

DRAFT - Prototypes Catalog and Potential Code

Hood River Housing Prototypes



Date December 14, 2020
To Dustin Nilsen - City of Hood River
From Ben Weber, Ross Determan, Emma-Quin Smith, and Elise Chelak – SERA

PURPOSE

This memorandum catalogs a range of “missing middle” duplex, triplex, and cottage cluster housing prototypes and potential code adjustments necessary to permitting them on various City of Hood River R1, R2, and R3 zoned properties.

Each prototype is presented in a “cutsheet” depicting a site plan, axonometric 3-D image, and text describing basic development and site characteristics.

This memo includes two draft proposed development standards tables and text describing other key design and development standards for consideration.

In this draft two of the cutsheet plan views, the Duplex on 7,000sf lot and Cottage Cluster on 14,000sf lot, include code annotation graphics to describe how the proposed development standards table applies on site.

HOW TO USE THIS MEMO

1. Note that this memo includes *blue italic text* throughout to provide ongoing City of Hood River and SERA Architects commentary.
2. Review the cutsheets and take note of the “Key Questions” text for your consideration.
3. Review the two code tables for suitability in Hood River. The commentary directs you to several key questions and reasoning for the inclusion or exclusion of certain standard.
4. Several cutsheets are marked “UNUSED” and represent older version work not carried forward.

SIGNIFICANT QUESTIONS

The below material includes numerous detailed and specific questions. Several question themes apply throughout the prototypes and standards, some of which include:

1. How to limit the quantity and impact of driveway curb cuts?
2. How to promote strong street-facing dwellings?
3. What encroachments, most notable porches, should be allowed in setback areas?
4. Are the parking quantity and parking design requirements suitable?
5. Should dwelling size square footage be limited in any direct terms, or only controlled by site development standards such as setbacks, height, and lot coverage?
6. If, and how, should open space and landscaping standards apply?
7. Should accessory-dwelling units be permitted with duplexes and triplexes?

DETACHED DUPLEX

LOT SIZE: 5,000 sf

R2 / R3

Two dwelling units detached on a single lot. One surface parking stall per each dwelling.

PROTOTYPE PROFILE

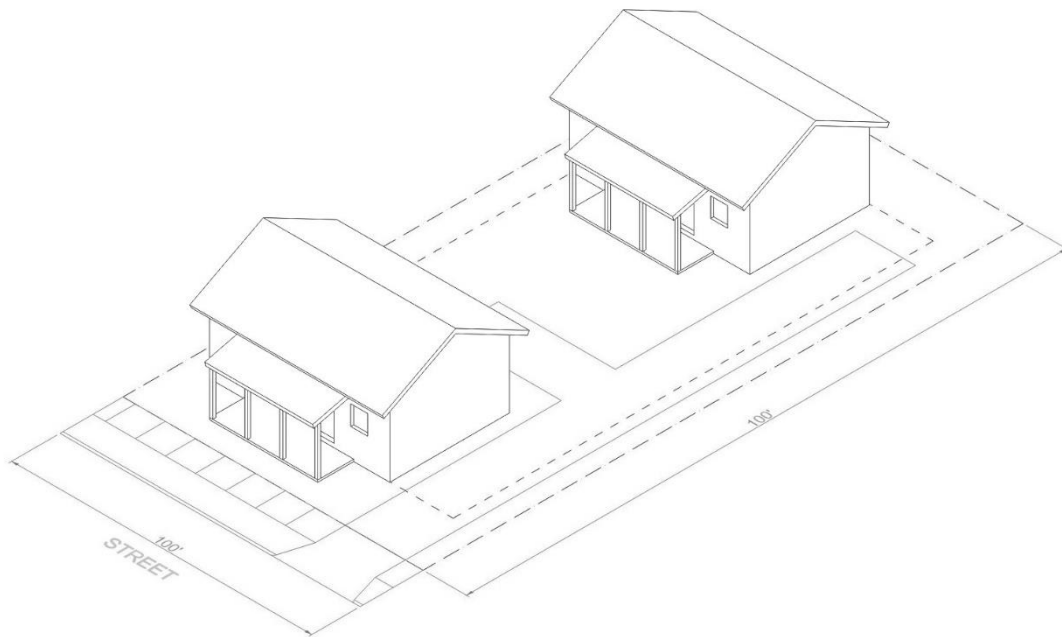
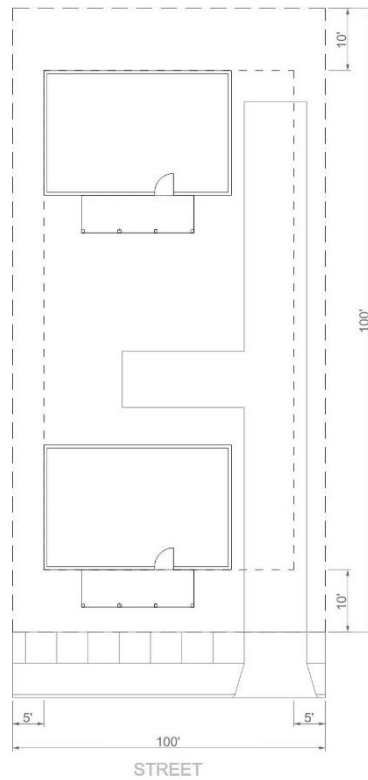
- Unit sizes: 600 sf each
- Unit Count: 2 dwellings
- Lot Dimensions: 50' x 100'
- Lot Coverage: 48%
 - Structure: 25%
 - Driveway/Parking: 23%

SITE AND DESIGN FEATURES

- Two dwellings: front/rear stacked
- Open space between dwellings
- Single driveway serving two surface parking pads

KEY QUESTIONS

- Porches permitted or restricted in front setback?
- Any thoughts on parking configuration?



THREE DWELLINGS

LOT SIZE: 5,000 sf

R2 / R3

Three dwelling units (two attached, one detached) on a single lot. One surface parking stall per each dwelling. **Could be regulated as a triplex or a duplex with single ADU (with parking as shown).**

PROTOTYPE PROFILE

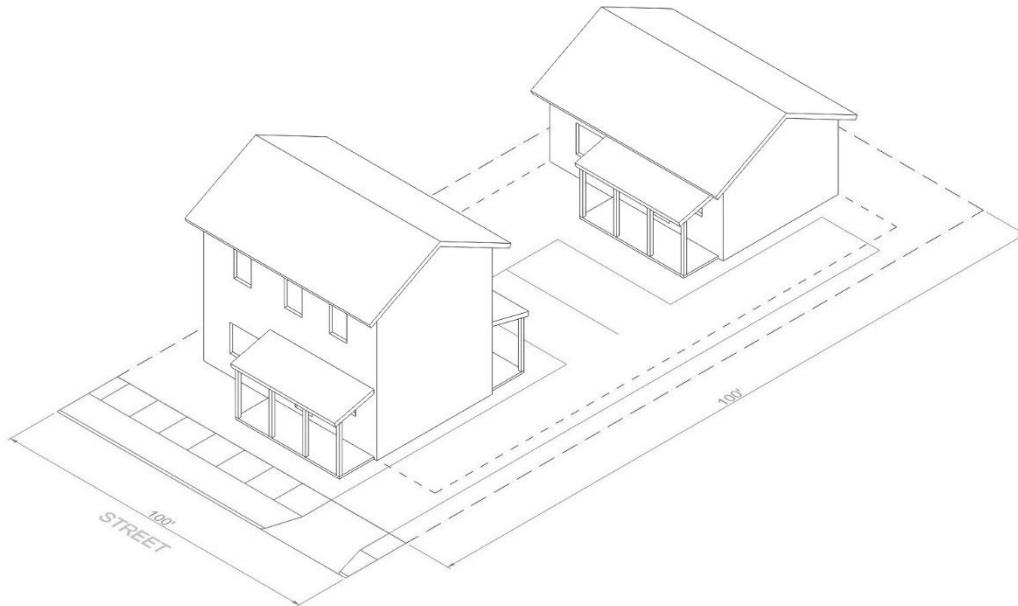
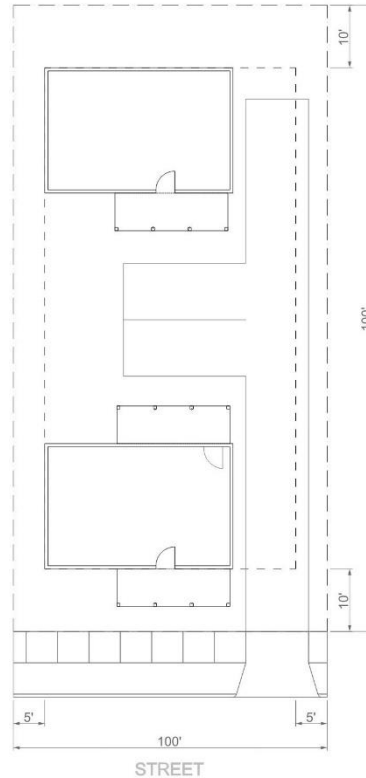
- **Unit sizes:** 600 sf each
- **Unit Count:** 3 dwellings
- **Lot Dimensions:** 50' x 100'
- **Lot Coverage:** 54%
- **Structure:** 25%
- **Driveway/Parking:** 29%
- **Garage Footprint :** None

SITE AND DESIGN FEATURES

- Three dwellings: front-facing stacked duplex with separated rear third unit
- Open space between dwellings
- Single driveway to three surface parking pads

KEY QUESTIONS

- Porches permitted or restricted in front setback?
- Any thoughts on parking configuration?
- ADUs: Would Hood River allow them on a duplex/triplex lot? Requires amending 17.23.010(B).



DETACHED DUPLEX – V1

LOT SIZE: 7,000 sf

R1

Two dwelling units detached on a single lot. Each with a single-car dual garage.

PROTOTYPE PROFILE

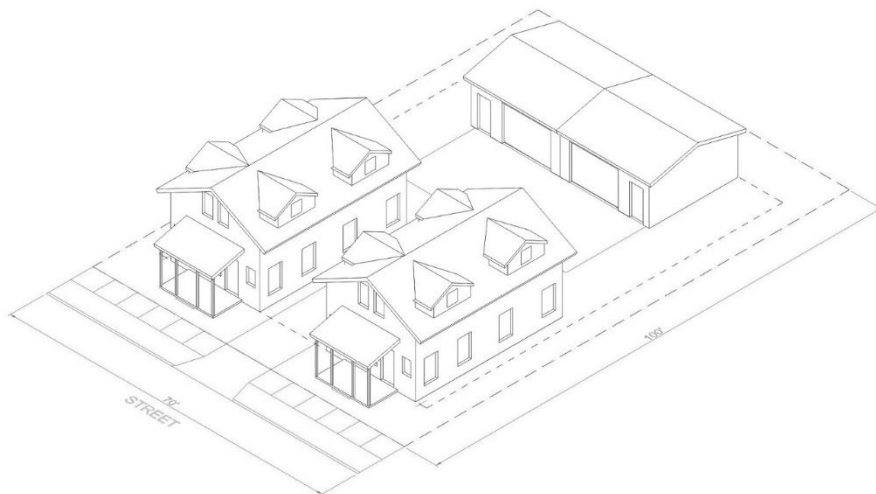
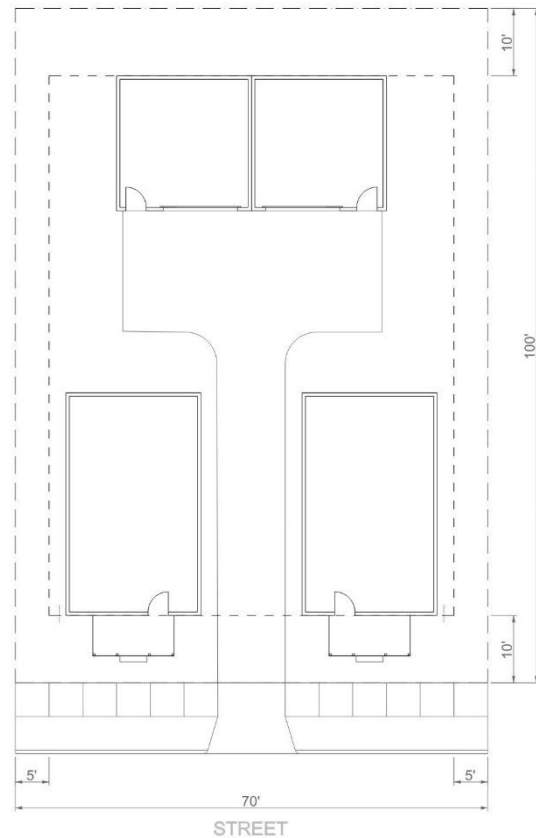
- **Unit sizes:** 1100 sf each
- **Unit Count:** 2 primary dwellings (as shown) with possible ADU on each
- **Lot Dimensions:** 70' x 100'
- **Lot Coverage:** 51%
 - **Structure:** 19%
 - **Driveway/Parking:** 20%
- **Garage Footprint :** 400 sf each

SITE AND DESIGN FEATURES

- Two street-facing dwellings
- Backyard open space for each dwelling
- Center-running driveway to both garages
- Buildable area would allow larger units, but would increase site coverage

KEY QUESTIONS

- Permit porches in front setback?
- Garages consolidated to the rear-center to reduce driveway paved area and leave larger side yard open space – any thoughts about this design?
- ADUs: Would Hood River allow them on a duplex/triplex lot? Requires amending 17.23.010(B).



DETACHED DUPLEX – V2

LOT SIZE: 7,000 sf

R1

Two dwelling units detached on a single lot. Each with a single-car detached garage.

PROTOTYPE PROFILE

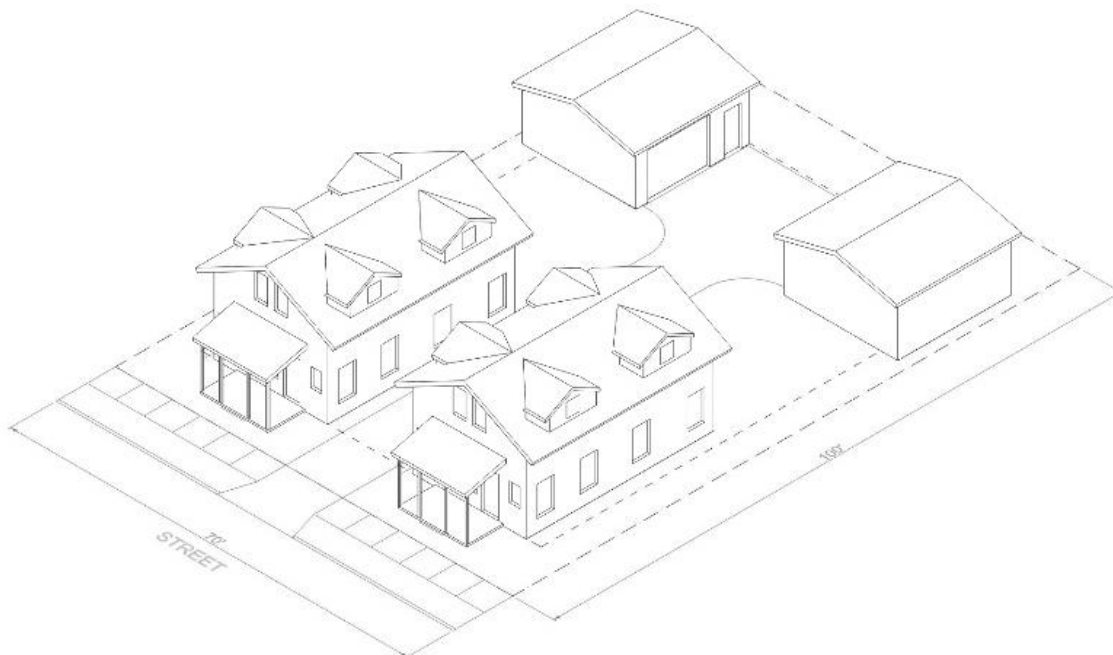
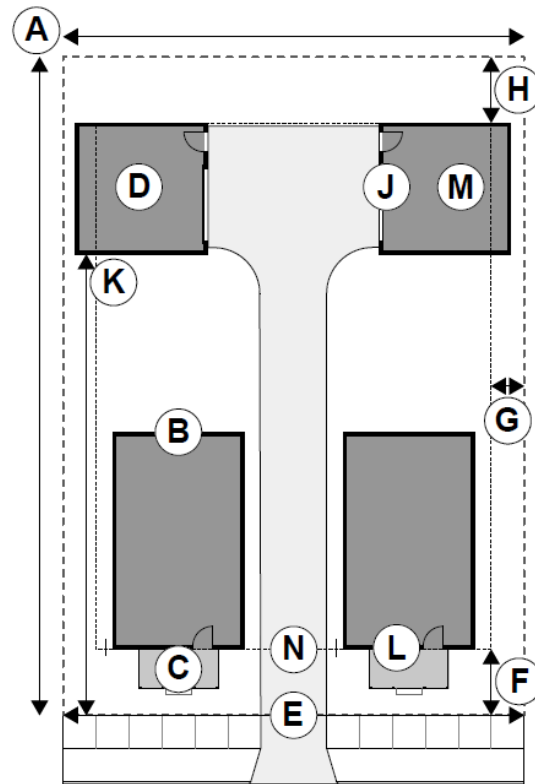
- **Unit sizes:** 1100 sf each
- **Unit Count:** 2 primary dwellings with possible ADU on each
- **Lot Dimensions:** 70' x 100'
- **Lot Coverage:** 51%
 - **Structure:** 19%
 - **Driveway/Parking:** 20%
- **Garage Footprint :** 400 sf each

SITE AND DESIGN FEATURES

- Two street-facing dwellings
- Backyard open space for each dwelling
- Center-running driveway to both garages
- Buildable area would allow larger units, but would increase site coverage

KEY QUESTIONS

- Permit porches in front setback?
- Permit or not a partial encroachment of garage in side-yard setback? Impacts vehicle turning radius.
- ADUs: Would Hood River allow them on a duplex/triplex lot? Requires amending 17.23.010(B).



COTTAGE CLUSTER

LOT SIZE: 10,000 sf

R2 / R3

Four or more detached or 2-unit attached dwellings on a single or individual parcel. Parking consolidated in one or more pods on site. **THIS MATERIAL IS DRAFT TO-BE-UPDATED.**

PROTOTYPE PROFILE

- **Unit sizes:** 700 sf each- average
- **Unit Count:** 5 units; one duplex and three detached single-dwellings
- **Lot Dimensions:** 100' x 100'
- **Lot Coverage:** 50%
 - **Structure:** 30%
 - **Driveway/Parking:** 20%

SITE AND DESIGN FEATURES

- Dwellings clustered around the site, with parking hidden in the rear
- Both private open space for each dwelling and a common central green
- Single driveway serving five parking stalls

KEY QUESTIONS

- Should cottages be regulated by an average dwelling size maximum?
- How should private versus public open space be required?

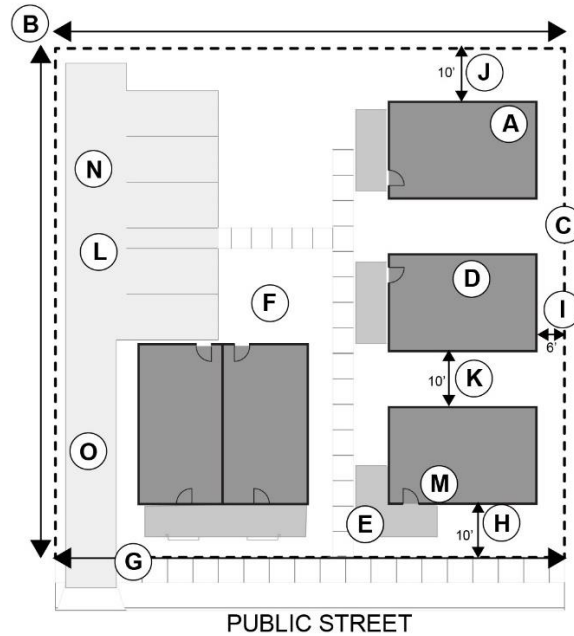


Image pending

ATTACHED TRIPLEX PAIR

LOT SIZE: 10,000 sf

R2 / R3

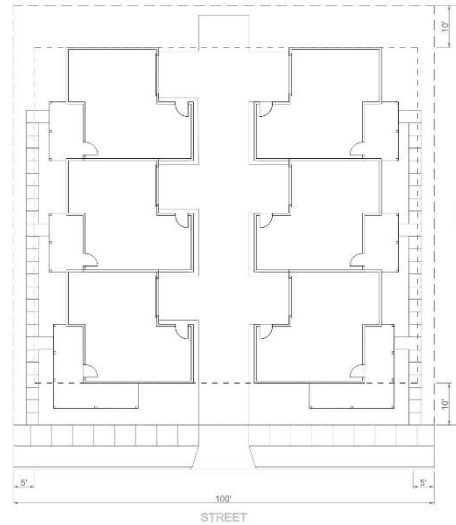
Two pairs of attached triplexes with a center-running driveway serving individual garages for each dwelling.

PROTOTYPE PROFILE

- **Unit sizes:** 1,170 sf each (includes 240 sf garage internal to dwelling)
- **Unit Count:** 6 units; two detached triplexes
- **Lot Dimensions:** 100' x 100'
- **Lot Coverage:** 57%
 - **Structure:** 39%
 - **Driveway/Parking:** 18%

SITE AND DESIGN FEATURES

- Two street-facing dwellings with attached dwellings running deep into the site
- Single driveway to individual garages.
- Street-facing primary entrances on front units
- Paths to primary entrances with porches
- Porches and outdoor open space assignable to each dwelling
- Potential for fee-simple lot division



KEY QUESTIONS

- Permit porches in front setback?
- Does prototype provide enough open space for each dwelling?
- Questions...



**ATTACHED TRIPLEX PAIR - V2
(UNUSED)**

LOT SIZE: 10,000 sf

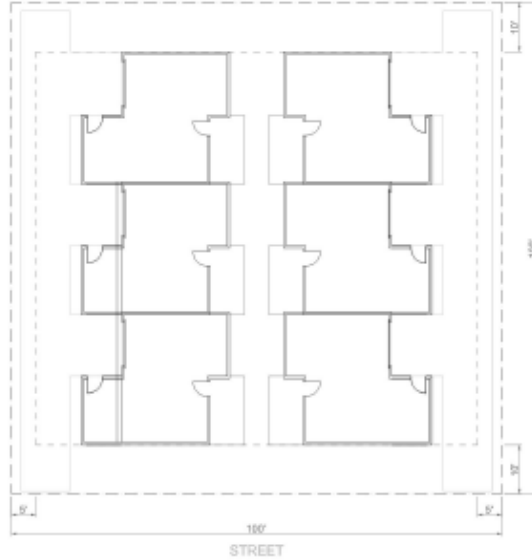
R2 / R3

Two pairs of attached triplexes with a driveway serving each of the triplex structures individually.

This is a previously dismissed prototype shown only for discussion purposes around how individual triplexes on adjacent 5,000sf lots could interact.

PROTOTYPE PROFILE

- **Unit sizes:** 1170 sf each
- **Unit Count:** 6 units; two attached triplexes
- **Lot Dimensions:** 100' x 100'
- **Lot Coverage:** 66%
 - **Structure:** 39%
 - **Driveway/Parking:** 27%



DETACHED TRIPLEX PAIR

LOT SIZE: 10,000 sf

R2 / R3

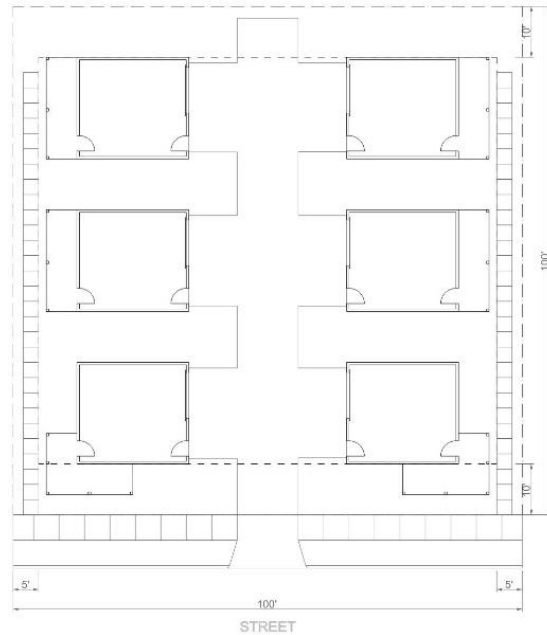
Two pairs of detached triplexes with a center-running driveway serving individual garages for each dwelling.

PROTOTYPE PROFILE

- **Unit sizes:** 880 sf each (includes 240sf garage internal to dwelling)
- **Unit Count:** 6 units; two detached triplexes
- **Lot Dimensions:** 100' x 100'
- **Lot Coverage:** 47%
 - **Structure:** 27%
 - **Driveway/Parking:** 20%

SITE AND DESIGN FEATURES

- Two street-facing dwellings with detached dwellings running deep into the site
- Central driveway to individual garages.
- Street-facing primary entrances on front units
- Paths to primary entrances with porches
- Porches and outdoor open space assignable to each dwelling
- Potential for fee-simple lot division



KEY QUESTIONS

- Permit porches in front setback?
- Does prototype provide enough open space for each dwelling?
- Is prototype dwelling size big enough?



**DETACHED TRIPLEX PAIR - V2
(UNUSED)**

LOT SIZE: 10,000 sf

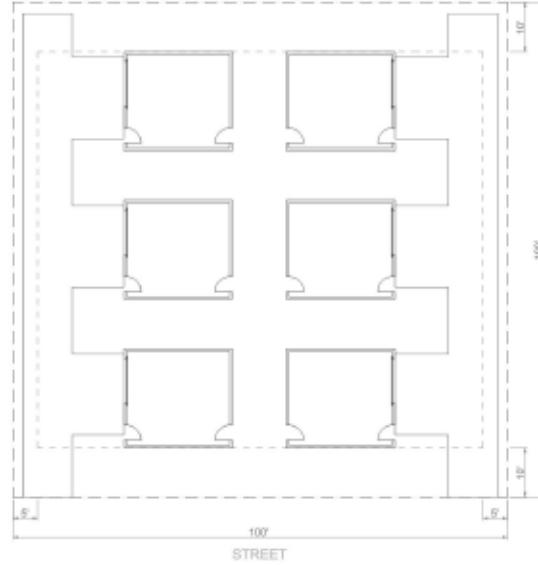
R1

Two pairs of detached triplexes with a driveway serving each of the triplex structures individually.

This is a previously dismissed prototype shown only for discussion purposes around how individual triplexes on adjacent 5,000sf lots could interact.

PROTOTYPE PROFILE

- **Unit sizes:** 880 sf each (includes 240sf garage internal to dwelling)
- **Unit Count:** 6 units; two attached triplexes
- **Lot Dimensions:** 100' x 100'
- **Lot Coverage:** 56%
 - **Structure:** 27%
 - **Driveway/Parking:** 29%



COTTAGE CLUSTER

LOT SIZE: 14,000 sf

R1

Four or more detached or 2-unit attached dwellings on a single or individual parcel. Parking consolidated in one or more pods on site. **THIS MATERIAL IS DRAFT TO-BE-UPDATED.**

PROTOTYPE PROFILE

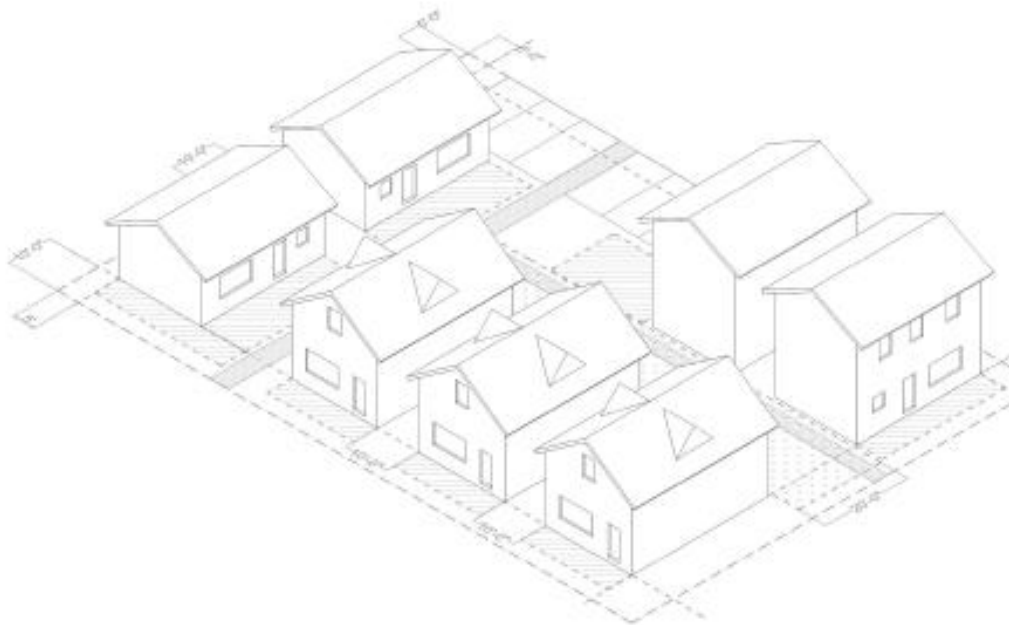
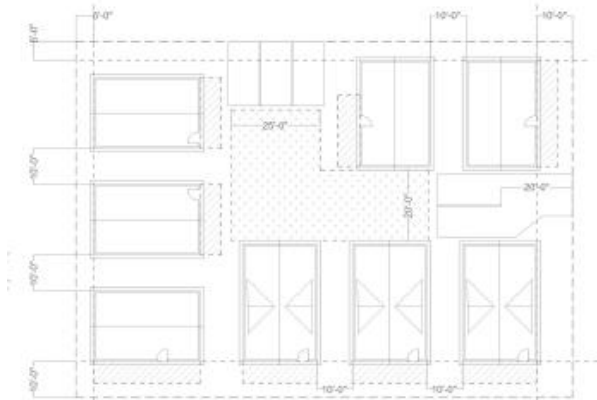
- **Unit sizes:** 1000 sf each, average
- **Unit Count:** 6 units; one duplex and four detached single-dwellings
- **Lot Dimensions:** 140' x 100'
- **Lot Coverage:** 41%
 - **Structure:** 27%
 - **Driveway/Parking:** 14%

SITE AND DESIGN FEATURES

- Dwellings clustered around the site, with parking hidden in the rear
- Both private open space for each dwelling and a common central green
- Single driveway serving six parking stalls

KEY QUESTIONS

- Should cottages be regulated by an average dwelling size maximum?
- How should private versus public open space be required?



DETACHED DUPLEX PAIR

LOT SIZE: 14,000 sf

R1

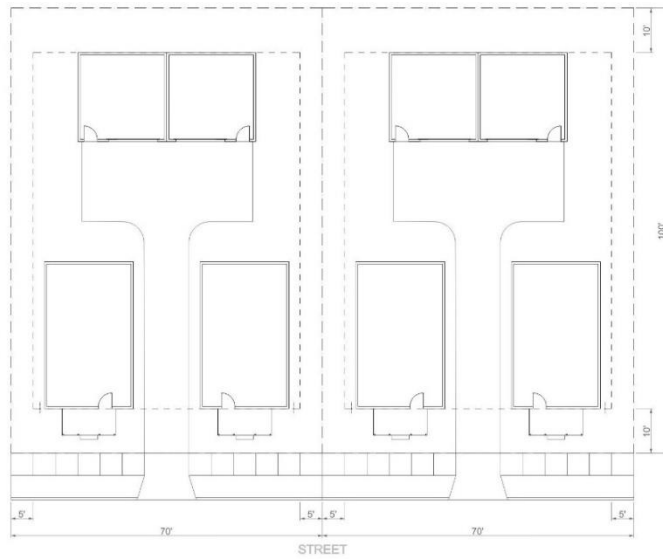
A pair of two dwelling units detached on a single lot. Each with a single-car dual garage.

PROTOTYPE PROFILE

- **Unit sizes:** 1100 sf each
- **Unit Count:** 4 primary dwellings (as shown) with possible ADU on each
- **Lot Dimensions:** 140' x 100'
- **Lot Coverage:** 51%
 - **Structure:** 19%
 - **Driveway/Parking:** 20%
- **Garage Footprint :** 400 sf each

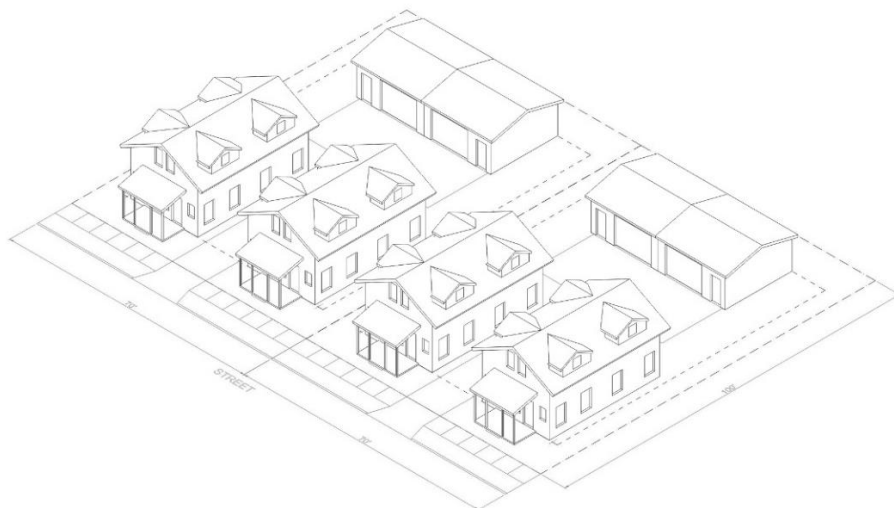
SITE AND DESIGN FEATURES

- Four street-facing dwellings
- Backyard open space for each dwelling
- Shared, center-running driveway serving two garages
- Potential for fee-simple lot division



KEY QUESTIONS

- Porches permitted in front setback?
- Garages consolidated to the rear-center to reduce driveway paved area and leave larger side yard open space –thoughts about this design?
- Make units larger? Would increase footprint/coverage.
- ADUs: Would Hood River allow them on a duplex/triplex lot? Requires amending 17.23.010(B).



DETACHED TRIPLEX PAIR – V1 (UNUSED)

LOT SIZE: 14,000 sf

R1

Two pairs of detached triplexes with a driveway serving each of the triplex structures individually.

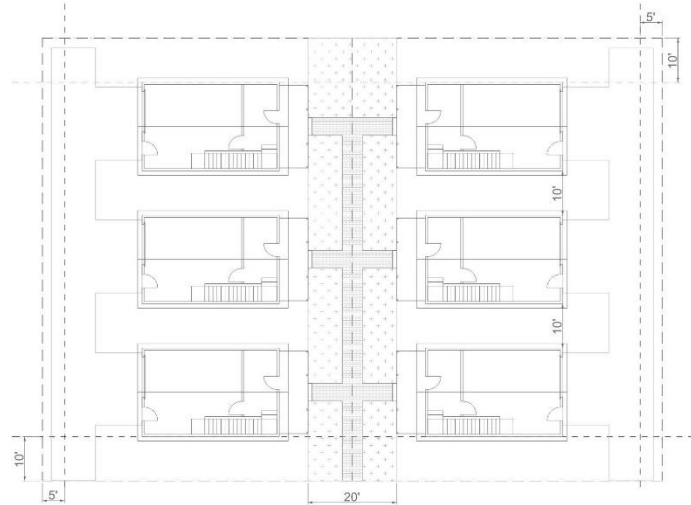
This lot configuration is rare and so a previous draft of the prototype is included for discussion purposes only and will not be updated.

PROTOTYPE PROFILE

- **Unit sizes:** 1240sf each (includes 240sf garage internal to dwelling)
- **Unit Count:** 6 units; two detached triplexes
- **Lot Dimensions:** 140' x 100'
- **Lot Coverage:** 48%
 - **Structure:** 27%
 - **Driveway/Parking:** 21%

SITE AND DESIGN FEATURES

- Large common green space in center of lot
- two Driveway curb-cuts
- Potential for fee-simple lot division



KEY QUESTIONS

- Permit porches in front setback?
- Does prototype provide enough open space for each dwelling?



DETACHED TRIPLEX PAIR – V2

LOT SIZE: 14,000 sf

R1

Two pairs of detached triplexes with a center-running driveway serving individual garages for each dwelling. **THIS MATERIAL IS DRAFT TO-BE-UPDATED.**

PROTOTYPE PROFILE

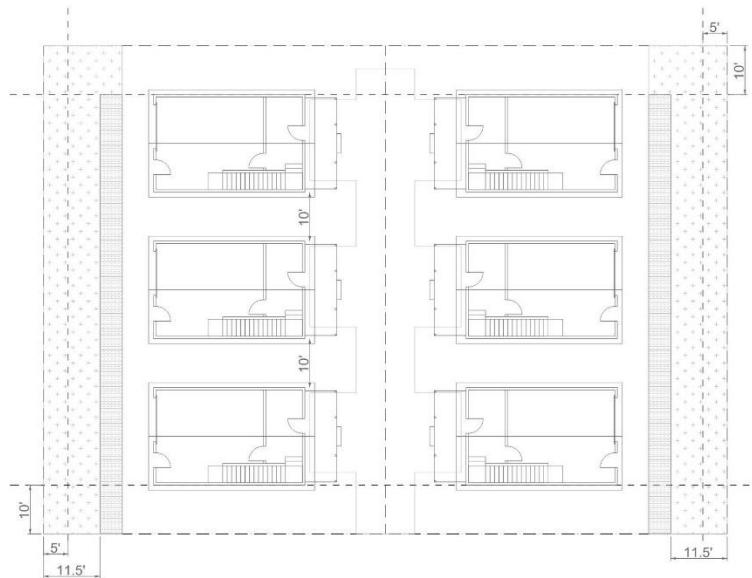
- **Unit sizes:** 1240 sf each (includes 240sf garage internal to dwelling)
- **Unit Count:** 6 units; two attached triplexes
- **Lot Dimensions:** 140' x 100'
- **Lot Coverage:** 42%
 - **Structure:** 27%
 - **Driveway/Parking:** 15%

SITE AND DESIGN FEATURES

- Large shared green spaces on either side of lot
- Single Driveway curb-cut
- Potential for fee-simple lot division

KEY QUESTIONS

- Permit porches in front setback?
- Does prototype provide enough open space for each dwelling?



DUPLEX AND TRIPLEX DEVELOPMENT AND DESIGN STANDARDS

Commentary on Duplex/Triplex standards table (by SERA Architects):

Key items to consider regarding possible duplex/triplex code include:

- *Definition – the phrase “in any configuration” reflects permitting both attached and detached duplexes and triplexes.*
- *Maximum Unit Density – in units per square foot of site area*
- *Lot Coverage – the allowed percentage is higher than Hood River currently allows; this provides more site design flexibility but is balanced by strong open space, vegetation, and tree coverage requirements. Per existing Hood River code, a porch above a certain size is allowed additional lot coverage.*
- *Lot Frontage – this standard is in flux and may need to be as low as 0’ to allow for lot subdivision*
- *Setbacks – as shown are consistent with existing Hood River. Question: should porches be allowed to encroach a front setback in certain terms (such as, no more than a 6’ encroachment and for a surface area up to 100sf)?*
- *Building Height – Hood River’s current metric of 28’ ridge height and 20’ eave height is applied to R1 and R2 zoning – reasonably allowing 2.5 stories, and possibly three on steeper sites. R3 zoning will allow taller buildings up to 35’ ridge and 27’ eave heights – fitting three full stories*
- *Parking Requirements – 1 space per dwelling minimum is typical and customary. You may also consider establishing a maximum of 1.5 or 2 spaces per dwelling.*

Note these standards do not regulate the following:

- *Maximum dwelling size (in either individual or average). The code relies on other standards such as setbacks, height, and lot coverage maximums to control overall mass and square footage.*
- *Minimum Spacing Between Structures – is not regulated but could be if the City wishes to anticipate later subdivision of parcels to allow, for example, a detached duplex to subdivide into two individual single-dwelling homes, and to preserve building setbacks.*
- *Open Space Requirements – it is reliant upon setbacks and lot coverage maximums to ensure adequate unbuilt space is preserved on a site.*
- *Landscape Standards – current Hood River code doesn’t require landscaping for outright Permitted residential uses in R1, R2, and R3. Duplexes and triplexes would become Permitted uses not subject to Conditional Use standards currently in the code.*

DUPLEX/TRIPLEX				
Duplex: Two units on a parcel in any configuration. Triplex: Three units on a parcel in any configuration.				
	Zone	R-1	R-2	R-3
	Maximum Unit Density	1 dwelling per 2,500sf	1 dwelling per 1,500sf	1 dwelling per 1,500sf
A	Minimum Lot or Parcel Size	5,000 SF	3,000 SF	3,000 SF
	Lot Coverage (%)			
B	Maximum	50%	55%	65%
C	Additional lot coverage allowed with front porch (when porch meets standards of 17.04.120(B)(2))	3%	3%	3%
D	Additional lot coverage allowed with detached rear garage	5%	5%	5%
E	Lot Frontage	X' on dedicated public street; X' on public dedicated cul-de-sac	X' on dedicated public street; X' on public dedicated cul-de-sac	X' on dedicated public street; X' on public dedicated cul-de-sac
	Setbacks			
F	Front yard	10' (with 15" eave, gutter, and chimney encroachment allowed)	10' (with 15" eave, gutter, and chimney encroachment allowed)	10' (with 15" eave, gutter, and chimney encroachment allowed)
G	Side yard	6' (with 15" eave, gutter, and chimney encroachment allowed)	5' (with 15" eave, gutter, and chimney encroachment allowed)	5' (with 15" eave, gutter, and chimney encroachment allowed)
H	Rear yard	10' (with 15" eave, gutter, and chimney encroachment allowed)	10' (with 15" eave, gutter, and chimney encroachment allowed)	5' (with 15" eave, gutter, and chimney encroachment allowed) (8' for structures great than 28' tall)
I	Alley	5'	5'	5'
No annotation letter – but could go on Axon drawing if needed	Building Height Limit	28'	28'	35'
	Upper grade to ridge	28'	28'	35'
	Upper grade to eave	20'	20'	27'
J	Parking Requirements			

	Minimum number of parking spaces required per dwelling	1	1	1
	Maximum number of parking spaces per dwelling	2?,	2?,	2?, 1 allowed within front yard setback
K	Garage Setback			
	Constructed to face adjacent public street	20'	20'	20'
	Constructed not to face adjacent public street	10'	10'	10'
	Constructed not to face a public alley	5'	5'	5'
L	Entrance Orientation			
M	Garages and Off-Street Parking Area			
N	Driveway Approach			

Commentary on Design Standards (by SERA Architects):

Below are several design standards extracted and adapted for Hood River from the Oregon Model Code for Middle Housing. Hood River may consider applying such standards. Key local adaptations could include:

- *Increasing the size and roof-coverage requirements of porches*
- *Reducing (from 50% in Model Code) the maximum allowed width of on-site parking and maneuvering areas*
- *Reduce the allowed maximum individual and combined width of curb cuts and driveways.*
- *Restrict the number of curb cuts for driveways allowed on each street frontage*

1. Entry Orientation. At least one main entrance for each duplex or triplex structure must meet the standards in subsections (a) and (b) below. Any detached structure for which more than 50 percent of its street-facing facade is separated from the street property line by a dwelling is exempt from meeting these standards.

- a. The entrance must be within 8 feet of the longest street-facing wall of the dwelling unit; and
- b. The entrance must either:
 - i. Face the street
 - ii. Be at an angle of up to 45 degrees from the street; or
 - iv. Open onto a porch. The porch must:
 - (A) Be at least 60 square feet in area; and
 - (B) Have at least one entrance facing the street and have a roof.

4. Garages and Off-Street Parking Areas. Garages and off-street parking areas shall not be located between a building and a public street (other than an alley), except in compliance with the standards in subsections (a) and (b) of this subsection (4).

- a. The garage or off-street parking area is separated from the street property line by a dwelling; or
- b. The combined width of all garages and outdoor on-site parking and maneuvering areas does not exceed a total of 50 percent of the street frontage.

5. Driveway Approach. Driveway approaches must comply with the following:

- a. The total width of all driveway approaches must not exceed 24 feet per frontage, as measured at the property line. For lots or parcels with more than one frontage, see subsection (5)(c) of this subsection.
- b. Driveway approaches may be separated when located on a local street. If approaches are separated, they must meet the jurisdiction's driveway spacing standards applicable to local streets.
- c. In addition, lots or parcels with more than one frontage must comply with the following:
 - i. Lots or parcels must access the street with the lowest transportation classification for vehicle traffic. For lots or parcels abutting an improved alley (defined as an alley that meets the jurisdiction's standards for width and pavement), access must be taken from the alley.
 - ii. Lots or parcels with frontages only on collectors and/or arterial streets must meet the jurisdiction's access standards applicable to collectors and/or arterials.
 - iii. Duplexes and triplexes on lots or parcels with frontages only on local streets may have either:
 - Two driveway approaches not exceeding 24 feet in total width on one frontage; or
 - One maximum 12-foot-wide driveway approach per frontage.

COTTAGE CLUSTER DEVELOPMENT AND DESIGN STANDARDS

Commentary on Cottage Cluster standards table (by SERA Architects):

The below reflects information from previous under-consideration cottage cluster standards (not adopted) in Hood River, and consideration of standards through this project process. Key items to consider include:

- *Cottage Definition - Will Hood River allow “attached” cottages, such as two attached units meeting all the other standards and within a cluster development?*
- *Maximum Average Dwelling Size – as written this allows flexibility in each unit size, while keeping the average for the cluster within a limit. The maximum could be lower (Oregon Model Code, for example, limits each dwelling to 900sf) or higher; and/or it could require that some percentage of dwellings be under a size cap (75% must be smaller than 800sf, for example)*
- *Maximum Unit Density – in units per square foot of site area*
- *Lot Coverage – the allowed percentage is higher than Hood River currently allows; this provides more site design flexibility but is balanced by strong open space, vegetation, and tree coverage requirements. Per existing Hood River code, a porch above a certain size is allowed additional lot coverage.*
- *Landscape Area and tree canopy minimums - are recommendations but could be deleted or changed. Landscape standards of 17.17.040 currently require 20% site area coverage for Conditional Uses in residential zones and could be suitable to apply to cottage clusters, which would become an outright Permitted Use in R1, R2, and R3 with the adoption of these overall changes.*
- *Open Space Requirements – we suggest using a blended open space minimum and allowing some design flexibility to allocate this between common and private open space areas.*
- *Lot Frontage – this standard is in flux and may need to be a low as 0’ to allow for lot subdivision*
- *Setbacks – as shown are consistent with existing Hood River. Question: should porches be allowed to encroach a front setback in certain terms (such as, no more than a 6’ encroachment and for a surface area up to 100sf)?*
- *Minimum Space Between Structures – 10’ spacing would allow individual lot subdivision while maintaining 5’ side setbacks. However, 10’ is generous spacing that may limit the number of cottages able to fit on a site.*
- *Building Height – a complete 2-story limit along with 18’ at eave and 25’ at ridge is a common cottage height limit.*
- *Parking Requirements – 1 space per dwelling minimum is typical and customary. You may also consider establishing a maximum of 1.5 or 2 spaces per dwelling. You may want to require a limited number of off-street Guest parking spaces, or simply rely on on-street parking to accommodate that.*
- *Garage Setbacks – are consistent with garage setbacks for duplex and triplex development. Private, individual garages for cottages are rare and inadvisable. Hood River may consider a garage for consolidated parking locations, but a surface lot or parking canopy would be more common. Cottage clusters could include accessory storage structures (not large enough for vehicles) under a certain square footage that would typically be subject to 17.04.030 standards which allow encroachment in the setback zone (for structures under 100sf) up to within 3’ of the property line.*

COTTAGE CLUSTER				
Cottage Cluster: a grouping of detached dwelling units that includes a common courtyard. Units may be located on a single Lot or Parcel, or on individual Lots or Parcels.				
	Zone	R-1	R-2	R-3
A	Maximum Average Dwelling Size	1,200sf	1,200sf	1,200sf
	Maximum Unit Density	1 dwelling per 2,500sf	1 dwelling per 1,500sf	1 dwelling per 1,500sf
B	Minimum Lot or Parcel Size	5,000 SF	4,500 SF	4,500 SF
C	Minimum Number of Dwellings	2	3	3
	Lot Coverage (%)			
D	Maximum (total footprint of all structures over 150sf each and all driveway and parking footprint)	50%	55%	65%
E	Additional lot coverage allowed with front porch (when porch meets standards of 17.04.120(B)(2))	3%	3%	3%
	Landscape Area minimum	20%	20%	20%
	Tree canopy coverage minimum (at maturity)	40%	40%	40%
F	Open Space Requirement	Must provide minimum 300sf open space per dwelling, no more than 60% of which may be common open space or private open space. (See Open Space Standards below)	Must provide minimum 300sf open space per dwelling, no more than 60% of which may be common open space or private open space. (See Open Space Standards below)	Must provide minimum 300sf open space per dwelling, no more than 60% of which may be common open space or private open space. (See Open Space Standards below)
	Common Open Space			
	Private Open Space			
G	Lot Frontage	X' on dedicated public street; X' on public dedicated cul-de-sac	X' on dedicated public street; X' on public dedicated cul-de-sac	X' on dedicated public street; X' on public dedicated cul-de-sac
	Setbacks			
H	Front yard	10' (with 15" eave, gutter, and chimney encroachment allowed)	10' (with 15" eave, gutter, and chimney encroachment allowed)	10' (with 15" eave, gutter, and chimney encroachment allowed)
I	Side yard	6' (with 15" eave, gutter, and chimney encroachment allowed)	5' (with 15" eave, gutter, and chimney encroachment allowed)	5' (with 15" eave, gutter, and chimney encroachment allowed)
J	Rear yard	10' (with 15" eave, gutter, and chimney)	10' (with 15" eave, gutter, and chimney)	5' (with 15" eave, gutter, and chimney)

		encroachment allowed)	encroachment allowed)	encroachment allowed)
	Alley	5'	5'	5'
K	Minimum Space between Structures	10'	10'	10'
No annotation letter – but could go on Axon drawing if needed	Building Height Limit	2 stories	2 stories	2 stories
	Upper grade to ridge (with 6:12 minimum roof pitch requirement)	25'	25'	25'
	Upper grade to eave	18'	18'	18'
L	Parking Requirements			
	Under 800 SF	1	1	1
	800 SF and over	1.5	1.5	1.5
	Minimum number of parking spaces required per dwelling	1	1	1
	Maximum number of parking spaces per dwelling	2?,	2?,	2?, 1 allowed within front yard setback
	Bicycle Parking Minimum			
	Private Per Dwelling (may be located in the dwelling or in a secured, weather-protected shared location)	2	2	2
	Guest bicycle parking spaces	0.5 per dwelling; minimum of 2 spaces regardless of dwelling count	0.5 per dwelling; minimum of 2 spaces regardless of dwelling count	0.5 per dwelling; minimum of 2 spaces regardless of dwelling count
	Garage Setback			
	Constructed to face adjacent public street	20'	20'	20'
	Constructed not to face adjacent public street	10'	10'	10'
	Constructed not to face a public alley	5'	5'	5'
M	Entrance Orientation			
N	Garages and Off-Street Parking Area			
O	Driveway Approach			

Landscape/Hardscape (decorative Paving)/LOW Impact Development

Commentary on Landscape/Hardscape/LID (by SERA Architects):

Some of the below standards are not Clear and Objective and need to be further detailed or refer to other code sections that provide suitable standards.

- 7. Storm Water and Low-Impact Development.

- a. Developments shall include open space and landscaped features as a component of the project's storm water low-impact development techniques including natural filtration and on-site infiltration of storm water.
- b. Low-impact development techniques for storm water management shall be used wherever possible. Such techniques may include the use of porous solid surfaces in parking areas and walkways, directing roof drains and parking lot runoff to landscape beds, green or living roofs, and rain barrels.
- c. Impervious surfaces shall be located to maximize the infiltration of storm water runoff. Dwellings shall be grouped and parking areas shall be located to preserve as much contiguous, permanently undeveloped open space and native vegetation as reasonably possible when considering all standards in this chapter.

Common Open Space

Commentary on Common Open Space (by SERA Architects)

Some of the below standards are not Clear and Objective.

- *Item 2: The permission for accessory structure for common usage allowed in the common open space should be better defined: maximum area and footprint, what uses define common usage, any restrictions on the location of a common use building.*
- *Item 4: More detail should be provided for what constitutes a sufficient "walkway, fencing, landscaping, or berm"*
- *Item 6: Provide a definition of "visible and accessible"*

Required Common Open Space. Common open space is intended to be an amenity shared by all residents of the cottage housing development. Each Cottage Court development shall provide a common open space area for the Cottage Court development meeting all the following standards.

1. The minimum dimension for the common open space is 20 ft on all sides. Connections between separated open spaces, not meeting this dimensional requirement, shall not contribute toward meeting the minimum open space area.
2. Other than parking garages, accessory structures for common usage are allowed in the common open space areas.
3. Physically constrained areas such as wetlands or steep slopes cannot be counted towards the open space requirement.
4. The open space shall be distinguished from the private outdoor areas with a walkway, fencing, landscaping, or berm to provide a visual boundary around the perimeter of the common area.
5. Parking areas and driveways do not qualify as open space.
6. Entrance to at least one common open space area must be visible and accessible from an adjacent public street.

Standards for Provided Private Open Space.

Commentary on Private Open Space (by SERA Architects)

The minimum dimension requirements are ordinary and acceptable. We recommend not mandating a specific minimum area of private open space for cottage clusters, but instead requiring an overall Open Space minimum area per dwelling that must be then divided between Common and Private. See the Cottage Cluster development standards table for recommendations.

Private outdoor areas shall be separate from the open space to create a sense of separate ownership.

Private open space adjacent to each unit is intended for the exclusive use by the resident.

Each Cottage Court development shall provide a private open space area for each dwelling in the Cottage Court development meeting all the following standards

- a) Each unit shall have a private open space on the same lot as the unit. The space shall be at least 100sf with no dimension of less than 10 ft on 1 side. It shall be contiguous to each unit for the exclusive use of the residents.
- b) Front porches are not included in the private open space calculation.
- c) Private open space shall be adjacent to each dwelling unit and directly accessible by one or more dwelling entrances.

Internal Pedestrian Circulation

Development shall include continuous pedestrian paths for internal circulation on-site. The minimum width for pedestrian paths shall be 6 ft. Paths must provide a continuous connection between each unit, common open space, adjoining rights-of-way, parking areas, and any other areas of common use within the development.

Walkways in compliance with HRMC 16.12.030(B) must be included to provide for movement of residents and guests from parking areas to homes and other amenities. These walkways must be shown on the subdivision tentative plan or site plan and be part of the common areas/tracts.

Possible Amendments to Westside Concept Plan (identified by Dustin Nilsen):

- a) The common open space shall contain a minimum of 400 square feet per dwelling unit in the cluster.
- b) Each unit shall be connected to the common open space by a walkway.
- c) Areas such as utility vaults, exterior setbacks and common parking areas and driveways are not counted in the common open space requirements.
- d) Common open space may contain an ASI or drainage swale area, provided the area is usable open space.
- e) Required common open space shall be provided at ground level in a contiguous commonly owned tract with an easement indicating that it benefits all lots in the development.
- f) Common open space shall have a minimum average width of 20 feet.
- g) The common open space areas shall be constructed and landscaped prior to filing a final plat or, in the case of a site plan, construction and landscaping will be tied to final occupancy of the first dwelling.
- h) The common open space shall be recorded as a perpetual open space to benefit all residents of the housing development prior to filing a final plat or prior to obtaining a building permit.

Dwelling Unit Size Restrictions (method of measurements)

Commentary (by SERA Architects):

Each of the below options can be considered for inclusion in the code to limit dwelling size maximums. The HB 2001 options have been feasibility-tested for cottage dwelling sizes, but Hood River may decide to adjust the standards to the local context.

OPTION 1. Maximum Floor Area. The maximum gross habitable floor area for 75 percent or more of the cottages, within developments of four units or greater, shall be 800 square feet or less per unit. At least two of the cottages within three-unit cottage housing developments shall have a gross habitable floor area of 800 square feet or less. The gross habitable floor area for any individual cottage unit shall not exceed 1,000 square feet.

OPTION 2. The total footprint of a dwelling unit shall not exceed 700 sq ft, and the total floor area of each dwelling unit shall not exceed 1,000 sq ft. The size of a dwelling may not be increased beyond the maximum floor area in subsection X. A deed restriction shall be placed on the property notifying future property owners of the size restriction.

OPTION 3. HB 2001 – OAR 660-046-0220 (4)(e). "Dwelling Unit Size: A Large City may limit the minimum or maximum size of dwelling units in a Cottage Cluster, but must apply a maximum building footprint of 900 square feet per dwelling unit. A Large City may exempt up to 200 square feet in the calculation of dwelling unit footprint for an attached garage or carport. A Large City may not include detached garages, carports, or accessory structures in the calculation of dwelling unit footprint."

Commentary (by Dustin Nilsen):

Westside Concept Plan Potential Code Amendments: The maximum floor area per dwelling unit without an attached garage is 1,100 square feet. A dwelling unit with an attached garage shall have a maximum floor area of 1,500 square feet including the garage.

Bend's code sets limits at 1,100 sf without a garage, and 1,200 sf with an attached garage. The maximum size in Redmond's code is 1,500 square feet, including an attached garage (but not a detached garage, unheated storage space, and areas less than 6' high). Kirkland's code allows a maximum of 1,500 square feet, plus up to 250 additional square feet for an attached garage.

As noted previously, the code currently does not include a definition of floor area. It could be important for a unit that is tightly limited (e.g. how stairs are treated); however, creating such a broadly applicable definition is beyond the scope of this project.

Building Orientation and Separation

Commentary on Building Orientation and Separation (by SERA Architects):

The requirement that at least half of cottages orient towards a common open space may conflict with the later requirement for street orientation by some cottages.

Building Separation. A middle housing development may include two-unit attached, as well as detached, units. With the exception of attached units, a minimum separation of six/ten feet measured from the

nearest point of the exterior walls is required between housing units. Accessory buildings (e.g., carport, garage, shed, multipurpose room) shall comply with building code requirements for separation from residential structures. Eaves, chimneys, and gutters may project into this required separation by 15 in.

There shall be a minimum separation of six feet between the eaves of the dwelling units.

The front of a dwelling is the façade with the main entry door and front porch. This façade shall be oriented toward either a common open space or public street. If a unit is not contiguous to either of these, it shall be oriented toward an internal pedestrian circulation path.

At least half of the units in a cottage cluster shall be oriented toward a common open space.

Street Orientation

Commentary on Building Orientation and Separation (by SERA Architects):

The street-facing primary entrance orientation requirement may make it challenging to also orient at least half of cottages on the common open space.

All cottage dwellings with footprint within 20' of the front property line facing a street shall have a primary entrance oriented towards the street.

Height (Method of measurements) limit and slope impacts

The height for all structures shall not exceed 18 ft. Dwellings or amenity buildings having pitched roofs with a minimum slope of 6/12 may extend up to 25 ft at the ridge of the roof.

Accessory structures, including detached garages (with or without an ADU), shall be no more than 18 feet in height.

Commentary: SERA Architects has not yet, as of 12/14/20, reviewed in-depth the following standards, but have made minor edits for consistency and to support best practices.

Required architecture

The intent of the design standards is to create architecture consistent with traditional northwest design and small home craftsmanship.

- 1) Units fronting a street shall avoid blank walls by including at least one of the following:
 - a) Changes in exterior siding material.
 - b) Bay windows with a minimum depth of 2 ft and minimum width of 5 ft.
 - c) Wall offsets of at least 1 ft deep.
- 2) Trim around windows and doors shall be at least 3 in wide and ¾ in deep.
- 3) All roofs shall have a minimum roof pitch of 4/12.
- 4)
- 5) At least 60% of the siding material on each wall shall be either horizontal lap siding, between 3 to 7 in wide once installed, or shake siding.

Front Porches

Each unit shall have a porch on the front of the building. The porch is intended to function as an outdoor room that extends the living space of the units into the semipublic area between the unit and the open space or right of way.

- a) The width of the porch shall be at least 50% of the width of the overall length of the front façade.
- b) The front door of the dwelling must open onto the porch.
- c) The entire area of the front porch must be covered.
- d) The surface of the front porch may not exceed 24 in above grade, as measured from the average ground level at the front of the porch.
- e) Each unit shall have a covered entry of at least 80 square feet with a minimum dimension of six feet on any side.
- f) Front Porch may encroach by up to 6' in a front setback zone of a least 10'

Windows.

A minimum of 15 percent of the area of all street-facing facades must include windows or entrance doors. Facades separated from the street property line by a dwelling are exempt from meeting this standard. See Figure 18.



Fences

Fence height is limited to four feet on interior areas adjacent to open space, front and side yards abutting a public street, and on the perimeter of the development. All fences on the interior of the development shall be no more than 3 ft high. Fences along the perimeter of the development may be up to 6 ft high, except as restricted by HRMC 17.04 Clear Vision at Intersection. Chain-link fences are prohibited.

Accessory Buildings, Common Buildings, Existing Nonconforming Structures and Accessory Dwelling Units.

Common Buildings. Up to 25 percent of the required common open space, but no greater than 1,500 square feet, may be utilized as a community building for the use of the housing development residents. Common buildings shall not be attached to dwellings nor shall be used for vehicle parking or storage.

Carports and Garage Structures. Consolidated carports or garage structures, provided per subsection 18.2.3.090.C.3.b, are not subject to the area limitations for common buildings.

Existing Dwelling Units. An existing single-family residential structure built prior to the effective date of the ordinance codified in this section (X), which may be nonconforming with respect to the standards of this chapter, shall be permitted to remain. Existing nonconforming dwelling units shall be included in the maximum permitted unit density. One thousand square feet of the habitable floor area of such nonconforming dwellings shall be included in the maximum floor area permitted per subsection

18.2.3.090.C.2.a. Existing garages, other existing nonhabitable floor area, and the nonconforming dwelling's habitable floor area in excess of 1,000 square feet shall not be included in the maximum floor area ratio.

Accessory Dwelling Units. New accessory dwelling units (ADUs) are not permitted in middle housing developments, except that an existing ADU that is accessory to an existing nonconforming single-family structure may be counted as a unit if the property is developed subject to the provisions of this chapter.

Alt: B.L. Accessory Dwelling Units. Accessory dwelling units in Cottage Court developments are limited to units located above a garage. All standards of HRMC 17.23 apply, except that the number of dwelling units on the building site, including both ADUs and cottage dwelling units, shall be limited to 1.5 times the unit count in 17.25 Table