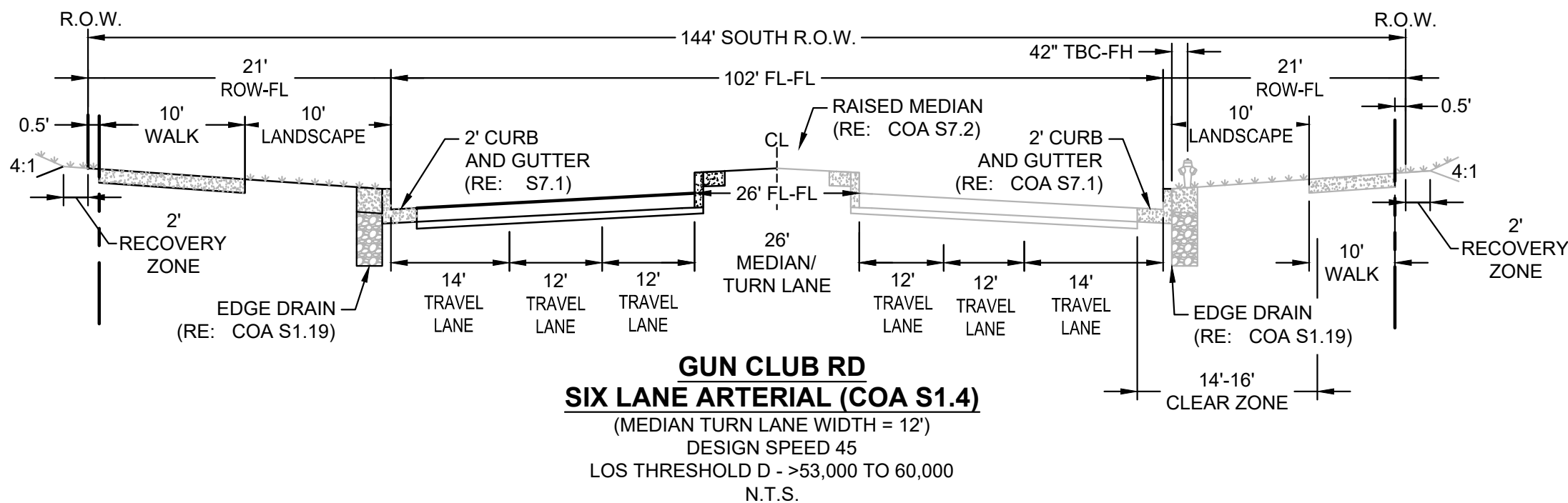
Table 2.
Recommended Traffic Volume Thresholds

ROADWAY CLASSIFICATION	NUMBER OF LANES EACH DIRECTION	RECOMMENDED DAILY TRAFFIC VOLUME LOS THRESHOLDS (VEHICLES PER DAY)		
		C	D ⁽¹⁾	E
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Minor Arterial	2	> 22,500 to 25,500	> 25,500 to 28,500	> 28,500 to 32,000
Minor Arterial ⁽¹⁾	3	>30,000 to 34,500	>34,500 to 38,500	>38,500 to 43,000
Major Arterial	2	> 30,000 to 36,000	> 36,000 to 40,000	> 40,000 to 45,000
Major Arterial	3	> 46,000 to 53,000	> 53,000 to 60,000	> 60,000 to 67,000
Major Arterial ⁽¹⁾	4	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000
Expressway	2	> 38,000 to 44,000	> 44,000 to 49,000	> 49,000 to 55,000
Expressway	3	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000

⁽¹⁾ System performance evaluation only.

⁽²⁾ LOS D threshold volumes used for development roadway planning consistent with traffic impact study guidelines.

ADT THRESHOLDS PER OCTOBER 2018 NEATS REFRESH



PUBLIC IMPROVEMENT PLAN

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ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

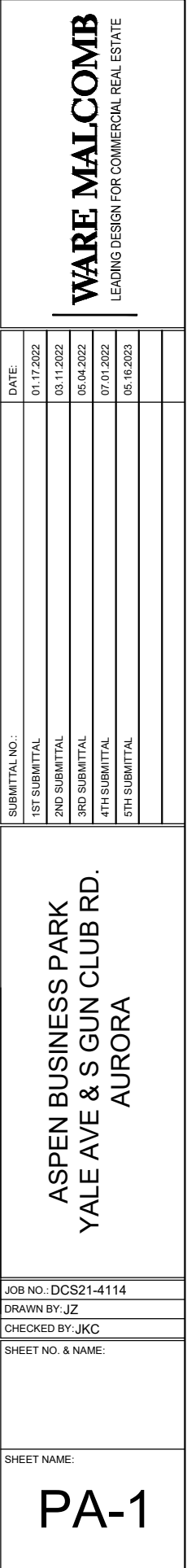
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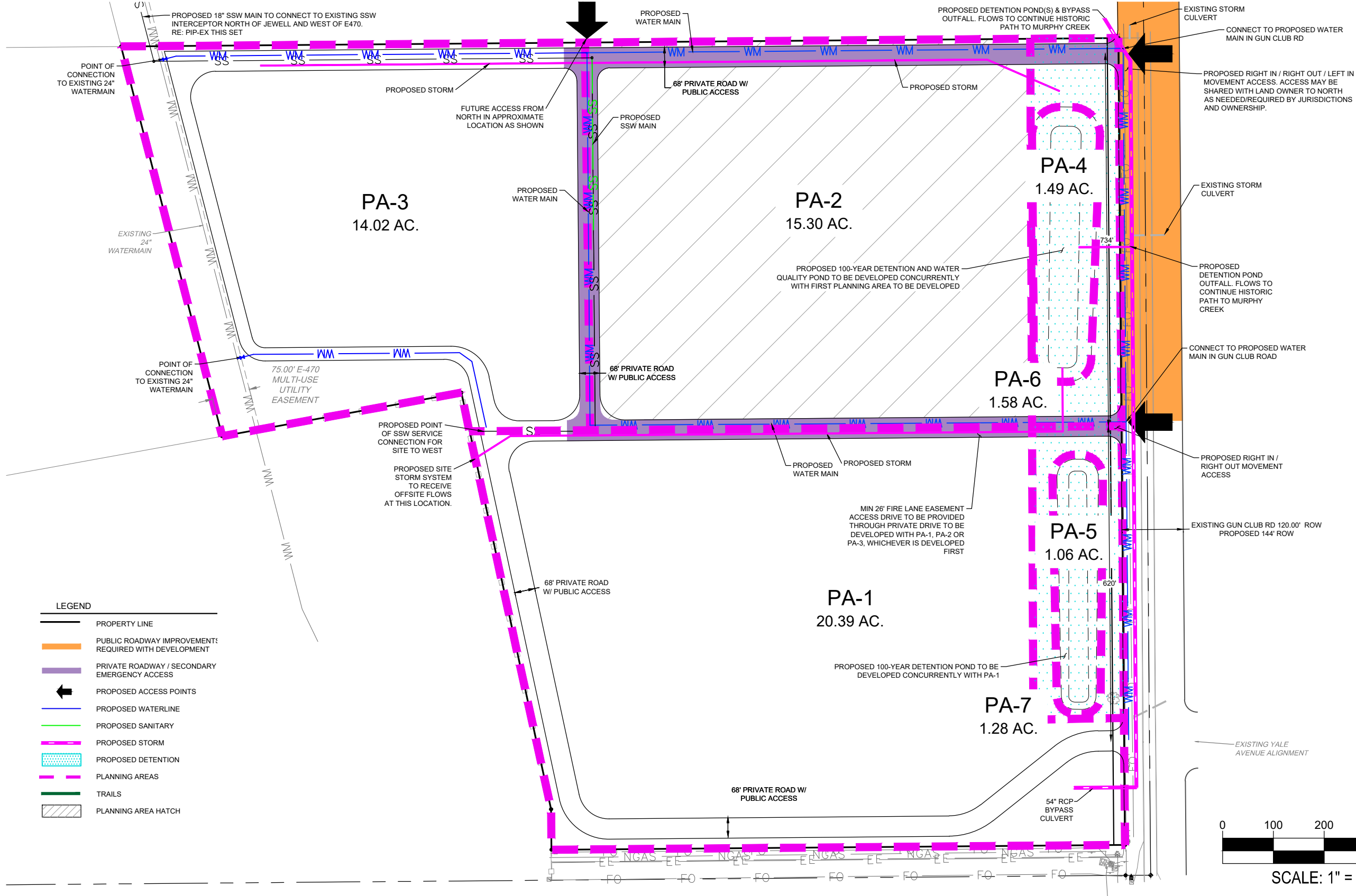
PIP-2

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



MASTER PLAN - PUBLIC IMPROVEMENT PLAN
ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



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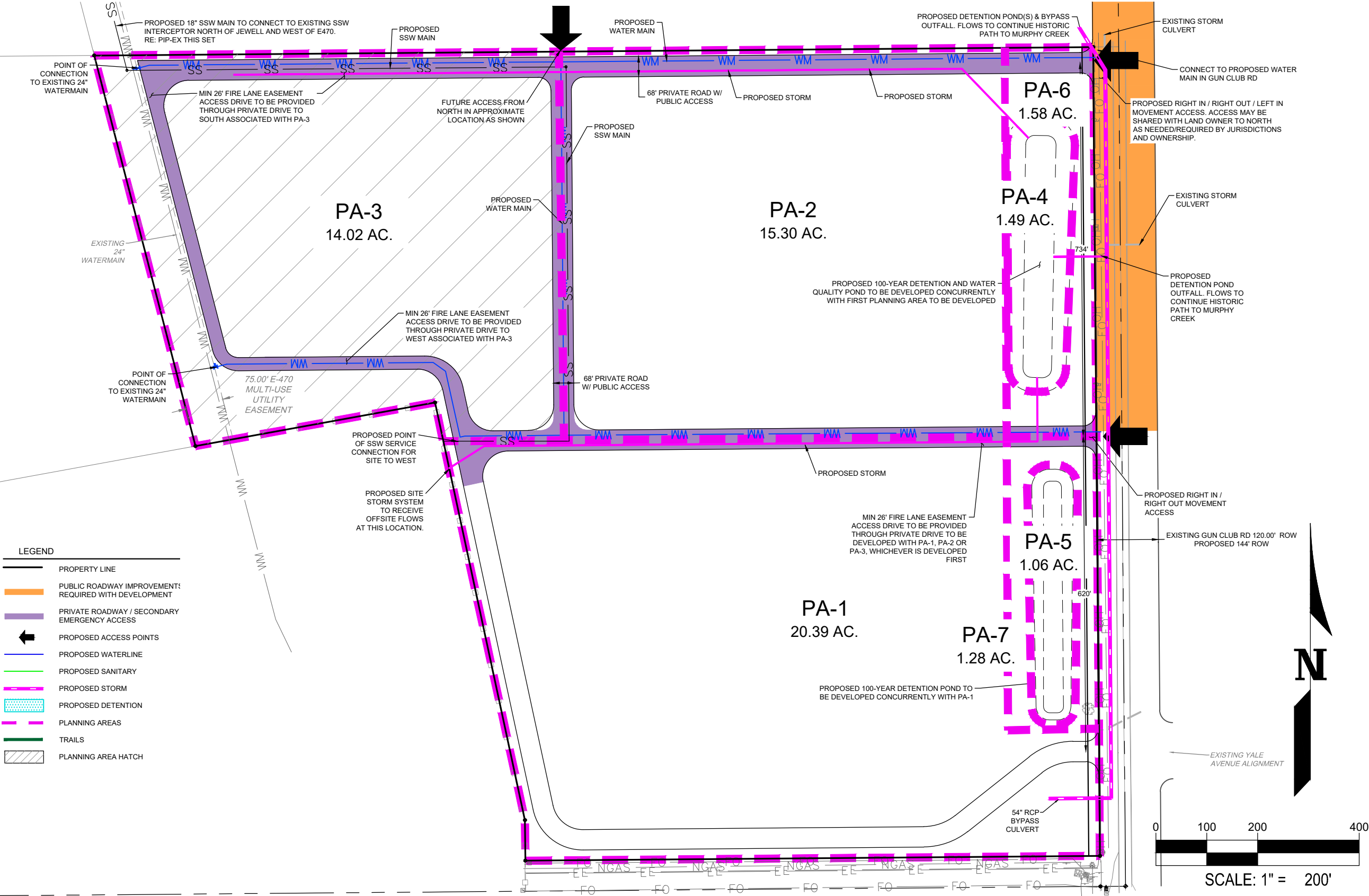
JOB NO.: DCS21-4114
DRAWN BY: JZ
CHECKED BY: JKC

SHEET NO. & NAME:

SHEET NAME:
PA-2

MASTER PLAN - PUBLIC IMPROVEMENT PLAN
ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
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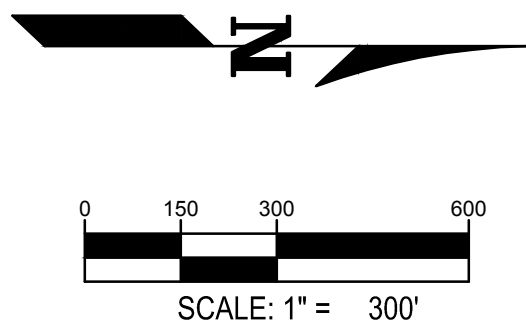
ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.: DCS21-4114
DRAWN BY: JZ
CHECKED BY: JKC
SHEET NO. & NAME:
SHEET NAME:

PA-3

MASTER PLAN
ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



PUBLIC IMPROVEMENT PLAN - OFFSITE UTILITY EXHIBIT

WARE MALCOMB
LEADING DESIGN FOR COMMERCIAL REAL ESTATE

DATE:	
01.12.2022	
03.11.2022	
05.04.2022	
07.01.2022	
05.16.2023	

SUBMITTAL NO.:	
1ST SUBMITTAL	
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4TH SUBMITTAL	
5TH SUBMITTAL	

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.:
DRAWN BY:
CHECKED BY:
SHEET NO. & NAME:

SHEET NAME:
PIP-EX