



MISSOULA COMMUNITY PLANNING, DEVELOPMENT & INNOVATION

Development Services Division

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October 3, 2022

Joe Dehnert
IMEG Corp.
1817 South Avenue W
Missoula, MT 59801

Re: Icon Apartment Homes at Dougherty Ranch Annexation, Zoning, and Subdivision 1st Sufficiency Review

Dear Joe Dehnert,

Following certification of 1st Element review and distribution of agency request-for-comment letters, the Icon Apartment Homes application became eligible for 1st Sufficiency review on September 12, 2022. The sufficiency review deadline is October 3, 2022. **Development Services cannot certify your application packet as sufficient for governing body review.**

Below is a summary of the deficiencies. Please address the items listed below, then submit only the updated sections of the application packet with a new cover page clearly titled as 2nd Sufficiency Review, and include the date submitted. Please submit the amended sections as PDFs and provide a replacement paper copy of only sections that are amended. The amended materials will only need to be provided to the agencies indicated in the agency mailing list provided by this office.

Sufficiency Items

General – Subdivision Regulations

- Provide an easement required for accessing the property to the South (5-020.5).
- Provide landscaping and maintenance plans for common areas, parkland, and landscape buffer strips and screening (5-020.14H).

General – Form Based Code

- Please reduce the density in T3
(*max. density is 8 units / acre*)
- Please identify the EADA zone within the subject property.
- **Note:** All FBC Division 3 Standards will apply (ref. Table 3-1)

Annexation Petition

Legal Description

- Please provide the correct legal description on a revised annexation petition.

Section A

A2. Project Summary

- The project summary says 51 lots (2 locations) are proposed while the plat appears to show 50 lots and 2 open space parcels. Please correct and clarify.
- Please review and verify or correct the accuracy of the legal description.
- Summary of Non-Motorized Facilities: This section says Flynn Lane will be extended to the subject property. This does not appear to be accurate. Please verify or correct.

A3. Project Summary

- Section B: Please verify or correct the legal description and total number of lots.

A4. Preliminary Plat

- The legal description provided on the plat (3 locations) is not consistent. Please provide accurate and consistent legal descriptions.
- Bottom right corner: please change 'an' preliminary plat to 'a' preliminary plat.
- Please number Lot 37 and provide block numbers (5-010.4.C).
- Is the narrow space between the lots and subdivision boundary at the southern edge of Lots 47-50 intentional or a drafting error? If intentional, please label the width and purpose. If accidental, please remedy.
- The plat clearly shows the exterior property boundaries but outside of the north, west, and south boundaries are proposed offsite public access and utility easements. How and when are these easements to be provided?
- Please update the date of plat (5-010.3F).
- Please include the road names – they are currently shown on other plan sheets (5-010.4D).
- Please provide ground elevations of the tract. Contour intervals for the entire subdivision must be provided at vertical intervals of 2 feet where the average slope of the subdivision is less than 15% and at intervals of 5 feet where the average slope of the subdivision is 15% or greater (5-010.4G). Contour lines are shown on the existing conditions map but do not have elevations labeled.
- Please provide a filing schedule for the phases and the amount of parkland to be dedicated per phase (5-020.14.A).
- Please add no access strips to the lot lines fronting Dougherty Drive.
- Please fix the discrepancy between the preliminary plat and the lot layout shown on the Master Plan documents. The preliminary plat shows 5 lots (Lots 1-5 on the Plat) in the northwest corner whereas the Master Plan identifies 4 lots. Similarly, the lots in the block second from the right (Lots 20-23) are shown as 4 lots on the Plat and 5 lots on the Master Plan sets.
- Please revise the following Lot widths & depths:
 - Lot 1: The front of this lot may be either Veteran's Way or Maddox Ave. If the chosen front is Veteran's Way, the lot width may not exceed 180' in the T5 zone. It is currently 379.7' wide.
 - Lot 20: The front of this lot may be either Veteran's Way or Roper Way. If the chosen front is Veteran's Way, the lot width may not exceed 180' in the T5 zone. It is currently 289.1' wide.
 - Lots 21-23: The front of these lots is Roper Way. The lot width may not exceed 100' in the T4 zone. Each lot is currently 128.6' - 130.8' wide.
 - Lot 36: The front of this lot may be: Jumping Horse Lane, Dougherty Drive, or the Flynn Trail Street. If the chosen front is Dougherty Drive, the lot width may not exceed 100' in the T4 zone. It is currently 329.2' wide.
 - Lot 37: The front of this lot may be either Jumping Horse Lane or Dougherty Drive. If the chosen front is Jumping Horse Lane, the lot width may not exceed 100' in the T4 zone. It is currently 330.2' wide.

- Lot 43: The front of this lot is Roper Way, not Jumping Horse Ln. The minimum lot depth in the T4 zone is 80'. The lot is currently 74.6' deep.

A5. Master Plan

- **Note:** Based on the Street Hierarchy in Division 6, Section 6.2 of the Form Based Code, the proposed streets are ranked in the following order:
 - TIER 1:**
 - Road B Pine Butte Blvd. / (Main Street Primary)
 - TIER 2 (tied):**
 - Road C Roper Way (Urban Secondary St)
 - Road D Maddox Ave. (Urban Secondary St)
 - Veterans Way (Urban Bike St)
 - TIER 3 (tied):**
 - Grant Creek-Flynn BUILD Grant Connection (Trail St)
 - Pedestrian-Only Connection (Trail St)
 - Dougherty Drive (Neighborhood Collector)
 - Road A Jumping Horse Lane (Neighborhood St)
 - TIER 4:**
 - Alleys
- Please reconsider the street designation of Dougherty Drive, it does not seem appropriate to have a BUILD-grant road with higher levels of predicted traffic volumes to have such a low-intensity street classification.
- Alleys do not divide blocks. Three blocks (including their alleys) are over the 2,000 ft perimeter maximum (BLOCK 1: 2,618.2 // BLOCK 2: 2,348.6 // BLOCK 3: 2,239.5). Please revise.
- Building placement (fronts & backs): **Please ensure all buildings are located adjacent to the street with the highest rank on the street hierarchy**
 - *Multiple* buildings face their fronts towards another building's back. Much of this is due to fronting buildings towards alleys. Please revise the site plan so that *no building fronts the back of another building.*
 - *Multiple* proposed open-space / stormwater detention areas are located in *mandatory* build-to zones.
 - Lots 2-4: The building located here will need to be placed in the build-to zone on Maddox Ave and face the front towards Maddox Ave.
 - Lot 5: The building located here will need to be placed in the build-to zone on Maddox Ave and face the front towards Maddox Ave.
 - Lot 13: The building located here will need to be placed in the build-to zone on Veterans Way and face the front towards Veterans Way unless Dougherty Drive is upgraded to a more urban design.
 - Lot 23: The building located here will need to be placed in the build-to zone on Roper Way and face the front towards Roper Way.
 - Lot 29: The building located here will need to be placed in the build-to zone on Maddox Ave and face the front towards Maddox Ave.
 - Lots 44-46: The buildings located here will need to be placed in the build-to zone on Pine Butte Blvd and face the front towards Pine Butte Blvd.
 - Lots 47-50: The buildings located here will need to be placed in the build-to zone on Pine Butte Blvd and face the front towards Pine Butte Blvd.
- Please identify gross floor area of the clubhouses.
- Please clearly segregate the parking spaces dedicated to T5 versus those dedicated to T4 zones.
- Lots 45-47 exceed the maximum allowed parking for the T5 zone, please revise.

- Buildings on Lots 16-19 are fronting an Alley. Alleys should be faced with the backs of buildings. Additionally, the front of these buildings faces the back of the 42-plex to the east. Please revise.
- Landscape Zone along Road 'A' must be 8-12' wide.
- Please identify how bike lanes will be protected along Dougherty Drive.
- Grant Creek/ Flynn Build Grant (Trail Street) Connection: this road must have a minimum of 8' wide planting strips. The map currently shows 6' min. Please revise.
- Please fix the discrepancy between the preliminary plat and the lot layout shown on the Master Plan documents. The preliminary plat shows 5 lots (Lots 1-5 on the Plat) in the (northwest) corner whereas the Master Plan identifies 4 lots. Similarly, the lots in the block second from the right (Lots 20-23) are shown as 4 lots on the Plat and 5 lots on the Master Plan sets.

A9. Parkland

- Provide an exhibit that clearly shows which areas are proposed as parkland dedication / open space dedication in total and per phase.
- Clearly show how the proposed trail section connects to planned trail segments.
- Consider breaking up the large areas of parking into smaller areas for more visually attractive appearance and safer pedestrian passage from car to building. As part of this, consider adding more bioretention in landscape islands to treat as much stormwater as possible from these large impervious areas.
- City Parks & Recreation Department prefers fewer than 25 parking spaces are provided for the open space area in the southwest corner to reduce impervious surfaces and to promote a walkable community.

Section B

B3. Comprehensive Plan and Land Use Map

- Please provide a map with land use designations (Article 5, 5-020.4)

B6. USGS Topographic Map

- Please provide further topographic detail (Article 5, 5-020.9E)

B7. Floodplain Map

- Please include surface water features, springs, and irrigation ditches within 100 feet outside the subdivision (ideally showing the western section of the second PDF included) (Article 5, 5-020.13)

Section C

C3. Draft Covenants – Icon Apartment Homes

- Please include criteria 3-10 in 5-020.14K and correct the legal description.

Section D

D5. Grading, Drainage, and Road Plans

- Sheet D1, Detail A: Main Street Primary Typical Section shows 50' total improvements for this project, preliminary plat shows 54' total of ROW
- Sheet D1, Detail C, Neighborhood Street Typical Section shows inconsistent dimension
 - Pavement width – $13.5' + 13.5' = 27'$
 - Street section – $10' + 10' + 7' = 27'$

- Either remove the dimensions for the pavement width from centerline or adjust it to 25.5' total pavement width
- Sheet D2, Detail A (Collector Street Typical Section – Dougherty Drive): Provide 1' sidewalk maintenance area
- Sheet D2, Detail C (Trail Street Typical Section): Show 1' shoulders

D6. Preliminary Grading and Drainage Engineering Design Report

- Shallow depth dry wells will not be allowed. Alternative infiltration devices should be considered.
- What factor of safety is being applied to pond draw-down and infiltration rates?
- Analyze existing condition sub-basins to follow existing topography and quantify discharge at site boundary. When stormwater discharge across a site boundary is proposed/required, existing condition sub-basins should be based around existing flow paths, not to mirror post-construction layout. Existing condition and post construction basins should include off-site tributary area.
- Google Earth images show concentrated flow paths across the property. The assumption that stormwater is conveyed only by sheet flow under existing conditions is not valid.
- Flow in curb line is concentrated flow. How would post-development off-site discharge not be concentrated?
- Provide a table comparing pre- and post-development discharge rates and volumes at the site boundary for 2-, 10-, and 100-yr storms.
- Provide table of post development basins stormwater rate and volume, storage volume.
- Provide discussion of post-development stormwater conveyance and sizing for both internal routing and cross boundary flow.
- Provide a figure showing pre-development basins, time of concentration flow paths, contours, and discharge points.
- Provide a figure showing post-development basins, time of concentration flow paths, ponds, conveyance infrastructure, contours, and discharge points. We understand post-development infrastructure design is not complete. Provide information currently available and revise/update during later design phases. The focus should be on demonstrating that adequate retention/detention and infiltration is available with the proposed lot layout.
- Discuss maintenance of stormwater features: maintenance activities, who is responsible for maintenance, maintenance frequency.
- Additional comments are in the grading plan provided by Adam Marsh, P.E. on September 25, 2022.
- It appears the proposal is to allow the 100-year storm on the site to discharge through pipes into the right-of-way. This is going to be a mess of private and public stormwater mixing. A maintenance agreement for all the private stormwater infrastructure will be necessary.
- Need to account for the future curbing on the west side of Maddox and where the stormwater will route.
- Need to address the low points in road profiles that are meant to convey stormwater offsite. These are going to turn into bathtubs at storms greater than a 10-year event.
- We will need an agreement between property owners that they will accept the adjacent properties stormwater onto their private property.
- Need to quantify the stormwater flowing on-site from the adjacent development east and include it in the stormwater calculations. Show exactly where it is coming onto your site.
- Please ensure all stormwater infrastructure follows the Design Criteria in the Form Based Code, Division 4, Section 4.7.C and Table 4-6.

Section E

E3. School Inquiry

Please provide the received response if any.

Additional Comments to be Addressed in Application Materials

Transportation

Mountain Line requests that the developers petition this property into the Missoula Urban Transportation District as a condition for subdivision approval/City annexation. This allows Mountain Line to plan for future transit service in the Sx^wtpqyen neighborhood.

Air Quality

It would be great if these units are built with energy efficiency in mind to protect consumers from future energy volatility. The Missoula City-County Air Pollution Control Program supports the inclusion of protective covenant 16 on wood burning devices and 19 on radon mitigation. With high density housing, wood combustion could easily negatively impact neighbors breathing space and both these covenants will protect the health of future residents. Ground source heat pumps may be an excellent method for heating and cooling these large of units even though the upfront cost may be more.

Water Quality

The Water Quality District would like to highlight that there is high groundwater in the area. Variable geologic deposition of alluvium and gravel from movement of Grant Creek across the valley floor in this area results in quickly draining gravel seams in some areas while pockets of finer sediment and clay limit drainage in others. Throughout the portion of this reach of Grant Creek that has not been lined with clay, Grant Creek loses water to groundwater throughout most of the year. Downgradient at the Mullan Trails subdivision, flooding of Grant Creek in the Spring of 1997 during high groundwater resulted in substantial flooding of basements and homes. Water elevation data has only been collected during average or below average years. The planned movement of Grant Creek to closer proximity of this subdivision may also influence groundwater dynamics. Considering the changing climate and alteration of the hydrograph from irrigation to a flashier urban hydrograph, water elevation should be reassessed throughout the development process to incorporate any additional information to ascertain the appropriateness of stormwater sumps and basements in different phases or as individual houses or infrastructure are built.

Five Valleys Audubon Society

Our concern with the Icon Apartment Homes project is not with its scope and location. It's in an area where the community has expressed its wish to see future residential development and we expected that eventuality. Rather, we are concerned with the way the project's impacts to wildlife and wildlife habitat were addressed in the application. Predicting the impact of an undertaking requires knowledge of what species tend to use an area being proposed for development. A report submitted along with the application contains site specific accounts of vegetation and wildlife found in the area. Yet, conclusions in the application regarding impacts on wildlife and wildlife habitat are not founded on that information. Rather, they are based on large-scale species inventories. Data from those inventories are not site-specific and pertain to critical species that might be found within a broad geographical area. By and large, they are of little value in describing wildlife use on a specific land area such as that being proposed for the Icon Apartment Homes development. In addressing the impact of the development on the natural environment, the application concluded that "There are minimal impacts to the natural environment because the site is currently vacant." The development will have a substantive impact on year-round avian use of the site, particularly that of raptors. The proposed Icon

Apartment Homes development would be in an area that now exists as open space land and comprises habitat for meadow voles and Columbian ground squirrels. Both species are important prey for such raptors as American kestrels and red-tailed, Swainson's and rough-legged hawks. Since the proposed development will eliminate the prey species habitat, another increment of land needed by foraging raptors is lost. Responding to new human activity, raptors will doubtlessly seek prey on undeveloped habitat elsewhere and the impact may seem minor. Yet, when viewed in context with what is occurring in the Missoula Valley, the impact is consequential. It is a loss of land that adds to the slow and persistent shrinking of our remaining open space habitat.

City of Missoula Urban Forester

- The utilities need to be routed to ensure no conflicts with tree planting. This could be an issue for the 3 blocks of Dougherty Drive.
- Please ensure the sewer is located under the trail (Grant Creek to Flynn Trail) and not under the boulevard.
- Sewer service lines can be run under driveways to protect the limited tree planting areas.
- Trees need to be included on the full length of the Grant Creek to Flynn Trail corridor.
- The trees along Pine Butte Boulevard to be class 2 trees the tree pits will need to be 8' wide, x 15' long and soil not subgrade to a depth of 5'.

Recommendations

This section contains additional recommendations for improving the quality of the packet. It also includes important notes about process and staff requests. These are not sufficiency items – though they are still recommended.

1. Preliminary Plat

- Alleys are shown with 36' ROW on the preliminary plat, FBC Section 6.7.U requires 24'. With the proposed 36' ROW there will be parking lot elements in the ROW. Can the width be reduced to 24'?
- Change the name of Trail Street from "Grant Creek to Flynn Trail" to "Flynn Trail".
- 12' pedestrian access easement between Lot 39 and Sapphire Place: Can Sapphire Place provide this connection? I am assuming they need this for some sort of block perimeter issue, but it won't be logical with the Sapphire Place common area.
- Provide ROW easement for Veterans Way and Maddox in Phase 1 to allow future adjacent developments to extend utility mains through phase 2 if needed.

2. Utilities

General

- Are Water Line Q and Sewer Line E needed, run services
- We prefer to not have water/sewer beneath trails. If possible, relocate or eliminate these mains. The trail will be 10' asphalt, 1' shoulder each side and trees both sides. One water main would be the maximum allowed through this section considering the clear space between the trees and maintenance access for vehicles.
 - Are Sewer D and G and Water L needed? Seems feasible to run service lines from mains in Maddox and Dougherty.
 - Option - move sewer line D to the alley and route to Jumping Horse Lane.
 - Option – route water line L through the alley instead of the trail and loop back to Dougherty.
- Consider adjusting lot layout to ensure each lot has access to utility mains.
- Except for fire hydrants, utilities shall run underground, and above-ground projections of utilities shall be placed in rear service areas wherever practicable.

- All utility services should be in the rear of buildings, clear of pedestrian and vehicular interaction, and screened from view from adjacent public Right-of-Ways, properties, and pedestrian walkways (not including Alleys).
- Tree wells or root barriers should be used where proposed street trees are near proposed underground infrastructure lines or adjacent to a travel way (vehicular or pedestrian).
- Alleys and portions of the Thoroughfare Right-of-Way should serve as designated drainage and utility corridors/easements.
- Street Lighting, Parking Lot Lighting, and Pedestrian Walkway Lighting need to comply with the Form Based Code, Division 4, Section 4.4 and Division 6, Section 6.5.

Sewer

- Sewer main C and E – can these mains be eliminated or re-oriented to avoid locating sewer gravity main, sewer force main, water main, and possibly storm drain all in Jumping Horse Lane?
- Provide insulation where sewer main depth is less than 5-ft (Line H)
- Ensure setback requirements are met between new buildings and easement for existing sewer mains
- Is sewer main G needed or will services suffice? Route sewer main G or services in parking lot to the south rather than under trail.
- Lift station
 - Lift station and force main is needed as part of phase 1
 - Provide an analysis of the area that could be served by the lift station so that mains and lift station are sized appropriately, and mains are deep enough.
 - Lift station should be able to serve Icon and currently undeveloped land west to Airport property and south to Camden Street. Undeveloped property to the north will be served by a separate lift station.
 - Lift station should follow layout of STD-550 1 to 3. Revisions to STD-550 are proposed for 2023 PWM updates, including: asphalt surface, 8" thick concrete approach and sidewalk, valve on force main.
 - Provide easement, or dedicated Maddox Ave in Phase 1, to allow adjacent properties to access lift station.
- Force Main
 - Coat discharge manhole and next two downstream manholes in accordance with STD-555.
 - If gravity sewer must run in parallel to force main, please provide additional separation between force main and gravity main

Water

- Looping - Phase 1 water is a giant dead end main extended from the existing 12" main south of Summit if adjacent developments are delayed. If water mains are installed in phases, provide a way to loop water main as part of phase 1.
 - North on Dougherty, east on Veterans to the existing 12"
 - South on Dougherty to the future 12" in England
- Is Water Line Q required? Can services be run to Water Line J and K? If required, loop Water Line Q (404' long) to Water Line J.
- All water mains shall be 12" for multifamily development
- Add hydrant on Dougherty between Jumping Horse and Veterans

3. Streets

General

- Trail Street (east of Roper Way) – ensure pedestrian crossing of Roper is appropriately sized and aligned.

- Coordinate the detail design for the parking planters on the urban secondary with City Engineering. This is the first design of its type, and we want to ensure it meets the intent of form-based code as well as allows for longevity and routine maintenance.
- The asphalt thicknesses for the local streets are shown to be 4" and can instead be 3" thick.

Trail Street

- Add plan and profile.
- Show pedestrian scale lighting.
- Show trees.
- Enhanced trail crossing of Dougherty drive (table, RRFB).

Street & Trail lighting

- Dougherty Drive street-lighting to be accepted by the City and added to SILD (or another method) with a separate utility service and shall meet MCPWSS Chapter 7 standards.
- Flynn Trail lighting to be accepted by the City and meet Parks standards.
- Other roads street lighting meet requirements of FBC Section 6.5
- Add plan and profile for Alleys.
- Add pedestrian, bicycle facilities on Dougherty south of Pine Butte Blvd.
- Sheet 6 – show parking lot approach from Pine Butte.
- Sheet D1 and D2 Typical Sections reference a Geotech report for pavement design – none provided.
- Sheet D1, Detail A
 - Note - ROW does not match Sapphire Place due to trail on Sapphire place
- Sheet D1, Detail B
 - Urban Secondary Typical Section shows 36' (+3.5' extra space) total improvements for this project, preliminary plat shows 43' total of ROW
 - Note – Maddox will have extra 3.5' of ROW
 - Note – Roper will have extra 7' of ROW
 - Showing monolithic adjacent to the parking/planting lane instead of Typical L curb. Will review this detail during infrastructure review
 - Check Roper (60' ROW, 53' of improvements) tie-in with Sapphire Place (51.5' ROW, 51.5' of improvements)
- Sheet D2, Detail B (Urban Bike Street Typical Section – Veterans Way)
 - Showing 2 parking lanes, FBC Section 6.7.H requires 1 but the north parking lane can be used as a bike lane until adjacent development completes the street with a side path.
 - Although not to scale, the 3' bike protection strip is misleading
- All sidewalks should have a continuous unobstructed path of a width no less than 60 inches (obstructions include utility poles, fire hydrants, benches, street signs, etc).
- At-grade pedestrian crossings should be used where possible, eliminating the need for curb ramps. Bollards should be used at such crossings for pedestrian and vehicle separation.
- Pedestrian and bike crossing infrastructure shall be provided across all intersection approaches, including high visibility crosswalks, sidewalk ramps, and detectable warnings.

4. Fire Protection

- A second fire access will be needed for Phase 1 via Veterans Way, Pine Butte Boulevard, or Roper Way. Consider this in conjunction with adjacent development that additional off-site improvements may be needed due to timing of adjacent projects.
- Add hydrant on Dougherty between Jumping Horse and Veterans
- Provide turning analysis through the parking lots to show fire apparatus access to structures not fronting a road.

- Addressing/way finding/monuments for interior buildings will be needed from the public right-of-way to direct emergency services. This could include naming the alleys.

5. Parking

- Nearly every block is considerably over-parked (and T5 has parking maximums), please consider adding more pedestrian amenities/parks/plazas and less hardscaping.
- Some parking spaces are not located behind the Principal Façade of buildings, please revise this.\

6. Additional Items

Landscaping & Sustainability

- Landscaping (in compliance with FBC Division 4, Section 4.6) and Street Trees (in compliance with FBC Division 6, Section 6.4) will be required prior to building permit approval.
- Opportunities for recycling and composting shall be provided wherever trash receptacles are located.

Scale & Character

- Please include the names of the different types of housing (row house, mansion apartment, villa, etc.) on the architectural renderings.
- For buildings of three stories or more, the ground floor should be differentiated from those floors above to reinforce the pedestrian space.
- Note: Please review the building placement standards in Division 3 (buildings are required to comply with a build-to zone that some of these current buildings may not meet).

When you are ready to submit your updated materials, please direct them to the attention of Madson Matthias. If you have any additional questions, you may reach me at (406) 552-6093 or email me at MatthiasM@ci.missoula.mt.us.

Warmly,

Madson Matthias

Madson Matthias, Associate Planner
Development Services
Community Planning, Development, & Innovation

cc: Dave DeGrandpre, CPDI
Mary McCrea, CPDI
Eran Pehan, CPDI
Walter Banziger, CPDI
Troy Monroe, PW&M
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