

February 29, 2024  
Merrick Project No. 100183.00

Brit Vigil  
City of Aurora  
Office of Development Assistance  
15151 E. Alameda Parkway  
Suite 5200  
Aurora, CO 80012

**Re: Horizon Uptown Filing 7 (#1739864)/Pre-Application Meeting held 08/24/2023**

Dear Ms. Vigil:

Merrick & Company has reviewed the comments dated September 7, 2023, regarding the Horizon Uptown Filing 7 project. The following summarizes Merrick's responses to the comments provided by the City of Aurora.

---

***Standards and Issues:***

**1. Zoning and Place type**

**1A. Zoning**

The purpose of the R-2 District is to promote and preserve various types of medium-density housing with adequate amounts of usable common space and amenities. This district is intended for use close to collector streets and public transit facilities. The primary use in this district is single-family residences, but several types of attached dwellings are also permitted. Many commercial uses are also allowed. The subject property also has the Flexible Residential Lot Option (formerly Sustainable Use Neighborhood) per the Horizon Uptown Master Plan. This designation is intended to "promote neighborhoods that emphasize a highly integrated, fine grain mix of uses and diverse housing types to meet the needs of a variety of households and incomes". It encourages higher density development, pedestrian-oriented, walkable streets, quality urban form, and the creation of special community places and amenities that are easily accessible to residents and businesses. In exchange for allowing more density and smaller lots, there are requirements related to lot size diversity, streetscapes, connectivity, sustainability, building design and mix of uses.

[Response: Acknowledged](#)

**1B. Placetype**

The subject property is within the Urban District placetype, which is the city's most intensely developed area with mixed-use, entertainment, institutional, retail, restaurant, and multi-family residential as defining uses. This place type creates a unique mix of uses in a relatively dense urban fabric, that provides a pedestrian-friendly environment and a place to live, work, shop, dine, recreate and more. It is distinguished from other place types by density, scale, and the prioritization of multi-modal transportation. Defining features into connected, well-designed urban streetscapes, high-quality design, and a grid street network with small urban blocks.

[Response: Acknowledged](#)

**1C. Master Plan**

The subject property is within the Horizon Uptown Master Plan and will be governed by both the UDO and the Horizon Uptown Design Standards and Guidelines. If there is a conflict, the more stringent requirements will apply. If the Parks, Recreation and Open Space Department determines that a Master Plan Amendment is needed to account for the open space location or trigger changes, this should be submitted concurrently with the subject application.

[Response: Acknowledged](#)

Employee Owned



5970 Greenwood Plaza Blvd  
Greenwood Village, CO 80111



Tel: +1 303-751-0741



hello@merrick.com  
www.merrick.com

## 2. Land Uses

### 2A. Proposed Land Uses

The proposed uses – alley-loaded single-family detached homes, alley-loaded duplexes, townhomes, and green courts – are permitted in the R-2 District.

[Response: Acknowledged](#)

## 3. Development Standards

### 3A. Dimensional Standards

The subject property has the Flexible Residential Lot Option (formerly Sustainable Use Neighborhood) per the Horizon Uptown Master Plan. The Horizon Uptown Design Standards and Guidelines (HUDSG) include the lot size, setback, encroachment, building height, and porch size requirements for this site based on the lot type. The lot types in the HUDSG include Village, Town, City, Corner Duplex, Backyard Row House, Cottage, Cottage Duplex, and Compact Row House. Each lot type has different requirements. Please clearly state which lot types are proposed when the application is submitted and ensure that all standards are met for all product types.

[Response: Acknowledged](#)

### 3B. Subdivision Standards

#### *Lot Design and Layout*

- All lots shall have direct or indirect access to a dedicated public or private street. Indirect access through an easement may be approved by the city for alternative lot layouts defined in the UDO, based on considerations of pedestrians, bicycle, emergency vehicle access and safety, and through-connectivity.
  - [Response: Acknowledged](#)

#### *Remainder Parcels Prohibited*

- No subdivision of land shall result in any remainder parcel or tract that does not otherwise meet the standards for a required open space, drainage area, buffer, or other area required by the UDO.
  - [Response: Acknowledged](#)

#### *Sidewalks, Trails and Bicycle Paths*

- All properties shall provide an interconnected system of sidewalks that directly connect all lots to and within commercial centers, employment areas, designated parks and open spaces, and other uses. All lots shall include or directly abut a sidewalk. Accessible routes meeting the ADA shall also be provided from the building or site entries to a public or private street.
  - [Response: Acknowledged](#)

### 3C. Horizon Uptown Design Standards and Guidelines (HUDSG)

The applicant is responsible for reviewing the HUDSG to ensure compliance with all standards. A letter of approval from the Horizon Uptown Design Review Board will be required prior to approval of the Site Plan. Below are some of the key standards that may impact the conceptual plan presented at the pre-application meeting, but this is not an all-inclusive list:

#### *General Requirements*

- A portion of the conceptual plan is within the Central Park South neighborhood and the rest is within the Central Park East neighborhood.
  - [Response: Acknowledged](#)
- Single-family homes (does not include single-family attached townhomes) shall not front to arterial roads, including Crossroads Boulevard.
  - [Response: Acknowledged](#)



- No block face shall be longer than 660' without being interrupted by a public street, park, or green court at least 30' wide.  
[Response: Acknowledged](#)
- No blocks shall be larger than 5 acres without being interrupted by a public street or primary private street.  
[Response: Acknowledged](#)
- There shall be no more than 500' between access points along 8th Avenue, and they shall align with the adjoining streets to the south in Central Park South.  
[Response: Acknowledged](#)
- At least one access point shall be provided along Tempe Street and the maximum distance between access points shall be 500'.  
[Response: Acknowledged](#)
- Two access points are required along Crossroads Boulevard. This intersection shall be no more than 500' from the intersections with 8th Avenue or 12th Avenue.  
[Response: Acknowledged](#)
- At least three access points are required along 8th Avenue and there shall be no more than 550' between access points along 8th Avenue, and they shall align with the adjoining streets to the north, from Central Park East.  
[Response: Acknowledged](#)
- One access point is required along Crossroads Boulevard. This intersection shall be no more than 800' from the intersections with 8th Avenue or 6th Avenue.  
[Response: Acknowledged](#)
- All residents in Central Park South shall be within 900' of a park or open space.  
[Response: Acknowledged](#)

*Single-Family, Duplexes, Single-Family Attached Townhomes, and Green Courts*

- A minimum of two different lot types are required on a block.  
[Response: Acknowledged](#)
- Lot types may be combined on a block face in accordance with the chart on Page 24.  
[Response: Acknowledged](#)
- Green courts may be designed in a closed configuration with an alley wrapping around two or three sides of the court or placed between two streets with alleys at the rear of lots on each side.  
[Response: Acknowledged](#)
- All single-family residential units shall provide a minimum of two off-street parking spaces, and at least one space shall be in a garage.  
[Response: Acknowledged](#)
- One on-street or off-street guest parking space shall be provided for each residential unit. These spaces may be provided on a block-by-block basis with spaces provided within 200 feet of the residential unit being served. It is unclear whether this requirement is being met based on the proposed lot configuration.  
[Response: Acknowledged. All public ROW will provide parallel parking on both sides of the street where able.](#)
- Buildings on corner lots shall address both streets. Corner lots are typically 6 feet wider to



accommodate the side yard setback along the street and allow for building articulation and side porches.

[Response: Acknowledged](#)

- Homes must comply with the “Design Quality Performance Standards” on Page 32 and the architectural design standards on Pages 42-52.

[Response: Acknowledged](#)

- Excluding green court, duplex and cottage lots, all single-family detached lots shall contain an open area with a minimum dimension of 15’ in either direction or an area of 360 square feet.

[Response: Acknowledged](#)

### 3D. *Miscellaneous Unified Development Ordinance Requirements*

In addition to the requirements in the HUDSG, all standards in the UDO shall be met. The more stringent requirement must be followed. Below are some of the key standards that may apply to the conceptual plan presented at the pre-application meeting, but this is not an all-inclusive list:

#### *Green Courts*

- Each green court dwelling shall have direct frontage on and pedestrian access to a street that includes on-street parking and sidewalks on both sides.

[Response: Acknowledged](#)

- No more than 14 dwelling units may face the same green court open space, except that the number of units facing a green court open space may be increased to 24 dwelling units if both ends of the green court open space have frontage on a public street and the design is approved by Life Safety.

[Response: Acknowledged. 11 dwelling units are proposed.](#)

- The length of the green court open space shall not exceed 360’ in length measured from any street.

[Response: Acknowledged](#)

- Green courts should be designed to be usable spaces, with sidewalks typically on the perimeter of the space. Green courts should also vary in design, for example some might be more of a green space design while others a common patio design.

[Response: Acknowledged](#)

- If green courts are not abutting streets on both sides (or a street and an alley), the green court must provide guest parking for motor vehicles at a rate of one-half parking space per green court dwelling and must be located within 200 feet of the front entrance of the dwelling it serves.

[Response: Acknowledged](#)

### 3E. *Landscape, Water Conservation, Stormwater Management*

#### *General Landscape Plan Comments*

Prepare the landscape plans in accordance with the Horizon Uptown Master Plan, the Unified Development Ordinance (UDO), and the Landscape Reference Manual. The landscape comments provided herein are based upon Section 146-4.7 (Landscape, Water Conservation, Stormwater Management). Please ensure that the landscape architect or designer has a copy of these documents as well as our project specific comments.

#### *Landscape Plan Preparation*

Please label all landscape sheets “Not for Construction.” Landscape construction drawings are not required and therefore do not necessitate the signature, stamp and seal of a licensed landscape architect upon final approval by the City of Aurora. Landscape plans are used by the city to determine compliance with the landscape standards and for code enforcement purposes.

[Response: Acknowledged](#)



Landscape plans must be prepared on 24" x 36" sheets. Plans shall have plant symbols, plant labels with quantities, and a plant schedule upon first submission or a complete review will not be possible. Landscape plans shall include the necessary landscape tables for each of the required landscape treatments (i.e. standard right-of-way landscaping, street and non-street frontage buffers, building perimeter landscape tables etc.) to demonstrate compliance with code requirements. Should any of the above information be missing, it may result in additional submittals and ultimately delays in approval of the plan set.

[Response: Acknowledged](#)

#### Sight Triangles

Include sight distance triangles per the Roadway Design and Construction Specifications document. All landscaping within the designated triangles shall not exceed 26" in height as measured from the roadway surface.

[Response: Acknowledged](#)

#### Horizon Uptown Master Plan

The following bullet points are not necessarily an all-inclusive list of the landscape requirements found within the Master Plan. The applicant is responsible for reviewing the Master Plan and determining all applicable landscape conditions.

#### Volume 2: The Public Realm

- Crossroads Boulevard, 6th and 8th Avenues shall be constructed with detached sidewalks and curbside landscaping. Sod / warm season grass is permitted.

[Response: Acknowledged](#)

- Streets shall have a minimum of two and a maximum of three tree species on each block face.

[Response: Acknowledged](#)

- Street trees shall be spaced a minimum of 30' and a maximum of 40' on center.

[Response: Acknowledged](#)

- There are specific streetscape standards regarding accoutrements that are permitted within the furnishings, throughway and frontage zones as noted in Tables 2.4., 2.5, 2.7 and 2.9.

[Response: Acknowledged](#)

#### Volume 5: The Neighborhoods

##### Plant Materials

- Local streets are encouraged to utilize the tree lawn as a bio-swale for storage, treatment and infiltration of storm water runoff from surrounding streets.

[Response: Acknowledged](#)

#### Landscape Standards

- In cases where there is a conflict or redundancy between the City of Aurora standards and the Horizon Uptown Design Standards, the Horizon Uptown Design Standards shall apply.

[Response: Acknowledged](#)

- Refer to Table 5-3 for the required minimum plant requirements by proposed product type for the building perimeter landscaping and front yard landscaping requirements. Refer to the UDO standards below for townhome landscape standards.

[Response: Acknowledged](#)

- Provide a Residential Product Type Plan like the one provided for Horizon Uptown Phases 5 and 6 that breaks down the lot types proposed for this pre-application and the expected landscaping to be provided for each. Include the building setbacks, anticipated utilities and utility easements for each product type proposed. Provide a specific plant list for front yard landscapes if the overall plant list



cannot be used for the front yard / building perimeter landscape requirements given limited space for planting.

[Response: Acknowledged](#)

#### Section 146-4.7 (Landscape, Water Conservation, Stormwater Management)

The following bullet points are not necessarily an all-inclusive list of the landscape requirements found within this Section 146-4.7. The applicant is responsible for reviewing this section and determining all applicable landscape conditions.

##### Section 146-4.7.5.C.2a (Required Landscaping, Curbside Landscaping)

Street trees are required at a ratio of one street tree per 40 linear feet along all street frontages. While a separate parcel is being set aside on the west side of Tempe Street for a future Aurora Public School, APS is not required to comply with UDO requirements for landscaping. Street trees should be included for that parcel/side of the street when the landscape plan is prepared for this development. Street trees shall be provided in the curbside landscape when a detached walk is provided or 4'-5' from behind the back of walk when an attached walk is provided. Street trees shall be located 50' from the face of a stop sign to maintain regulatory sign visibility. Refer to Figure 4.7-2.

[Response: Acknowledged](#)

Despite sod being permitted within the curbside landscape as part of the Horizon Uptown Master Plan, City Council passed a non-functional turf ordinance and sod is no longer permitted within the curbside areas. Questions regarding the ordinance should be directed to Tim York, Water Conservation Supervisor, Water Conservation Division, 303-326-8819. Landscaping for the curbside area should follow this section and include shrubs at a ratio of one shrub per 40sf of curbside area.

[Response: Acknowledged](#)

##### Section 146-4.7.5.I (Private Common Open Space/Tract Landscaping)

All development areas of land that have been disturbed during construction and are required or designated to be preserved and protected from future development for nonpublic active and passive recreation areas and facilities, trails, wildlife habitat or the preservation of view corridors and natural land features shall be landscaped with one tree and ten shrubs per 4,000 square feet. This excludes areas defined as street buffers, detention and water quality ponds, undisturbed marshes, wetlands, 100-year floodways and lakes are excluded. Please include a plan that clearly delineates the tract areas that don't include the landscaping.

[Response: Acknowledged](#)

##### Section 146-4.7.5 P (Residential Yard Landscape)

Building and/or front yard landscaping shall be provided in accordance with the HUDSG. See above comments.

[Response: Acknowledged](#)

##### Section 146-4.7.5.J.3 (Multifamily and Single Family Attached (Townhome) Residential Structures)

The HUDSG require all townhomes to have one front yard tree and one corner lot tree for end units only. The remainder of the design standards for townhome building perimeter landscaping shall comply with this section of the UDO. Plant beds shall be an average of six feet wide and shall consist of 1.25 plants per five linear feet of unit perimeter footage. At least five percent should be a mixture of evergreen and deciduous trees, at least 15% shall be tall shrubs with a mature height of six feet and up to 80% shall be a mixture of evergreen and deciduous shrubs chosen to create seasonal interest. An example table demonstrating compliance has been provided below.

[Response: Acknowledged](#)





**Building Perimeter Landscape Table**

Building	Building Perimeter Landscape Description	Length	Trees Required	Trees Provided	Tall Shrubs Required	Tall Shrubs Provided	Regular Shrubs Required	Regular Shrubs Provided
1	Building 1 Elevation	207 LF						
	5% Trees (Mix of Evergreen and Deciduous)		3	3				
	15% Tall Shrubs				8	8		
	80% Other Shrubs						42	42
2	Building 2 Elevation	238 LF						
	5% Trees (Mix of Evergreen and Deciduous)		3	3				
	15% Tall Shrubs				9	9		
	80% Other Shrubs						48	48
3	Building 3 Elevation	208 LF						
	5% Trees (Mix of Evergreen and Deciduous)		3	3				

### Section 146-4.7.3 (Detention and Water Quality Ponds)

All detention pond facilities shall be approved by Aurora Water. The area within the tract surrounding the pond shall contain a minimum of one tree and 10 shrubs or the approved tree and shrub equivalents per 4,000 square feet above the 100-year water surface elevation. When overlapping landscape standards occur, such as when buffers, detention/water quality and parking lot landscape requirements fall within the buffer, they may be counted towards meeting the buffer requirements. However, the most restrictive requirements shall be met. No portion of the detention pond may encroach into street and non-street buffers including outlet structures, rip rap, trickle channels, energy dissipaters or overflow areas. Plant material required for buffers or detention pond facilities may count towards meeting both requirements should the two requirements overlap. The more restrictive plant quantities should be met. Staff will determine whether the overlap exists once a formal site plan is submitted.

[Response: Acknowledged. Detention pond is not a part of this project.](#)

### Section 146-4.7.3.C (Irrigation)

All developments shall install an automatic irrigation system for landscape areas. To assess irrigation tap fees, Aurora Water requires that the applicant to divide their landscape into water conserving, non-water conserving and non-irrigated areas as part of the landscape submittal. A table summarizing these areas shall also be provided. Contact Timothy York at 303.326.8819 regarding irrigation plan requirements and application fees. An irrigation permit is required prior to the installation of an irrigation system.

[Response: Acknowledged](#)

### 3F. Building Design Standards

Section 146-4.8 contains design standards for homes within Horizon Uptown. There are standards for design variety, durability, masonry, windows and architectural features. All homes will also need to follow the architectural standards in the approved Horizon Uptown Master Plan, which are generally most stringent than the standards in the UDO. Please be aware that code has specific requirements for single-family design variety and durability, and that the building elevations must meet a minimum score of 17 points in Section 146-4.8.3.F, Table 4.8-2 in order to receive building permits. The Horizon Uptown Design Review Board must review and approve all building elevations prior to submitting building permits to the city. Please note that all building elevations for the townhomes must be included within the Site Plan as these are reviewed differently than single-family detached or duplex homes.

[Response: Acknowledged. No townhomes are proposed with this application.](#)



**Table 4.8-1****Building Design Standards Applicability by Building Type****Adjustments for Affordable Housing Structures appear in Sections 146-4.8.5 and 146-4.8.6**

Standard	Single-family detached or two-family dwellings	Single-family attached	Multifamily buildings	Single-story non-residential buildings	Multi-story mixed-use or non-residential buildings	Large-scale retail large format-over 75,000 sq. ft. gfa.
<b>General building design standards</b>						
Design variety	✓					
Distribution of masonry and architectural features	✓					
Windows	✓					
Building orientation and spacing			✓	✓	✓	✓
<b>Massing and articulation</b>						
Horizontal articulation		✓	✓	✓	✓	✓
Vertical articulation	✓		✓		✓	✓ [1]
Maximum building length			✓	✓	✓	✓
<b>Building materials</b>						
Primary building materials	✓		✓	✓	✓	✓
Masonry standards		✓	✓			
<b>Four-sided building design</b>						
Facade character elements			✓	✓	✓	✓
Entry design			✓	✓	✓	✓
<b>Roof design</b>						
Roof materials	✓		✓	✓	✓	✓
Roof form	✓		✓	✓	✓	✓
<b>Screening of mechanical equipment</b>						
Rooftop equipment	✓		✓	✓	✓	✓
Ground-mounted equipment	✓		✓	✓	✓	✓
Garbage storage areas			✓	✓	✓	✓

Notes:

[1] Only applies when more than two stories or over 30 feet tall.

**3G. Exterior Lighting**

Standards for exterior lighting are found in Section 146-4.9 and in the HUDSG (Volumes 2 and 5). Show typical details of lighting on the Site Plans.

**Response:** Acknowledged

**3H. Signs**

Section 146-4.10 governs signage standards. Please review this section for complete details. The HUDSG (Volume 6) will also guide any proposed signage. Please show the location of any monument signs on the Site Plans.

**Response:** Acknowledged. No monument signs proposed with this application.

**4. Adjustments**

Section 146-5.4.4 details the definitions, applicability, procedures, and criteria of approval for all adjustments to development standards. If any adjustments are requested, they must clearly be listed and justified in the Letter of Introduction. They must also be listed on the cover sheet of the Site Plan and any other sheets on which they are applicable. Approvals of adjustment requests are not guaranteed. Adjustment requests should identify the reason for the adjustment, efforts to minimize the adjustment, and design elements proposed to mitigate the standards proposed for reduction. Typically, mitigation techniques should go *above and beyond* requirements from other code sections. If an adjustment does not meet the limits for administrative approval under Section 146-5.4.4.F, then the adjustment will require approval from the Planning and Zoning Commission.

**Response:** Acknowledged

**5. Submittal Reminders****5A. PDF Requirements**

The application will be uploaded through the city's development review website as separate PDFs. Please ensure that all AutoCAD SHX text items are removed from the "Comment" section during the PDF creation process and that the sheets are flattened to reduce ability to select items. PDFs will be rejected during pre-acceptance reviews if they do not comply with this requirement, which could result in delays.





Response: Acknowledged

**5B. Mineral Rights Notification**

Please fill out the [Mineral Rights Affidavit](#) and supply this document to your Case Manager with the application submittal.

Response: Acknowledged

**Pre-Submittal Meeting:**

Contact the assigned Case Manager to schedule a pre-submittal meeting at least one week prior to submitting an application. At the pre-submittal meeting, staff will review the submittal requirements, discuss the review timeline, provide a fee estimate, and review the process for uploading files and inputting adjacent property owners.

Response: Acknowledged

Please note that a separate pre-submittal meeting is required with Land Development Review for the Subdivision Plat prior to application submittal. Please contact Real Property directly to schedule this meeting.

Response: Acknowledged

**Community Participation:**

The City of Aurora promotes citizen participation in the development review process. One way to promote this participation is through a community meeting. Registered neighborhood organizations within a onemile radius and adjacent property owners will formally be notified of the application when a submittal has been made to the Planning and Development Services Department. Occasionally, it will be necessary to hold a community meeting to discuss the application. Your Planning Case Manager can assist and inform you if a community meeting will be required.

Response: Acknowledged

**Community Meetings:**

- Currently, the city is utilizing Kerri Drumm with Purpose Aligned Consulting to facilitate these meetings. Please work with your assigned Planning Case Manager to schedule these meetings.

Response: Acknowledged

- These community meetings allow applicants an opportunity to present their proposal to adjacent neighborhoods and any impacted citizens. The meetings also allow residents to share their questions and opinions about the proposal to both the applicant and City staff.

Response: Acknowledged

- All meetings with registered neighborhood organizations should also include the Planning and Development Services Department Case Manager so that questions concerning the UDO and land use procedures can be properly addressed. The applicant will be expected to take meeting notes and include any project-related commitments that are made to the community at these meetings. After the meeting, please continue to work with the organizations that express interest in your project to address comments and mitigate concerns.

Response: Acknowledged

- Additional information about Community Meetings can be provided by reaching out to the Planning Case Manager for the application or by visiting the Planning and Development Services page of the city website.

Response: Acknowledged

- You can also find adjacent neighborhood groups associated with your site via this link: [Aurora Registered Neighborhood Associations - HOAs \(arcgis.com\)](#).

Response: Acknowledged

**Energy and Environment Development**



There are no known plugged and abandoned (P&A) wells within your site and no existing or planned oil and gas surface facilities on your site at this time. There may be existing underground pipelines in rights-of-way. If you have questions or concerns about this, the Energy & Environment Division can assist with providing additional information.

[Response: Acknowledged](#)

The City of Aurora has no authority or control over subsurface well equipment or operations. Contact the Colorado Oil & Gas Conservation Commission (COGCC)/Colorado Energy and Carbon Management Commission (CECMC) for more information.

[Response: Acknowledged](#)

Should you have any questions about oil and gas development, please reach out to Jeffrey S. Moore, Manager of the Energy and Environment Division.

[Response: Acknowledged](#)

### **Parks, Recreation & Open Space Department (PROS)**

#### ***Project Characterization***

Based on your proposal, the following information has relevance to the determination of PROS' requirements for this project:

- Your proposal is part of the Horizon Uptown Master Plan; therefore, the requirements of Tab 9 and Form J apply.

[Response: Acknowledged](#)

#### ***Open Space***

The Master Plan identifies several open space areas triggered by this development. These include PA-67 (0.65 ac), PA-68 (.61 ac), and PA-69 (.81 ac). These planning areas are identified as open space to include seating, informal play equipment, and a trail connection at least 6' wide within a 30' corridor east-west. These are required to be built by 50% of the certificates of occupancy for residential units within PA-18 and PA-19 and, therefore, need to be designed with this site plan. These are to be privately owned/maintained.

[Response: Acknowledged.](#)

#### **Aurora Public Schools**

The total school land obligation for the number of residential units proposed in the Horizon FDP amendment is approximately 23 acres. APS agreed to apply the school land dedication requirement as site plans are approved for the purpose of calculating cash-in-lieu of land. APS will request cash-in-lieu of land when the cumulative school land requirement for approved site plans exceeds the 14 acre school site that will be dedicated.

[Response: Acknowledged. 14 acre parcel is provided.](#)



**AURORA PUBLIC SCHOOLS - STUDENT YIELD**  
9/6/2023

**Horizon Uptown Phase 7 - Pre-application**

Dwelling Type	Units	Yield Ratio	Student Yield
SFD	177	0.7	124
MF-LOW	172	0.3	52
MF-HIGH		0.145	0
<b>TOTAL</b>	<b>349</b>		<b>176</b>

YIELD	ELEMENTARY		MIDDLE SCHOOL		K-8 TOTAL	HIGH SCHOOL		K-12
	RATIO	STUDENTS	RATIO	STUDENTS	STUDENTS	RATIO	STUDENTS	TOTAL
SF	0.34	60	0.15	28	89	0.2	35	124
MF-LOW	0.17	29	0.08	14	43	0.05	9	52
MF-HIGH	0.075	0	0.04	0	0	0.03	0	0
<b>TOTAL</b>		<b>89</b>		<b>42</b>	<b>132</b>		<b>44</b>	<b>176</b>

SCHOOL TYPE	STUDENT YIELD	ACRES PER CHILD	ACRES REQUIRED
ELEMENTARY	89	0.0175	1.5649
MIDDLE	42	0.025	1.0520
HIGH	44	0.032	1.4080
<b>TOTAL</b>	<b>176</b>		<b>4.0249</b>

**Horizon Uptown Tracking - 9/06/2023**

**Filing**

Horizon Uptown NO 1

Horizon Uptown CSP NO 2

Horizon Filing 3

Horizon Phase 4 DA-1469-12

Horizon Phase 5 DA-1469-14

Horizon Phase 6 DA-1469-13

**Total**

SFD	MFL	MFH	Total Units	K-8	HS	Total Yield	Dedication Requirement	Status
86	60		146	58	20	78	1.8006	Approved
		246	246	28	7	35	0.805	Approved
	203		203	51	10	61	1.3347	Approved
		104	104	12	3	15	0.3403	Approved
73	72		145	55	18	73	1.667	Tech Subm
88	72		160	62	21	83	1.9122	Tech Subm
<b>247</b>	<b>407</b>	<b>350</b>	<b>1,004</b>	<b>266</b>	<b>79</b>	<b>345</b>	<b>7.8598</b>	

**Aurora Water**

**Utilities**

*Aurora Water will receive a referral of the Site Plan and Subdivision Plat for review and comment. Please respond to all Water Department comments with your initial submittal.*

**Key Issues:**

- ▶ Provide a utility conformance letter with the Site Plan. The letter must confirm that water and sanitary mains will be built per the approved MUS (EDN 218158) and that proposed demand and loading shall not exceed the approved MUS.  
[Response: Acknowledged.](#)
- ▶ Water and sanitary mains shall have frontage to all residential buildings to provide service connections.  
[Response: Acknowledged.](#)
- ▶ Single-family detached and attached residences shall have individual meters and sanitary service connections.  
[Response: Acknowledged.](#)
- ▶ Meters shall be located within landscaped areas and covered by pocket utility easements, if not located within ROW.  
[Response: Acknowledged.](#)
- ▶ A stormwater quality discharge permit shall be obtained for this development. Submit a stormwater management plan (SWMP) with the Civil Plan. Show interim erosion control BMPs between phases as necessary.



[Response: Acknowledged.](#)

**Utility Services Available:**

- Water service may be provided per the approved MUS (EDN 218158)  
[Response: Acknowledged.](#)
- Sanitary sewer service may be provided per the approved MUS (EDN 218158)  
[Response: Acknowledged.](#)
- Project is located on the following Map Pages: 05T and 06T  
[Response: Acknowledged.](#)

**Utility Service Requirements:**

- A Site Plan is required for this project and must show existing and proposed utilities including:
  - Public/Private Mains
  - Service Lines
  - Water Meters
  - Fire Suppression Lines
  - Fire Hydrants necessary to service your development.
  - Grease Interceptors are required for commercial kitchens.
  - Sand/Oil Interceptors are required for vehicle maintenance facilities.
  - All utility connections in the arterial roadway are required to be bores.[Response: Acknowledged.](#)
- General utility design criteria can be found in Section 5 of the [Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure](#) (Utility Manual).  
[Response: Acknowledged.](#)
- Note that Aurora Water reserves the right to enact certain restrictions that may include curtailment of water taps or usage of non-functional turf as established by City Ordinance.  
[Response: Acknowledged.](#)
- Please reference Ordinance No. 2022-46 pertaining to the use and restrictions of turf and ornamental water features.  
[Response: Acknowledged.](#)

**Utility Development Fees:**

- A partial Storm Drainage Development fee is required prior to the recording of the Subdivision Plat or at the time of building permit approval if a Plat is not required. Additional Storm Drainage fees may be charged and are based on the amount of impervious surface created by this project.  
[Response: Acknowledged.](#)
- The Water Transmission Development Fee and the Sanitary Sewer Interceptor Fee have been combined into the water connection fee and are required to be paid after issuance of building permit and prior to issuance of the Certificate of Occupancy.  
[Response: Acknowledged.](#)
- For a full listing of Utility Fees, please see the [Aurora Water Fee Schedules](#). Connection fees should be paid prior to December 31st which are subject to increases as approved by City Council.  
[Response: Acknowledged.](#)
- Commercial users with meters one and one-half inches and smaller with landscaped areas not served by a separate irrigation system shall be charged an outdoor fee based upon the total landscaped area.  
[Response: Acknowledged.](#)



## **Stormwater Management**

*Aurora Water reviews the drainage and public improvement components of your project plans. Drainage design standards can be found in the city's "[Storm Drainage Design and Technical Criteria](#)" and "[Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure](#)".*

### **Key Issues:**

- ▶ Public improvements shall be provided in conformance with the approved Public Improvement Plan (PIP). Review the PIP for required improvements to be installed for each planning site and incorporate prior to submittal.  
[Response: Acknowledged.](#)
- ▶ A preliminary drainage report shall be submitted with each site plan. Detention and water quality/EURV shall be in conformance with the master drainage study. Ensure that the assumptions made for imperviousness in the master study is consistent with the proposed site. Downstream drainage facilities must be installed prior to on site paving and must be accepted with an approved pond certificate prior to issuance of TCO/CO.
  - o Discuss how phasing will be incorporated on-site as development occurs and address interim drainage conditions.  
[Response: Acknowledged.](#)
- ▶ A stormwater kick-off meeting will not be required for this development.  
[Response: Acknowledged.](#)
- ▶ All finished floor elevations (FFE) shall be minimum one-foot above all emergency overflow elevations and all 100-year ponding and flow depths.  
[Response: Acknowledged.](#)
- ▶ Note that for all preliminary drainage reports (PDR) that review fees will be limited to the first three reviews. If additional reviews are required, fourth and greater, then new fees will be required.  
[Response: Acknowledged.](#)
- ▶ A drainage report review checklist should be completed and signed by a professional engineer and uploaded with the report first review. The checklist can be located at:  
<https://www.auroragov.org/cms/One.aspx?portalId=16242704&pageId=16533628>  
[Response: Acknowledged.](#)
- ▶ This site will be subject to Ordinance No. 2022-46 pertaining to the use of turf and water features and any future updates to the COA Storm Drainage Design and Technical Criteria. This ordinance and criteria manual updates may impact the sizing of storm infrastructure. Use the following tables for imperviousness and C value computations.  
[Response: Acknowledged.](#)



Surface Type	Imperviousness
Paved Streets	100%
Compacted Gravel (Streets and Parking)	60%
Concrete Drive and Walks	90%
Roofs	90%
Landscaping (Including Water-Wise, lawns, active turf, uncompacted gravel etc.)	20%
Artificial Turf (Assumes permeable subgrade with well drained material and/or underdrain system)	35%
Native Grasses (undisturbed)	5%
Open Water Areas, including footprint of WQCV	100%

Table 5-7. Runoff Coefficient Equations Based on NRCS Soil Group and Storm Return Period (MHFD Manual)

NRCS Soil Group	Storm Return Period						
	2-year	5-year	10-year	25-year	50-year	100-year	500-year
A	$C_A = \frac{0.84}{1.302}$	$C_A = \frac{0.86}{1.276}$	$C_A = \frac{0.87}{1.232}$	$C_A = \frac{0.88}{1.124}$	$C_A = \frac{0.85}{1.025}$	$C_A = \frac{0.78}{1.110}$	$C_A = \frac{0.65}{1.025}$
B	$C_B = \frac{0.84}{1.169}$	$C_B = \frac{0.86}{1.088}$	$C_B = \frac{0.81}{1.057}$	$C_B = \frac{0.63}{1.024}$	$C_B = \frac{0.56}{1.032}$	$C_B = \frac{0.47}{1.042}$	$C_B = \frac{0.37}{1.053}$
C/D	$C_{C/D} = \frac{0.83}{1.122}$	$C_{C/D} = \frac{0.82}{1.035}$	$C_{C/D} = \frac{0.74}{1.013}$	$C_{C/D} = \frac{0.56}{1.031}$	$C_{C/D} = \frac{0.49}{1.039}$	$C_{C/D} = \frac{0.41}{1.048}$	$C_{C/D} = \frac{0.32}{1.058}$

- Drainage references provided in these notes may not be an exhaustive list or include all potentially relevant existing or under-review documents. Please note that approved City documents before approximately the year 2000 are not available of the City website and must be requested by the design engineer from the Aurora Water Reviewer listed on the Pre-Application notes. Additionally, the City can only provide copies of approved Master Drainage, Preliminary Drainage, Final Drainage and Civil Plan documents. In cases where City review of these documents is on-going and they may have some impact on the project, it is the design engineer's responsibility to contact the designers of the underreview documents and coordinate designs.  
[Response: Acknowledged.](#)
- Refer to EDN's 219065 (Master Plan) for supporting information related to your site.  
[Response: Acknowledged.](#)
- Per Section [138-367](#) of the Aurora Municipal Code, a Preliminary Drainage plan and report is required prior to Site Plan or Plat approval. A Preliminary Drainage Plan and Report shall be submitted at the time of Planning Department application submittal. A review fee shall be paid to the city prior to acceptance of the preliminary drainage report. The site plan will not be approved until the preliminary drainage report is approved. Full spectrum detention is required for this project.  
[Response: Acknowledged. Detention is handled off-site.](#)
- The site is located within 10,000 feet of Buckley Space Force Base. Pond drain times for sites adjacent to air operations areas are limited by FAA recommendations contained in Advisory Circular 150/5200-33C dated 2/21/2020. These drain time limitations are intended to minimize wildlife attractants and





potential interference with air traffic. The drain time limitations preclude pond designers from obtaining the full drain times recommended by the Mile High Flood District (MHFD) for Water Quality Capture Volume (WQCV) and Excess Urban Runoff Volume (EURV). The total drain times for ponds within this area is 48 hours.

[Response: Acknowledged.](#)

- Under the provisions of Colorado Revised Statute 37-92-602(8), any detention or infiltration facility that becomes operational after August 5, 2015, is required to notify downstream water rights holders prior to operation. Mile High Flood District (MHFD) has created a spreadsheet form (called *SDI Design Data*) for determining compliance with the statute and a web portal that will send a weekly e-mail notification to downstream water rights holders, satisfying the notification requirements. The developer will be responsible for having a professional engineer, licensed in the State of Colorado, complete the *SDI Design Data* and uploading to the web portal. Aurora Water will verify the information matches the final drainage report. Notification must be made before Civil Plans will be approved or Stormwater Permits will be issued.

[Response: Acknowledged.](#)

- Detention of storm drainage is required for this site and shall be incorporated on the site unless a variance is approved through the City review process.

[Response: Acknowledged. Detention is provided off-site in detention ponds C2 and C3 per the master drainage report for the development.](#)

- Detention of storm drainage is supported by offsite ponds. If offsite ponds are supporting this development a pond certificate is required prior to TCO/CO. Include approved pond certificates or timing of the certificate submittals in the first submittal of the preliminary drainage report. The drainage map used in the design of the pond should be included and illustrate that this site is in compliance with the assumptions. All downstream infrastructure should be initially accepted prior to TCO.

[Response: Acknowledged.](#)

- Release rate for the detention pond shall be based upon the [“Storm Drainage Design and Technical Criteria”](#) Manual, latest revision, and in conformance with the MHFD’s MDP/OSP.

[Response: Acknowledged.](#)

- Cross pans are not allowed across collector or arterial roadways, nor are they allowed on roadways with storm sewer systems.

[Response: Acknowledged.](#)

- 2.08.1.06.2 The slope away from the building shall have a minimum grade of five (5) percent for the first ten feet or to the property line, whichever occurs first, then a minimum of two (2) percent until the slope reaches the swale around the building. If physical obstructions or lot lines prohibit the ten feet of horizontal distance, a five (5) percent slope shall be provided to an approved alternative method of diverting storm runoff away from the foundation. Swales used for this purpose shall be sloped a minimum of two (2) percent. In no condition shall the bottom of the swale at its highest point be less than Submittal Requirements and Procedures 2-32 2023 six inches below the grade at the foundation of any adjacent structure. Impervious surfaces within ten feet of the building foundation shall be sloped a minimum of two (2) percent away from the building.

[Response: Acknowledged.](#)

- Storm water from concentrated points of discharge from a minor storm event shall not be allowed to flow over sidewalks but shall drain to the roadway by the use of sidewalk chase sections. Sidewalk chase sections shall not be located within a curb cut, driveway, curb ramp, or curb return.

[Response: Acknowledged.](#)

- For alley loaded product areas with more than the equivalent of 2 lots draining to the private alley, flows cannot cross the sidewalk. One of the following treatments shall be utilized unless otherwise approved



by the City Engineer: 1. The 2-year storm event shall be collected prior to the sidewalk crossing. 2. The alley v-pan shall be warped to curb returns which shall include curb ramps with truncated domes. 3. The v-pan of the alley shall be perpetuated to the connecting street with the sidewalk approaching the alley terminated with truncated domes just prior to the alley. Any warping of the v-pan shall occur downstream of a line parallel to the adjacent sidewalk. [Acknowledged](#).

[Response:](#)

- A public storm sewer system appears to be located near this site. Please have your Engineer or Surveyor verify and tie your site drainage into it.

[Response: Acknowledged.](#)

- Extend storm sewer through the site, including inlets, pipes, manholes, etc., as needed.

[Response: Acknowledged.](#)

- Stormwater Conveyance - Notification of Adjacent Property Owners link: [https://cdns5-hosted.civicle.com/UserFiles/Servers/Server\\_1881137/File/Business%20Services/Development%20Center/Water%20&%20Other%20Utilities/2023/Stormwater%20Conveyance%20-%20Notification%20of%20Adjacent%20Property%20Owners.pdf](https://cdns5-hosted.civicle.com/UserFiles/Servers/Server_1881137/File/Business%20Services/Development%20Center/Water%20&%20Other%20Utilities/2023/Stormwater%20Conveyance%20-%20Notification%20of%20Adjacent%20Property%20Owners.pdf)

[Response: Acknowledged.](#)

- All “nuisance” flow inlets should be identified on the preliminary drainage plans and peak flows developed and storm profiles submitted at the time of civil plans.

[Response: Acknowledged.](#)

- Digital files supporting this submittal should be uploaded at the time of first review, examples are MHFD Detention files.

[Response: Acknowledged.](#)

### **Public Works Department**

*Traffic Engineering will receive a referral of the Site Plan, Subdivision Plat, and Civils for review and comment.*

#### **Key Issues:**

- ▶ A Detailed Traffic Impact Study (TIS) will be required for this development. See below for additional information.
  - If an interim roadway/access network is proposed, a traffic analysis for this condition would be required.[Response: Acknowledged.](#)
- ▶ Site access along arterials shall be spaced a minimum 300' CL-CL and along collectors/local streets a minimum 150' CL-CL, including from intersections.  
[Response: Acknowledged.](#)
- ▶ Traffic calming elements will be an area of focus of review for this site, primarily adjacent to the school and park sites. See TIS requirements below.
  - The City supports curb extensions at intersections consistent with what has been provided throughout the Horizon Uptown development.[Response: Acknowledged. Traffic calming measures have been provided.](#)
- ▶ Traffic signal escrow will be required for the intersections of 13th Avenue at Crossroads Boulevard, 8th at Crossroads Boulevard other intersections as determined by the TIS. See below for additional information.

[Response: Acknowledged.](#)



- ▶ Applicant shall install two 2" conduits and pull boxes to be owned/maintained by the City of Aurora, for future fiber optic interconnect of traffic signals along arterial roadways (13th Avenue).
  - Conduit
    - Conduit material shall be Schedule 80 HDPE (or similar).  
[Response: Acknowledged.](#)
    - A # 14 AWG stranded copper conductor shall be installed for city underground locating purposes.  
[Response: Acknowledged.](#)
    - A nylon pull tape with a minimum 1,250 lb tensile strength shall be installed in all new conduit.  
[Response: Acknowledged.](#)
  - Pull Box
    - Pull boxes shall be 30"x48"x24", with two-piece interlocking lids.  
[Response: Acknowledged.](#)
    - City conduit shall be installed into City Pull Boxes.  
[Response: Acknowledged.](#)
- Show all adjacent and opposing access points on the Site Plan.  
[Response: Acknowledged.](#)
- Label the access movements on the Site Plan.  
[Response: Acknowledged.](#)
- Objects and structures shall not impede vision within the sight triangles. Show sight triangles on the site plan and landscaping plan at all access points in accordance with [City of Aurora Standard Traffic Detail TE-13](#). In addition, street trees shall be set back from Stop signs and other Regulatory signs as detailed in [City of Aurora Standard Traffic Detail TE-13.3](#).  
**Add the following note landscape plans: 'All proposed landscaping within the sight triangle shall be in compliance with COA Roadway Specifications, Section 4.04.2.10'**  
[Response: Acknowledged.](#)
- Show existing stop signs and street name signs or the installation of new stop signs and street name signs by developer at the site access points onto public streets. Add the following note to the Site Plan:
  - The developer is responsible for signing and striping all public streets. The developer is required to place traffic control, street name, and guide signs on all public streets and private streets approaching an intersection with a public street. Signs shall be furnished and installed per the most current editions of The Manual on Uniform Traffic Control Devices (MUTCD) and City Standards, and shown on the signing and striping plan for the development.  
[Response: Acknowledged.](#)
- Homes and drives are allowed to front onto collector streets if the average daily traffic volume is less than 4,000 and certain mitigation measures are provided. Indicate the mitigation measures on the Site Plan. See Section 4.04.2.02.4 of the *Roadway Design & Construction Specifications*, October 2016 edition.  
[Response: Acknowledged.](#)
- Homes are allowed to front a local street within 75-feet of an arterial street if the average daily traffic volume is less than 2,000 and certain mitigation measures are provided. Indicate the mitigation measures on the Site Plan/Contextual Site Plan. See Section 4.07.7.02.5.04 of the *Roadway Design & Construction Specifications*, October 2016 edition.  
[Response: Acknowledged.](#)



- Mail kiosk locations shall be specified in the Site Plan. In coordination with any Postal Service requirements, mail kiosks shall be located:
  - Outside of sight triangles as defined by COA Roadway Manual, standard TE-13  
[Response: Acknowledged.](#)
  - Outside of the influence area (including traffic queues) for a controlled intersection (stop-controlled, signal controlled, or otherwise)  
[Response: Acknowledged.](#)
  - A minimum of 30' away from stop signs (for stop sign visibility)  
[Response: Acknowledged.](#)
  - A maximum of 50' away from curb ramp crossings (curb ramps to be located on both sides of roadway)  
[Response: Acknowledged.](#)
  - Preferred location for mail kiosks is on side lots or other common areas for a neighborhood, and while meeting the above criteria, to avoid conflicts with mail kiosk traffic and specific homeowner ingress/egress  
[Response: Acknowledged.](#)

#### ROW/Plat:

- Designate a Public Access Easement along private drives/streets.  
[Response: Acknowledged.](#)
- To permit maintenance of the proposed traffic signal equipment (such as controller cabinets, pull boxes, and signal poles), dedicate a traffic signal easement (consisting of a 75-ft corner chamfer from the intersection of flowlines) at multiple intersections as determined by the TIS.  
[Response: Acknowledged.](#)
- Right turn lanes for major intersections shall consider alternative geometric configurations (standard geometry for channelized right turn lanes with acceleration lane, compound curves for channelized right turn lanes without acceleration lanes).  
[Response: Acknowledged.](#)

#### Traffic Signal Escrow:

- Multiple intersections are potential candidate for a future traffic signal if and when signal warrants are met. As an adjacent landowner/developer, you must participate in the cost of the traffic signal installation. Add the following note to the Site Plan:
  - **(Applicant/owner name, address, phone)** shall be responsible for payment of 25%/50%/100% of the traffic signalization costs for multiple intersections, if and when traffic signal warrants are satisfied. Traffic signal warrants to consider shall be as described in the most recently adopted version of Manual on Uniform Traffic Control Devices, as of the date or dates of any such warrant studies. For warrant purposes, the minor street approach traffic shall typically be comprised of all through and left-turn movement and 50% of right turn movements unless otherwise determined by the traffic engineer. **Pursuant to 126-38 of city code, the percentage of the traffic signalization costs identified above shall be paid to the city by the applicant / owner, to be held in escrow for such purpose, prior to the issuance of a building permit for the related development or as otherwise required by city code.** The percentage above will be applied to the entire traffic signalization cost as estimated at the time of the escrow deposit to calculate specific dollar funding requirement.  
[Response: Acknowledged.](#)



### **Traffic Impact Study:**

- A Traffic Impact Study will be required for this site which will include addressing the following specific items:
  - 1) Existing, buildout and 2050 average daily traffic counts.  
[Response: Acknowledged.](#)
  - 2) Trip Generation from the site.  
[Response: Acknowledged.](#)
  - 3) Site Circulation Plan and interior intersection control  
[Response: Acknowledged.](#)
  - 4) Include detailed analysis, including vehicle queuing evaluation, of:
    - a) All site access points and internal collector/collector or higher classified intersections
    - b) All intersections on Crossroads Boulevard from 13th Avenue to 6th Avenue
    - c) Intersection of 13th Avenue at Temple Street
    - d) Intersection of 13th Avenue at 11th Avenue
    - e) Intersection of 12th Avenue at 11th Avenue
    - f) Intersection of 12th Avenue at Temple Street
    - g) Intersection of 12th Avenue at Road A
    - h) Intersection of 6th Avenue at Temple Street
    - i) Intersection of 6th Avenue at Rome Street[Response: Acknowledged.](#)
  - 5) Interior roadway ADT & classification  
[Response: Acknowledged.](#)
  - 6) Signal Warrant Analyses of 13th Avenue at Crossroads Boulevard, 8th Avenue at Crossroads Boulevard and other intersections as determined by the TIS – Warrant 1,2,3 all to be included (collect 72-hour tube counts for analysis)  
Interior roadway ADT & classification  
[Response: Acknowledged.](#)
  - 7) If a traffic signal or multiway stop warrant is met at an intersection, then a roundabout shall also be considered at the intersection.  
[Response: Acknowledged.](#)
  - 8) Analysis of pedestrian connectivity, including vehicle/pedestrian crossing of trails. Enhancements will be required and any concerns with sight distance need to be addressed.  
[Response: Acknowledged.](#)
  - 9) Discussion of the application of elements from the Traffic Calming Toolbox and countermeasures applicable from the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018) to address any concerns for speeding, pedestrian crossings, etc. Techniques in the Traffic Calming Toolbox include: Advanced Yield Lines, Enhanced Crosswalk, High-Visibility Signs and Markings, In-Street Pedestrian Crossing Signs, Enhanced Pedestrian Crossing Sign Devices (HAWK or RRFB), Mid-Block Lane Narrowing, Curb Extension, Angled Parking, Pedestrian Safety Island, Staggered Pedestrian Safety Island, Lane Narrowing, Mini Roundabout, Speed Cushions and Chicane. Details of Enhanced Crosswalk, compact roundabout, speed cushions and chicane may be made available if requested.  
[Response: Acknowledged.](#)

The Traffic Study shall be prepared in accordance with the [City of Aurora Traffic Impact Study Guidelines](#).



#### Submitting the Traffic Study:

- The Traffic Study shall be sent directly to Steve Gomez at [segomez@auroragov.org](mailto:segomez@auroragov.org) as soon as possible.  
[Response: Acknowledged.](#)
  - The Traffic Study shall also be uploaded with the rest of the submittal.  
[Response: Acknowledged.](#)
  - Previously approved Traffic Impact Studies/Letters are available through this [link](#).  
[Response: Acknowledged.](#)
- 1) Based on our review of the Traffic Impact Study, additional improvements may be required.  
[Response: Acknowledged.](#)

#### **Engineering Division**

*The Engineering Division reviews the roadway and public improvement components of your project plans. Engineering reviews referrals of the Site Plan and Subdivision Plat from the Planning Department.*

#### **Key Issues:**

- ▶ The public improvements shall be provided in conformance with the Public Improvement Plan (PIP) for planning areas sixteen through twenty or a PIP amendment would be required.
  - North half of E 6th Avenue
  - West half of Road 3 (Crossroads Boulevard)
  - North half of Road 2 (E 8th Avenue)
  - Colfax Avenue (E 13th Avenue) from E 11th Avenue to Gun Club Road
    - Full roadway width from Gun Club Road to PA-19 frontage
    - South half of the roadway from PA-19 frontage to E 11th Avenue
  - All other internal local streets shall be designed and constructed to city of Aurora standards during the site plan process.
  - As identified in the PIP, Picadilly Road improvements may be required if the volume threshold has been met.[Response: Acknowledged.](#)
- ▶ As shown, Phase 1 is required to be first and would need to be completed before the subsequent phases. If it is desired to have flexibility, phase boundaries need to be adjusted to include all necessary roads for each phase.  
[Response: Acknowledged.](#)
- ▶ The updated Roadway Manual has been adopted as of February 1, 2023. The link to the updated Roadway Manual can be found below.  
[Response: Acknowledged.](#)
- ▶ The City has updated its civil plan submittal intake process which became effective June 26, 2023. A civil plan pre-submittal is no longer required. Please review the new submittal instructions [here](#).  
[Response: Acknowledged.](#)
- ▶ Previously approved plans and reports can be found on the City's website. Instructions can be found here: [Getting to Engineering Documents Online](#). Older documents can be provided upon request.

#### **Improvements:**

*Sections and details referenced in the Improvements section refer to the City's [Roadway Design and Construction Specifications \(Roadway Manual\)](#).*

- Typical roadway sections are specified in the City Code and summarized in Section 4.08 with details shown in the Standard Detail S1.  
[Response: Acknowledged.](#)





- Mountable curb and gutter shall be used on all Type 1 and 2 streets. All other streets, including those within the Urban Centers and TODs shall use 6" vertical curb and gutter.  
[Response: Acknowledged.](#)
- Curb ramps must be shown (located) on the plans at all curb returns, "T" intersections, residential mail kiosks or clustered mailboxes, and any other location of public necessity. Detailed grading of the curb ramps shall be included in the civil plans.  
[Response: Acknowledged.](#)
- Flared curb cuts, Standard Detail S7.4, are not permitted for commercial/industrial or residential driveways where traffic movements would be substantial. When the number of parking spaces exceeds 20, curb returns are required, and the curb return radii shall be labeled on the plan.  
[Response: Acknowledged.](#)
- Pedestrian Bicycle Railings will be required at and continuous along vertical separations of 30 inches, or greater, or on slopes greater than or equal to 3:1 adjacent to pedestrian areas. See Standard Detail S18.  
[Response: Acknowledged.](#)
- Retaining walls shown on plans shall indicate material type and a height range or indicate a maximum height. Where appropriate, guard or hand rails may be required. Structural calculations are required with the first civil plan submittal for all cast in place walls and walls greater than four feet in height. Please refer to Section 4.02 of the Roadway Manual for additional retaining wall requirements.  
[Response: Acknowledged.](#)
- The maximum private access drive slope may be 4% (non-residential) when sloping down toward the public street and up to 6% maximum when sloping up toward the public street.  
[Response: Acknowledged.](#)
- Homes and drives are allowed to front collector streets if the average daily traffic volume is less than 4,000 and certain mitigation measures are provided. Indicate the mitigation measures on the Site Plan. See Section 4.04.2.02.4 of the *Roadway Design & Construction Specifications*, October 2016 edition.  
[Response: Acknowledged.](#)
- Homes are allowed to front a local street within 75-feet of an arterial street if the average daily traffic volume is less than 2,000 and certain mitigation measures are provided. Indicate the mitigation measures on the Site Plan/Contextual Site Plan. See Section 4.07.7.02.5.04 of the *Roadway Design & Construction Specifications*, October 2016 edition.  
[Response: Acknowledged.](#)
- If gates are incorporated into the design of the development, they are required to be setback from the street flow line a minimum of 35-feet or one truck length, whichever is greater.  
[Response: Acknowledged.](#)
- Streetlights are required along adjacent roadways. Please refer to the Draft Lighting Standards for streetlight spacing, location, wattage, etc., information. Streetlights along public right-of-way shall become city-owned and maintained once they have been installed and the final acceptance letter for the lights has been issued. Streetlight locations shown on the site plan are conceptual. The streetlighting plan shall be included with the Civil Plan submittal and will determine final streetlight locations based on a photometric analysis.  
[Response: Acknowledged.](#)

**ROW/Easements/Plat:**

- ROW dedication is required for public streets.



[Response: Acknowledged.](#)

- The dedication of a 25-foot lot corner radius is required at the intersection of arterial roadways, a 20-foot lot corner radius is required at the intersection of collector roadways, and a 15-foot lot corner radius is required at the intersection of local roadways.

[Response: Acknowledged.](#)

- Please coordinate with the Real Property Division of Public Works for the dedication of any required easements. If a plat will be prepared for this development, the plat can cover the required easements.
  - Sidewalk easements may be required for new sidewalk installed.

[Response: Acknowledged. Sidewalk should all be within the public ROW](#)

- A drainage easement shall be required for any detention/water quality facilities on site. This drainage easement shall tie to a public way. Please coordinate with Aurora Water for their alignment.

[Response: Acknowledged.](#)

- Utility easements shall be required for any proposed water/sanitary sewer/public storm sewer located outside of public right-of-way. Please coordinate with Aurora Water for their alignment.

[Response: Acknowledged. Easements outside of the ROW will be prepared as necessary.](#)

- Public access/fire lane easement shall be required for fire lanes outside of public right-of-way. Please coordinate with Life Safety for their alignment.

[Response: Acknowledged.](#)

#### **Fire/Life Safety Comments - Building Division**

*The Building Division will receive a referral of the Site Plan and Subdivision Plat for review and comment. They will review these documents for Life Safety (Fire Code) and Building Code issues.*

#### **Key Issue:**

- The Aurora Building Division currently utilizes the adopted 2021 International Codes Series except for the 2023 NEC. This includes the International Existing Building Code (IEBC).

[Response:](#)

#### **Advisory Comment:**

On behalf of the Aurora Fire Department, all plan reviews, permits, and inspection associated to site plans, civil plans, platting documents, the International Fire Code and fire protection systems are conducted by the Aurora Building Division's Fire/Life Safety Group. Please avoid contacting Aurora Fire Rescue or the Fire Prevention Bureau with associated questions since they will only differ your inquiries to the Aurora Building Division Fire/Life Safety Group.

[Response:](#)

#### **Accessibility Requirements:**

The City of Aurora reviews accessibility requirements based on 2021 IBC, Chapter 11, the 2017 ICC A117.1 and the revised 2003 Colorado State [House Bill 03-1221](#), Article 5, Standards for Accessible Housing.

- Accessibility Requirements - [Residential - Apartments and Townhomes](#)

[Response:](#)

The City of Aurora reviews accessibility requirements based on 2021 IBC, Chapter 11 and the 2017 ICC/ANSI A117.1

- Accessibility Requirements - [Residential – Single-Family Dwellings](#)
  - The site plan and the civil plans must reflect the location of the outside mail kiosk. Details of the types of mail kiosks must be included along with a drawing showing how the residents will access their mailbox, how the postal service will load the mailboxes, along with curb ramp and sidewalks abutting the mail kiosks.



Response: Acknowledged.

- The site plan and the civil plans must show the location of Electric Vehicle (EV) charging stations and parking spaces.

Response: Acknowledged. None proposed.

The City of Aurora reviews accessibility requirements based on 2021 IBC, Chapter 11, the 2017 ICC/ANSI A117.1.

- Accessibility Requirements - [Commercial](#)

**Address Directory Signs for [Single-Family Dwellings Facing Green Belts instead of Public Right-of-Way](#):**

An approved address directory shall be shown within the detail sheet of the site plan and/or civil plan sign package. Address Directory Signs must be installed at properties where the single-family unit is facing a green belt and access to the unit is from garage of an adjacent access road.

• Adjacent public/ private roadways, or fire lane easements/public access easements must provide emergency access to within 150' of all exterior portions of the first floor of each structure. The utilization of a greenbelt product cannot exceed this requirement.

**Addressing Requirements:**

All buildings or structures, except accessory buildings, shall display the proper building number in the manner provided in this article. It shall be the responsibility of the owner, occupant or any person obtaining a building permit to place such numbers in the manner provided in the Aurora City Code of Ordinance, Chapter 126 - Article VII - Numbering of Buildings.

**Adopted Codes by the City of Aurora – Setbacks:**

The site plan and civil plans must reflect the setback requirements of the 2015/2021 International Building and Fire Code for placement of the structure(s) in relation to adjacent buildings, property lines, public ways, accessible walkways, etc. To view the 2015/2021 International Codes please utilize the following hyperlink: [ICC Codes Online](#).

- As of Jan. 8, 2022, the City of Aurora has adopted the 2021 International Codes and the 2023 National Electrical Code.
- Using the 2021 International Building Code adopted by the City of Aurora, the site plan submittal must show the distance between new or existing property lines and proposed exterior walls of structure(s).

**Civil Plans:**

Based on the discussion within the pre-application meeting the following information must be reflected within the Civil Plan package submitted to Public Works Department.

- [Grading Plan](#)
- [Handicap Accessible Parking Signs](#)
- [Keep Drive Aisle Passable at All Times Signs](#)
- [Sign Package](#)
- [Signature Block](#)
- [Street Standards and Street Section Details](#)

**Fire Department Access:**

Based on the information presented so far, the type(s) of fire apparatus access road(s) needed for this site is:

- [Designated Fire Lane](#)
- [Fire Lane Easement](#)
  - Buildings less than 30' in height require only a 23' wide fire lane easement with 29' inside and 52' outside turning radii. Buildings greater than 30' in height require a 26' wide fire lane easement with a 26' inside and 49' outside turning radii.



- Buildings greater than 30' in height are regulated by the 2021 IFC Section D105 and require both a 26' Fire Lane Easement and two points of emergency access. Typically, the 26' fire lane easement is located on the front main entry side of the structure within a minimum of 15' and a maximum of 30' from the exterior wall of the building. Structures greater than 30' in height also require a second point of emergency access.
- Motor Courts and Looped Lanes – 146-4
- Public Street Adjacent to Site
  - Structures greater than 30' in height and adjacent to a public street must provide a 26' wide fire area capable of accommodating aerial fire apparatus (ladder trucks). The intent is to establish a fire apparatus parking area no greater than 30' and no less than 15' from the exterior wall of the structure. This fire apparatus area must be posted as "No Parking-Tow Away Zone" to ensure availability for fire apparatus.

#### **Fire Hydrants:**

The number and spacing of fire hydrants are determined using the 2021 IFC, Appendix B & C. As indicated in the previously stated code sections, fire hydrant coverage requirements include both internal site areas and abutting public street systems.

- In single-family detached residential sites, the IFC reflects an exception in Section 507.5.1 that allows IRC R-3 dwellings to utilize a 600' on center spacing of fire hydrants.  
[Response: Acknowledged.](#)
- Three lane roadways without medians require fire hydrants every 500' on alternating sides of the street. Please show any known site entry points to the north and south sites. Show and label any existing or proposed fire hydrants within 500' of this site development area. The fire/life safety group will assist in the placement of fire hydrants to ensure only the hydrants needed to support the site are provided.  
[Response: Acknowledged.](#)

- An onsite looped water supply will be needed where there are two or more fire appliances, such as fire hydrants and fire service lines supporting a fire sprinkled structure.  
[Response: Acknowledged.](#)

- Please show the location of all fire hydrants within 400' of this site. Where fire hydrants are outside the boundaries of the site plan you can indicate the distance using a fire hydrant label or symbol with an arrow and distance.  
[Response: Acknowledged.](#)

#### **Fire Sprinkled Structures:**

The requirements for the installation of a fire sprinkler system are provided within the Chapter 9 of the 2021 IFC and IBC.

#### **General Comments:**

- Our jurisdiction has amended the IFC through a city ordinance that removes the requirement for fire sprinkling R-3 Single-Family residences. During the pre-application meeting it was stated that these units would be IRC R-3 Occupancy. If this is changed to IBC R-2 occupancy, then a fire sprinkler system will be required for these units.  
[Response: Acknowledged.](#)

#### **Flag Lots:**

A flag lot is considered a parcel of land that is entirely dependent upon an adjacent property for access to a public street and to a public water supply. A flag lot can create an area of land that is undevelopable unless a dedicated means of access and water is established at the time of the subdivision of the site.

[Response: Acknowledged. No flag lots proposed.](#)



**Legend:**

The cover sheet must include a “Site Plan Legend” reflecting both existing and/or proposed site elements that are existing or proposed within site.

[Response: Acknowledged.](#)

**Petroleum and Gas Line Easements:**

Please review either 49 CFR part 195, Transportation of Hazardous Liquids by Pipeline criteria or 49 CFR part 192, Transportation of Natural and Other Gas by Pipeline criteria to determine minimum distance criteria of a pipeline proximity of any private dwelling, industrial building, or place of public assembly in which persons work, congregate, or assemble. You can also gain assistance by obtaining a letter from the petroleum or gas line easement owner indicating the minimum distance they would allow the buried gas line and easement line to the proposed exterior wall. Submit this letter with your site plan amendment planning documents for recordation.

[Response: Acknowledged.](#)

**Phasing Plans:**

A phasing plan must be provided with the Planning Departments Site Plan and the Public Works Departments Civil Plans submittals.

[Response: Acknowledged.](#)

**Site Plan, Civil Plan, Framework and General Development Plan, and Plat Notes:**

The notes being provided below must be included on the cover sheet of the indicated submittal type.

- (Plat Note) If Plat does not contain a Dedicated Fire Lane Easement
- (Plat Note) If Plat Contains Fire Lane Easement
- (Site Plan Note) Addressing
- (Site Plan Note) Aircraft Noise Reduction (LDN)
  - This area is within a LDN noise mitigation area. [Sec. 22-425](#)
- (Site Plan Note) Americans with Disabilities Act
- (Site Plan Note) Emergency Ingress and Egress
- (Site Plan Note) Fire Lane Easements
- (Site Plan Note) Fire Lane Signs

[Response: Acknowledged.](#)

**Site Plan Data Block:**

The site plan must include a “Data Block” on the cover sheet that reflects all items indicated within the “link” that apply to your project.

[Response: Acknowledged.](#)

**Special Design Considerations:**

Based on the information presented in the pre-application meeting, these additional Life Safety criteria must be shown on the site plan, plat and civil plans.

- [Abutting Fire Lane or Public Access Easement to Property](#)
  - If an existing fire lane or public street must be removed or relocated for any reason, the roadway must be replaced using the current specifications of the Public Works Department.  
[Response: Acknowledged.](#)
- [Access to within 150 feet of Each Structure](#)
  - The fire code official is authorized to increase the dimension of 150 feet reach requirement where the building is fire sprinkled in accordance with the 2021 IFC, Section 503.1.1. If granted approval, a fire sprinkled structure may utilize 200-foot reach criteria in place of the 150-foot standard requirement.  
[Response: Acknowledged.](#)



- Where fire hydrants and fire department connections are provided adjacent to vehicular access drive aisles, they will need to be dedicated as fire lane easements in order to provide emergency access to them.

Response: Acknowledged.

- [Access Road Width with a Hydrant](#)
- [Aerial Fire Apparatus Access Roads](#)

- of the alternative surfacing material that reflects the current Public Works fire lane specifications.

Response: Acknowledged.

- [Fire Apparatus Access Road Specifications](#)

- If an existing fire lane or public roadway must be removed or relocated for any reason, the portion replaced must follow the current specifications of the Public Works Department.

Response: Acknowledged.

- [Combined Fire Lane, Public Access and Utility Easements](#)
- [Construction of Fire Lane Easements and Emergency Access Easement](#)
- [Cul-De-Sac's](#)
- [Dead-end Fire Apparatus Access Roadways](#)
- [Dead-End Public Streets](#)
- [Encroachment into Emergency Access or Fire Lane Easements are Prohibited](#)
- [Grade](#)
- [Labeling of Easements on the Site Plan, Plat and Civil Plans](#)
- [License Agreement](#)

- Motor Courts - Where Motor Courts and Looped Lanes are utilized please provide a dedicated Fire Lane Easement within the required width of each drive aisle (23' for Motor Courts and 18' for Looped Lanes) as depicted in [the Unified Development Ordinance, Section 146-4.2.E](#)

Response: Acknowledged.

- [No Parking is allowed within a Fire Lane Easement](#)
- [Private Streets Constructed to Public Street Standards](#)
- [Pocket Utility Easements for Fire Hydrants](#)
- [Public Street Systems Adjacent to Site](#)
- [Remoteness](#)
- [Speed Bumps](#)
- [Snow Removal Storage Areas](#)
- [Two points of Emergency Access](#)
- [Width and Turning Radius](#)

#### **Trash Enclosure:**

Per the 2021 International Fire Code, Section 304.3.3, dumpsters and containers with an individual capacity of 1.5 cubic yards or more shall not be stored in buildings or placed within 5 feet of combustible walls, openings, or combustible roof eave lines.

Response: Acknowledged.

#### **Land Development Review Services Division**

*The Land Development Review Services Division reviews the Site Plan and processes Subdivision Plats, Easements, and License Agreements that may be necessary for development of property.*

#### **Subdivision Plats:**

- The property has never been platted and shall be subdivided at this time in order to obtain a building permit. Plats must be prepared using City of Aurora specifications provided in our most current [Subdivision Plat Checklist](#). Plat review may run concurrently with your other Planning





Department submittals.

[Response: Acknowledged.](#)

- A **presubmittal meeting** with Land Development Review Services is required on all plat submittals so our team may verify that basic elements have been addressed before they are submitted to Planning. This 30-minute meeting is for the 1st submittal of plats only and is by appointment only. Call *Darren Akrie* at 303.739.7300 to schedule your appointment. The person preparing the plat and your project manager should attend the meeting. Please bring two sets of the plat.

[Response: Acknowledged.](#)

#### **Site Plans:**

A Site Plan will be required by the Planning Department. Land Development Review Services has items that need to appear on that site plan above and beyond what other departments may require. These items are listed on the Land Development Review Services [Subdivision Plat Checklist](#).

[Response: Acknowledged.](#)

#### **Separate Documents:**

- A separate document refers to a process to describe and record an encumbrance (easement, license etc.) or release of such on property when a subdivision plat already exists. The document usually consists of a legal description and drawing. Each are reviewed and approved by the city, signed by the property owner as well as the appropriate city officials and recorded with the county.
- During the pre-application meeting no requirement for separate documents were specifically identified for your site as proposed. However, review of your actual Site Plan when submitted may identify additional conditions which will require a separate document. Following are the links to additional information if needed later in your formal review process:
  - [Dedications Packet](#)
  - [Easement Release](#)
  - [License Agreement Packet](#)
- **Offsite easement dedications** may be required to make your project work. It's up to the developer to obtain these easements for the city, pay compensation, etc. Dedication documents must be prepared using Land Development Review Services specifications which can be found in the [Dedications Packet](#). Once complete and accurate easement dedication information is submitted to Land Development Review Services, it takes **about 8-10 weeks** to complete the process. They must be complete and ready to record before Land Development Review Services will record the Plat and/or Site Plan.
- If there are existing easements that are no longer needed, the city will require the developer to make application to the city to release those easements. Easement release documents must be prepared using Land Development Review Services specifications and are available in the [Easement Release Packet](#). Once complete and accurate easement release information is submitted to Land Development Review Services, it takes about **8-10 weeks** to complete the process. They must be complete and ready to record before Land Development Review Services will record the Plat and/or Site Plan.
- The developer may need to **dedicate new easements** and/or street right-of-way on the site. Since a new subdivision plat is not required, these dedications must be done by separate legal document. These legal documents must be prepared using Land Development Review Services specifications which are found in the [Dedications Packet](#). Once complete and accurate easement dedication information is submitted to Land Development Review Services, it takes about **4-6 weeks** to complete the process. They must be complete and ready to record before Land Development Review Services will record the Plat and/or Site Plan.
- **(Residential only)** No portion of any roofed structure may encroach into any easement. However, the city will allow certain items to encroach in easements such as fences, gates, retaining walls, monument signs, etc. as long as they do not interfere with the use of the easement. If your encroachment is approved, you must obtain a **Revocable License** from Land Development Review Services. It is the responsibility of the applicant to identify and include all encroachments on their Revocable License application which can be found in the [Revocable License Packet](#). A Revocable



License takes about **1-2 weeks** to complete and must be complete before Land Development Review Services will record the Site Plan.

- You may have items that encroach into city-owned property or easements (i.e. retaining walls, medians, stairs, etc.). If allowed, these types of encroachments require a **License Agreement**. Requirements can be found in the [License Agreement Packet](#). It takes **8-10 weeks** to complete the process after submittal. The License Agreement must be completed before the Site Plan is recorded.
- Land Development Review Services may require a Monumented Field Survey, but we are unable to determine that until we make our first review.
- If a requirement for new street lighting is identified during the review process, this may be an opportunity to partner with cell carrier providers. New technology allows these providers to incorporate their technology with street lighting. These carriers are willing to take on the cost of purchasing and installing a light with qualifying projects. Please contact *Leslie Gaylord* at 303.739.7901 for additional details and contact information.

We hope we have adequately addressed your comments. If you have any questions, or need further clarification concerning the resubmitted plans, please don't hesitate to give me a call at 303-353-3744

Respectfully submitted,  
MERRICK & COMPANY

Tyler Scarlett, PE

