

Carbondale Board of Trustees

Planning & Zoning Commission

Carbondale Town Hall and Via Zoom

7:00 PM

Join the meeting via Zoom:

https://us02web.zoom.us/j/82706216436?pwd=VW5ueHAwTmEvbjMwcFNiY0lhTXp0QT09

When: Thursday, August 24, 2023, 7:00 PM Mountain Time (US and Canada)

Topic: Town of Carbondale Planning & Zoning Commission August 24, 2023, Meeting

Passcode: 631631

Or One Tap mobile: US: ++17193594580,,82706216436#,,,,*631631# US +16699006833,,82706216436#,,,,*631631# US (San Jose)

Or Telephone: Dial: US: +1 719 359 4580 US, +1 669 900 6833 US (San Jose), +1 253 205 0468 US, +1 253 215 8782 US (Tacoma), +1 346 248 7799 US (Houston), +1 669 444 9171 US +1 312 626 6799 US (Chicago), +1 360 209 5623 US, +1 386 347 5053 US, +1 507 473 4847 US +1 564 217 2000 US, +1 646 931 3860 US, +1 689 278 1000 US, +1 929 205 6099 US (New York), +1 301 715 8592 US (Washington DC), +1 305 224 1968 US, +1 309 205 3325 US

Webinar ID: 827 0621 6436

International numbers available: : <u>https://us02web.zoom.us/u/kdkGqhiUch</u>

Page

- 1. Call to Order
- 2. Roll Call
- 3. 7:00 pm 7:10 pm Consent Agenda
 - 3.1 Minutes of the August 10, 2023, Meeting 3 10 <u>8 10 2023 Draft_(1).pdf</u> Ø
- 4. 7:10 pm 7:15 pmPublic Comment for Persons Not on the Agenda

5.	326 S. 3rd Approval Documents	11 - 15
	326 S 3rd St Packet for P&Z 082423.pdf 🖉	
6.	7:15 pm - 8:00 pm	16 - 69
	PUBLIC HEARING: Impervious Lot Coverage Code Text Amendments	
	Lot Coverage Public Hearing Packet 082423.pdf 🔗	
7.	8:00 pm - 8:45 pm	70 - 134
	Work Session: Accessory Dwelling Units Code Text Amendments	
	ADU Worksession P&Z Packet 082423.pdf 🔗	
8.	8:45 pm - 8:55 pm	

Staff Update

September 28th Meeting Cancelled

9. 8:45 pm - 8:55 pm Commissioner Comments

10. 9:00 pm Adjournment

Upcoming P & Z Meetings:

9-14-2023 – PUBLIC HEARING: ANB Bank Mixed Use Building (Rezoning/Conditional Use/Major Site Plan)

9-28-2023 -- Cancelled

ATTENTION: All meetings are conducted in person and virtually via Zoom. If you wish to comment concerning an agenda item, please email <u>kmcdonald@carbondaleco.net</u> by 4:00 p.m. the day of the meeting.



Minutes Planning & Zoning Commission Carbondale Town Hall and Via Zoom

Thursday, August 10, 2023

Commissioners Present:

Jay Engstrom	Chair
Jarret Mork	Member
Kim Magee	Member
Nick Miscione	Member
Jess Robison	Alternate
Cindy Suplizio	Alternate

Commissioners Absent:

Kade Gianinetti	Member
Nicholas DiFrank	Member
Jeff Davlyn	Member

Town Staff Present:

Jared Barnes	Planning Director
Kelley Amdur	Planner
Kae McDonald	Planning Technician

Guest and Attendees:

John Toley	259 Sopris Avenue, Carbondale
Dan Bullock	682 Euclid Avenue

Call to Order

Jay Engstrom called the August 10, 2023, Planning and Zoning Commission to order at 7:02 pm.

Roll Call

Consent Agenda

Motion to approve the meeting minutes of the July 13, 2023, Planning and Zoning Commission. *Moved by:* Kim Magee

Seconded by: Cindy Suplizio

Aye Jay Engstrom, Kim Magee, Nick Miscione, and Cindy Suplizio

Abstain Jarrett Mork and Jess Robison

Carried 4-0

Public Comment for Persons Not on the Agenda

There was no one present, not on the agenda, to address the Commission.

Artspace Update: Ramsey Fulton and jv DeSousa

Ramsey thanked the commission members for making time for the update. He noted that they met with the Board of Trustees a few weeks ago and appreciate the opportunity to open a dialogue with the Planning and Zoning Commission. Ramsey explained that the public outreach for the project was kicked off last week at Carbondale's Wednesday Farmers Market and they also hosted a table at last Friday's First Friday event. Ramsey shared his screen to show the planned public outreach working document, noting that Artspace updates can also be found under the Carbondale Connect link on the Town of Carbondale's landing page. He also shared the Artspace website: artspace.org, where additional information on the project can be found.

Jv explained that they would like to identify the stakeholders over the next few months to provide input on the design process. He expressed his desire to attract a broad spectrum of people and organizations to participate in the design process.

Ramsey noted that they will be attending the upcoming Summer Concert Series and the Our Town, One Table, along with two community charrettes to round out the public outreach. He added that October, November, and December will be set aside for the planning the design and 2024 will be devoted to fundraising. Ramsey highlighted the project goals:

- Develop a mix of Workforce Housing for the Carbondale Community
- Develop a vibrant central Promenade Supporting Creative Non-profits and Industries
- Engage with the Carbondale Community to develop a shared vision for the program, built environment, and community spirit
- Keep Carbondale, Carbondale
- Through public outreach and events, we plan to build upon the planning and market studies of the Town of Carbondale and Artspace that are currently informing this vision.

Jay commented that he is excited to work with the team and that this will be a big deal for Carbondale. Jay asked how they will dialogue with the LatinX community.

Ramsey explained that they are working to find the best way to have events and they are speaking with local leaders in the LatinX community to do that. He noted that they are currently getting all their documentation translated and that it will be available soon.

Jv noted that they will need to limit the number of participants to ensure the stakeholder group's effectiveness. He added that they will reach out to those volunteers that best represent Carbondale's spectrum.

Ramsey assured the group that information from the charrette will be posted so everyone can see what was done.

PUBLIC HEARING: 326 S. 3rd Street ADU (Conditional Use Permit/Minor Site Plan)

Jay introduced the Public Hearing for 326 S. 3rd Street ADU.

Staff Presentation:

Kelley noted that the property owners of 326 S. 3RD Street were at the meeting. She proceeded to summarize her Staff memo, noting that the application is for a Minor Ste Plan Review to construct a two-story addition that will house an accessory dwelling unit situated over a new two-car garage that will be attached to the existing single-family residence; no new curb cut is required due to an existing drive-over curb and the new driveway does not remove any existing street parking spaces. She noted that Section 2.5.3 of the Unified Development Code requires a Minor Site Plan review for ADUs in the Residential/Low Density zone district, and Section 4.2.5 states that a Conditional Use permit is also required for ADUs in the R/LD zone district. She added that the Planning and Zoning Commission (P&Z) is required to hold a public hearing on the Minor Site Plan Review and if the Minor Site Plan application is approved by the P&Z Commission, the Planning Director will approve the Conditional Use Permit. Kelley pointed out that the public hearing was noticed in the Sopris Sun on July 20, 2023, and the applicant completed a mailed notice and posting on July 25, 2023.

Kelley explained that Staff received three public comments – one letter in support of the project and one phone call and one letter expressing concern over the potential for increased competition for on-street parking. Kelley noted that the project complies with the goals of the Comprehensive Plan and code requirements as stipulated in the UDC. She highlighted how the design will mitigate the presence of the street-facing garage using color, materials and design elements and detailed how the project provides Code-complying off-street parking for the single-family dwelling as well as the ADU and removes a parking nonconformity.

Applicant Presentation:

J. Ray explained that he and his family have lived at 326 S. 3rd Street since 2004, noting that one son is in college, one is a rising senior at Roaring Fork High School and his wife is the Athletic Director at RFHS. He added that he knew the former owners of the property very well as well as the history of the property. He proceeded to share his screen and highlight aspects of the site plan. J. Ray acknowledged his neighbors' concerns regarding the on-street parking but explained that he doesn't have sufficient impervious lot coverage to add a fifth parking space. He related that the has offered to create space for parking in the public right-of-way and that he has encouraged his neighbors to have an open dialogue if there were any problems.

Questions for Staff and Applicant:

Nick pointed out that the right-of-way along that portion of Sopris Avenue is very wide and asked if anyone knew what the intended width was for.

Kelley explained that she spoke with the Public Works Director, and he acknowledged that there are several streets with very wide rights-of-way, but there is no planned use for that space. Kelley noted that J.Ray is required to provide code-compliant parking -- pointing out that they have satisfied the parking requirement – and they can continue to use existing parking along 3rd Street as needed. She emphasized that the Town discourages property owners from presuming that r-o-w parking in front of their home "belongs" to them.

Jay noted the improvements along 3rd Street that entailed diagonal parking and ends just before Sopris Avenue.

Kelley replied that on the library side, the improved curb rounds the corner, while along the property in question the curb transitions from a raised to a "rollover" curb.

J.Ray pointed out that the curbs were the product of a r-o-w realignment, explaining that they previously had established parking along 3rd Street that was replaced with the ribbon curb that holds asphalt about 2/3 of the way along the property frontage before ending. He noted there have been no additional improvements to the remaining eastern side of 3rd Street.

Kim asked about for confirmation that there can be no parking along the curb demarcated with yellow paint.

J.Ray answered in the affirmative.

Jarret asked for clarification regarding the impervious lot coverage requirement.

J.Ray explained that his maximum impervious lot coverage is 3900 square feet and when the proposed project elements are scaled out, he is left with 53 square feet remaining.

Public Comment:

John Toley, 259 Sopris Avenue, explained that he was concerned about the on-street parking because it is in demand already. He wasn't sure whether the stacked parking would be used effectively and explained that after a conversation with J.Ray in which J.Ray committed to creating additional parking adjacent to his property in the right-of-way, he was more comfortable with the project moving forward.

Dan Bullock, 682 Euclid Avenue and a member of Carbondale's Tree Board, suggested adding a street tree to the right-of-way, as well.

Motion to close the Public Hearing.

Moved by: Jarrett Mork

Seconded by: Nick Miscione

Aye Jay Engstrom, Kim Magee, Nick Miscione, Cindy Suplizio, Jarrett Mork and Jess Robison

Nay None

Carried 6-0

Commissioner Comments:

Jess asked if the Commission could require additional parking in the public right-of-way.

Jay replied that the Commission can't make it a condition of approval but might support it for the sake of the neighbor.

Nick pointed out that creating parking in the public right-of-way shouldn't be discussed at all.

Jay wondered if the jog along the west side of the driveway would prevent a vehicle from pulling into the garage if a car was parked on the eastern side.

J.Ray explained that he was trying to minimize the use of gravel and he envisioned a "hammerhead" configuration for backing out. He pointed out that the parking spaces are oversized and expressed confidence that there was adequate room for cars to maneuver in and out of the driveway.

J.Ray asked for guidance on the process for using the right-of-way.

Jared advised that it was a right-of-way permit through Public Works.

Motion to approve a Minor Site Plan Review for an Accessory Dwelling Unit to be located at 326 S. 3rd Street, with the following conditions and findings:

Conditions

1. The Accessory Dwelling Unit's ownership shall not be legally severed from ownership of the associated lot and any other structures on such lot.

2. The Accessory Dwelling Unit shall not have separate water or sewer service.

3. All other representations of the Applicant in written submittals to the Town or in public hearings concerning this project shall also be binding as conditions of approval.

4. The Applicant shall pay and reimburse the town for all applicable professional and Staff fees pursuant to the Carbondale Municipal Code.

5. The applicant shall apply for and receive a building permit as required.

Findings for Approval - Site Plan Review Criteria

1. The site plan meets the purposes of the R/LD zone district and is consistent with the 2022 Comprehensive Plan.

2. The site plan is consistent with any previously approved subdivision plat, planned unit development, or any other precedent plan or land use approval as applicable.

3. The site plan complies with all applicable development and design standards set forth in the Unified Development Code.

4. Traffic generated by the proposed development will be adequately served by existing streets within Carbondale.

Moved by: Jess Robison

Seconded by: Nick Miscione

Aye Jay Engstrom, Kim Magee, Nick Miscione, Cindy Suplizio, Jarrett Mork and Jess Robison

Nay None

Carried 6-0

PUBLIC HEARING: "Clean-up" Code Text Amendments

Jay reminded the commission members that this topic was discussed during a work session at the July 13th meeting.

Kelley explained that this was a public hearing for the purpose of "Clean-Up" code text amendments that include typographical errors, reordering of numbers and changing "Title 19" to "Title 16." She pointed out that none of these corrections impact the purpose of the Unified Development Code, but they are necessary for the proper use of document by Staff and the public. She added that there are no known fiscal impacts related to these proposed text amendments.

Questions for Staff:

Jarrett asked for clarification on the difference between references to Table and Section.

Kelley replied that that was a confusing aspect of the document and "Section" refers to a specific header leading up to the table and "Table" refers to the specific table.

Jay asked if anything had been added since the July 13th Work Session.

Kelley replied that there had been no further additions.

Public Comment:

Dan Bullock, 682 Euclid Avenue and a member of Carbondale's Tree Board, asked for consideration of new verbiage related to homeowners' association's treating trees – especially with the recent outbreak of Emerald Ash Borer – without getting permission from the Public Works Director. He also asked that the Tree Board be added to Section 5.3.2.D.1 and that the Tree Ordinance should be included by reference.

Jarrett asked how closely the Tree Board worked with the Parks and Recreation Commission.

Dan replied that they are currently discussing trees as they relate to the new aquatic facility. He noted that the Public Works Director and the Town Arborist bring plans for review by the Tree Board as needed.

Jay asked how these proposed changes might be brought forward.

Jared explained that he has had preliminary discussions with the Town Arborist to better reference landscape requirements and while he appreciates Dan's suggestions, he would like to bring forward those code text amendments that relate to landscaping and the Tree Board later to ensure all the information is accurate.

Motion to recommend to the Board of Trustees approval of the UDC text amendments for the purpose of cleaning up numerous sections of the UDC as they relate to cross references and other citations as presented in Exhibit B with the following findings:

Findings for Approval:

1. The proposed amendments do not impact the public health, safety, and general welfare;

2. The proposed amendments are consistent with the Comprehensive Plan and the stated purposes of this Unified Development Code; and

3. The proposed amendments are necessary for the proper use and accuracy of the UDC.

Moved by: Jarrett Mork

Seconded by: Kim Magee

Aye Jay Engstrom, Kim Magee, Nick Miscione, Cindy Suplizio, Jarrett Mork and Jess Robison

Nay None

Carried 6-0

Staff Update

Jared pointed out that the "Clean-Up" Text Amendments was the first in a series that will get progressively more challenging. He reminded the commission members that the Public Hearing on Impervious Lot Coverage will take place at the August 24th meeting. Jared noted that there will be an initial Board of Trustee Work Session on ADU regulations on August 15th with separate work sessions for the Planning and Zoning and Historic Preservation Commissions. He encouraged each commission member to consider their experience with the various ADU applications they have reviewed.

Jared reminded the Commission of the upcoming Boards and Commissions Open House taking place immediately following the August 15th BOT Work Session. He invited Jay and Nick to be present to represent their respective Commissions and encouraged at least one or two other commission members to attend. He noted that this is an opportunity to educate the public and solicit new members, pointing out that the BOT envisioned this to be an annual event.

Jared added that MAP Carbondale is moving forward and, to date, have developed branding and engaged in public outreach. He reported that Town Staff and members of the Bike, Pedestrian and Trails Commission have hosted tables at both the July and August First Fridays and are hosting a table at the Farmers Market through the end of August. He announced that they now have over 700 individual interactions and while most of the comments focus on the Highway 133 corridor, there are good comments regarding other areas of town except for River Valley Ranch.

Kelley noted that Jarrett and Nick DiFrank volunteered for the stakeholder group and that aspect of the project will be organized by the end of August or early September.

Kelley announced that the Little Blue Preschool draft resolutions will not be considered at the August 24th meeting. She explained that the engineering has not yet been completed and they would like the various components to move forward in a similar time frame.

Commissioner Comments

Jarrett asked for an update on Short-term Rental regulations.

Jared replied that the BOT provided direction to Staff to continue with STR regulations as they are currently written. He noted that Staff is working with Gov/OS to undertake STR licensure and enforcement along with receipt of required taxes.

Adjournment

Jarrett moved to adjourn the August 10, 2023, Carbondale Planning and Zoning Commission meeting at 8:27 pm.



Town OF CARBONDALE 511 COLORADO AVENUE CARBONDALE, CO 81623

Planning and Zoning Commission Memorandum

Meeting Date: August 24, 2023

TITLE:	Resolution No 3, 2023 for 326 S. 3rd Street
Actions:	Approve or disapprove the Resolution

BACKGROUND

At a public hearing on August 10, 2023 the Planning and Zoning Commission (P&Z) approved a Minor Site Plan Review for 326 S. 3rd Street. Attached is a Resolution that reflects the Conditions and Findings for Approval that were reviewed and approved by the P&Z on August 10th.

RECOMMENDATION

Staff recommends the Commission make the following motion: Move to approve Resolution No 3, Series of 2023 for an Accessory Dwelling Unit to be located at 326 S. 3rd Street.

Prepared By: Kelley Amdur, Planner

RESOLUTION NO. 3 SERIES OF 2023

A RESOLUTION OF THE PLANNING AND ZONING COMMISSION OF THE TOWN OF CARBONDALE, COLORADO, APPROVING A MINOR SITE PLAN REVIEW FOR PROPERTY LOCATED IN THE TOWN OF CARBONDALE, COLORADO

WHEREAS, J Ray and Christa Barlow ("Applicants") requested approval of a Minor Site Plan Review and Conditional Use Permit to allow an Accessory Dwelling Unit to be constructed above the garage attached to their single family dwelling located at 326 S. 3rd Street, Lots 10-12 in Block 6, Original Townsite, Town of Carbondale.

WHEREAS, the Planning and Zoning Commission of the Town of Carbondale reviewed this application during a Public Hearing on August 10, 2023 and approved said application on the terms and conditions set forth below;

NOW, THEREFORE BE IT RESOLVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF CARBONDALE, COLORADO, that the Minor Site Plan Review is hereby approved, subject to the following conditions and findings:

Conditions of Approval

- 1. The Accessory Dwelling Unit's ownership shall not be legally severed from ownership of the associated lot and any other structures on such lot.
- 2. The Accessory Dwelling Unit shall not have separate water or sewer service.
- 3. All other representations of the Applicant in written submittals to the Town or in public hearings concerning this project shall also be binding as conditions of approval.
- 4. The Applicant shall pay and reimburse the town for all other applicable professional and staff fees pursuant to the Carbondale Municipal Code.
- 5. The applicant shall apply for and receive a building permit as required.
- 6. The approval of the Minor Site Plan Review is contingent upon the Planning Director's approval of the Conditional Use permit. If the Conditional Use permit is disapproved or altered in any way by the Planning Director, the Minor Site Plan Review shall be rendered null and void and require a subsequent review and approval by the Planning and Zoning Commission.

Findings for Approval - Site Plan Review

- 1. The site plan meets the purposes of the R/LD zone district and is consistent with the 2022 Comprehensive Plan.
- 2. The site plan is consistent with any previously approved subdivision plat, planned unit development, or any other precedent plan or land use approval as applicable.
- 3. The site plan complies with all applicable development and design standards set forth in the Unified Development Code.
- 4. Traffic generated by the proposed development will be adequately served by existing streets within Carbondale.

INTRODUCED, READ, AND PASSED THIS _____ day of _____, 2023.

PLANNING AND ZONING COMMISSION OF TOWN OF CARBONDALE

By:

Jay Engstrom Chair



TOWN OF CARBONDALE

511 Colorado Avenue Carbondale, CO 81623 www.carbondalegov.org (970 963-2733 Fax: (970) 963-9140

FINDINGS OF FACT AND GRANT OF CONDITIONAL USE PERMIT

Type of Application: Land Use File Number: Applicants/Owners: Property Location: Zone District: Lot Size: Present Land Use: Proposed Land Use:

Attachments:

Conditional Use Permit LU23-000012 J Ray and Christa Barlow 326 S. 3rd Street R/LD 8,250 Square Feet Single family dwelling Single family home with attached Accessory Dwelling Unit Plans dated 6/21/23

The Town of Carbondale **hereby grants a Conditional Use Permit** to the applicant for the property located at 326 S. 3rd Street. The Conditional Use Permit is to permit an Accessory Dwelling Unit pursuant to UDC §2.5.3. The project also requires approval of a Minor Site Plan application by the Planning and Zoning Commission (P&Z).

The project consists of a two-story addition to the existing, single-family home. The addition includes a two-car garage with an Accessory Dwelling Unit above.

The ADU is approximately 545 square feet in size, with 1 bedroom and 1 bathroom, and is accessed via an external stair adjacent to the garage. The ADU also includes a deck on the north side that projects over the driveway below.

The approval is subject to the following conditions:

- 1. The Conditional Use Permit shall be limited to the Accessory Dwelling Unit located at 326 S. 3rd Street, as shown on plans dated 6/21/23.
- 2. The ADU parking requirement is reduced from 2 spaces to 1 space pursuant to UDC Table 5.8-1.

- 3. Pursuant to UDC Table 5.8-1, parking related complaints received by the Town shall be evaluated by the Planning and Zoning Commission who may, at their discretion, require a 2nd parking space to be allocated to the ADU.
- 4. The Conditional Use approval is contingent upon the approval of the Minor Site Plan application by the P&Z. If the Minor Site Plan application is disapproved or altered in any way by the P&Z, the Conditional Use approval shall be rendered null and void and require a subsequent review and approval by the Planning Director.
- 5. The Applicant shall comply with all applicable building code provisions.

Approval is based on the following findings:

- 1. The conditional use permit has been approved per UDC Section 2.5.1.
- 2. The 2-story addition and Accessory Dwelling Unit meet the criteria specified for the use and the addition complies with all applicable regulations and development standards in the UDC.
- 3. The Accessory Dwelling Unit is consistent with the Comprehensive Plan which encourages ADUs, diverse housing types and increased density.
- 4. The existing home is nonconforming for the front setback on the west side, but the nonconformity is not increased by the 2-story addition on the east side of the home.
- 5. Parking is available for the Accessory Dwelling Unit in a manner that will minimize adverse impacts on the traffic in the neighborhood or surrounding uses. Sheet A.105 of the plans dated 6/21/23 shows the required parking spaces and the area for the reserved parking space is included in the lot coverage calculation.
- 6. The Accessory Dwelling Unit is compatible with adjacent uses in terms of scale and site design.

Town of Carbondale

8 15 23

Date

LU23-000024



Town of Carbondale 511 Colorado Ave Carbondale, CO 81623 (970)963-2733

Pre-Application Meeting Date_

Fees____Date Pd_

Land Use Application

PART 1 - APPLICANT INFORMATION

Applicant Name: Town of Carbondale, Jared Barnes, Planning Director Phone: 970 510 1208

Applicant Address: 511 Colorado Ave, Carbondale, CO 81623

E-mail: jbarnes@carbondaleco.net

Owner Name: Same

Phone: Same

Address: Same E-mail: Same

Property Location: provide street address and either 1) subdivision lot and block; or 2) metes and bounds:

Town-wide municipal code amendment.

PART 2 - PROJECT DESCRIPTION

Project Description: Code text amendments to the Unified Development Code (Title 17 of the Carbondale Municipal Code) related to Impervious Lot Coverage. The proposed text amendments are focused on UDC Section 3.8.5, Impervious Lot Coverage, but may include additional sections as necessary, such as UDC Section 8.3, Other Defined Terms. The intent of the code text amendment is to provide additional clarity to what areas are defined as impervious or pervious lot coverage and what standards need to be met for compliance.

Type of Application(s): Unified Development Code Text Amendment

Existing Zoning: N/A Proposed Zoning: N/A

PART 3 - SIGNATURES

I declare that I have read the excerpt from the Town of Carbondale Municipal Code Article 8 Land Use Fees. I acknowledge that it is my responsibility to reimburse the Town for all fees incurred as a result of this application. I declare that the above information is true and correct to the best of my knowledge.

19	Ull	11	X	X	4
Applik	ant Sig	gnature	•		

Signature of all owners of the property must appear before the application is accepted.

Owner Signature	Date	Owner Signature	Date
STATE OF COLORADO)		
COUNTY OF GARFIELD)		
The above and foregoing docume	ent was acknowle	dged before me this _	15th day of
August 2023 by L	duren Gi	ster	
Witness my hand and official My commission expires TholeT JESSICA JEWEL MARKHAM Notary Public State of Colorado Notary ID # 20194025808 My Commission Expires 07-10-2027	Notary Public	the	2



TOWN OF CARBONDALE 511 COLORADO AVENUE CARBONDALE, CO 81623

Planning and Zoning Commission Memorandum

TITLE:	Impervious Lot Coverage Code Text Amendment
SUBMITTING DEPARTMENT:	Planning Department
ATTACHMENTS:	 A: Existing UDC Impervious Lot Coverage Regulations B: DRAFT Redlines of UDC Sections 3.8.5 C: Other Jurisdictions Regulations D: Aspen Urban Runoff Management Plan, Section 8.5.1.4 E: P&Z Minutes – July 13, 2023

BACKGROUND

At the July 13, 2023 meeting, the Planning and Zoning Commission (P&Z) held a worksession to discuss regulations related to impervious lot coverage. The discussion arose from Staff's identified issues when applying the Unified Development Code's (UDC) impervious lot coverage over the past year (Attachment E). Some issues identified are related to:

- 1. How applicants prepare and present lot coverage information;
- 2. Staff interpretation of what areas count towards impervious lot coverage; and,
- 3. Application of impervious lot coverage exemptions.

At the meeting, the P&Z discussed a variety of topics related to impervious and pervious area. Some of the topics which could be addressed in this code text amendment were:

- 1. Add language that prevents stormwater flows from leaving the property;
- 2. Modifying the definition of the term Principal Building;
- 3. Determining if overhangs should be included in impervious lot area;
- 4. Determining how decks should be considered; and,
- 5. Consideration of "green roofs" and "pedestal paver systems" as pervious spaces.

The P&Z directed staff to consider a simplified version of the code and one that provided additional requirements for pervious paving systems. Ultimately, the P&Z moved to initiate a Code Text Amendment to the UDC for the purpose of reviewing changes to Section 3.8.5, *Impervious Lot Coverage*.

DISCUSSION

Attached to this memorandum are Existing UDC sections related to Impervious Lot Coverage regulations (Attachment A). UDC §3.8.5 largely defines how impervious lot coverage is calculated including categorizing improvements into various buckets of impervious improvements. In addition, each zone district includes a maximum impervious lot coverage requirement as a percentage of the total lot area as summarized in Tables 3.7-2 and 3.7-3. In all residential districts, the percentage increase as the lot size decreases ranging from 1.5% to 60%. The commercial zone districts all include a flat percentage which range from 80%-100%. UDC §3.8.6 defines floor area and gross square footage and generally includes all areas from the outside of the exterior wall. When reviewing and applying these regulations, staff identified

areas of confusion or difficulty where additional clarity would be beneficial. Subsections 3.8.5.A and B discuss various structure types but don't define how roof overhangs are addressed. Some buildings are designed with large roof overhangs for improved outdoor living which impact overall site permeability and should be considered in relation to impervious lot coverage.

UDC §3.8.5 includes two exemptions from impervious lot coverage: patio exemption; and, pervious paver exemption, both of which are only applicable to residential zone districts. Subsection E sets forth the patio exemption which only pertains to "any impervious covered or uncovered deck and/or patio" and limited to 10% of the floor area of a dwelling units excluding the basement and garage. This language is confusing as it implies that an uncovered deck should be counted as impervious area, but decks are not included in subsections A-D. Staff believes that subsections A-D could be further clarified with respect to how decks and patios are calculated as impervious lot coverage.

Subsection F sets for the pervious paver exemption which applies to "parking, driveways, and walkways" if a pervious paving system is used. This exemption is limited to 10% of the pervious surface required (the inverse of the maximum impervious lot coverage). The Director is required to approved manufactured pervious paving systems, but no guidance is provided on the minimum acceptable standard. The pervious paving market is rapidly changing with more systems being sold as pervious, but upon further inspection the system is only pervious in certain applications, some of which are prohibited in cold weather climate installations. Additional standards would prove beneficial to ensure installed systems are truly permeable.

Most of the time compliance with the maximum impervious lot coverage requirements are reviewed after a building permit has been submitted during the Planning Department's zoning review. The lack of clarity of the regulations, especially with the exemptions application, increases the difficulty of an applicant's preparation of a code compliant building permit. Changes at this point in the process can be costly and time consuming especially if redesigning the primary structure is required. Additional clarity would help with staff review, applicant submission, and reduce conflicts that arise over compliance discrepancies.

Other Jurisdiction's Regulations

Staff reviewed multiple other jurisdictions regulations to determine if and how lot coverage is regulated (Attachment C). The regulations varied widely from extremely simple to extremely detailed, while utilizing lot coverage maximum, floor area ratios (FAR), and definitions of terms to set forth standards and provide guidance. The following code summaries are arranged in order of complexity for most simplistic to most complex.

The City of Glenwood Springs does not have an impervious surface calculation and only applies a maximum lot coverage requirement to infill residential development. Infill residential development is defined as residential development on a parcel that shares a common lot line with at least two existing single-family homes. Given that definition the maximum lot coverage standards are relatively limited in their applicability in Glenwood.

The Town of Avon regulates maximum lot coverage as the area rendered impermeable by buildings compared to the total area of the site, less those rendered undevelopable. Driveways and patios are excluded for the maximum allowed area. Avon's zoning code includes a maximum lot coverage percentage for each zone district and type of residential use.

The Town of Eagle also regulates development through a maximum lot coverage requirement. In certain residential zone districts, Eagle's codes include both a maximum lot coverage for buildings and a separate maximum for all other impervious surfaces. Eagle defines lot coverage to mean the portion of a lot or site covered by materials forming any unbroken surface impervious to water, including: (A) Buildings, decks, patios, structures; (B) Streets, driveways, parking lots, and other impervious materials. In addition, Eagle's codes limit the maximum floor area in certain residential zone districts.

The Town of Basalt uses a combination of maximum lot coverage and FAR for residential developments. In most residential zone districts either a maximum lot coverage or FAR is used, but in some districts both are used to govern development. Although not defined well, building footprints, decks, and patios are included in the maximum area, while driveways are not included.

The Town of Crested Butte uses a combination of FAR and required open space rather than a maximum lot coverage. These regulations serve the same purpose as maximum lot coverage as a required open space of 50% would limit the structures lot coverage to 50%. Open space is defined by all unoccupied land which does not include any structure above grade. However, decks 18" or higher above grade do count as "structure area". The regulations do not include driveways and other miscellaneous impervious improvements "structure area".

The City of Aspen uses a combination of FAR, floor area maximums, and maximum site coverage to regulate lot coverage in zone districts. The specific combination of regulations varies depending on the zone district. For example, the Medium-Density Residential district contains a maximum site coverage and FAR with square foot caps based on the size of the lot. The Low-Density Residential district only uses FAR with a maximum square foot cap to regulate lot coverage. City of Aspen also uses a complex and prescriptive policy to regulate permeable pavers. Section 8.5.1.4 of the Urban Runoff Management Plan (Attachment D) describes three categories of pervious pavement solutions: modular block pavement (MBP), cobblestone block pavement (CBP), and reinforced grass pavement (RGP). The regulations contain numerous regulations and design and construction considerations for installing the various systems to ensure permeability, including but not limited to minimum void spaces, fill material, sub-grade material and size. MBPs require a minimum void space of 20%, while CBPs require a minimum of 8% and RGP do not require any void space. A minimum of 12 inches of sub-grade material is recommended to resist freeze-thaw damage.

As demonstrated above regulations for lot coverage vary widely. When lot coverage is regulations, one commonality is that all structures and above grade decks area considered lot coverage.

Lot Coverage Modification Options

Based on prior conversations staff prepared three options for modifications to the UDC (Attachment B). The purpose of each option is to determine which direction is most appropriate for the Town of Carbondale.

Option 1:

The first option proposes code language to simplify how impervious lot coverage is calculated. Subsections A and B are modified to include any roof overhang more than 2 feet. The intent is to include larger roof forms as impervious area. A new subsection E is included to better define what types of decks and patios are considered impervious. Both exemptions (subsections E and F) are removed from the regulations.

The result of this proposed regulation will simplify what areas are considered impervious and make the calculation easier for applicant and staff to understand. It will however have an impact on the total amount of developed areas a lot can contain, by including more portions of the development as impervious (decks, patios, large roof overhangs). It will also remove both exemptions which have been widely used to allow for more development on a site, thus further restricting the gross amount of development.

Option 2:

The second option proposes code language which provides additional clarity for the calculation of impervious lot coverage is calculated, while keeping the patio exemption. Similar to Option 1, Subsections A and B are modified to include any roof overhang more than 2 feet, while a new subsection E is included to better define what types of decks and patios are considered impervious. In Option 2, the pervious paver exemption is removed from the regulations, while the deck and patio exemption is clarified to reference the new definition of which decks an patios are considered impervious.

This proposed regulation will still provide the clarity of Option 1, while keeping the patio exemption largely as implemented today. It will still have an impact on the magnitude of development on a lot by increasing the impervious portions of the development (decks, patios, large roof overhangs), but the impact will be less than Option 1 given the continuation of the patio exemption.

Option 3:

The third option proposes code language which provides clarity for impervious lot coverage while keeping in place both existing exemptions. The proposal is the same as Option 2, with the exception that the pervious paver exemption remains with additional requirements. This option includes minimum design standards for three types of pervious pavement systems: modular block pavement (MBP); cobblestone block pavement (CBP), and reinforced grass pavement (RGP). The minimum standards are borrowed from the City of Aspen's Urban Management Runoff Plan and intend to set standards related to minimum surface voids, void fill materials, and base course depth and materials, among others.

This proposed regulation will still provide the clarity of Options 1 and 2 while keeping both exemptions. The additional minimum standards for pervious pavers is intended to provide direction to applicant, improve the ease of review for Staff, and create more predictable outcomes during the building permit review. It will still have a minor impact on the magnitude of development on a lot by increasing the impervious portions of the development (decks, patios, large roof overhangs), but the retention of the exemptions will help keep development magnitude largely at what is seen today.

RECOMMENDATION

Staff recommends the Planning and Zoning Commission (P&Z) discuss the draft regulation options and provide feedback to Town Staff. In addition, Staff recommends the P&Z continue the public hearing and make the following motion:

Move to continue the public hearing to September 14, 2023 for Amendments to the Unified Development Code related to Impervious Lot Coverage and Section 3.8.5.

3.7.2. MAXIMUM IMPERVIOUS LOT COVERAGE, RESIDENTIAL DISTRICTS

The maximum impervious lot coverage in each zoning district shall not exceed the percentages shown in Table 3.7-2 below. The remaining area of the lot shall be pervious surface and shall be landscaped as required in Section 5.4, *Landscaping and Screening*.

Table 3.7-2: Maximum Impervious Lot Coverage – Residential Districts					
Zoning District	AG	OTR	R/LD	R/MD	R/HD
Net Lot Area	Maximum Impervious Lot Coverage Percentage (%)				
400,000 sf or larger	5	1.5	5	60	60
200,000 – 399,999 sf		2	7	60	60
87,120 – 199,999 sf		4	15	60	60
43,560 – 87,119 sf		8	20	60	60
20,000 – 43,559 sf		16.5	25	60	60
15,000 – 19,999 sf		21	33	60	60
12,500 – 14,999 sf		24	35	60	60
10,000 – 12,499 sf		29	42	60	60
7,500 – 9,999 sf		34	45	60	60
6,000 – 7,499 sf		40	52	60	60
4,000 – 5,999 sf		42	52	60	60
Less than 4,000 sf		44	52	60	60

3.7.3. COMMERCIAL AND MIXED-USE DISTRICTS DIMENSIONAL STANDARDS

Table 3.7-3 summarizes the commercial and mixed-use district dimensional standards.

Table 3.7-3:					
Summary of Commercial and Mixed-Use Districts Dimensional Standards					
	C/T	CRW	HCC	MU	
Lot Standards					
Lot area minimum	3 000 sf	15.000 sf	2 500 sf	2 500 sf	
Lot area per dwelling unit, minimum, multifamily dwellings [1]:	5,000 31	10,000 31	2,000 31	2,000 31	
Efficiency	1,050 sf			1,050 sf	
1 bedroom	1,450 sf			1,450 sf	
2 bedroom	1.650 sf			1.650 sf	
3 bedroom	1.850 sf			1.850 sf	
4 bedroom	2,050 sf			2,050 sf	
Lot depth, minimum	100 feet	100 feet	100 feet	100 feet	
Lot width, minimum	30 feet	100 feet	25 feet	25 feet	
Impervious lot coverage, maximum	80 percent	80 percent	100 percent	90 percent	
Landscaped area, minimum	20 percent [2]	20 percent	None	10 percent	
Setbacks, Minimum - Commercial Districts					
Front					
Adjacent to Highway 133	5 feet	5 feet	n/a		
Adjacent to sub-arterial street	5 feet	5 feet	0 feet		
Adjacent to collector street	5 feet	5 feet	0 feet		
Adjacent to local street	5 feet	5 feet	0 feet		
Side					
Adjacent to alley	0 feet	0 feet	0 feet		
Adjacent to commercial or industrial district	0 feet	0 feet	0 feet		
Adjacent to residential district	[3]	[3]	5 feet		
Rear					
Adjacent to alley	0 feet	0 feet	0 feet		
Adjacent to commercial or industrial district	20 feet	20 feet	0 feet		
Adjacent to residential district	5 feet[3]	[3]	5 feet		
Setbacks – Mixed-Use District					
Front, minimum				0 feet	
Front, maximum				10 feet	
Side, minimum				0 feet	
Side, adjacent to single-family residential district,				5 feet	
minimum				0 1001	
Rear, minimum				0 feet	
Rear, adjacent to single-family residential district, minimum				5 feet	
Adjacent to alley, minimum				5 feet	
Building Standards					
Height maximum principal building	35 feet	35 feet	35 feet [4]	35 feet	
Height maximum accessory buildings	25 feet	25 feet	25 feet	25 feet	
	201000	201000	201000	201000	
Notes:	d MIL districts is a	loulated by summ	ning the minimum	por unit square	

[1] Minimum lot area for multifamily dwellings in the C/T and MU districts is calculated by summing the minimum per-unit square footage specified in this table; however, in all cases the minimum lot area shall be no smaller than 3,000 sf. For example, the minimum lot area for a three-unit multifamily development with two bedroom units would be 4,950 (1,650 x 3 units = 4,950 sf).

[2] Forty percent minimum open space is required for residential-only projects in the C/T district.

[3] See Section 3.7.5: Transitions Between Different Land Use Areas.

[4] See Section 5.7.7 for additional height standards applicable to the HCC zoning district.

CHAPTER 17.03: ZONING DISTRICTS

Table 3.8-1:	
Authorized Exceptions to S	etback Requirements
Storage sheds	In all residential zoning districts, storage sheds less than 120 square feet in size may be placed up to, but no closer than, three feet from a rear or side property line if they are not placed on a permanent foundation. Storage sheds shall not be located over an easement.
Front porches and stoops	In all residential zoning districts, covered front porches and stoops may extend into the required front setback up to eight feet, provided the porch or stoop is unenclosed and the eaves are at least five feet from the front property line.
Handicap ramps	Handicap access ramps may be located within required front, side, and rear setbacks.
Uncovered balconies	In all residential zoning districts, balconies that are uncovered may extend into any side or rear setback provided these projections are at least five feet from the property line. Uncovered balconies may also extend into the required front setback up to six feet.
Incidental architectural features	Cornices, eaves, canopies, sunshades, gutters, chimneys, flues, belt courses, headers, sills, pilasters, lintels, ornamental features, and other similar architectural features may project up to two feet into any required setback.

3.8.4. BUILDING HEIGHT

A. Measurement

Heights referred to in this Code shall be measured as stated in the definitions chapter under the term "building height."

B. Encroachments

Architectural features shall not exceed the maximum applicable building height within any zoning district, unless specifically authorized in the table below.

Table 3.8-2:			
Authorized Exceptions to Maximum Height Standards			
Church spires or belfries	Church spires or belfries may be up to 25% greater than the maximum allowed height; provided they are designed without provision for occupancy and plans receive prior approval of the Town.		
Parapet walls	Screening parapet walls may extend above the maximum height limit up to 30 inches for buildings containing two or more dwelling units.		
Rooftop mechanical equipment	Cupolas, chimney ventilators, skylights, water tanks, elevator overrides, solar collection equipment, and all other mechanical equipment may extend up to five feet above the maximum height limit provided the equipment complies with screening requirements set forth in Section 5.4.5: <i>Screening</i>		
Transmitting antennae	A transmitting antenna may exceed the maximum applicable building height; provided, the total height does not exceed five feet plus twice the distance to the nearest property line, but in no case shall an antenna exceed 60 feet in height.		

3.8.5. IMPERVIOUS LOT COVERAGE

The area of the lot covered by the following shall be included in the calculation of impervious lot coverage in all districts:

- A. The principal building;
- B. All accessory buildings, parking garages, carports, utility and storage sheds;
- C. Porches, stairways and elevated walkways, paved areas or areas otherwise covered with materials impervious to water;
- D. Parking areas and driveways regardless of surface materials;
- E. In a residential zoning district, any impervious covered or uncovered deck and/or patio is allowed to be calculated as pervious surface; however, this allowance is

limited to 10 percent of the square footage of the floor area of a dwelling unit, excluding the floor area of the basement and garage.

F. Up to 10 percent of the pervious surface required in Section 3.7.2, *Maximum Impervious Lot Coverage, Residential Districts* may be used for improvements such as parking, driveways, and walkways if a manufactured pervious paving system is used. To qualify for this exception, specifications for the manufactured pervious paving system shall be submitted to and approved by the Director.

3.8.6. FLOOR AREA AND SQUARE FOOTAGE

- A. All areas within a structure including interior storage areas, closets, living areas and bathrooms, garages, and interior and exterior walls shall be included in the calculation of floor area of a structure. Private outdoor areas for multifamily structures shall be excluded from this calculation.
- B. Gross square footage of a structure shall be measured from the outside of the exterior walls and shall include the area of the walls.
- C. When there is more than one use within a structure the square footage of each use shall be determined by the gross square footage of the use plus a portion of any areas used in common pro-rated on the basis of the square footage of each use sharing such areas.

CHAPTER 17.05: DEVELOPMENT STANDARDS

Trustees shall file a notice of such lien in the office of the Garfield County Clerk and Recorder upon the properties affected and shall be such unpaid assessments to the County Commissioners and the Garfield County treasurer for collection, enforcement, and remittance in the manner provided for by law for the collection, enforcement, and remittance of general property taxes.

5.4 LANDSCAPING AND SCREENING

5.4.1. PURPOSE

This section is intended to ensure that new landscaping and the retention of existing vegetation are integral parts of all development and that they contribute added high quality to development, retain and increase property values, conserve water, and improve the environmental and aesthetic character of Carbondale. It is also the intent of this section to provide flexible requirements that encourage and allow for creativity in landscape design.

5.4.2. APPLICABILITY

This section establishes minimum standards for landscaping and screening. These requirements apply to all nonresidential uses and to multifamily projects containing three or more dwelling units.

5.4.3. MINIMUM LANDSCAPING REQUIRED

- A. Site Area Landscaping
 - 1. Any pervious area of a site not used for impervious surfaces such as buildings, parking, driveways, sidewalks, etc. shall be landscaped. All landscape material shall comply with landscaping as defined in Section 8.3.
 - 2. All undeveloped building areas within partially developed residential, commercial, or industrial uses shall control dust and erosion by use of vegetative ground cover or other means.
 - 3. Minimum site area landscaping may count towards a development's common open space requirements, provided it meets the standards of Section 5.3: *Open Space*.

B. Streetscape Landscaping

 Except in the HCC district and along local streets in the R/LD district, a landscape area shall be established along all streets between the public right-ofway and any buildings, parking lots, loading areas, storage areas, screening walls or fences, or other improvements in association with any use, in accordance with the following:

Table 5.4-1: Minimum Width of Landscaped Area		
Adjacent To	Width (Feet)	
Highway 133	10	
Any other street	5	

CHAPTER 17.05: DEVELOPMENT STANDARDS

b. Adjacent land uses and developments, including but not limited to adjacent residential developments, retail shopping centers, office buildings, or restaurants.

C. Stormwater Runoff

All paved walkways and bicycle paths provided pursuant to this section shall be designed to minimize stormwater runoff. Materials and design of pervious and permeable pavement shall be approved by Town staff. If a paved sidewalk or bicycle path is located in a low area where runoff will be problematic, a drywell or other form of stormwater management shall be incorporated into the design.

D. Trails

All new development shall construct on-site portions of trails and multi-use paths that are identified in plans adopted by the Board of Trustees or connected to the Carbondale trails system, provided that any such improvements are directly related to the impacts of the proposed use or development and are roughly proportional in both extent and amount to the anticipated impacts of the proposed use or development.

Table 5.8-3: Off-Street Loading Requirements		
Use size	Loading spaces required	
Under 15,000 square feet	None	
15,000–49,999 square feet	1	
50,000+	2	

E. Maximum Parking Spaces Allowed

No commercial or industrial use shall provide off-street parking spaces in an amount that is more than 125 percent of the minimum requirements established in Table 5.8-1, *Off-Street Parking Schedule A*, unless mitigation is provided in the form of additional landscaping pursuant to subsection 5.8.3.E.3 below.

- 1. Calculating Maximum Spaces
 - a. For the purpose of calculating parking requirements, the following types of parking spaces shall not count against the maximum parking requirement:
 - i. Accessible parking;
 - ii. Vanpool and carpool parking;
 - iii. On-street parking adjacent to the lot or lots on which the parking located; and
 - iv. Structured parking, underground parking, and parking within, above, or beneath the building(s) it serves.
 - b. For the purpose of calculating parking requirements, fleet vehicle parking spaces shall not count against either the minimum or maximum requirements.
- 2. Exceptions to Maximum Parking Requirement

Exceptions to the maximum parking requirement may be allowed by the Director in situations that meet the following criteria:

- a. The proposed development has unique or unusual characteristics such as high sales volume per floor area or low turnover, that create a parking demand that exceeds the maximum ratio and that typically does not apply to comparable uses;
- b. The parking demand cannot be accommodated by on-street parking, shared parking with nearby uses, or by increasing the supply of spaces that are exempt from the maximum ratio;
- c. The request is the minimum necessary variation from the standards; or
- d. If application of the maximum parking standard would result in fewer than six parking spaces, the development shall be allowed six parking spaces.
- 3. Enhanced Landscaping Required for Parking in Excess of Maximum)

Parking that is provided in excess of the 125 percent of the maximum parking requirement shall be required to increase the internal landscaping requirements required in Section 5.4.3.C, *Parking Lot Landscaping*, and shall be required to

use pervious pavement for the number of spaces that exceed the maximum parking requirement and in the center rows between the wheel stops or curbs.

- F. Computation of Parking and Loading Requirements
 - 1. Fractions

When measurements of the number of required spaces result in a fractional number, any fraction exceeding 0.5 shall be rounded up to the next higher whole number.

2. Multiple Uses

Lots containing more than one use shall provide parking and loading in an amount equal to the total of the requirements for all uses.

3. Area Measurements

Unless otherwise specified, all square footage-based parking and loading standards shall be computed on the basis of gross floor area of the use in question. Structured parking within a building shall not be counted in such measurement.

4. Computation of Off-Street Loading Spaces

Required off-street loading spaces shall not be included as off-street parking spaces in computation of required off-street parking space.

5.8.4. PARKING ALTERNATIVES

The Director may approve alternatives to providing the number of off-street parking spaces required by this Code in accordance with the following standards.

A. Shared Parking

The Director may approve shared parking facilities for developments or uses with different operating hours or different peak business periods if the shared parking complies with all of the following standards:

1. Location

Shared parking spaces shall not be located farther than 600 feet of an entrance.

2. Zoning Classification

Shared parking areas shall be located on a site with the same or a more intensive zoning classification than required for the primary uses served.

3. Shared Parking Study

Those proposing to use shared parking as a means of satisfying off-street parking requirements shall submit a shared parking analysis to staff that clearly demonstrates the feasibility of shared parking. The applicant shall also demonstrate that any parking reduction requested as part of the shared parking study will not result in the spillover of parking onto other properties or the public right-of-way.

4. Agreement for Shared Parking

The parties involved in the joint use of off-street parking facilities shall submit a written agreement in a form to be recorded for such joint use, approved by the Director as to form and content. The Director may impose such conditions of approval as may be necessary to ensure the adequacy of parking in areas

CHAPTER 17.05: DEVELOPMENT STANDARDS



Figure 5.8.6-G: Commercial Development Circulation

- 4. No residential use should be allowed to access directly onto a major arterial street. Residential uses should use a hierarchy of streets providing access to major streets via a local or collector street.
- 5. Access to service areas, bay doors, and loading ramps shall be accommodated by maneuvering areas on-site, allowing ingress and egress to and from the lot by forward motion of the vehicles.

F. Surfacing

- 1. In single-family residential districts, off-street parking spaces shall have a minimum of three inches of ³/₄-inch road base gravel, asphalt or cement strips at least 18 inches wide or shall be fully surfaced with acceptable pervious surfaces as approved by the Director.
- 2. In multifamily residential, commercial, mixed-use, industrial, and other nonresidential uses, off-street parking areas, driveways, and maneuvering areas shall be surfaced with pavers, concrete, asphalt mat, chip and seal over road base, or other type of material impervious to water. A pervious surface system may be allowed if approved by the Director. In all nonresidential uses required parking spaces shall be adequately marked to show the dimension and location of each parking space.
- 3. Parking lots over 1,000 square feet in size shall incorporate Low Impact Development (LID) techniques to protect water quality and reduce run-off. Low impact development techniques may include infiltration pervious pavers, grass

CHAPTER 17.08: DEFINITIONS

Building Materials, Feed, Supply Store

An establishment engaged in the storage, distribution, and sale of building materials such as lumber, brick, tile, cement, insulation, floor covering, lighting, plumbing supplies, electrical supplies, cabinetry and roofing materials. Feed and supply stores include commercial sale of feed and supplies related to the agricultural industry. Accessory uses may include repair or delivery services and outside sale of equipment, plants, and gardening supplies.

Building Official

See Section 2.8.5.C.

Building, Principal

A building or buildings in which the primary use of the lot is conducted or is intended to be conducted.

Building, Public

Any building held, used, or controlled for public purposes by any government, whether state, county, or municipal, without reference to the ownership of the building or of the land on which it is situated.

Building Setback

The minimum horizontal distance required between the front, side, or rear lot lines and the wall of any building as specified by the regulations of a particular zoning district.

Bulk Storage of Liquefied Petroleum Gas (LPG) - 2,000 Gallons or More

A permanent facility for the storage of gasoline, propane, butane, or other petroleum products offered for wholesale distribution (not for direct sale to the general public).

Business Research and Development

A facility including research, synthesis, analysis, development and testing laboratories, including the fabrication, assembly, mixing and preparation of equipment and components incidental or convenient or necessary to the conduct of such activities.

С

Caliper

Diameter measurement of a tree-trunk taken at six inches above ground level for trees up to and including four inches in caliper. For trees larger greater than four inches in caliper, measurement of caliper shall be taken at 12 inches above ground level.

Campground and RV Park

An outdoor facility designed for overnight accommodation of human beings in tents, motorized vehicles, rustic cabins and shelters, or trailers for recreation, education, naturalist, or vacation purposes. Office, retail and other commercial uses commonly established in such facilities and related parking structures shall be allowed as accessory appurtenances.

Centerline

For purposes of the sign regulations of this Code, the centerline of the adjoining right-of-way closest to the sign.

Certificate of Occupancy

The final permit or authorization issued by the Town allowing occupancy or use of a building, and certifying that the building has been constructed in accordance with all applicable requirements.

Impervious Lot Coverage

Portions of a lot or parcel covered by buildings, parking areas, carports, driveways, accessory structures, covered porches, sidewalks, cantilevered portions of building, and other areas covered by water-impervious surfaces.

Improvements

For the purposes of this Code, the community public works and facilities determined to be necessary in relation to proposed development, including, but not limited to; access drives, landscaping, parking facilities, sanitary sewers, site and street lighting, storm drainage facilities, street facilities, traffic control facilities, and water facilities. All required improvements shall conform to current requirements and standards as established in this Unified Development Code and other applicable sections of the Carbondale Municipal Code.

Incandescent or Halogen Light Source

The emission of light (visible electromagnetic radiation) from a hot body due to its temperature. Incandescence occurs in incandescent light bulbs because the filament resists the flow of electrons. This resistance heats the filament to a temperature where part of the radiation falls in the visible spectrum.

Indoor Recreational Facility

Commercial recreation conducted entirely within an enclosed structure for amusement or sport, and which is operated for financial gain; including but not limited to bowling alleys, skating rinks, pool halls, video and pinball parlors, and private gymnasiums.

Infill Development

New development that is sited on vacant, undeveloped, or underutilized land within an existing community, and that is surrounded by previously developed areas. Infill is further defined to include development as indicated in Chapter 4 of the Town's Comprehensive Plan.

Infiltration

The process of water percolation or movement into the soil subsurface.

Instructional or Performing Arts Studio

An enclosed space used by anyone engaged in artistic employment or instruction in painting, sculpture, photography, music, dancing, dramatics, literature, or similar activities.

Invasive Plant Species

Botanical species included on the Town's invasive species list that is maintained and updated by the planning department, as provided under this Code.

J

reserved

Κ

Kennel

Any establishment where dogs and/or cats are bred or raised for sale, or boarded, cared for, and/or groomed commercially, exclusive of veterinary care.

L

Landscaped Area, Minimum

The pervious area of a site which must be improved with landscaping.

Permit, Conditional Use

See conditional use permit.

Permit, Special Use

See special use permit.

Person

Any individual, lessee, firm, partnership, association, joint venture, corporation, or agent of the aforementioned groups, or the State of Colorado or any agency or political subdivision thereof.

Personal Service, General

An establishment or place of business primarily engaged in the provision of frequent or recurrent needed services of a personal nature. Examples include beauty and barbershops, nail salons, shoe repair shops, tailor shops, and tanning salons.

Pervious Surface

The sum of areas of a lot or parcel that are landscaped with vegetative material and other areas not covered by buildings, parking areas, carports, driveways, accessory structures, sidewalks, or other areas covered by impervious surfaces.

Planned Unit Development

A development designed to accommodate varied types of residential or non-residential development including single, two-family, and multiple-family housing, commercial, or industrial uses, and related accessory uses and special uses commonly found in similar developments, in patterns or layouts not otherwise permissible in other zoning districts of this Code. Planned unit developments are designed to provide substantial additional public amenities or benefits to the Town in return for flexibility in the design, layout, and dimensions of the development.

Planning and Zoning Commission

See 2.8.3.

Plat

A map or diagram and other writing(s) containing all the required descriptions, locations, specifications, dedications, provisions and information required by state law and prepared for the purpose of dividing property through subdivision or partition.

Plat, Preliminary

A plat showing the proposed land subdivision including the character and proposed layout of land in conformance with the requirements of this Code.

Point Light Source

The exact place from which illumination is produced (i.e., a light bulb filament or discharge capsule).

Porch

A projection from an outside wall of a dwelling covered by a roof and/or sidewalls (other than the sides of the building to which the porch is attached).

Pre-application Meeting

A meeting between an applicant, the Director, and other municipal staff or entities as deemed necessary. A pre-application meeting is intended to familiarize all parties with conceptual plans or proposals and the necessary regulations and requirements applicable to a proposed application.

CHAPTER 17.08: DEFINITIONS

Rain Garden

A planted depression or a hole that allows rainwater runoff from impervious areas such as roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be absorbed.

Real Estate Sign

Any on-premise sign pertaining to the sale, rental, development, or lease of a lot, tract of land, one or more structures, or a portion thereof, to which the sign is located.

Recycling of Metals, Paper, Plastic, or Automotive Oil

A facility, excluding salvage yards, where recyclable materials are collected, separated, and processed for shipment to a recycling plant or other facility for eventual reuse into new products.

Redevelopment

Any development of previously-developed land.

Regularly Operated Open Air and/or Farmer's Market

An occasional or periodic market held in an open area or structure where groups of individual sellers offer for sale to the public items such as fresh produce, seasonal fruits, fresh flowers, arts and crafts items, and food and beverages dispensed from booths located on-site.

Religious Use

Uses primarily engaged in providing meeting areas for religious activities. Examples of religious uses include churches, chapels, mosques, temples, and synagogues. Affiliated preschools are classified as day care uses. Affiliated schools are classified as schools.

Repair

The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

Repair Establishment, Major

Maintenance or repair of larger household or business-related items including washers/dryers, dishwashers, refrigerators, copy machines, or other large appliances or mechanical items.

Repair Establishment, Minor

Maintenance and repair of smaller household or business-related items including watches, musical instruments, vacuums, computers, televisions, furniture, or other similar items.

Restaurant

An eating establishment where customers are primarily served at tables or self-served and food is consumed primarily on the premises, and that does not have a drive-in or drive-through facility to serve patrons food while seated in their vehicles.

Restaurant, with Outdoor Dining Facility

Any restaurant with an outdoor eating and drinking area that is associated with and incidental and subordinate to a primary use of that parcel or lot. This use may include removable tables, chairs, planters, or similar features and equipment.

Retail, General, 10,000 sf or less

Retail sales containing not more than 10,000 sf of gross floor area.

Retail, General, over 10,000 sf

Retail sales containing more than 10,000 sf of gross floor area.

Retail Marijuana Cultivation Facility

"Retail marijuana cultivation facility" shall have the same meaning as set forth in subsection 16(2) of article XVIII of the Colorado Constitution under "marijuana cultivation facility" (an entity licensed to cultivate, prepare, and package marijuana and sell marijuana to retail marijuana

DRAFT UDC Impervious Lot Coverage Code Amendments

Option 1: Simplified Code

3.8.5. IMPERVIOUS LOT COVERAGE

The area of the lot covered by the following shall be included in the calculation of impervious lot coverage in all districts:

- A. The principal building, as measured from the outside walls and including all roof overhangs in excess of 2 feet;
- B. All accessory buildings, parking garages, carports, utility and storage sheds, as measured from the outside walls and including all roof overhangs in excess of 2 feet;
- C. Porches, stairways and elevated walkways, paved areas or areas otherwise covered with materials impervious to water;
- D. Parking areas and driveways regardless of surface materials;
- E. Covered decks and patios, uncovered decks extending over an impervious surface, and decks and patios which are solid and/or use impervious materials.
- E. In a residential zoning district, any impervious covered or uncovered deck and/or patio is allowed to be calculated as pervious surface; however, this allowance is limited to 10 percent of the square footage of the floor area of a dwelling unit, excluding the floor area of the basement and garage.
- F. Up to 10 percent of the pervious surface required in Section 3.7.2, *Maximum Impervious Lot Coverage, Residential Districts* may be used for improvements such as parking, driveways, and walkways if a manufactured pervious paving system is used. To qualify for this exception, specifications for the manufactured pervious paving system shall be submitted to and approved by the Director.

Option 2: Simplified with Patio Exemption

3.8.5. IMPERVIOUS LOT COVERAGE

The area of the lot covered by the following shall be included in the calculation of impervious lot coverage in all districts:

- A. The principal building, as measured from the outside walls and including all roof overhangs in excess of 2 feet;
- B. All accessory buildings, parking garages, carports, utility and storage sheds, <u>as</u> <u>measured from the outside walls and including all roof overhangs in excess of 2 feet</u>;
- C. Porches, stairways and elevated walkways, paved areas or areas otherwise covered with materials impervious to water;
- D. Parking areas and driveways regardless of surface materials;
- E. Covered decks and patios, uncovered decks extending over an impervious surface, and decks and patios which are solid and/or use impervious materials.
- <u>FE</u>. In a residential zoning district, any <u>impervious covered or uncovered</u> deck and/or patio<u>as described in subsection E, above</u>, is allowed to be calculated as pervious surface; however, this allowance is limited to 10 percent of the square footage of the floor area of a dwelling unit, excluding the floor area of the basement and garage.
- F. Up to 10 percent of the pervious surface required in Section 3.7.2, *Maximum Impervious Lot Coverage, Residential Districts* may be used for improvements such as parking, driveways, and walkways if a manufactured pervious paving system is used. To qualify for this exception, specifications for the manufactured pervious paving system shall be submitted to and approved by the Director.

Option 3: Clarifying Exemptions

3.8.5. IMPERVIOUS LOT COVERAGE

The area of the lot covered by the following shall be included in the calculation of impervious lot coverage in all districts:

- A. The principal building, as measured from the outside walls and including all roof overhangs in excess of 2 feet;
- B. All accessory buildings, parking garages, carports, utility and storage sheds, <u>as</u> measured from the outside walls and including all roof overhangs in excess of 2 feet;
- C. Porches, stairways and elevated walkways, paved areas or areas otherwise covered with materials impervious to water;
- D. Parking areas and driveways regardless of surface materials;
- E. Covered decks and patios, uncovered decks extending over an impervious surface, and decks and patios which are solid and/or use impervious materials.
- <u>F</u>E. In a residential zoning district, any <u>impervious covered or uncovered</u> deck and/or patio, <u>as described in subsection E, above</u>, is allowed to be calculated as pervious surface; however, this allowance is limited to 10 percent of the square footage of the floor area of a dwelling unit, excluding the floor area of the basement and garage.
- <u>G</u>F. Up to 10 percent of the pervious surface required in Section 3.7.2, *Maximum Impervious Lot Coverage, Residential Districts* may be used for improvements such as parking, driveways, and walkways if a manufactured pervious paving system is used. To qualify for this exception, specifications for the manufactured pervious paving system shall be submitted to and approved by the Director and meet the minimum standards, <u>below:</u>-

1. General Requirements:

- All systems shall use at least 12 inches of sub-base material.
- <u>Snowmelt systems may be installed beneath cobble block or modular block</u> pavement systems, however system must be designed to not interfere with infiltration.
- Impervious underlayment are prohibited without sub-drain systems.
- Retention capacity of the system shall be designed for a 100-year storm event.
- 2. Modular Block Pavement:
 - Surface area has voids that occupy at least 20% of the total surface area.
 - Voids are filled with ASTM C-33 sand or sandy loam turf (at least 50% sand by weight in its volume) and placed on one-inch thick leveling course of C-33 sand.
 - Base Course shall be AASHTO No. 3 coarse aggregate, with 30% total volume be open pore space.
- 3. Cobblestone Block Pavement:
 - Surface area has voids that occupy at least 8% of the total surface area.
 - <u>Voids are filled with ASSHTO No. 8 fractured aggregate and placed on one-inch</u> <u>thick leveling course of same No. 8 aggregate.</u>
 - Base course shall be AASHTO No. 67 coarse aggregate, with 30% total volume be open pore space.
- 4. Reinforced Grass Pavement
 - Base course shall be AASHTO No. 67 coarse aggregate.

City of Glenwood Springs

070.040.080 - Residential Site and Building Design.

(d)(2) Residential Site Design Standards, Dimensional Standards.

- d. Lot Coverage.
 - 1. *Maximum Lot Coverage*. For infill residential development, maximum lot coverage shall be fifty (50) percent of the total lot area, or twenty-five (25) percent above the existing lot coverage, whichever is less. (Figure 040-11: Maximum Lot Coverage Example Calculations)





Lot size: 6,000 sf Existing lot coverage: (1,250/6,000) = 21%Allowable lot coverage: 21% + 25% = 46%Allowable lot coverage in square feet: $46\% \times 6,000$ sf = 2,800 sf



Existing lot coverage: (1,850/6,000) = 30%Allowable lot coverage: 50%Allowable lot coverage in square feet: $50\% \times 6,000sf = 3,000sf$

 Lot Coverage in Sensitive Areas. In areas subject to Section 070.040.020, Sensitive Area Protection, lot coverage may be further limited by the establishment of limits of disturbance as required by Subsection 070.040.020(a)(4), Limits of Disturbance.

070.070.030 - All Other Terms Defined.

Building, principal. A building from which the principal use of the lot is conducted and/or located. *Footprint.* For purposes of this Code, the physical area covered by a building or structure. *Impervious surface.* An asphalt, concrete, or other surface that is not a component of a porous paving system.

Infill residential. Residential development on a parcel or tract of land that shares a common lot line with at least two (2) existing single-family homes and is located within a residential zoning district. Infill development generally occurs on lots that are already subdivided, and that are less than one (1) acre in size and located within established single-family neighborhoods; however, some larger parcels may also be included in this definition.

Lot Coverage. The percentage of a lot area occupied by the ground area of principal and accessory buildings or structures excepting the percentage covered by ground-mounted small scale solar energy systems.

Porous paving system. A system providing erosion control, softening hard surfaces, reducing stormwater/snowmelt runoff, and/or providing green space. The system includes concrete, plastic, or other systems which may incorporate grass or other landscaped spaces.
Town of Avon

7.08.010 - General definitions.

Lot coverage means the ratio of the area of the site which is rendered impermeable by buildings compared to the total area of a site, excluding those rendered undevelopable, expressed as a percentage.

7.20.060 - Residential districts purpose statements.

b) Residential Low Density (RL). The RL district is a mixed dwelling district intended to provide sites for single-family, two-family and multi-family dwellings either in traditional neighborhoods or in a setting with a mix of dwelling unit types. This district implements the residential low density classification of the Avon Future Land Use Plan and can be located as a transitional use between lower density single-family development and medium density or mixed-use development. Residential low density should be located along a local road.

Table 7.20-3

Dwelling	Max.	Min.	Min.	Max. Lot	Min.	Min.	Min.	Min.	Max.	Max.
Туре	Density	Lot Size	Lot	Coverage	Landscape	Front	Side	Rear	Building	Units/
	(units/	(acres	Width	(%)	Area (%)	Setback	Setback	Setback	Height	Building
	acre)	or sq.	(feet)			(feet)	(feet)	(feet)	(feet)	
		ft.)								
SF Detached	7.5	5,445	40	50	25	25	7.5	10	35	1
		sq. ft.								
Duplex	7.5	10,890	40	50	25	25	7.5	10	35	2
		sq. ft.								
		(5 <i>,</i> 445								
		/ unit)								
Townhouse/	7.5	15, 335	40	50	25	25	7.5	10	35	n/a
Multifamily		sq. ft.								
		[1]								
[1] Must meet	density a	nd sethack	requirem	nents						

Dimensions for the Residential Low Density District

[1] Must meet density and setback requirements.

Town of Eagle

Section 4.03.040. - Definitions.

Floor area means the total gross horizontal area of all floors in a building

Lot or site coverage means the portion of a lot or site covered by materials forming any unbroken surface impervious to water, including:

- A. Buildings, decks, patios, structures;
- B. Streets, driveways, parking lots, and other impervious materials.

Section 4.04.080. - Schedule of requirements in residential districts.

RESIDENTIAL ZONE DISTRICTS TABLE										
ZD	MLA	MLA/DU	Μ	FY	MSY	MRY	MBH	MLC*	MFA	MUO/DU
	35	25	L	25'	Greater of 12.5' or ½ building height	20'	35'			
R acres	35 acres	С	25'							
		А	50'							
RR	2	2 acres	L	25'	Greater of 12.5' or ½ building height	20'	35'			
acres		С	25'							

RESIDE	NTIAL ZO	NE DISTRICTS	TAE	BLE						
ZD	MLA	MLA/DU	Μ	FY	MSY	MRY	MBH	MLC*	MFA	MUO/DU
			А	50'						
	10,000	40.000 sf	L	25'	Greater of 12.5' or ½ building height	20'	35'	Building 30%; all other impervious 20%	60%	
RL	sf	10,000 st	С	25'						
			А	50'						
D4	6,000		L	25'	Greater of 12.5' or ½ building height	20'	35'	Building 40%; all other impervious 20%	60%	
KI	sf	6,000 ST	С	25'						
			А	50'						
DNA	RM 6,000 sf	6,000 sf	L	25'	Greater of 12.5' or ½ building height	20'	35'	Building 40%; all other impervious 20%	80%	
RIVI			С	25'						
			А	50'						
DNAE	6,000	SF 6,000 sf;	L	25'	Greater of 12.5' or ½ building height	20'	35'	Building 50%; all other impervious 20%	150%	
RIVIE	sf	MF 4,000 sf	С	25'						
			А	50'						
	20.000		L	25'	15'	20'	35'			1,000 sf
RH	RH 20,000		С	25'						
	51		А	50'						
	2		L	25'	20'	20'	35'			
MHP*	2 acres		С	25'						
acres			А	50'						

NOTES:

Minimum yard setback for the MHP/PUD zone district means those around the outside of the subdivision park (see Section 4.09.030(C)).

* MLC—maximum lot coverage. Lot or site coverage means the portion of a lot or site covered by materials forming any unbroken surface impervious to water, including buildings, decks, patios, structures; and streets, driveways, parking lots, and other impervious materials.

Town of Basalt

Sec. 16-4. - Definitions.

Lot coverage means the percent of the total lot area that is devoted to ground floor building area. Calculation of lot coverage is as shown below:

Lot coverage	=	Total building ground floor area x 100
(expressed as a percent)		
		Lot Area

Sec. 16-22. - Schedules of uses and requirements.

(2) Schedule of Requirements. The Schedule of Requirements includes basic bulk, setback, density, intensity and open space requirements for each residential and commercial zone. Additional requirements are listed for uses permitted by special review.

Attachment C

Schedule of Requirements

R-1	R-2	R-3	R-3TN	R-4	R-4 MD
43,560	14,520	6,000 ¹	6,000 ²	6,000 ³	Note 12
24	24	24	24 ⁴	33	Note 12
28	28	28	28 ⁴	35	Note 12
2	2	2	2	3	Note 12
75	50	50		50	Note 12
					Note 12
			Note ⁶		Note 12
50	40	25	25	25	Note 12
35	25	25	Note 7	25	Note 12
25	20	20	Note 7	20	Note 12
25	20	20	Note 7	20	Note 12
20	10	10	7.5 ¹¹	10	Note 12
35	20	20	10	20	Note 12
Note 10	Note 10	Note 10	Note 10	Note 10	Note 10
—	_	0.35	0.35 to	.50	Note 12
			0.50 ⁹		
20%	30%	-	30%	—	Note 12
_	_	20%	20%	30%	Note 12
	R-1 43,560 24 28 2 75 50 35 25 25 25 25 25 25 25 25 25 25 20 35 Note ¹⁰ 20% 	R-1 R-2 43,560 14,520 24 24 28 28 2 2 75 50 75 50 50 40 35 25 20 10 35 20 Note ¹⁰ Note ¹⁰ - 20% 30% -	R-1 R-2 R-3 43,560 14,520 6,000 ¹ 24 24 24 28 28 28 2 2 2 75 50 50 2 2 2 75 50 50 50 40 25 35 25 25 25 20 20 20 10 10 35 20 20 Note ¹⁰ Note ¹⁰ Note ¹⁰ - 0.35 20% 30% - 20% 20%	R-1 R-2 R-3 R-3TN 43,560 14,520 6,000 ¹ 6,000 ² 24 24 24 24 ⁴ 28 28 28 28 ⁴ 2 2 2 2 75 50 50 - 75 50 50 - 75 50 50 - 75 50 50 - 75 50 50 - 7 25 25 25 35 25 25 Note ⁷ 25 20 20 Note ⁷ 20 10 10 7.5 ¹¹ 35 20 20 10 Note ¹⁰ Note ¹⁰ Note ¹⁰ Note ¹⁰ - 0.35 0.35 to 0.50 ⁹ 20% 30% - 30%	R-1 R-2 R-3 R-3TN R-4 43,560 14,520 6,000 ¹ 6,000 ² 6,000 ³ 24 24 24 24 ⁴ 33 28 28 28 28 ⁴ 35 2 2 2 2 3 75 50 50 50 50 75 50 50 50 50 7 50 50 50 50 7 50 50 50 50 7 50 50 50 50 7 7 50 50 50 10 25 25 25 25 35 25 20 20 Note ⁷ 20 20 10 10 7.5 ¹¹ 10 35 20 20 10 20 Note ¹⁰ Note ¹⁰ Note ¹⁰ Note ¹⁰ 11 0 35 <

Town of Crested Butte

Sec. 16-1-20. Definitions.

For the purpose of this Article, the use of a plural form shall not necessarily imply that more than the singular is suggested, condoned or allowed, and certain words and phrases shall be defined as follows:

Building means any structure having a roof supported by columns or walls.

Floor area means the sum of the horizontal areas of all floors and areas in an enclosed structure with the potential to contain more horizontal floors, as set forth in Subparagraph d. below, in principal and accessory buildings on a building site, as measured from the exterior faces of the walls and enclosed porches as measured by the exterior limits thereof. However, those spaces that are above the fourteen-foot and twenty-three-foot heights which occur under a pitched roof of 10:12 or greater that are not suitable for potential living space are excluded for floor area ratio purposes. Such areas must be less than seven (7) feet wide in any dimension or measuring less than seventy (70) square feet. The floor area of basements, as defined by the building code adopted by the Town in Chapter 18 of this Code, shall not be included as floor area. For structures other than enclosed structures, floor area shall be computed as follows and shall be included as additional floor area:

- a. Unroofed porches, decks, balconies and terraces:
 - 1. If such improvement is more than eighteen (18) inches above grade and occupies less than ten percent (10%) of the area of the building, then zero (0) floor area.
 - 2. If such improvement is more than eighteen (18) inches above grade and occupies ten percent (10%) or more of the area of the building, then one-half (½) the actual floor area.
 - 3. If such improvement is eighteen (18) inches or less above grade, then zero (0) floor area.
- b. Roofed or covered porches, decks, balconies and terraces:
 - 1. If such improvement occupies less than ten percent (10%) of the area of the building, then one-half (½) the actual floor area.
 - 2. If such improvement occupies ten percent (10%) or more of the area of the building, then the actual floor area.

- 3. For purposes hereof, such roofed or covered porches, decks, balconies and terraces shall not be enclosed structures, meaning that no more than thirty percent (30%) of the vertical surfaces may be hard surfaced, not allowing the passage of air through the porch, deck, balcony or terrace. When figuring this hard-surface area, up to two (2) walls that compose parts of adjacent enclosed structures shall not be counted.
- c. Any private garage, as that term is herein defined, shall have its floor area calculated and included as additional floor area in an amount equal to one-half (½) of the first two hundred (200) square feet if it is located within an accessory building or is attached to or part of the principal building; otherwise, its floor area shall be calculated and included as additional floor area in an amount equal to the actual floor area of such garage.
- d. Any part of a building whose interior height is less than fourteen (14) feet is counted once for floor area purposes. Any part of a building whose interior height is fourteen (14) feet or higher is counted twice for floor area ratio purposes, except that any part of such building which has an interior height of twenty-three (23) feet or more is counted three (3) times. For floor area ratio purposes, interior heights shall be measured from the lowest floor level above grade to the underside of the roof assembly. In those cases where the lowest floor level is more than eighteen (18) inches above natural grade or the site is sloped in such a manner that the lowest floor intersects the natural grade, the Building Official will determine the floor plane from which measurements will be calculated.

Floor area ratio means a fraction, the numerator being the floor area of the buildings on a lot and the denominator being the area of such lot, up to the maximum lot area allowed by right in the zone district.

Open space means open and unoccupied land which does not include any structure above grade level. Decks less than eighteen (18) inches above grade level shall not be considered *structures* for purposes of this definition.

Principal building means the building which is the largest structure on a site, unless otherwise determined by the Board, considering the location and use of all the structures on the site.

Sec. 16-4-50. - Floor areas.

The following shall be measurements for floor areas for property located in the "R1" District:

- (1) Minimum floor area: four hundred (400) square feet for each residential unit; provided, however, that the minimum floor area for an accessory structure built before July 1, 1942, which is being converted to a residential unit, historic accessory structure, shall be two hundred twenty (220) square feet, plus a closet, a bathroom and one hundred (100) additional square feet for each occupant in excess of two (2), only if the following conditions are met:
 - a. The residential unit must be an accessory dwelling used exclusively as a long-term rental unit;
 - b. The occupants of the dwelling must have been residents of the County for three (3) consecutive years of the preceding seven (7) years;
 - c. At least fifty-one percent (51%) of the occupants' income must be earned from work for an employer situated within the County or from work actually performed in the County; and
 - d. The above limitations for occupants and the limitation of the term of rental shall be recorded pursuant to Section 16-9-70 of this Chapter.
- (2) Maximum floor area:
 - a. Accessory building, including an accessory dwelling, if any: one thousand (1,000) square feet or twothirds (3/2) of the floor area of the principal building, whichever is smaller.
 - b. Accessory dwelling: one thousand (1,000) square feet of floor area or two-thirds (3/3) of the floor area of the principal building, whichever is smaller.
- (3) Maximum floor area ratio:
 - a. Principal building: 0.3 as a matter of right, up to 0.4, depending on neighborhood context and lot size; provided that no principal building shall exceed two thousand eight hundred (2,800) square feet.
 - b. All buildings: 0.5, provided that all buildings shall not be larger than three thousand eight hundred (3,800) square feet in the aggregate.

Sec. 16-4-70. - Additional provisions.

- (a) Open space required: Fifty percent (50%) of the lot area shall be open, unencumbered and free of any building or structure.
- (b) Minimum exterior wall height: seven (7) feet.
- (c) Minimum vertical distance from eave line of roof to the finished grade level: six (6) feet.
- (d) Slope of roof: a minimum of 4:12. A flat roof must contain a parapet on the side facing a street, and as otherwise required by the Board.
- (e) Stream margin review: all uses within twenty (20) feet of a designated water course shall meet the requirements of Section 16-11-10 of this Chapter.

City of Aspen

Sec. 26.104.100. - Definitions.

Floor area ratio (FAR). The total floor area of all structures on a lot divided by the lot area.

Floor area ratio, external. The total floor area of all structures compared to the total area of the building site.

Floor area ratio, internal. The floor area within a building devoted to a particular use, compared to the total floor area of the building.

Site coverage. The percentage of a site covered by buildings, measured at the exterior walls of a building at ground level. (See Supplementary Regulations - Section 26.575.020, Calculations and measurements.)

Sec. 26.710.040. - Medium-Density Residential (R-6).

(7) *Maximum* site coverage:

Gross Lot Area (Square Feet)	Maximum Site Coverage (%)
0—5,999	No limitation
6,000—9,000	50%, minus 1% for each additional 300 square feet of
	Gross Lot Area, to a maximum site coverage of 40%
9,000—12,000	40%, minus 1% for each additional 300 square feet of
	Gross Lot Area, to a maximum site coverage of 30%
12,000—18,000	30%, minus 1% for each additional 1,200 square feet of
	Gross Lot Area, to a maximum site coverage of 25
18,000+	25%

(11) Floor area ratio (applies to conforming and nonconforming lots of record):

Net Lot Area	Allowable Floor Area for Single-Family	Allowable Floor Area for Two Detached
(Square Feet)	Residence*	Dwellings or One Duplex*
0-3,000	80 square feet of floor area for each 100	90 square feet of floor area for each 100
	square fee in Net Lot Area, up to a	square feet in Net Lot Area, up to a
	maximum of 2,400 square feet of floor area	maximum of 2,700 square feet of floor area
3,000—6,000	2,400 square feet of floor area, plus 28	2,700 square feet of floor area, plus 30
	square feet of floor area for each additional	square feet of floor area for each additional
	100 square feet in Net Lot Area, up to a	100 square feet in Net Lot Area, up to a
	maximum of 3,240 square feet of floor area	maximum of 3,600 square feet of floor area
6,000—9,000	3,240 square feet of floor area, plus 14	3,600 square feet of floor area, plus 16
	square feet of floor area for each additional	square feet of floor area for each additional
	100 square feet in Net Lot Area, up to a	100 square feet in Net Lot Area, up to a
	maximum of 3,660 square feet of floor area	maximum of 4,080 square feet of floor area
9,000—	3,660 square feet of floor area, plus 6	4,080 square feet of floor area, plus 6
15,000	square feet of floor area for each additional	square feet of floor area for each additional
	100 square feet in Net Lot Area, up to a	100 square feet in Net Lot Area, up to a
	maximum of 4,020 square feet of floor area	maximum of 4,440 square feet of floor area

a. Single-Family, Duplex, or Two (2) Detached Dwellings.

Attachment C

Net Lot Area	Allowable Floor Area for Single-Family	Allowable Floor Area for Two Detached
(Square Feet)	Residence*	Dwellings or One Duplex*
15,000—	4,020 square feet of floor area, plus 5	4,440 square feet of floor area, plus 5
50,000	square feet of floor area for each additional	square feet of floor area for each additional
	100 square feet in Net Lot Area, up to a	100 square feet in Net Lot Area, up to a
	maximum of 5,770 square feet of floor area.	maximum of 6,190 square feet of floor area
50,000+	5,770 square feet of floor area, plus 2	6,190 square feet of floor area, plus 3
	square feet of floor area for each additional	square feet of floor area for each additional
	100 square feet in Net Lot Area	100 square feet in Net Lot Area

Sec. 26.710.080. - Low-Density Residential (R-30).

(10) Floor area ratio (applies to conforming and nonconforming lots of record):a. Single-Family and Duplex.

a. Sing	ie-Family and Duplex.	
Net Lot Area	Allowable Floor Area for Single-Family	Allowable Floor Area for Duplex
(Square Feet)	Residence	
0-3,000	80 square feet of floor area for each 100	90 square feet of floor area for each 100
	square feet in Net Lot Area, up to a	square feet in Net Lot Area, up to a
	maximum of 2,400 square feet of floor	maximum of 2,700 square feet of floor
	area	area
3,000—9,000	2,400 square feet of floor area, plus 28	2,700 square feet of floor area, plus 30
	square feet of floor area for each	square feet of floor area for each
	additional 100 square feet in Net Lot Area,	additional 100 square feet in Net Lot Area,
	up to a maximum of 4,080 square feet of	up to a maximum of 4,500 square feet of
	floor area	floor area
9,000—	4,080 square feet of floor area, plus 7	4,500 square feet of floor area, plus 7
15,000	square feet of floor area for each	square feet of floor area for each
	additional 100 square feet in Net Lot Area,	additional 100 square feet in Net Lot Area,
	up to a maximum of 4,500 square feet of	up to a maximum of 4,920 square feet of
	floor area	floor area
15,000—	4,500 square feet of floor area, plus 6	4,920 square feet of floor area, plus 6
50,000	square feet of floor area for each	square feet of floor area for each
	additional 100 square feet in Net Lot Area,	additional 100 square feet in Net Lot Area,
	up to a maximum of 6,600 square feet of	up to a maximum of 7,020 square feet of
	floor area	floor area
50,000+	6,600 square feet of floor area, plus 2	7,020 square feet of floor area, plus 3
	square feet of floor area for each	square feet of floor area for each
	additional 100 square feet in Net Lot Area	additional 100 square feet in Net Lot Area

Required Action	Maintenance Objective	Frequency of Action
Litter removal	Remove litter and debris to prevent gully development, enhance aesthetics, and prevent floatables from being washed offsite.	Routine – As needed by inspection.
Inspections	Inspect irrigation, turf grass density, flow distribution, gully development, and traces of pedestrian or vehicular traffic and request repairs as needed.	Annually after spring runoff and after each major storm (that is, larger than 1.0 inches in precipitation).
Turf replacement	To lower the turf below the surface of the adjacent pavement, use a level flow spreader, so that sheet flow is not blocked and will not cause water to back up onto the upstream pavement.	As needed when water padding becomes too high or too frequent a problem. The need for turf replacement will be higher if the pavement is sanded in winter to improve tire traction on ice. Otherwise, expect replacement once every 5 to 15 years.
Rock Mulch Strip	Remove litter and debris from rock mulch strip.	As needed. Expect to replace rock mulch once every 5 to 15 years depending on size and concentration of runoff area.

8.5.1.4 Pervious Pavement (PP)



Figure 8.26 Modular block permeable pavement in this small parking lot allows runoff from roof downspout, promoting infiltration and reducing the overall storage volumes for the site.



Figure 8.27 Modular block permeable pavement is used for an on-street parking lane on this residential street.

Description

Pervious Pavement (PP) covers a variety of stabilized surfaces that can be used for the movement and parking of vehicles (automobiles, trucks, construction equipment, etc.) and storage of materials and equipment. Pervious pavement differs from conventional pavement. It is designed to infiltrate stormwater runoff instead of shedding it off the *surface*. PP offers the advantage of decreasing the effective imperviousness of an urbanizing or redevelopment site, thereby reducing runoff and pollutant loads leaving the site.

Pervious pavement can be designed with and without underdrains. Whenever underdrains are used, infiltrated water will behave similarly to interflow and will surface at much reduced rates over extended periods of time. All types of pervious pavement help to return stormwater runoff hydrology to more closely resemble pre-developed conditions. However, the actual consumptive use of water falling onto

Chapter 8 - Water Quality

Rev 11/2014

the ground is considerably less than under pre-developed conditions and for grass lawns in urban areas. The designer needs to consult with a geotechnical engineer as to the suitability of each type of pervious pavement for the loads and traffic it will support and carry, and the geologic conditions the pavement will rest upon.

For modular block pavement and reinforced grass pavement, the WQCV can be provided by providing adequate aggregate depth to provide the storage required for the WQCV in the pore volume beneath the pavement. Because of the very limited net open area of a cobblestone block pavement, it is generally not feasible to attain enough infiltration to provide WQCV storage beneath the pavement. All of the types of pervious pavement discussed reduce effective imperviousness.

The following sections describe three types of pervious pavement that may be used in Aspen. Porous concrete and asphalt are not allowed in Aspen, largely because of experience with failures of these types of pervious pavements in other parts of Colorado.

Modular Block Pavement (MBP)

This pavement consists of concrete block units with open surface voids laid on a gravel sub-grade with open surface voids. These voids occupy at least 20% of the total surface area that are filled with sand (ASTM C-33 sand fine concrete aggregate or mortar sand) or sandy loam turf that has at least 50% sand by weight in its volume. However, unless the pavement will be watered regularly (i.e., using a sprinkler system) to keep the vegetation viable, concrete sand infill is the recommended material.

Modular block pavement may be sloped or flat. Modular block pavement has been in use in United States since the mid-1970s. Although field data that quantify their long-term performance are somewhat limited, the data collected locally, and at other part of United States, and the episodic reports from Canada, Australia, Asia, and Europe, indicate that properly installed modular block pavements are reliable and have experienced few problems under a wide range of climates.

Cobblestone Block Pavement (CBP)

This pavement consists of concrete block units replicating the appearance of cobblestone that create open voids by beveling the corners of each block and/or wider spacing between the blocks. One of the commercial "cobblestone" products that meets this description is Eco-stone[™] made by Pavestone Co[®]. These "cobblestones" are laid on a gravel sub-grade. The surface area has voids that occupy at least 8% of the total surface area and are filled with sand or stone per the manufacturer recommendation and compliance with PICP standards.

Cobblestone block pavement may also be laid on a sloped or on a flat grade. This type of pavement has been in use since the 1980s. Field data that quantify the long-term performance of cobblestone block pavement are limited; however, the data and the episodic reports from other parts of the United States, Canada, Australia, Asia and Europe indicate that when properly installed, Cobblestone block pavement is reliable and has experienced few problems under a wide range of climates.

Reinforced Grass Pavement (RGP)

This is a stabilized grass surface intended for use in parking lots that experience intermittent use. Past experience has shown that RGP may not be suitable for heavy vehicles, especially those associated with critical services such as fire trucks. It has been shown to function well under wet-weather conditions and, when properly designed and installed, it will infiltrate rainwater at rates that equal or exceed the infiltration rates of NRCS Hydrologic Soil Group Type B soils. The grasses need to be mowed on a cycle that depends on the grass types and whether or not irrigation is used. Use of irrigated grasses should be considered for more actively-used parking lots.

Another type of reinforced grass pavement design is based on the Federal Aviation Administration's (FAA) recommendations for *Aggregate Turf* originally developed for use with light aircraft that do not exceed a gross load of 12,500 pounds. This design offers a very stable surface and has a relatively simple cross-section. When it is installed using good site preparation, compaction and the specified gravel-topsoil mix, it has functioned well on small general aviation airports for many years.

General Application

Modular Block and Cobblestone Block Pavement

Modular block pavements and cobblestone block pavements are best suited for use in low vehicle movement zones, such as roadway shoulders, driveways, parking strips and parking lots. Vehicle movement (i.e., not parking) lanes that lead up to one of these types of porous pavement parking pads may be better served, but not always, by solid asphalt or concrete pavement. The following are potential applications for these two types of porous pavement:

- Low vehicle movement zones
- Crossover/emergency stopping/parking lanes
- Residential street parking lanes
- Private and public building driveways
- Maintenance roads and trails
- Roadway shoulders and parking lanes
- Emergency vehicle and fire access lanes
- Low vehicle movement commercial and industrial parking lots, including driveways
- Commercial/retail parking lots
- Equipment storage areas

Reinforced Grass Pavement

Reinforced grass pavement is best used in overflow parking zones or in parking lots that experience occasional uses (e.g., once-a-week-used portions of church and football stadium parking lots), roadway shoulders, residential street parking lanes, and emergency vehicle access lanes. Vehicle movement lanes (i.e., not parking pads themselves) that lead up to one of these reinforced grass pavement surfaces need to be served by solid asphalt or concrete pavement. The following are potential applications for this type of porous pavement:

- Crossover/emergency stopping/parking lanes
- Roadway shoulders and parking lanes
- Maintenance roads and trails
- Commercial/retail parking lot overflow areas
- Church parking areas more remote from buildings
- Residential parking areas with light use.

Advantages/Disadvantages

Aside from the potential for high particulate pollutant removal and the removal of other constituents similar to what a sand filter would provide, pervious pavements can dramatically reduce the surface runoff from most rainstorms and snowmelt events and virtually eliminate surface runoff from smaller storms. These reductions in runoff volumes translate directly to proportional reductions in pollutant loads leaving the site. Its use can result in stormwater surface runoff conditions that approximate the predevelopment site conditions, something that can be used in selecting surface retention and infiltration parameters that are close to pre-developed conditions when using stormwater runoff hydrologic models. Even when underdrains are used, the response time of runoff is significantly delayed and approaches the characteristics of what hydrologists call *interflow* (flow that enters the subsurface via infiltration and then reemerges to the surface with a time delay). As a result, drainage and downstream flooding problems can be significantly reduced. These can translate in savings since the downstream facilities needed to address site runoff, such as *WQCV*, detention volumes and conveyance facilities can be smaller. For modular block and reinforced grass pavements, the WQCV can actually be provided in the aggregate pore space beneath the pavement surface. If aggregate is deep enough, flood control benefits (i.e. minor storm) may also be achieved.

Another advantage that the use of pervious pavement offers is that creative selection by land planners and landscape architects of pervious pavement materials, patterns and colors can also provide aesthetic enhancements to what often are very mundane surfaces. Some types of pervious pavements may be snowmelted.

The primary disadvantage of pervious pavements is that they cost more to install and maintain than conventional concrete or asphalt pavement. These added costs can be somewhat offset by the cost savings in the downsizing of on-site and downstream drainage systems and facilities such as detention basins, numbers of inlets, storm sewers and channels. Other disadvantages of pervious pavements can include uneven driving surfaces and potential inconvenience of walking on these types of surfaces in high heel shoes. Pervious pavements are not compatible with sanding activities. Snow plowing has the potential to damage many types of pervious pavements, and special plowing techniques may be necessary.

Physical Site Suitability

Pervious pavements can be installed even when free draining sub-soils are not present at the site by providing them with underdrains. An underdrain insures that the gravel sub-grade is drained when the sub-soils or site conditions do not allow infiltration.

Not all types of pervious pavements may be suitable for heavy equipment/fire lane access. Applications of pervious pavements that are anticipated to experience heavy loads should be evaluated to assure that the pervious pavement is compatible with the intended use.

In the case where the installation is located on top of expansive soils, the installation of an impermeable liner along with underdrains is strongly recommended. The liner is needed to prevent wetting the underlying expansive clays. In addition, pervious pavements installed over expansive soils should not be located adjacent to structure foundations in order to reduce the potential for damages to structures.

An impermeable liner with underdrains shall be utilized anywhere pavers are installed immediately adjacent to a structure. The impermeable liner shall be installed along the foundation of the structure and extend a minimum of 10' away from the structure walls. Liners and underdrains shall direct runoff away from the building foundation.

A continuous impermeable liner with underdrains shall also be used whenever commercial or industrial sites may have activities, or processes, that could result in the storage and/or handling of toxic or caustic chemicals, fertilizers, petroleum products, fats, or greases. An impermeable liner has to be designed to prevent groundwater and soil contamination should such products or materials come into contact with stormwater and could infiltrate into the ground. If the site is expected to have contaminants mentioned above, the underdrains shall be directed or connected to runoff capture and treatment facilities.

Construction Considerations

The construction phase and staging is critical to producing PPS that are structurally sound and have good rates of stormwater infiltration into surface of the pavement and into the underlying sub-grade or underdrains. It is important to understand that permeable pavement systems are examples of high performance infrastructure that have two functions: a structural pavement and a stormwater management BMP. It is not sufficient to use the same construction practices for PPS as for conventional, non-porous pavement. Issues of concern that can affect the eventual performance of the PPS include but are not limited to the following:

- Excessive compaction of the sub-grade and heavy equipment traffic over these surfaces.
- Sediment loading from adjacent construction areas. Pervious pavements should be constructed as late in the phasing of a project as feasible, and if there are adjacent disturbed areas redundant erosion and sediment control measures should be provided (i.e. silt fence and wattles).
- Proper gradation and installation of the fracture-faced aggregate and sand materials at

various levels of the PPS cross section.

- Proper use and installation of geotextiles and geogrids.
- Impermeable geomembrane (liner) installation, seaming and liner penetrations.
- Underdrain installation, including providing adequate slope and avoiding damage to the underdrain pipe.
- Edge restraints for permeable interlocking concrete pavers and concrete grid pavement.
- Achieving uniform gradation of aggregate and soils for reinforced turf type of pavements.

Pollutant Removal and Effective Imperviousness

Specific field data on the reductions of pollutant concentrations by various pervious pavements are very limited as of 2009. However, reductions in the concentrations of total suspended solids and associated constituents, such as metals, oils and greases appear to be relatively high. At the same time, the fact that all pervious pavements significantly reduce the average annual runoff volume makes them very effective in reducing pollutant loads reaching the receiving waters. Filtration of stormwater runoff through the sand and gravel of the modular block voids and entrapment in the gravel media are the primary removal mechanisms of pollutants. Adsorption and ion exchange that occur as stormwater travels through the underlying soils before the stormwater reaches groundwater are secondary removal mechanisms.

When using pervious pavements, the site designer can take advantage of the fact that it reduces the effective surface runoff rates and volumes. Based on field testing and observations of modular block pavement by the Denver Urban Drainage and Flood Control District at a test site in Lakewood and other information gleaned from literature, interim recommendations for reducing *total site imperviousness* to *effective imperviousness* were developed. Because this represents the best currently available data, these guidelines have been adopted by Aspen. The use of these interim guidelines is recommended when planning stormwater quality and drainage facilities for new land development and redevelopment sites. These guidelines are summarized in **Figure 8.28** and are called "interim" because they are based, in part, on limited amounts of short-term data and best professional judgment that considered the type of pavement, its long term maintenance needs, its sealing potential and its loss of void space volume over time.



Figure 8.28 Recommended Effective Percent Imperviousness for PPS (Based on the Ratio of the Impervious Area Tributary to Porous Pavement)

The following notes apply to using Figure 8.28:

- 1. It is recommended that impervious areas be made to drain to pervious pavements where possible. Figure 8.28 shows the effective imperviousness values used for all paved area (impervious and pervious) in situations where impervious areas drain to pervious pavements. To calculate the ratio shown on the x-axis, divide the impervious area that drains to pervious pavement by the area that is pervious. For example if 500 ft² of impervious area flows uniformly over 500 ft² of pervious pavement the ratio in Figure 8.28 is 1.0. If modular block pavement is used without underdrains, the effective imperviousness for a ratio of impervious area to pervious pavement area of 1.0 would be approximately 25 percent according to Figure 8.28. The effective imperviousness, 25%, would apply to the entire 1000 ft².
- 2. Use no more than two units of impervious area for each unit of PP. All impervious areas exceeding this ratio shall be treated as 100% impervious in hydrologic calculations, including runoff volumes. For example, the maximum amount of impervious area that could drain to a 500 ft² pervious pavement area would be 1000 ft². Any imperviousness beyond that should not be directed to the pervious pavement area or, if it must be directed to the pervious pavement area, it should be treated as 100

percent impervious area in all calculations.

3. Whenever impervious areas cannot be made to run onto the pervious areas in a uniform sheet-flow fashion, identify individual areas and what ratios apply to each and then composite them treating each as a separate area.

Cold Weather Considerations

PPS have been applied in cold weather climates including the northeast, northern states in the Mid-West and even Canada. In cold climates PPS have an advantage of quicker melting of accumulated snow due to circulation of air beneath the surface. Potential challenges in cold climates include plugging from accumulated sediment (sanding) and freeze-thaw deterioration. These disadvantages can be minimized in the following ways:

- PPS may not be used in areas that are sanded or in locations where adjacent tributary drainage areas are sanded.
- Signage should be used for PPS to caution against sanding.
- Achieving a well-drained sub-base is critical to avoid problems with freezing. Studies in the northeast have shown that PPS with at least 12 inches of sub-base material are more resistant to freeze-thaw damage. It may be feasible to install a snowmelt system beneath the surface of cobblestone block or modular block pavements; however, care should be taken to assure that the snowmelt tubing does not interfere with infiltration.

Design Considerations

Design criteria for pervious pavements vary depending on the wearing course. Volume 3 of the UDFCD Urban Storm Drainage Criteria Manual provides extensive guidance for all of the types of pervious pavements in this Manual. Because of the length of the UDFCD guidance (more than 80 pages) and the desire to keep the Aspen Manual streamlined, the following is provided as general guidance and criteria for pervious pavements. The designer should refer to the Denver Urban Storm Drainage Criteria Manual for detailed guidance, figures, etc. All pervious pavement designs in the City of Aspen should be checked against the most current version of Volume 3 of the UDFCD guidance since pervious pavement criteria are currently evolving.

Modular Block and Cobblestone Block Pavements

Figure 8.29 below shows one type of locally available modular block pervious pavement. There are other block patterns that may be used, provided they have at least 20 percent (\geq 40% preferred) of their surface area as open annular spaces. This is the minimum open surface area to be considered as modular block pavement.



Figure 8.29 Modular Block Pavement

Figure 8.30 is of a typical cobble block pervious pavement available locally. It has to have at least eight percent (8%) of its surface area as open annular spaces to qualify as cobblestone block pervious



pavement.

Figure 8.30 Cobblestone Block Pavement

Figure 8.31 below shows typical cross-sections for modular block and cobblestone block pervious pavements.



Figure 8.31 Typical Pervious Pavement Cross Section



Figure 8.32 Membrane Liner/Concrete Connection Detail

Sieve Size	Mass Percent Passing Square Mesh Sieves
19.0 mm (3/4")	100
4.75 mm (No. 4)	60-100
300 µm (No. 50)	10-30
150 µm (No. 100)	0-10
75 μm (No. 200)	0-3

Table PPS-1. Gradation Specifications for Class C Filter Material (Source: CDOT Table 703-7)

Table PPS-2	Dimensions for Slotted Pipe
-------------	-----------------------------

Pipe Diameter	Slot Length ¹	Maximum Slot Width	Slot Centers ¹	Open Area ¹ (per foot)
4"	1-1/16"	0.032"	0.413"	1.90 in ²
6"	1-3/8"	0.032"	0.516"	1.98 in ²

¹ Some variation in these values is acceptable and is expected from various pipe manufacturers. Be aware that both increased slot length and decreased slot centers will be beneficial to hydraulics but detrimental to the structure of the pipe.

Table PPS-3.	Physical Rec	uirements for	Separator Fabric ¹
		10	

	Class B			
Property	Elongation <50% ²	Elongation >50% ²	Test Method	
Grab Strength, N (lbs)	800 (180)	510 (115)	ASTM D 4632	
Puncture Resistance, N (lbs)	310 (70)	180 (40)	ASTM D 4833	
Trapezoidal Tear Strength, N (lbs)	310 (70)	180 (40)	ASTM D 4533	
Apparent Opening Size, mm (US Sieve Size)	AOS < 33 mm (US Sieve Size No. 50)		ASTM D 4751	
Permittivity, sec ⁻¹	0.02 default value, Must also be greater than that of soil		ASTM D 4491	
Permeability, cm/sec	K fabric > k soil for all classes		ASTM D 4491	
Ultraviolet Degradation at 500 hours	50% strength retained for all classes		ASTM D 4355	

Table PPS-4. Physical Requirements for Geomembrane

Property	Thickness 0.76 mm (30 mil)	Test Method
Thickness, % Tolerance	±5	ASTM D 1593
Tensile Strength, kN/m (lbs/in) width	12.25 (70)	ASTM D 882, Method B
Modulus at 100% Elongation, kN/m (lbs/in)	5.25 (30)	ASTM D 882, Method B
Ultimate Elongation, %	350	ASTM D 882, Method A

Tear Resistance, N (lbs)	38 (8.5)	ASTM D 1004
Low Temperature Impact, °C (°F)	-29 (-20)	ASTM D 1790
Volatile loss, % max.	0.7	ASTM D 1203, Method A
Pinholes, No. Per 8 m2 (No. per 10 sq. yds.) max.	1	N/A
Bonded Seam Strength, % of tensile strength	80	N/A

Reinforced Grass Pavement

Figure 8.33 shows typical cross-sections and details for one type of reinforced grass pavement based on a product called Grasspave2[™] by Invisible Structures, Inc. Other products that achieve the same end goal and structural stability are also available. Regardless of which brand of product is used, the manufacturer's instructions should **be closely followed except as called for differently in this Chapter.**

The typical section of an RGP design based on the Federal Aviation Administration's (FAA) recommendations for *Aggregate Turf* is illustrated in **Figure 8.34**. The thickness is designed same as for asphalt pavement; however the design includes extra base course thickness for compensate in the carrying capacity of asphalt pavement sections.

When designing and installing *Aggregate Turf*, it is critical that the sub-grade be adequately compacted, especially when the gravel and pavement is being placed on fill. Additional guidance is provided in Volume 3 of the Denver UDFCD Urban Storm Drainage Criteria Manual



Figure 8.33 Typical Reinforced Grass Pervious Pavement Cross Section



Figure 8.34 Typical Aggregate Turf Reinforced Grass Pervious Pavement Cross Section

Design Procedure and Criteria

Modular Block Pervious Pavement

1.	Select Blocks	Select MBP that have 20% or more (40% preferred) of the surface area open. Follow Manufacturer's installation instructions, except that <i>Porous Pavement</i> <i>Infill</i> and <i>Base Course</i> materials and dimensions specified in this section shall be strictly adhered to.
2.	Infill materials and Leveling Course	The MBP openings shall be filled with ASTM C-33 graded sand or very sandy loam and shall be placed on a one-inch thick leveling course of C-33 sand.
3.	Base Course	The <i>Base Course</i> shall be AASHTO No. 3 coarse aggregate; all fractured surfaces. For volume calculations assume 30 percent of total volume to be open pore space. Unless an underdrain is provided, at least 6-inches of the sub-grade underlying the <i>Base Course</i> shall be sandy and gravely material with no more than 10% clay fraction.
4.	Impermeable Liner Under the <i>Base Course</i>	When expansive or NRCS Type D soils are present, or potential for groundwater contamination exists, install an impermeable 30 mil thick, or heavier, liner on the bottom and sides of the basin under the pavement.

5. Membrane Installation Place by rolling membrane parallel to the contours starting at the most downstream part of the pavement. Provide a minimum of 18-inches of overlap between adjacent sheets.

Bring up impermeable membrane to the top of perimeter walls. Attach membrane to perimeter walls with roofing tar or other adhesive or concrete anchors. Provide sufficient slack in the membranes to prevent stretching them when sand and/or rock is placed. Seal all joints of impermeable membrane to be totally leak free.

- 6. Perimeter Wall Recommend that a concrete perimeter wall be installed to confine the edges of the MBP block areas.
- 7. Contained Cells Lateral Flow Barriers Install lateral-flow cut-off barriers using 30 mil, or thicker, PE or PVC membrane liner or concrete walls installed parallel to the contours (i.e., normal to the flow) to prevent flow of water downstream and then surfacing at the toe of the PP installation. Distance (L_{MAX}) between these cut-off barriers shall not exceed:

$$L_{MAX} = \frac{D}{1.5 \bullet S_O}$$

- in which, L_{MAX} = Maximum distance between cut off membrane normal to the flow (ft.),
 - S_O = Slope of the base course (ft/ft),

D = Depth of gravel Base Course (ft).

- 8. Sub-drain System When the MBP is located on NRCS Type D soils, when the Type B or C soil sub-base is to be compacted for structural reasons, or when an impermeable membrane liner is needed, install a sub-drain system using Schedule 40 HDPE pipe. Locate each perforated pipe just upstream of the lateral-flow cut-off barrier. Do not exceed 20-foot spacing. Use a control orifice sized to drain the pore volume to empty each cell in 6-12 hours.
- 9. Design Area Ratio and Effective Imperviousness
 The design area ratio shall not exceed 2.0 (ratio = contributing impervious area divided by porous pavement area). In certain cases where the land use of the contributing drainage basin is known to carry low sediment levels, a slightly higher design area ratio may be permitted. The interim recommendations for the "Effective Imperviousness" are given in Figure 8.28 and may be used when sizing detention basins, WQCV and stormwater conveyance systems.

Cobblestone Block Pervious Pavement

- 1. Select Blocks Select CBP blocks that have 8% or more of the surface area open. Follow Manufacturer's installation instructions, except that *Porous Pavement Infill* and *Base Course* materials and dimensions specified in this section shall be strictly adhered to.
- 2. Infill materials and Leveling Course Shall be placed on a one-inch thick leveling course of same No. 8 aggregate.
- 3. Base Course The Base Course shall be AASHTO No. 67 coarse aggregate; all fractured surfaces. For volume calculations assume 30 percent of total volume to be open pore space.

- 4. Impermeable Liner Under *Bottom Sand Layer* When expansive or NRCS Type D soils are present, or potential for groundwater contamination exists, install an impermeable 30 mil thick, or heavier, liner on the bottom and sides of the basin under the pavement.
- 5. Membrane Installation
 Place by rolling membrane parallel to the contours starting at the most downstream part of the pavement. Provide a minimum of 18-inches of overlap between adjacent sheets.
 Bring up impermeable membrane to the top of perimeter walls. Attach membrane and fabric to perimeter walls with roofing tar or other adhesive or concrete anchors. Provide sufficient slack in the membranes to prevent stretching them when sand and/or rock is placed. Seal all joints of impermeable membrane to be totally leak free.
- 6. Perimeter Wall Recommend that a concrete perimeter wall be installed to confine the edges of the MBP or CBP block areas.
- 7. Contained Cells Lateral Flow Barriers Install lateral-flow cut-off barriers using 30 mil, or thicker, PE or PVC membrane liner or concrete walls installed parallel to the contours (i.e., normal to the flow) to prevent flow of water downstream and then surfacing at the toe of the PP installation. Distance (L_{MAX}) between these cut-off barriers shall not exceed:

$$L_{MAX} = \frac{D}{1.5 \bullet S_O}$$

in which, L_{MAX} = Maximum distance between cut off membrane normal to the flow (ft.),

 S_O = Slope of the base course (ft/ft),

D = Depth of gravel Base Course (ft).

- 8. Sub-drain System When the CBP is located on NRCS Type D soils, when the Type B or C soil sub-base is to be compacted for structural reasons, or when an impermeable membrane liner is needed, install a sub-drain system using Schedule 40 HDPE pipe. Locate each perforated pipe just upstream of the lateral-flow cut-off barrier. Do not exceed 20-foot spacing. Use a control orifice sized to drain the pore volume of empty each cell in 6-12 hours
- 9. Design Area Ratio and Effective Imperviousness
 The design area ratio shall not exceed 2.0 (ratio = contributing impervious area divide by porous pavement area). In certain cases where the land use of the contributing drainage basin is known to carry low sediment levels, a slightly higher design area ratio may be permitted. The interim recommendations for the "Effective Imperviousness" are given in Figure 8.28 and may be used when sizing detention basins, WQCV and stormwater conveyance systems.

Reinforced Grass Pavement

- 1. Select Type of RGP will be used. The two types that are described in this RGP to be Used *Manual* are *Reinforced Grass*, as illustrated in **Figure 8.33** and *Aggregate Turf*, as illustrated in **Figure 8.34**.
- 2. Base Course for Provide the required Base Course of AASHTO No. 67 (CDOT Section 703) coarse aggregate for the *Reinforced Grass* type of RGP as called for in **Figure**

Reinforced Grass **8.33**. The aggregate shall have all fractured surfaces. No Base Course is required for *Aggregate Turf.*

- 3. Impermeable Membrane Under the Base Course impermeable 30 mil thick, or heavier, liner on the bottom and sides of the basin under the pavement.
- 4. Membrane Installation
 Place by rolling impermeable membrane parallel to the contours starting at the most downstream part of the pavement. Provide a minimum of 18-inches of overlap between adjacent sheets.
 Bring up impermeable membrane to the top of perimeter walls. Attach membrane to perimeter walls with roofing tar or other adhesive or concrete anchors. Provide sufficient slack in the membranes to prevent stretching them when sand and/or rock is placed. Seal all joints of impermeable membrane to be totally leak free.
- 5. Design Area Ratio and Effective Imperviousness Ratio and Effective Imperviousness Ratio and Effective Imperviousness Ratio and Effective Resign area ratio shall not exceed 2.0 (ratio = contributing impervious area divide by porous pavement area). In certain cases where the land use of the contributing drainage basin is known to carry low sediment levels, a slightly higher design area ratio may be permitted. The interim recommendations for the "Effective Imperviousness" are given in **Figure 8.28** and may be used when sizing detention basins, *WQCV* and stormwater conveyance systems.

Construction/Installation

The construction phase is very critical in having a successful pervious pavement installation. Successful PP installations are structurally sound and have good rates of stormwater infiltration into surface of the pavement and into the underlying sub-base or underdrains. It is not sufficient to use the same construction practices for pervious pavement as for conventional, non-porous pavement. Issues of concern are excessive compaction of the sub-grade and heavy equipment traffic over these surfaces, proper gradation and installation of the gravel and sand materials at various levels of the pervious pavement section, proper use and installation of geotextile and impermeable liner membranes, edge restraints for modular block types of pervious pavements, achieving uniform gradation of gravels and soils for reinforced turf type of pavements and other issues that can affect the eventual performance of the pervious pavement.

Sub-grade

When the native soils in the sub-grade are suitable for infiltration (i.e., NRCS Hydrologic Group A, B and C), it is important maintain their infiltration capacities as much as possible. When the sub-base is deliberately compacted to provide greater pavement stability or is inadvertently compacted by construction equipment traffic over them, infiltration capacity will be significantly reduced. To prevent the latter, it is crucial that heavy construction equipment, especially rubber-tired machinery, be kept off the sub-grade. This will require the use of light track equipment, delivery of gravels via conveyors, delivery of concrete via extended chutes (not conveyors) or lift pour buckets, and stopping all work when the sub-grade is wet or thawing.

When compaction of the sub-grade is needed for structural support of the pavement that will carry or park vehicular traffic, an underdrain system may be needed to compensate for the loss of infiltration capacity. This will be the case if the sub-grade soils have significant fractions of silt or clay and are not granular in nature (e.g., not Type A or B).

Compaction of the sub-grade is recommended for sites where the pavement will be placed on top of fill. Unless the fill is composed of predominantly granular materials, the engineer needs to plan for underdrains for all PP types except *Aggregate Turf*, which essentially duplicates natural grass surfaces.

Preventing Clogging from Excess Sediment

It is common to install pavement before all site work such as landscaping and finishing of buildings is completed. As a result, sediment loads from construction and landscaping activities after the pervious pavement is installed can be very high. It crucial to protect all surfaces of the pervious pavement from runoff and sediment deposits until all construction activities are completed and the areas tributary to the pervious pavement are fully stabilized.

Regardless of the type of pervious pavement being used, the highest priority during construction has to be to prevent sediment from entering the *base course* and the surface of pervious pavement. The following practices will help to keep the pervious pavement form being clogged during these construction periods:

- Keep muddy equipment and materials away from the pervious pavement area
- Install silt fences and temporary swales to divert water away from the pervious pavement area
- Cover the surfaces with heavy flexible impermeable membrane whenever construction activities threaten to deposit sediment onto the pervious pavement area

Base Course Each lift shall not exceed 6-inches and shall be compacted by using a 10-ton, or heavier, vibrating steel drum roller. Make at least four passes with the roller, with the initial passes made while vibrating the roller and the final one to two passes without vibration.

If the design calls for an upper layer of the *Base Course*, install it using the same layer thicknesses and compaction requirements described above. Follow-up the installation of the uppermost layer of the *Base Course* by installing the specified geotextile fabric on top of it. The leveling course or porous pavement, as required by the plans, is then applied over the uppermost geotextile fabric.

When a sand leveling course is called for in the plans, compact it using the drum roller before laying the paver units on top of it. If the top of the *Base Course*, sand filter layer or the leveling course layers are disturbed and not uniform, they shall be re-leveled and re-compacted. The top of each layer below the leveling course shall uniform and will not deviate more than $\pm 1/2$ -inch when a 10 foot straight edge is laid on its surface. The top of the leveling course shall not deviate more than $\pm 3/8$ -inch in 10 feet.

Modular Block and Cobblestone Block Installation

Place the paver blocks tightly against each other on top of the compacted sand leveling course. Before compacting the pavers into place, cut and place paver units to tightly fill spaces between adjacent pavers and the restraining wall at the edges.

Compact the installed paver blocks initially using a plate compactor that exerts a minimum of $5,000 \text{ lbs/ft}^2$ when using 4-inch thick pavers and a minimum of $6,800 \text{ lbs/ft}^2$ when using pavers thicker than 4-inches. After initial compaction, fill the paver openings and joints to the top with ASTM C-33 sand and compact again. If the sand or gravel infill drops more than 1/8 inch below the top of the paver block, add more sand and re-compact. Remove excess sand or gravel by broom sweeping the surfaces. Paver installation can be done by hand or using mechanical equipment specially designed for this type of work. If the latter is used, follow the requirements and procedures provided in the ICPT (1998) *Technical Specification 11 – Mechanized Installation of Interlocking Concrete Pavements*.

Reinforced Grass Pavement Installation

For the *Reinforced Grass* type of installations adhere strictly to the recommendations of the manufacturer for the installation of this pavement.

Maintenance

 Tables 8.8 through 8.10 outline maintenance recommendations for pervious pavements.

Required Action	Maintenance Objective and Action	Frequency of Action
Debris and litter removal	Accumulated material should be removed as a source control measure.	Routine – As needed.
Sod maintenance	If sandy loam turf is used, provide lawn care, irrigation system, and inlay depth maintenance as needed.	Routine – As dictated by inspection.
Inspection	Inspect representative areas of surface filter sand or sandy loam turf for accumulation of sediment or poor infiltration.	Routine and during a storm event to ensure that water is not bypassing these surfaces on frequent basis by not infiltrating into the pavement.
Rehabilitating sand infill surface	To remove fine sediment from the top of the sand and restore its infiltrating capacity.	Routine – Sweep the surface annually and, if need be, replace lost sand infill to bring its surface to be ¼ below the adjacent blocks.
Replacement of Surface Filter Layer	Remove, dispose, and replace surface filter media by pulling out turf plugs or vacuuming out sand media from the blocks. Replace with fresh ASTM C-33 sand or sandy loam turf plugs, as appropriate.	Non-routine – When it becomes evident that runoff does not rapidly infiltrate into the surface. May be as often as every two year or as little as every 5 to 10 years.
Replace modular block pavement	Restore the pavement surface. Remove and replace the modular pavement blocks, the sand leveling course under the blocks and the infill media when the pavement Surface shows significant deterioration.	Non-routine – When it becomes evident that the modular blocks have deteriorated significantly. Expect replacement every 10 to 15 years dependent on use and traffic.

Table 8.8 Maintenance Recommendations for Modular Block Pervious Pavement

Table 8.9 Maintenance Recommendations for Cobblestone Block Pervious Pavement

Required Action	Maintenance Objective and Action	Frequency of Action
Debris and litter removal	Accumulated material should be removed as a source control measure.	Routine – As needed.
Inspection	Inspect representative areas of surface filter fine gravel infill for accumulation of sediment and poor infiltration.	Routine and during a storm events to ensure that stormwater is infiltrating and not bypassing the pavement surface on frequent basis.
Rehabilitating fine grave infill surface	To remove fine sediment and trash accumulations from the top of the gravel and restore its infiltrating capacity.	Routine – Vacuum sweep the as indicated by inspection and if need be replace lost or clogged gravel infill to bring its surface to be ¼ below the adjacent blocks.
Replace cobble block pavement	Restore the pavement surface. Remove and replace the cobble pavement blocks, the leveling course under the blocks, the infill media, gravel base and geotextile materials when the pavement surface shows	Non-routine – When it becomes evident that the modular blocks have deteriorated significantly and the underlying gravels have accumulated much sediment and/or when the geotextile fabrics underneath it are clogged. Expect replacement every 10

significant deterioration or when the pavement no longer infiltrates stormwater at rates that are acceptable.	to 25 years dependent on use and traffic.
--	---

Table 8.10 Maintenance Recommendations for Reinforced Grass Pervious Pavement

Required Action	Maintenance Objective and Action	Frequency of Action
Debris and litter removal	Accumulated material should be removed as a source control measure.	Routine – As needed.
Inspection	Inspect all surface areas for healthy grass growth, areas of dead grass, tire rutting, surface erosion, accumulation of sediment and slow infiltration.	Routine and during a storm events to ensure that water is infiltrating and not bypassing the pavement's surface on frequent basis.
Repair sod surface	To repair worn out or damaged sod with sod grown in very sandy loam type soils.	Routine – As needed. Repairs may be needed as often as every year.
Repair and replacement of sod	Major repair of damaged and aged sod. Remove and replace, as needed the sod layer to maintain a healthy vegetative cover or when sod layer builds up significant amount of silt (i.e., >1.5 inches) above the originally installed surface layer.	Non-routine – When it becomes evident that many parts of the sod has deteriorated or when runoff does not rapidly infiltrate into the surface. Major replacement of sod may be as little as every 10 to 25 years.

8.5.1.5 Green Roofs (GR)



Figures 8.35 and 8.36 Two local examples of green roofs are pictured above. These roofs have a significant impact on stormwater runoff and are aesthetically pleasing while providing extra insulation for homes. A wide variety of plants can be used on green roofs. These plants help reduce the impervious area of roofs to nearly zero in some cases.



MINUTES

CARBONDALE PLANNING AND ZONING COMMISSION Thursday July 13, 2023

Commissioners Present:

Jay Engstrom, Chair Kim Magee Jeff Davlyn Kade Gianinetti Cindy Suplizio (Alternate)

Staff Present:

Jared Barnes, Planning Director Kelley Amdur, Planner Kae McDonald, Planning Technician

Commissioners Absent:

Nicholas DiFrank, Vice-Chair Nick Miscione Jerrett Mork Jess Robision (Alternate)

The meeting was called to order at 7:03 p.m. by Jay Engstrom.

June 8, 2023 Minutes:

Kade *moved* to approve the June 22, 2023, meeting minutes. Cindy *seconded the motion*, and it was *approved with Jeff abstaining*.

Yes: Jay, Kim, Kade, Cindy No: none Abstaining: Jeff

Public Comment – Persons Present Not on the Agenda

There were no persons present to speak on a non-agenda item.

"Clean Up" Code Amendments Worksession

Kelley explained that there was a table included as part of the packet that lists items Staff is proposing as "Clean Up" to address typographical and minor errors in the Unified Development Code. She noted that most of the errors relate to the same table. Kelley stated that Staff recommends that the Commission make a motion to initiate an Amendment and schedule a public hearing.

Jeff commented that the changes don't seem substantive.

Jared explained that most of the corrections have to do with a cross reference that is referenced incorrectly in each table. He noted that these errors are straightforward and not controversial and would be a good initial public hearing.

1 | Page

Jay noted that the reference to Section 5.1.3.F in the table should read "Correct 'Chapter 19.10' to read 'Chapter 16-1-20'."

Motion Passed: Kade *moved* to initiate an Amendment to the Unified Development Code pursuant to Section 2.4.1 of the UDC for the purpose of reviewing proposed "Clean Up" UDC Text Amendments and direct Staff to schedule a public hearing on August 10, 2023. Jeff *seconded the motion,* and it was *unanimously approved*.

Yes: Jay, Cindy, Kade, Jeff, and Kim No: None

Jared noted that the public hearing will be noticed for August 10th.

Impervious Lot Coverage Worksession

Jared explained that his approach to code amendments is to conduct work sessions to have informal conversations to understand the issues prior to a public hearing because it helps the public stay engaged in the process without having to endure iterative meetings. He noted that as he and Kelley are learning the UDC and how to apply it they have found that the impervious lot coverage section is clunky in how it is written and how it is applied, and it leaves a lot of room for interpretation at all levels. He added that it is difficult for everyone to read it and understand how to comply with it. Jared pointed out that that the intent of the UDC is to present requirements in a straightforward manner, unfortunately, by the time a project is reviewed for zoning compliance the building permit has already been applied for, and a lot of invested time and money can be wasted if it doesn't meet the impervious lot coverage requirements. Jared pointed out that while much of tonight's conversation will be centered on Section 3.8.5, he also included other sections of the UDC where impervious lot coverage is mentioned such as Tables 3.7.2 and 3.7.3, landscaping, stormwater run-off, and definitions of driveways and parking lots. Jared identified specific challenges that arise when completing zoning compliance code checks:

- UDC Section 3.8.5.A states that the principal building is considered part of the impervious area but doesn't well define how that measurement is made. One question staff has is should this area be inclusive of roof overhangs or only the area within the outside walls? Jared pointed out that if this level of ambiguity can be removed, it would be a beneficial code clean up.
- UDC Sections 3.8.5.E and UDC 3.8.5.F grant two exemptions one for decks and/or patios and the other for pervious pavers – and these two exemptions comprise the bulk of the confusion because the exemptions are applied for differently and the design elements that are being highlighted for the exemptions don't always qualify. Jared noted that Staff has developed an Impervious Lot Coverage Sample Data Table and an accompanying plan sheet and while that has helped, it hasn't always eliminated the confusion.

Jared listed some topics to guide the discussion:

• The deck/patio exemption is only applicable to residential zone districts. As written this section allows certain decks and/or patios to be considered pervious area even if finished with impervious materials "In a residential zoning district,

any impervious covered or uncovered deck and/or patio is allowed to be calculated as pervious surface; however, this allowance is limited to 10 percent of the square footage of the floor area of a dwelling unit, excluding the floor area of the basement and garage."

- Generally, should decks be considered impervious or pervious?
- Should the categorization be dependent upon the ground treatment underneath?
- Should a deck only be considered impervious if covered?
- The pervious paver exemption is also only applicable to residential zone districts; other sections of the UDC clearly categorize all driveway and parking areas as impervious regardless of surface area.
 - Applicants want to know what systems are approved. The town doesn't keep a list, but in the past had indicated that GrassPave2 was the only approved system.
 - Many pervious paving systems are only pervious with specific types of subsurface. Historically any system that used road base would be ineligible for the exemption. This is challenging to ensure compliance during construction as no driveway inspections are done.
 - After construction, pervious driveways are often changed and modified without any permits and put existing properties into non-compliance.
- The overarching question is whether the Commission considers the exemption important and, if so, is it better served by increasing the lot coverage percentage.

Jeff asked what the main purpose of limiting impervious surface was.

Jared responded that there are three primary reasons for limiting impervious surfaces:

- 1. Stormwater management;
- 2. Lot coverage controlling the mass of built forms; and,
- 3. Aesthetics providing open space and separation between design elements.

Jay commented that he was excited to discuss this topic. He noted that while he considers this topic a weak spot in the code, he also appreciates the simplicity of the UDC. Jay explained that, unlike many other residential codes, the UDC doesn't state that projects must have an engineered design that prevents stormwater flows from leaving a property. He acknowledged that for the larger commercial projects, stormwater retention is addressed, but there isn't such a requirement for smaller residential projects.

Jared agreed that this would be a good opportunity to add that language.

Kelley added that most of the residential applications that Staff reviews are at their maximum lot coverage and applying the exemptions can be challenging – for example, simple decks often put applications over the maximum lot coverage percentage and must be denied.

Jared agreed and noted that it is even an issue with multi-family – duplexes, triplexes, etc. – lots.

Jeff wondered how often the term "principal building" is found in the UDC.

Jared replied that it isn't a defined term, but he didn't look to see how widely it is used in the UDC.

Jeff asked if overhangs – similar to decks – are serving the purpose of stormwater retention.

Jay replied if one is following the definition of an impervious surface, any overhang would be impervious.

Jared suggested a standard two-foot overhang would be acceptable, but anything that exceeds that length would not.

Kade asked what a realistic percentage shift would be.

Jared replied that those calculations haven't yet been considered but thought it could be researched. He noted that there is a dichotomy in that new single-family residences in River Valley Ranch are being designed to the maximum lot coverage requirement while in the older residential neighborhoods the lots exceed the maximum because of structures and improvements added piecemeal. He pointed out that no matter how much that percentage is increased, there will be a desire to design to that standard.

Jay commented that much of that is stating what percent is the actual structure versus what percent is softscape.

Cindy agreed, noting that there are new technologies being introduced as a rapid rate.

Jared replied that it would consume Staff time to study each new product and thought that developing a standard matrix for the pervious paver exemption could provide clarity.

Jay pointed out that the City of Aspen has a 12% gap requirement for pavers and that would achieve such a standard. He noted that the underlayment must have retention capacity for a 100-year storm event and that could be satisfied by requiring a four-inches of gravel beneath it along with a non-compacted subgrade and native fill.

Jared noted that that would add another inspection and then what recourse does the Town have when there is noncompliance because Carbondale residents may not have the same financial ability that Aspen residents do to tear something out and start over.

Jay pointed out that this would be an exemption to go over the lot's impervious cover, so there should be an expectation of performance.

Kade suggested allowing a roof overhang of two feet and getting rid of the patio/deck exemption.

Kelley replied that allowing decks to be considered permeable would be a big shift because except for the 10% allowance, decks are currently counted as impervious surfaces.

Jay noted that it should be demonstrated that water is flowing through the deck and there isn't sheet flow off the end of the deck.

Jared stated that he would rather have a deck exemption than a driveway exemption. He added that he spoke with Jess prior to this evening's meeting, and she relayed that she liked the simplicity of the code and didn't want to see it overcomplicated.

Jay asked how Jared felt about the current lot ratios and commented that he thought it was a good compromise.

Jared replied that the percentages seem fair given the existing density – for example, the Residential/Low Density ratios are scaled based on the size of the lot.

Kelley commented that the scale is appropriate and achieves a consistent building size appropriate for the neighborhood.

Cindy asked if the deck exemption is eliminated, would the lot coverage ratio still be adjusted.

Kade commented that they also need to be forward-thinking for increased density as the population grows.

Jeff pointed out that there are other code regulations that still limit the size of the building.

Jared suggested presenting a simplified version along with a version that accounts for the use of innovative products for the public hearing, or the work session can continue at the next meeting.

Jay asked for clarification on how the pervious paver exemption relates to driveways if the percentage is increased.

Jared replied that the 10% exemption tied to driveways is not 10% of the total lot size, but 10% of the pervious lot coverage. He pointed out that the 10% exemption could be limited to the driveway specifically, but the challenge is those River Valley Ranch lots with long driveways to access the buildable space would end up with a large amount of pervious pavers.

Jeff asked how the pervious paver exemption is being met.

Jared replied that typically the garage apron and the side parking is permeable, but it isn't overly clear.

Kade suggested reconsidering the parking requirement for accessory dwelling units to regain pervious surface in those lots.

Jay commented that that could be an incentive for more impervious lot coverage if there is an ADU. He added that there are pros and cons to simplification, but it seems that the some of the issues are geared towards River Valley Ranch and he doesn't want to see small lots being denied for putting stepping stones to their front door.

Jeff thought some caution should be used because it could be a concrete walkway or a flagstone walkway and would those be considered in the same way.

Jared replied that currently walkways are considered impervious, but they could consider parking areas categorized as impervious along with concrete patios and sidewalks and flagstone/tile/pavers sidewalks with a 12% separation are categorized as pervious.

Cindy thought it would be easier to classify what was impervious surfaces.

Jared replied that the challenge is the application of pavers or tiles with a tight gap.

Kelley suggested identifying a width dimension because that would be easy to enforce.

Kim appreciated the points discussed and suggested moving forward with the public hearing.

Cindy asked if RVR had a design review committee that approved building plans.

Jared replied that RVR building plans are subjected to a high level of review, but the RVR zoning code states that approvals are conditioned upon meeting the UDC's building height, setbacks, and lot coverage requirements. He thought it might be helpful to share a simplified code to the RVR design review board.

Jeff wondered if there would be an opportunity to talk to RVR DRC.

Jared replied that they could be invited to comment. He thought architects would also appreciate a simplification of the impervious lot coverage requirements.

Kelley asked the commission members if they would like to hear from professionals and applicants.

Jeff replied that any "real world" examples would be appreciated.

Kade added that in all goes back to why this requirement is important and thought that groundwater retention was a good place to start.

6 | Page

Jeff suggested that it would be helpful to present the overlapping regulations that limit building mass.

Jared pointed out that most of what is being discussed is on the fringes of design and won't materially change the type of development being reviewed.

Jay didn't think that engineers would consider this requirement as the best stormwater management, and if all the RVR lots were to go up to 60% impervious, the entire basin would be limited in its water retention. He pointed out that in those big storm events, the sheetflow would cross over most surfaces and would end up going in the river. He noted that every other every jurisdiction requires stormwater retention on individual lots, and it can be expensive, but creative solutions would be helpful. He also pointed out that most of the stormwater flows into the public right-of-way and Carbondale doesn't have any stormwater provisions.

Jared replied that although this requirement isn't addressing stormwater to best management practices, most RVR lots fall under 30% lot coverage, but he thought the lot coverage helped create a predictable built form environment.

Jay suggested two other items to consider for pervious spaces:

- 1. "Green" roofs; and,
- 2. Pedestal paver systems.

Motion Passed: Jeff *moved* to initiate an Amendment to the Unified Development Code pursuant to Section 2.4.1 of the UDC for the purpose of reviewing changes to Section 3.8.5, Impervious Lot Coverage. Kade *seconded the motion,* and it was *unanimously approved*.

Yes: Jay, Cindy, Kade, Jeff, and Kim No: None

Staff Update

Kelley noted that on the agenda under "Upcoming P & Z Meetings," the ANB Bank public hearing listed for August 24th will be delayed until September 14th. She explained that the application proposes to rezone from P/C to M/U with a mixed-use building of approximately 10,000 square feet for the bank, approximately 10,000 square feet of retail and restaurant space, 16 dwelling units and 74 parking spaces.

Kelley also noted that the Little Blue Preschool Expansion Rezoning and Site Plan application will be heard by the Board of Trustees at their July 25th meeting. She added that a Conditional Use Permit and Minor Site Plan Review for 326 S. 3rd Street will be heard at the August 10th Planning & Zoning Commission meeting.

Jared informed the commission members that the MAP Carbondale project is underway, and an online commenting tool is live under "Carbondale Connect." He noted that public outreach events have included the July First Friday and Wednesday's Farmers Market and they anticipate being present at additional Town events as well as posting on various community boards. Jared added that Age Friendly Carbondale is

7 | Page

going to share their Highway 133 study information to add to the Map Carbondale data. He explained that the project has an eight-to-nine-month timeline with an anticipated completion in the first quarter of 2024.

Jared announced that a Building Official has been hired and will start on July 25th.

Commissioner Comments

Jeff commented that he appreciated the deliberations on the Little Blue Preschool Expansion but was disappointed that it was so contentious. He added that the community is very lucky to have such a quality program and with the lack of childcare being the problem it is in the valley, allowing the expansion makes a big difference.

Cindy asked about the We-Cycle stations going up around town.

Jared replied that there will be 17 We-Cycle Stations in total and will include a mix of electric and traditional bikes. He noted that the ribbon cutting will take place in early August.

Motion to Adjourn

A motion was made by Cindy to adjourn, Jeff seconded the motion, and the meeting was adjourned at 8:29 p.m.



Planning & Zoning Commission

Memorandum

TITLE:	Accessory Dwelling Unit Regulation Worksession
SUBMITTING DEPARTMENT:	Planning Department
ATTACHMENTS:	 A – Current ADU Regulations B – Current PUD Regulations C – PUD Location Maps D – 2022 Comprehensive Plan Excerpts for ADUs

BACKGROUND:

Accessory Dwelling Units (ADUs) within Carbondale are governed by a combination of the Unified Development Code (UDC) and Planned Unit Development (PUD) zoning guides and private covenants. As such, the regulations for ADUs vary widely between properties based on zoning, lot size, and primary dwelling size.

During the 2022 Comprehensive Plan, the community identified ADUs as an area that needed to be examined. In the Implementation Matrix, ADUs are listed in three of the "near-term" actions related to Community Character and Housing and Jobs. Lastly, the 2023 Planning Department Goals and 2023 Planning and Zoning Commission (P&Z) Priorities listed ADU regulations as a priority for review.

The Board of Trustees (BOT) discussed the ADU regulations at their August 15, 2023 worksession. Commissioner Engstrom was present for the conversations. The BOT were appreciative of all of the information presented that helped them better understand Carbondale's existing regulations. The BOT provided staff with a few goals, as follows, to help guide additional work on ADU regulations:

- 1. Overarching goal of expanding opportunities to add ADUs.
- 2. Provide a more streamlined process.
- 3. Review the need for a conditional use or special use permit to determine if needed or value is added.
- 4. Do ADUs need to be reviewed by the P&Z or could a Administrative Site Plan review be acceptable.
- 5. Review the parking requirements with the goal of reducing and potentially eliminating required spaces.
- 6. Ensure the process has adequate response to Structures of Merrit and Historic Preservation.
- 7. Review allowed sizes of ADUs for potential ADA-compliant units, studio, and multibedroom units, or tiny homes.
- 8. Consider attached and detached units throughout Town.

DISCUSSION:

As stated previously, ADUs regulations have a wide variety of applicability based on location. Starting with zoning, all properties within Carbondale are either zoned a Straight Zone District (e.g. Residential Low Density; Residential High Density; Old Town Residential) or PUD.

Straight Zone Districts

Straight zone districts are regulated by a few different sections of the UDC regarding when ADUs are permitted (Attachment A). The Old Town Residential (OTR) and Residential Low Density (R/LD) zone districts have additional minimum lot area and minimum lot width requirements for residential development with an ADU which meet or exceed the minimum standards for residential development without an ADU. ADUs are also permitted in the Residential Medium Density (R/MD), Residential High Density (R/HD) and Mixed Use (MU) zone districts, as discussed below.

Planned Unit Developments

PUDs on the other hand may or may not be regulated by the UDC based on the language of each individual PUD. Staff has prepared a draft Summary of PUD Regulations regarding ADUs (Attachment B). This draft spreadsheet is still being developed but demonstrates a wide range of regulations. Some PUDS refer back to the Town's Municipal Codes, while others set forth permitted uses which expressly prohibit, indirectly prohibit, or are silent on ADUs. PUD regulations can be listed in the permitted uses, definitions of a dwelling unit, permitted occupancy of a dwelling unit, or other related regulations. This demonstrates that the Town's PUD regulations are complicated for the Town to implement and confusing for Residents to understand. As such the applicability of any regulations relating to ADUs would have limited applicability across town, but mostly be applicable to those areas which are not within a PUD. Staff has also prepared a PUD Location Map (Attachment C) to help identify the locations of each PUD, especially the smaller "mini-PUDs".

Development Review Process

ADUs have an additional review process as outlined in the UDC (Attachment A). Single-family Dwellings with an ADU are required to be processed through a Minor Site Plan Review. The Minor Site Plan Review process requires a noticed public hearing before the P&Z. Due to the Town's noticing requirements this step can add an additional 3-4 weeks to the review time.

In addition, ADUs are required to receive either a Conditional Use Permit (R/LD, R/MD, or MU zone districts) or Special Use Permit (OTR zone district) if located in certain zone districts. These processes track with the Minor Site Plan review and do not delay the review process. They do however include an additional application and fee which adds to an applicant's submission requirements. Lastly, ADUs located in the R/HD zone district require no additional approvals.

UDC Regulations

Every section of the UDC which refers to ADUs has been collated with specific regulations highlighted (Attachment A). UDC §4.4.4.A provides additional standards for ADUs. In summary, these standards provide review criteria for ADUs related to size, location on a site, and features. Some sections of note are:

- 1. Only 1 ADU is permitted per property;
- 2. ADUs are prohibited for multi-family or live/work units;
- 3. ADUs shall have a separate entrance, contain cooking, sleeping, and sanitary facilities, but shall not have more than one bedroom;
- 4. ADUs are not permitted to have separate ownership or utilities;
- 5. ADUs can range in size from 300 SF 850 SF depending on the zone district, size of the primary dwelling unit, or size of the lot; and,
- 6. ADUs are permitted to be attached or detached, but are only allowed as detached in the OTR if the primary dwelling is a structure of historical significance.

UDC §5.9.3.A outlines the parking requirements for ADUs. ADUs are required to have 2 spaces per ADU. The number of spaces may be reduced to 1 space if the property owner can demonstrate adequate space exists for an additional parking space. If the Town receives parking complaints related to the ADU, the Town can require the parking space be constructed.

Lastly, the UDC Definitions Section present definitions for a wide range of Dwelling, including ADUs. The definition of an ADU is below.

Accessory Dwelling Unit

A subordinate dwelling unit added to, created within, or detached from a single-family residence, but located on the same lot or parcel as a primary residential structure, that provides basic requirements for living, sleeping, cooking, and sanitation.

Comprehensive Plan Recommendations

The Comprehensive Plan focused on ADUs as a topic and is discussed throughout the document. The Future Land Use designations discusses how ADUs should be considered infill development and have an incremental increase in dwelling units in a neighborhood, while also highlighting the need for special care to be taken to minimize impacts on neighbors. The Old Town (OT), Residential Traditional (R/T), and Residential Mixed (R/Mx) future land uses discuss ADUs as either a desired use or an opportunity for a use. One recommendation within the OT future land use is to explore a simplified review and permitting process for smaller and/or lower occupancy ADUs. Each of these future land use areas present the desire for parking requirements to be linked to size and occupancy of an ADU. Lastly, these future land use areas discuss the need for ADUs to be visually secondary to the main dwelling and architecturally compatible with the site and the neighborhood.

The Implementation Matrix includes the following recommended strategies and actions:

- 1.3.3: Adopt form-based residential infill development standards to ensure new development, additions and ADUs are compatible with adjacent historic and neighborhood context.
- 3.4.2: Educate homeowners on Accessory Dwelling Units (ADU) regulations and provide guidance on permitting and construction conversion. Research best practices from peer communities for enforcement and monitoring.
- 3.4.3: Consider amending the UDC to allow detached ADUs.

Senate Bill 23-213

Although not approved, Senate Bill 23-213 included several regulations that could impact housing availability. One aspect of this bill which could have been applicable to Carbondale is the ADU preemption. As proposed, ADUs would have been permitted as a use by right in all zone districts where a single-family detached dwelling unit is permitted. It would have prohibited a local jurisdiction from applying any non-objective standards that could evaluated local conditions and compatibility. In addition, the regulations would have prohibited the requirement of off-street parking spaces for an ADU.

The preemption of local regulations, such as PUDs and private covenants, could have assisted Carbondale in permitting ADUs more broadly throughout Town, but the lack of local control for

size, design standards, compatibility, consideration of historical structures of merit, limitations on use of the ADU could have increased the amount of unintended consequences of ADUs.

Current Code Feedback

Given that Planning Staff is new, we have limited experience with applying these regulations. In the past year, and reviewing more recently approved ADUs, a few items have been identified as benefits or constraints of the current regulations, as follows:

- 1. The maximum size of an ADU hasn't been a restriction for applicants, with the exception of an ADA compliant ADU;
- 2. The need for a noticed public hearing has increased the review time for ADU applications;
- 3. Where permitted Staff hasn't received many inquiries about adding and ADU;
- 4. Where not permitted Staff has received some inquiries, but not many regarding a desire for and ADU;
- 5. In many cases, properties have constructed a "room with a wet bar (no cooking facilities) and bathroom" which essentially serve as an ADU, but are not considered and ADU. In these cases, cooking facilities are either added illegally after a building permit has been finalized or "hot plates" have been provided for minimal cooking; and,
- P&Z review has improved outcomes of ADU development through improved architectural and site compatibility within the neighborhood and consideration of impacts on neighboring properties.

Discussion Guidance

Staff is looking to the BOT, P&Z, and Historic Preservation Commission (HPC) for input, guidance, and direction, as appropriate, to help surface ideas to improve the ADU regulations, streamline the process, and ensure compliance. In addition, Staff is requesting consideration by these bodies of current and future unintended consequences of regulation modifications. Below are questions Staff has prepared to guide a conversation:

- 1. Review Process:
 - a. What are the drawbacks to the current review process?
 - b. What feedback has been received from the public which is impacting ADUs from being developed?
 - c. Are there benefits to the current review processes that improve outcomes for development and neighborhoods?
- 2. Regulations:
 - a. Should "studio" ADUs or 2-bedroom ADUs be considered?
 - b. Are the maximum sizes of ADUs acceptable or should they be increased?
 - c. Should ADUs have different size requirements for an ADA-accessible unit?
 - d. Should ADUs be prohibited from being used as a short term rentals to ensuring housing for local residents?
 - e. Should parking regulations be modified to align the parking requirement with the size of the unit?
 - f. Should parking requirements be reduced or waived for smaller ADUs?
 - g. Should attached or detached ADUs be permitted in the OTR zone district?

FISCAL IMPACT:

Staff is preparing a code analysis and will work on drafting potential regulations. It is anticipated that Town Attorney time will be utilized, and Staff time will be required to prepare an updated UDC. Some additional costs could be incurred for printing of a new UDC, but overall costs to the Town to modify the code should be limited.

RECOMMENDATION:

Staff recommends the P&Z consider the above and attached information and have a dialogue regarding ADUs. The P&Z could provide general feedback and guidance on the regulations for additional analysis and preparation of code modifications. Staff plans to hold a worksession with the HPC to gain additional feedback, then subsequently request that the P&Z initiate a Code Text Amendment to review and prepare recommended language. Ultimately, the Code Text Amendment will be brought to the HPC, P&Z, and BOT for consideration at a noticed public hearings.

Prepared By: Jared Barnes, Planning Director

CHAPTER 17.02: ADMINISTRATION

B. Applicability

1. Thresholds for Site Plan Review Type

Table 2.5-1: *Site Plan Review Thresholds*, describes the applicable site plan review type (administrative, minor, or major) required for various projects.

Table 2.5-1:											
Site Plan Review Thresholds											
	Administrative Site Plan Review (Staff)	Minor Site Plan Review (Planning & Zoning Commission)	Major Site Plan Review (Board Of Trustees)								
Residential Districts ^{[1][2]}											
R/LD and OTR		Single-family with accessory dwelling unit									
R/MD	< 4 units	4-6 units	> 6 units								
R/HD	< 6 units	6-9 units	> 9 units								
Commercial and Mixed-U	Ise Districts ^{[1][2]}										
HCC	< 5,000 sf	5,001 – 10,000 sf	> 10,000 sf								
C/T	< 7,000 sf	7,001 – 12,000 sf	> 12,000 sf								
MU ^[3]	< 6 units or	6-9 units or	> 10 units or								
	< 7,000 sf	7,001 – 12,000 sf	> 12,000 sf								
All Other Districts											
All other districts	< 10,000 sf	10,001 - 30,000 sf	> 30,000 sf								
Notes: [1] Unit numbers are cumulative within one lot and refer to residential dwelling units. [2] Accessory dwelling units each count as one unit.											

2. "Call-Up" Procedures

plan review.

- a. Administrative site plans can be referred to the Planning and Zoning Commission or Board of Trustees by the Director.
- b. Minor site plans can be referred to the Board of Trustees by the Director or Planning and Zoning Commission.
- 3. Exemptions

The following types of projects are exempt from site plan review:

- a. Single-family detached without accessory dwelling units;
- b. Tenant improvements in which the existing building is not expanded.

C. Approval Criteria for All Types of Site Plans

A site plan may be approved upon a finding that the application meets all of the following criteria:

- 1. The site plan meets the purposes of the zoning district in which it will be located and is consistent with the Comprehensive Plan;
- 2. The site plan is consistent with any previously approved subdivision plat, planned unit development, or any other precedent plan or land use approval as applicable;
- 3. The site plan complies with all applicable development and design standards set forth in this Code; and

CHAPTER 17.03: ZONING DISTRICTS

3.7 SUMMARY TABLES OF DIMENSIONAL STANDARDS

In case of a discrepancy with the summary tables for any zoning district, the individual zoning district tables in Sections 3.2, 3.3, and 3.4 shall govern.

3.7.1. SUMMARY OF RESIDENTIAL DISTRICTS DIMENSIONAL STANDARDS

Table 3.7-1:										
Summary of Residential Districts Dimensional Standards										
	AG	OTR	R/LD	R/MD [1]	R/HD [1]					
Lot Standards										
Lot area, minimum	10 acres	4,125 sf	6,000 sf [2]	3,000 sf	3,000 sf					
Lot area, minimum, with ADU		5,500 sf	6,000 sf [2]							
Lot area per dwelling unit, minimum				3,000 sf						
Lot depth, minimum	None	100 feet	100 feet	50 feet	50 feet					
Lot width, minimum	None	37.5 feet	60 feet [3]	25 feet	25 feet					
Lot width, minimum, with ADU		50 feet	60 feet [3]	25 feet	25 feet					
Impervious lot coverage, maximum			See Table 3.7-2							
Setbacks, Minimum [1]										
Front	50 feet	15 feet	15 feet	10 feet	5 feet					
Side	35 feet	5 feet	7.5 feet	5 feet	5 feet					
Side, street	40 feet	10 feet	10 feet	7.5 feet	4 feet					
Rear	35 feet	5 feet	7.5 feet	5 feet	5 feet					
Rear, adjacent to alley	35 feet	5 feet	5 feet	5 feet	5 feet					
Building Standards										
Height, maximum, principal dwelling unit	27 feet	25 feet [4]	27 feet	27 feet	35 feet					
Height, maximum, accessory buildings	22 feet	14 feet on lots 7,000 sq ft or smaller; 21 feet on lots larger than 7,000 sq ft [4]	22 feet	22 feet	25 feet					
Notes:										

[1] Lot area, lot depth, lot width, and side yard setbacks may vary if approved through subdivision process in order to allow townhomes to be subdivided. Zero lot line may be established at time of subdivision.

[2] Minimum site area and lot size for properties in original Townsite, Weaver's Addition, and Fender's Addition is 5,500 square feet.

[3] Lots in the original Townsite, Fender's Addition, and Weaver's Addition have a minimum 50-foot lot width. [4] See Section 5.6.6.C for additional height limitations.

Attachment A

CHAPTER 17.04: USE REGULATIONS

4.2. Table of Allowed Uses 4.2.5. Table of Allowed Uses 4.2.1.F Use-Specific Standards

Table 4.2-1: Allowed P = permitted use C = conditional use	Residential Districts				Commercial and Mixed- Use Districts				Other Non- Residential Districts						
Use Category	Use Type	AG	OTR	R/LD	R/MD	R/HD	С/Т	CRW	нсс	MU	0	-	PF	_	Use-Specific Standards
RESIDENTIAL USES			_								_				
Household Living	Dwelling, duplex				Р	Р				С			Р		
				C		C	Р	<u> </u>	Р	D			D	Р	4224
	Dwelling, manufactured/factory-built home or	_	_	C	C		Г	C	Г	Г			г -	Г	4.3.2.A
	modular structure (IBC or IRC homes, not HUD)	Р	Р	Р	Р	Р				С			Р		4.3.2.F
	Dwelling, multi-family				С	Р	Р	S	Р	Ρ			Р		4.3.2.B
	Dwelling, single-family attached				С	Р				С			Р		4.3.2.C
	Dwelling, single-family detached	Р	Р	Р	Р	Р	Р						Р		4.3.2.D
	Mobile home park				S	S									4.3.2.G
Group Living	Adult day care			С	с	С	Р	Р	Ρ	Ρ					
	Assisted living facility				S	S	Р	S	S	S					
	Group home	С	С	С	С	С	С	С	С	С					4.3.2.E
	Nursing home					S	S	S	S	S					
PUBLIC, INSTITUTIONAL,	AND CIVIC USES														
Community and Cultural Facilities	Civic building						Р	Р	Ρ	Ρ			Ρ	Р	
	Club or lodge						С	С	С	С					4.3.3.A
	Community center		С	С	С	С	С	С	С	С					
	Convention hall						С	С	С	Ρ			Р		
	Country club	S		S											
	Library						Р	Р	Р	Р			Р		
	Museum						С	С	Р	Р	С		Р		
	Religious use	С	С	С	С	С	С	С	С	С					4.3.3.D
Transit Uses	Transit stop	Р	Ρ	Ρ	Ρ	Р	Р	Р	Ρ	Ρ	Ρ	Р	Ρ	Р	
	Transit terminal or station						С	С	Ρ	Ρ		Ρ	Ρ	S	
Child Care Facilities	Day care – fewer than seven children	С	С	С	С	С	С	С	С	S			С		
	Day care – seven children or more	S	S	S	S	S	S	S	S	S			S	S	4.3.3.B
Health Care Facilities	Hospital						Ρ	Ρ					Ρ		
	Medical or dental clinic						Ρ	Ρ	Ρ	Ρ					
Parks and Open Space	Park, playground, open space	Р	Ρ	Ρ	Ρ	Р	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	С	4.3.3.C

Carbondale, Colorado Unified Development Code

Attachment A

CHAPTER 17.04: USE REGULATIONS

4.2. Table of Allowed Uses 4.2.5. Table of Allowed Uses 4.2.1.F Use-Specific Standards

Table 4.2-1: Allowed Uses - Town of Carbondale				Residential					Commercial and Mixed-				' Noi Ionti	ן- 1	
P = permitted use C = conditional use	S = special use Blank cell = prohibited use		Di	istric	ts	-	U	se Di	stric	ts		Dist	ricts		
Use Category	Use Type	AG	OTR	R/LD	R/MD	R/HD	С/Т	CRW	нсс	MU	0	-	PF	_	Use-Specific Standards
	Solar energy device, primary use	Р						Р			Р		Р	Р	4.4.4.G
	Substation, receiving station, or switching station						S	S					S	S	4.3.5.E
	Water and wastewater treatment facility												Р		4.3.5.I
	Water reservoir	Р											Р		
	Water storage tank												Р		4.3.5.J
ACCESSORY USES															
	Accessory dwelling unit		S	С	С	Р				С					4.4.4.A
	Administrative, laboratory, and storage use related to public utility uses												Ρ	Ρ	4.4.4.B
	Automatic teller machine (ATM)						Р	Р	Р	Р				С	
	Garage, carport, or utility shed	Р	Р	Р	Р	Р	Р	Р	Р	Р				Р	
	Home occupation	С	С	С	С	С	С		С	С					4.4.4.C
	Outdoor storage, accessory	С					С	С					Р	Р	4.4.4.D
	Retail sales of products directly related to a primary industrial use													Ρ	4.4.4.E
	Satellite-receiving dish	Р	Р	Р	Р	Ρ	Р	Р	Р	Р			Р	Р	4.4.4.F
	Solar energy device, accessory use	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	4.4.4.G
	Wind energy conversion system (WECS)	С	С	С	С	С	С	С	С	С	С	С	С	С	4.3.5.K
	Other accessory uses, if determined by the Director to comply with the performance standards of the Code. See Section 4.4.2.														4.4.2.
TEMPORARY USES															
	Expansion or replacement facilities						С	С	С	С			С	С	4.5.6.B
	Mobile vendor	С	С	С	С	С	С	С	С	С				С	4.5.5.A
	Regularly operated open air and/or farmer's market	С					С	С	С	С			С	С	
	Temporary office space and equipment storage						С	С	С	С	С	С	С	С	4.5.6.A
	Temporary special event						Ρ	С	Ρ	Ρ	С	С	С	С	4.5.5.A
	Tent structure for single-vehicle parking						Ρ								4.5.6.C
WIRELESS FACILITIES (S	See Section 5.13)	_													
	Small cell facility, including wall-mounted or roof- mounted wireless facilities	Р	Р	Р	Р	Р	Р	Р	Ρ	Р	Р	Р	Ρ	Ρ	

CHAPTER 17.04: USE REGULATIONS

C. Storage Buildings Accessory to Nonresidential Uses

Except where otherwise expressly allowed in this Ordinance, the total floor area of storage buildings accessory to a nonresidential use shall not exceed the lesser of 2,000 square feet or 10 percent of the floor area of the principal building(s) on the lot.

D. Same Ownership Required

Accessory uses/structures and principal uses/structures shall be under the same ownership.

E. Use of Accessory Structures

Accessory structures, except for ADUs, shall not be used for living or sleeping quarters and shall not contain plumbing capable of facilitating a bathroom or kitchen.

F. Maximum Size of Accessory Structures

The maximum size of any accessory structure shall be 1,000 square feet unless otherwise stated in this Code.

G. Compliance with this Unified Development Code

All accessory uses and structures are subject to dimensional standards in Chapter 17.03: *Zoning Districts*, and the development and design standards in Chapter 17.05: *Development Standards*. In the case of any conflict, the more restrictive standards, as determined by the Director, shall apply.

4.4.4. ADDITIONAL STANDARDS FOR SPECIFIC ACCESSORY USES AND STRUCTURES

A. Accessory Dwelling Units

Accessory apartments or dwelling units ("ADUs") shall comply with the following standards:

- 1. Generally:
 - a. Only one ADU is allowed per property.
 - b. ADUs for multifamily dwellings or live/work units are prohibited.
- 2. Location and Design
 - a. Except as set forth below, an ADU shall be fully attached to or within the principal structure on the lot. "Attached" shall mean at least one/quarter of the total wall area or the floor or ceiling of the ADU shall be fully connected to a wall, floor, or ceiling of the principal residential structure.
 - b. Detached ADUs shall be located to the side or rear of the primary structure.
 - c. All ADUs shall have a separate exterior entrance from the principal dwelling unit and shall contain cooking, sleeping, and sanitary facilities.
 - d. An ADU shall not have more than one bedroom.
- 3. Public Services and Utilities

Separate water or sewer service for the ADU shall not be provided by the Town. Separate metering of other utilities shall be allowed.

4. Ownership Requirements

Ownership of the ADU may not be legally severed from ownership of the associated lot and any other structures on such lot.

5. OTR District

Additional ADU requirements for residential structures of historical significance within the OTR zoning district:

- a. A residential structure in the OTR zone district is of historical significance if the majority of the predominant elements of the structure were constructed prior to 1925.
- b. Detached ADU's may be permitted on a lot containing a residential structure of historic significance within the OTR zone district.
- c. The Planning and Zoning Commission may allow a reduction in the parking standards for an ADU in the OTR district pursuant to Section 5.8 when it is demonstrated that the reduction will contribute to the preservation of the historical character of a residence of historical significance within the OTR zoning district and such reduction will not adversely affect neighboring properties.
- d. The minimum size of an ADU shall be 300 square feet.
- e. The maximum size of an ADU shall be 10 percent of the total lot size up to a maximum unit size of 650 square feet.
- 6. OTR and R/LD Districts

ADUs require a minor site plan approval in accordance with Section 2.5.3.

- R/LD, R/MD, and R/HD Districts ADUs may be attached or detached units.
- R/LD, R/MD, R/HD, and MU Districts Square footage of ADUs shall be allowed as follows:
 - a. Primary dwelling units that are 1,500 square feet or less shall have a minimum unit size of 300 square feet and a maximum unit size of 500 square feet.
 - b. Primary dwelling units that are larger than 1,500 square feet-minimum unit size shall have a minimum unit size of 300 square feet and a maximum unit size of 33 percent of the total floor area of the primary dwelling unit, up to a maximum unit size of 850 square feet.

B. Administrative, Laboratory, and Storage Uses Related to Public Utility Uses

1. Generally

The Town shall take care in its design, planning and engineering to minimize environmental disturbances. "Best Management Practices" shall be utilized whenever possible, such as preserving natural grade, drainage patterns, and soil and vegetation.

- 2. Fencing and Screening
 - a. All operations shall be conducted completely within a building or within a yard enclosed by a fence or other structure so as to hide on all sides such activities from the outside view of persons standing on the ground.
 - b. Outdoor Storage is permitted subject to the screening standards in Section 5.4.5.

CHAPTER 17.05: DEVELOPMENT STANDARDS

- 1. The applicant provides the maximum amount of parking spaces possible without being required to remove or partially remove a structure;
- 2. If a structure or a portion of a structure is voluntarily removed, the resulting area shall be used to provide the additional parking spaces necessary towards fulfilling the requirements of Table 5.8-1: *Off-Street Parking Schedule A*; and
- 3. The amount of parking available for the new use is at least 80 percent of the parking required for the new use in Table 5.8-1: *Off-Street Parking Schedule A*.

D. Minimum Standards

The required parking standards in this section are minimum standards. It is the obligation of the owner of a use that generates the need for parking to provide sufficient quantities of off-street parking for the particular land use.

5.8.3. OFF-STREET PARKING REQUIREMENTS

A. Schedule A

Unless otherwise provided in this Code, off-street parking spaces shall be provided in accordance with Table 5.8-1: *Off-Street Parking Schedule A*.

Table 5.8-1: Number of Off-Stre	et Parking Spaces Required: Schedul	e A
Use Category	Use	Number of Spaces Required
Residential Uses		
Household Living	Dwelling, single family detached Dwelling, duplex Dwelling, multifamily: Studio or 1 bedroom Dwelling, multifamily: 2 or more bedrooms Mobile home park	 1.25 per efficiency unit; 1.5 per one-bedroom unit 1.5 per two-bedroom unit 800 SF or less 1.75 per two-bedroom unit over 800 SF 1.75 per three-bedroom unit 900 SF or less 2.5 per three-bedroom unit over 900 SF 2 per ADU; may be reduced to 1 space only when there shall be reserved on the lot sufficient open space to accommodate the additional space should the Town, based on parking related complaints from nearby property owners, require said parking to be provided on the lot. The area reserved for the reserved parking space shall be included in the lot coverage calculation.
	Dwelling, live/work	1 per dwelling unit
	Group home, adult day care	1 per 400 SF GFA, and 1 additional space, reserved for pickup and delivery of adults, per 800 SF GFA
Group Living	Assisted living facility	1 per unit for independent living, plus 1 per 3 beds for memory care unit, plus 1 per employee on largest shift
	Nursing home	1 per 3 beds, plus 1 per employee on largest shift

CHAPTER 17.08: DEFINITIONS

8.3 OTHER TERMS DEFINED

For the purposes of this Code, the following words and terms are defined as indicated in this chapter.

95th-Percentile Rainfall Event

The event whose precipitation total is greater than or equal to 95 percent of all 24-hour storms on an annual basis.

A

Access

Bicycle, pedestrian, or vehicular entry to or exit from a lot or parcel.

Accessory Building

A detached subordinate building located on the same lot as the principal building, the use of which is incidental to the principal building or use of the lot; such building shall not be used for living or sleeping quarters in a residential district and shall not contain plumbing capable of facilitating a bathroom or a kitchen, with the exception of detached accessory dwelling units specifically approved under Section 4.4.4.A.

Accessory Dwelling Unit

A subordinate dwelling unit added to, created within, or detached from a single-family residence, but located on the same lot or parcel as a primary residential structure, that provides basic requirements for living, sleeping, cooking, and sanitation.

Accessory Use

A use incidental and subordinate to the principal use of the lot, building, or another structure on the same lot.

Addition

An extension or increase in floor area or height of a building or structure.

Administrative, Laboratory, and Storage Use Related to Public Utility Uses

Typical clerical or office duties, basic laboratories, and storage of materials inherent to, but subordinate to, a public utility use.

Adult Day Care

A facility, whether in a private home or institutional setting, providing temporary care and supervision for persons 18 years of age or older. Care is provided for periods of less than 24 hours a day.

Adult Entertainment Establishment

Adult entertainment establishments include: adult book stores, adult motion picture theaters, adult mini motion picture theaters, adult massage parlors, adult theaters, adult artist-body painting studios, adult modeling studios, adult sexual encounter centers, adult cabaret and all other adult entertainment establishments.

Affordable

For purposes of the Community Housing Inclusionary Requirements: a housing price that will be calculated based upon principal, interest rate, taxes, insurance, homeowners' dues and private mortgage insurance, not to exceed 30 percent of gross household income, assuming a 95 percent loan-to-value ratio and 30-year mortgage.

CHAPTER 17.08: DEFINITIONS

Dedication

A transfer, by the owner, of a right to use of land for a specified purpose or purposes. Because a transfer of property rights is entailed, dedication must be made by written instrument, and is completed with an acceptance by the Board.

Directional Sign

A sign located outdoors, that guides, instructs, or directs viewers to a place or event not located on the same premises.

Director

Planning Director. See Section 2.8.5.B.

Ditch

A narrow channel dug in the ground, typically used for drainage alongside a road or the edge of a field.

Drainage Plan

A plan prepared in graphical format showing existing and proposed grading, drainage control, flood control and erosion control information in sufficient detail to determine project feasibility as required by the Director or Town Engineer.

Driveway

A private accessway providing access between a street and destinations points within an adjacent property.

Dry Cleaning Pick-Up

An establishment where laundry or dry cleaning is dropped off by customers or picked up by customers but not including any on-site cleaning or dry cleaning activities.

Dwelling

A structure or portion of a structure that is designed, occupied, or intended to be occupied as living quarters and includes facilities for cooking, sleeping, and sanitation; but not including hotels, motels, clubs, boarding houses, or any institution, such as an asylum, hospital, or jail, where human beings are housed by reason of illness or under legal constraints.

Dwelling, Duplex

Two residential dwelling units, other than mobile homes, within a single building and under a single roof.

Dwelling, Efficiency

A dwelling unit consisting of not more than one habitable room together with a kitchen or kitchenette and sanitary facilities.

Dwelling, Four-plex

Four residential dwelling units, other than mobile homes, within a single building and under a single roof.

Dwelling, Live/Work

A dwelling unit containing an integrated living and working space that is intended to function predominantly as business workspace with incidental residential use occupied by the business owner or operator. The unit typically has a store-front, with the workspace, public display area, or show-room on the ground floor of the unit and the majority of the residence located either on the upper floor if there are two floors, or the back of the unit if there is only one floor.

CHAPTER 17.08: DEFINITIONS

Dwelling, Manufactured/Factory-Built Home or Modular Structure

A transportable, factory-built structure that is manufactured in accordance with the federal Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Sec. 5401) and that is designed to be used for permanent dwelling units. This definition does not include recreational vehicles or structures with a floor area of less than 400 sq. ft. not intended to be used as year-round housing.

Dwelling, Multi-Family

Three or more residential dwelling units, other than mobile homes, within a single building and under a single roof, including apartments, houses and attached multi-family dwellings.

Dwelling, Single-Family Attached

Three or more single-family dwellings attached side-by-side, with each dwelling located on its own separate lot. This use includes triplexes, fourplexes, townhomes, and row-homes. A duplex is not considered a single-family attached dwelling.

Dwelling, Single-Family Detached

A dwelling unit (IBC, IRC or HUD standard) located on a separate lot or tract that has no physical connection to a building located on any other lot or tract.

Dwelling Unit

A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. This term shall be used interchangeably with the term "residential unit."

E

Easement

A conveyance or reservation of the use of land for a specialized purpose.

Effective Date

The date on which the ordinance codified in this Unified Development Code becomes effective after its passage, and as to territory annexed after such date, "effective date" shall mean the effective date of the ordinance adding such newly annexed territory to a zoning district in Town.

Elevation

The front, side, or rear of a structure

Employee Dwelling Unit

For purposes of the Community Housing Inclusionary Requirements: a separate community housing unit that meets the following criteria:

(1) Located within or attached to a nonresidential development, but with a separate entrance from the nonresidential portion of the development;

(2) Not accessed from another residential dwelling;

(3) Detached from the nonresidential development but located on the same lot, parcel or subdivision; and

(4) Located at an approved site location different than the site of the employment generation.

Environmentally Sensitive Areas

Lands containing specimen trees, steep slopes, wetlands, watercourses, floodplains, other riparian areas, habitat of endangered or threatened species, hillcrests, geologic hazards, and similar natural features.

	ADU Regulations By PUD (Updated July, 2023)											
PUD Name & Location	Date	Current Zoning	Protective Covenants Supercede UDC?	Are ADUs Permitted?	Pertine							
Amber Rock												
(869, 871 and 873 Amber		Residential/Medium Density			1. Reso							
Rock Court)	1976	(R/MD)	None listed in Resolution or Agreement		2. Plat							
Ellen Manor												
(865 to 885 Colorado												
Avenue)	1976	Residential	No covenants found in Laserfiche	N/A, Development is already apartment/condos	1. Plat							
					1. Ordi							
					(Record							
			PUD objectives are to provide a high quality	Current development is multi-family units;	2. Anne							
			condominium and rental development for the	**Except where noted above, all other regulations of	3. Carb							
			average local resident and provide an aesthetically	the Carbondale PUD regulations shall govern. In the	Recept							
		Residential/High Density (R/HD):	pleasing environment through the development and	event of discrepancy between regulations and those of	4. Ame							
		Residential/Medium Density	landscaning of common areas and development of	the Town of Carbondale these regulations shall	Santa I							
Carbondale South	1979	(R/MD)	adjacent recreational areas	nrevail **	nlat rea							
Melhy (203 10th St)	1982	Residential			1 Ordi							
Kister (890 Garfield)	1985	Residential Mediam Density			1. Oran							
	1505		PLID Objectives: To promote continued preservation		1.11011							
			of historic residences at 811 and 819 Garfield									
			Preserve and enhance the quality of the									
			neighborhood: provide conforming land use with the		1 Dara							
Paradise			surrounding neighborhood, PLID agreement lists		Recent							
(811 - 827 Garfield Ave)	1988	Residential High Density (R/HD)	development standards		2 Plat							
	1500		PLID objectives to provide a location for		1 Man							
			nreschool/daycare add a SER and promote housing		#A1AAA							
Manle		Residential Mediam Density	ownershin PLID Agreement lists development		2 Man							
(834 and 836 Fuclid)	1990	(R/MD)	standards		6/26/1							
		(1 Ordi							
					annlica							
Twelfth Street	1994	Industrial (I)			2. Plat							
					1. Ordi							
					Mini-Pl							
					2. Ordi							
					Plat of							
Lincoln Avenue East	1994	Residential (R)	None listed in Covenants		3. Plat							
				Article 17, Declaration of Covenants: The use and								
				occupancy of each lot shall be restricted to one single-								
	1			family dwelling Lot and any accessory uses allowed								
_			Association maintains common areas and certain	under the Town of Carbondale Municipal Code.	1. Cove							
S Aountain Sage	2007	Commercial/Transitional (C/T)	exterior elements.	Affordable housing deed restrictions	2. PUD							

ent Guiding Documents

lution No. 5, Series of 1976 (Approving Amber Rock PUD); (Recorded 6/8/1976, Reception #272920)

(Recorded 6/8/1976, Reception #272914)

nance No. 13, Series of 1976 providing for annexation ded 6/25/1976, Reception #273193); exation Plat (not recorded nor dated); bondale South PUD Block 1 (Recorded 11/29/1979, ion #306370); ended Final Plat of Carbondale Housing Project/Villas De Lucia (Recorded 6/10/1999, Reception #547022) (original corded 9/16/1994, Reception #468556) nance No. 5, Series of 1982

ned Unit Regulations

dise Land Mini-PUD Agreement (Recorded 9/21/1988, ion #398195);

(Recorded 1/9/1989, Reception #398194)

le Mini-PUD agreement (Recorded 6/11/1990, Reception 18);

le PUD Zone Map and Resubdivision Plat (Recorded 990, Reception #413954)

nance No 22, Series of 1994 approving subdivision ntion (Recorded 7/28/1994, Reception #466411); (Recorded 7/28/1994, Reception #466413)

nance No. 21, Series 1993 Approving Application for the UD (Recorded 1/21/1994, Reception #458281); nance No. 26, Series of 1993 Approving Final Subdivision PUD (Recorded 1/21/1994, Reception #458280); (Recorded 1/21/1994, Reception #***)

nants (Recorded 12/19/2007, Reception #739583); Plat (Recorded 12/19/2007, Reception #739581)

Crystal Village PUD - Single Family Area	1976	Residential/Single Family/6,000 (R/SF6000)	Single Family Residential Use	Appendix A (Protective Covenants) of Crystal Village PUD Zoning Regulations: All of the lots in the single- family area of Crystal Village Subdivision, PUD, shall be known and described as "residential building lots." No building shall be erected, altered, placed or permitted to remain on any one lot other than a one-family dwelling not to exceed two stories in height and a private garage for not more than two cars.	1. Zoni 2. PUD 3. Zoni 4. Prot #27462 5. Crys
Crystal Village PUD - Single Family Area Filing 2	1077	Residential/Single Family/6,000			1 Diat
Crystal Village PUD Filing 4 and Amendment	1979	Residential/Single Family Patio Home (R/SFPH)	Single Family Residential Use	Item #3 in Covenants: No out-buildings shall be allowed for any use other than a summer home or gazebo or for storage and shall contain no more than 175 square feet. No garages shall be allowed unless attached to the residence.	1. Decl 9/7/19 2. Plat 3. Resu #3515 4. Ame Recept
Crystal Village Town Homes	1981	Residential/Multiple Family 2 (R/MF2)		Article VIII, Section 1 (Use Restrictions): Restricted to residential dwellings for residential use and uses related to the convenience and enjoyment of such residential use. There are no conditional uses per the Filing #4 Amendment.	1. Dec #3192
Crystal Village PUD Single Family Area Filing No. 5	1981	Residential/Single Family/6,000 (R/SF6000)			1. Plat
Crystal Village PUD Filing No. 6, Phase 1	1981			 Article VIIA: SFR purposes only Article VIIF: No other building, shed or other structure shall be located on any lot 	1. Plat 2. SIA (3. Ame 4. Ame Recept 5. Decl (Recor parcel; 6. First Recept 7. Ame Recept
ک کم کم کم کم کم کر کم کم کم کم کم کم کم کم کم کم کم کم کم	1989	Residential/Single Family 2/6,000 (R/SF2/6000)	Single Family Residential Use		1. Reso Crysta #4018 2. Prot #4018 3. Plat

ng regulations (Recorded 9/10/1976, Reception #274377); Plat (Recorded 9/10/1976, Reception #274378); ng Map (Recorded 9/13/1976, Reception #***); ective Covenants (Recorded 9/29/1976, Reception 29);

tal Village Homeowners Association By-Laws (n.d.)

(Recorded 10/10/1977, Reception #281044)

laration of Covenants for Filing Number Four (Recorded 979, Reception #297277);

(Recorded 9/7/1979, Reception #297276);

ub of Filing 4 Plat (Recorded 4/19/1984, Reception 17);

endment to Protective Covenants (Recorded 4/19/1984, cion #351518)

laration of Covenants (Recorded 9/15/1981, Reception 03)

(Recorded 10/29/1981, Reception #320791)

(Recorded 9/15/1981, Reception #319202);

(Recorded 9/15/1981, Reception #319204);

ended Plat (Recorded 11/20/1981, Reception #321707);

nded Plat, Resub Lots 1-7, Block 27 (Recorded 11/20/1981, ion #321708);

laration of Covenants for Lots 1-4, Resub of Block 21,

ded in 1992, Reception #***) to sell each lot as a separate

Amended Protective Covenants (Recorded 12/18/1981, ion #322846);

nded Plat, Resub Lots 1-4, Block 20 (Recorded 11/20/1981, ion #321709)

olution No. 89-4 approving a substantial modification of the I Village PUD (Recorded 5/31/1989, Reception 22)converting Multi-Family to Single-Family Zone District 2:

22)converting Multi-Family to Single-Family Zone District 2; ective Covenants (Recorded 5/31/1989, Reception 24);

(Recorded 11/22/1989, Reception #407691)

				1. Orig
				2. Zon
				#4247
Crystal Village PUD Filing			Zone District Revisions Item A.5: Accessory Use -	3. Pro
3 - Commercial/		Commercial/Office (C/O);	Residential (dwelling units above ground level in	4. Plat
Professional	1991	Commercial Special (C/S)	buildings containing any of the above uses)	Recep
				1. Res
				#**) n
				7, Filir
				2. Ord
				Recep
				3. Zon
Crystal Village PUD -				4. Plat
Residential Single Family,		Residential/Single Family/8000	Governed by Zoning Regulations of Crystal Village PUE	Recept
8,000 Zone District	1991	(R/SF8000)	Single Family Residential Use as amended by the R/SF/8,000 Zone District	5. Prot
Crystal Village PUD - Multi				
Family Area Amended				1. Rev
Filing No. 6. Phase 1	1992	Residential/Multiple Family (R/MF)	Single Family Residential Use Already multi-family area	2. Plat
		, , , , , , , , , , , , , , , , , , , ,	Allowed uses: Multifamily dwellings:	
Crystal Village PUD -			Owner-occupancy restriction;	1. Ord
, Residential/ Multifamily 2		Residential/Multi Family	All residential units developed on the property shall be	Recep
Zone District	2008	(R/AH/MF)	deed-restricted units	Zone [
Crystal Village PUD -				
Zoning Changes & Plat				
Amendments (Lots 3, 14,				
A and B-H), Commercial/			Amends zone district text to allow residential units on	1. Ord
Office Zone District	2016	Commercial/Office (C/O)	the ground floor in two existing mixed-use buildings	Recept
				1. Cov
				2. Plat
				3. RFV
			1. RFV was originally conceived as a mobile home park	Recept
			along with a multi-family area, C/RW District and C/I	4. Roa
			District.	Coven
			2. In ***, the PUD was amended	5. 1st /
			R/MD permitted uses include SFR or Row House, not	12/14,
			more than 3 renters, separate or multiple dwelling unit	ts Maxim
			on the same lot, provided that no single structure shal	6. Res
Roaring Fork Village -			contain more than 4 dwelling units.	Recept
Filing 1 (Wheel Drive &			3. Resolution 3/89 lists SFR as permitted use	R/LD/S
'Vheel Circle); Filing 2		Residential/Medium Density	R/HD permitted uses include SFR, Multi-family, Boardi	ng 7. Ord
Surrey Road)	1981	(R/MD)	House (not more than 16 boarders)	#4097
loaring Fork Village - The		Residential/Medium Density		1. Cov
/ictorians	1983	(R/MD)		2. Plat

ginally recorded (Reception 291560); e District Revisions (Recorded 6/26/1991, Reception 60); tective Covenants (n.d.); (Filing No. 3 Lots 2, 3, 4, 5, 6, and 7) (Recorded 6/26/1991, tion #424761)

olution No. 13, Series of 1990 (Recorded ***, Reception nodifying the Crystal Village PUD by rezoning Lots 2 through g No. 3 as R/SF 8,000;

- inance No. 18, Series of 1990 (Recorded 6/26/1991, tion #424758);
- ing Regulations (Recorded 6/26/1991, Reception #424759); (Filing No. 3 Lots 2, 3, 4, 5, 6, and 7) (Recorded 6/26/1991, tion #424761);
- tective Covenants (Recorded 6/28/1991, Reception #***)

ised plat (Recorded 11/20/1981, Reception #321707); (Recorded 9/15/1981, Reception #319202)

inance No. 4, Series of 2008 (Recorded 4/30/2008, tion #747608) creating a new Residential/Multifamily 2 District and Rezoning Lot 13 as part of this new district

inance No. 20, Series of 2016 (Recorded 12/6/2016, tion #886166)

enants (Recorded 1/26/1981, Reception #311387);

- (Recorded 1/26/1981, Reception #311388);
- PUD Plan & Zone Regulations (Recorded 7/31/1978, tion #287348);
- ring Fork Village PUD Plan which includes Protective ants for Filings No. 1 and 2 (n.d.);
- Amendment to Protective Covenants (Recorded
- /1981, Reception #322540) deletes in full Paragraph 12,
- num dwelling units allowed and Exhibit "A";
- olution No. 3, Series of 1989 (Recorded 5/31/1989,
- tion #401822) rezoning the R/HD Zone District to a new SF Zone District;

inance No. 5, Series of 1989 (Recorded 2/7/1990, Reception 24) restates Resolution 3/89

enants (Recorded 12/13/1983, Reception #348137); (Recorded 9/13/1983, Reception #345636)

			All lots within the Subdivision shall be used for		
			residential purposes and each lot shall be limited to		1. Ordi
			one (1) single family dwelling and such accessory		Recept
Roaring Fork Village -		Residential/Low Density - Single	structures as are allowed in the Roaring Fork Village	Declaration of Protectives Covenants, Item #1 limits lot	2. Cove
Filing 3	1990	Family District (R/LD-SF)	PUD zone regulations and any amendments thereto.	to one SFR dwelling	3. Plat
				Per Ordinance 3/2018 Conditional Use Approval Criteria:	: 1. Cov
				one residential dwelling unit per building or per	2. Plat
Roaring Fork Village -				ownership of lot; a residential dwelling unit may only be	3. Ordi
Commercial/Retail &				built as part of a structure, the primary use of which is	Recept
Wholesale	1993	Commercial/Industrial (C/I)		C/R/W purposes	each lo
				Den Ordinance 10/1002 Canditional Lies Ammanal	
				Criteria: One residential dwelling unit per building or let	
				which over is lowest A residential dwelling unit may	1 Ordi
Poaring Fork Villago				whichever is lowestA residential dwelling unit may	L. Uru
Commercial/Industrial	1003			which is C/L purposes	conditi
	1993				conuit
			All lots within the subdivision shall be used for	1. Declaration of Protective Covenants, Item #1: Limited	
			residential purposes and each lot shall be limited to	to 1 SFR and such accessory structures as allowed by	
			one (1) single family dwelling and such accessory	zone district regulations.	1. Prot
			structures as are allowed by zone district regulations	2. 1990 Covenants Article III Use Restrictions: Section	Declar
		Residential/Low Density 7,000	of the Town of Carbondale and any amendments	3.1: SFR purpose only not to exceed 2 1/2 stories and a	#4324
Crystal Acres	1990	(R/LD/7000)	thereto.	private garage to accomodate not less than one (1) car.	2. PUD
			1. Vest TOC P&7 Commission with architectural		
		Accomodations (A):	design and review:		1. PUD
		Entertainment/Commercial (EC):	2. Comply with all TOC zoning and subdivision		10/31/
Cowen PUD	1990	Entertainment/Residential (ER)	ordinances		2. Plat

linance No. 30, Series of 1989 (Recorded 4/11/1990, otion #411483) rezoning subject property from R/SF to CRW; venants (Recorded 4/11/1990, Reception #411489); t (Recorded 8/24/1990, Reception #***)

venants (Recorded 1/22/1993, Reception #443459); t (Recorded 3/17/1983, Reception #339296); linance No. 3, Series of 2018 (Recorded 3/19/2018, otion #904524) to allow one accessory residential unit on ot above the ground floor

inance No. 10, Series of 1993 (Recorded 5/7/1993, tion #447191) to allow residential dwelling units as a ional use

tective Covenants in Laserfiche are undated (GarCo lists ration of Covenants (Recorded 3/10/1992, Reception 16)); D plat (Recorded 3/10/1992, Reception #432413)

D Development and Annexation Agreement (Recorded /1990, Reception #418395); (Recorded 10/31/1990, Reception #418398)

			1. The Architectural Control Committee shall have		1. By-l Recep 2. Ord to mo 3. Ord Recep for Ka 4. Res Recep
Kay PUD	1993	1 Commercial/Industrial (C/I)	 authority to approve or disapprove improvements within the PUD. 2. The covenants list specific guidelines for landscaping, parking areas, signs, storage areas, and refuse. 3. The Zone Text Amendment of 2008 provides the TOC Planning Director the purview to determine if the proposed use is in conformance with all the stated criteria contained in the ZTA. 	 PUD Plan IIIA: Residential dwelling units have also been provided for on second or third levels of any structure in the proposed districtto allow people live near their work and allow people the opportunity to live near a major regional transportation facility PUD Plan F.c.v: If additional residential density is proposed, it shall be demonstrated that the residential units are designed to effectively foster live/work or transit-oriented development relationships 	condo Cleave 5. Rese Recept condo Cleave 6. Rese Recept Lot 12
Kay PUD Phase 2 (Lots 7, 8 and 12)	2005	5 Commercial/Industrial (C/I)			1. Pha #5107 2. Ame
Kay PUD Phase 1 (Lots 1 and 2)	2005	5 Commercial/Industrial (C/I)			1. Pha 2. Ame
River Valley Ranch	1994	Residential/Low Density/6,000 (R/LD/6000); Residential Multiple Family (R/MF); Residential/Medium Density (R/MD); Residential/Low Density/10,000 4 (R/LD/10,000)	 RVR PUD Limits ADUs/CTUs to those which are outlined in the PUD guide and/or have a Certificate; Per RVR PUD Zone District document, paragraph 3 of Introduction states that any conflict regarding use, density and supplementary requirements shall defer to the provisions of the PUD. 	 Per RVR PUD Zone District document the R/LD/10,000 Zone District is alloted 30 caretaker units and will be designated as the time of issuance of a building permit; The R/MD Zone District is allowed up to 40 accessory dwelling units as designated at time of building permit and only one accessory dwelling unit will be allowed on each lot; No separate ownership if ADU is allowed 	1. Mas 9/27/1 2. First Recep 3. Thir Protec (Phase 4. Ame Coven 5. RVR

- Laws of Kay PUD Owners Association (Recorded ***, tion #***);
- inance No. 8, Series of 2001 (Recorded ***, Reception #***) dify residential density within the PUD;
- inance No. 13, Series of 2006 (Recorded 10/17/2008,
- tion #757375) amending and restating the PUD Zone Text y PUD;
- olution No. 2, Series of 2015 (Recorded 8/31/2017,
- tion #896836) approving the conversion of a commercial minium unit to a residential condominium unit on Lot 7B, er and Caleb Condominiums;
- olution No. 10, Series of 2016 (Recorded 8/31/2017, tion #896839) approving the conversion of a commercial minium unit to a residential condominium unit in Lot 7B, er and Caleb Condominiums;
- olution No. 2, Series of 2018 (Recorded 7/23/2018, tion #909563) approving ground-floor residential density on B (Red Hill Lots)
- se 2 (Lots 7, 8 and 12) Plat (Recorded ***, Reception 16);
- ended Final Plat (Recorded 2/24/2005, Reception #669149)
- se 1 (Lots 1 and 2) Plat (Recorded ***, Reception #450253); ended Final Plat (Recorded 2/24/2005, Reception #669148)
- ster Declaration of Protective Covenants (Recorded 1996, Reception #498944);
- t Amendment to Master Declaration (Recorded 1/28/1997, tion #***);
- d Supplemental Declaration to Master Declaration of ctive Covenants (Recorded 5/28/1998, Reception #525883) e IV);
- 4. Amended and Restated Master Declaration of Protective Covenants (Recorded 3/25/1998, Reception #***);
 5. RVR PUD Zone Districts (n.d.)

Attachment B

					1. Decl
					1996, I
					2. Decl
			Declaration of Protective Covenants Section 3.4:		Concer
			"Each lot shall be improved, occupied and used only		Block C
			for single-family residential purposes. Single family		Recept
			occupancy shall mean and shall be strictly limited to		3. First
			occupancy of the residence on a Lot by a family	1. Exhibit "B" of Thompson Corner Master Deed	Covena
Thompson Corner			comprised of (a) no more than 2 principal adults, (b)	Restriction Declaration (Page 16) lists Permitted Capital	#54797
Common Interest			the children of one or both of said principal adults,	Improvements; does not identify accessory dwelling	4. Secc
Community (Affordable			(c) no more than 2 additional family members	units as permitted or not permitted;	Protec
Housing Component of		Residential/Medium Density	(adults or children) who are related by blood to said	2. Exhibit "C" of TC Covenants Supplement (Pages 7-9)	5. Ame
River Valley Ranch)	1996	(R/MD)	principal adults, and occasional guests."	supplies a Bedroom Chart	3/25/1
River Valley Ranch The					
Residences at Crystal			RVR PUD Limits ADUS/CIUs to those which are		1. Decl
Springs	2007		outlined in the PUD guide and/or have a Certificate	Townhome Community consisting of 12 lots	10/22/
				Iters 1 under Dretestive Coversates All late within the	
				subdivision shall be used for residential nurnesses and	1 1 c+ /
				subdivision shall be used for residential purposes and	1. 1St A
				dwolling and such accessory structures as are allowed	2. 2110
		Residential (Medium Density		by P. L. D. Plan for the Handrick Panch Subdivision and	#40090
Hendrick Banch Phase 1	100/			any amendments thereto	Becent
	1554				Песері
				Item 1 under Protective Covenants: All lots within the	
				subdivision shall be used for residential purposes and	
				each lot shall be limited to one SFR, multi-family	
				dwelling and such accessory structures as are allowed	
				by P.U.D. Plan for the Hendrick Ranch Subdivision and	1. Hen
Hendrick Ranch Phase 2	1996	Residential/Low Density (R/LD)		any amendments thereto.	Recept
				1. Article 8.1:the Lots are hereby restricted to	
				residential use and uses;	
				2. No residential buildings other than one Building on	
Sopris Landscape at		Residential/Medium Density		each Lot constructed by the Declarant shall be erected	
Hendrick Ranch	1997	(R/MD)	18 Lots for Single Family Townhome Residences	or constructed on the Properties	1. Lot 4
				1 Accessory anartments are forbidden on all lots	1 Prot
				exclusive of Lot 5:	#52089
		Residential/Low Density/7000		2 Individual rental of bedrooms is forbidden:	2 Δnn
Fox Run	1998	(R/LD/7000)		3. Home occupations allowed	3. Plat

ration of Protective Covenants (Recorded September	r 27,
eception #498946);	

laration of Master Deed Restriction and Agreement rning the Sale, Occupancy and Resale of Property within G, Phase I, River Valley Ranch (Recorded 2/25/1998, tion #20824);

t Supplemental Declaration to Declaration of Protective ants for Thompson Corner (Recorded 6/28/1999, Reception 79);

ond Supplemental Declaration to Master Declaration of tive Covenants;

ended and Restated Master Declaration (Recorded 1998, Reception #522481)

laration for the Residences at Crystal Springs (Recorded /2007, Reception #735765)

Annexation Plat (Recorded 11/25/1985, Reception 366854); Annexation Plat (Recorded 9/27/1994, Reception 67);

drick Ranch PUD Phase 1 Plat (Recorded 11/15/1994, tion #471035)

drick Ranch PUD Phase 2 Plat (Recorded 5/3/1996, tion #492525)

48 Plat (Recorded in 1997, Reception #504780)

tective Covenants (Recorded 8/20/1998, Reception 81);

exation Agreement (Recorded ***, Reception #530875); (Recorded in 1998, Reception #530878)

				1. All SFR/DR lots may be used for either single-family of	r
				 No residential building whether located on a SFR, DR or SFR/DR Lot shall be allowed to contain more than a 	
		Residential/Medium Density		single dwelling unit in the case of a SFR lot or two	1. Cove
Cleveland I	2005	(R/MD)		dwelling units in the case of a DR Lot or SFR/DR Lot	2. Fina
			1. All SFR lots shall be used only for single-family		
			residential buildings and purposes;		
			2. All DR lots shall be used only for two-family		
			duplex residential buildings and purposes;		
			3. No residential building, whether located on a SFR		
			Lot or DR Lot shall be allowed to contain more than	Residential/Section 2.2 of Covenants/Declarations	1. Cove
Cleveland II	2008	Residential (R)	a single dwelling unit per lot.	restricts the number of dwelling units per lot	2. Plat
		Residential/Multi-Family			
		(R/AH/MF);			
		Residential/Single-Family/Park			
		Side (R/SF/PS);			
		Residential/Single-Family/Street		Improved, Occupied and Used only for private, single-	1. Decl
Keator Grove	2007	Side (R/SF/SS)		family residential purposes	Recept

venants (Recorded 7/22/2005, Reception #678761); al Plat (Recorded 7/22/2005, Reception #678760)

venants (Recorded 7/31/2007, Reception #729737); t (Recorded 7/31/2007, Reception #729736)

claration of Protective Covenants (Recorded 10/8/2007, otion #734737)






























































4.2 | Future Land Use Designations

The Comprehensive Plan offers guidance for how to manage change in the future in a way that maintains and enhances Carbondale's small town character. Because a compact, geographically distinct form is an integral component of small town character, community members believe that optimizing the use of land in town with infill and redevelopment in some key areas is an important component of managing change. The future land use plan provides guidance about how to accommodate infill and redevelopment while maintaining or enhancing the physical characteristics that people like about Carbondale.

Future land use designations set the general direction for the development of land in the future. Maintaining and enhancing Carbondale's small town character is paramount. Community character relates to the use of land, but, more importantly, represents the design characteristics that influence the "look and feel" of future development. Instead of specifically identifying land use, a determination of character is more distinctly defined by the intensity of development, the arrangement of buildings and parking areas, the preservation and use of open space, and other design features. The future land use plan includes designations that use several distinct but interrelated elements of small town character to describe the desired future conditions for the neighborhoods throughout Town. This provides the community with a tool to maintain and enhance the characteristics that make Carbondale such a great place to live and work.

Infill development takes various forms depending on the location as depicted in the Future Land Use Map:

- Development on an existing vacant lot in town.
- Adding to and remodeling existing structures to create more dwelling units or increase nonresidential square footage. This is infill and redevelopment.
- Demolish and replace with new structures that result in an increase in dwelling units or non-residential square footage. This is also infill and redevelopment.
- Annexation and redevelopment of previously developed lands that already function as part of town.
- Accessory dwelling units are also considered infill because they contribute to an incremental increase in dwelling units in a particular neighborhood.
- With infill in existing neighborhoods, special care shall be taken to ensure mass and scale conform to the existing neighborhoods beyond what is allowed in the current underlying zoning. ADU infill development on existing developed lots should take special care to minimize impacts on neighbors.

Figure 2: Future Land Use Designation Summary Table

DESIGNATION	CHARACTER ELEMENT	DESCRIPTION	
Old Town	Location/context	Encompasses the oldest residential neighborhood in the historic town grid.	
	Relationship of development to streets	Street emphasis on sidewalks, trees, homes not parking. Minimize curb cuts across sidewalks.	
	Uses	Single-family dwelling units are predominant. Opportunity for accessory dwellings and home occupations.	
	Building mass and scale and architecture	Mitigate visual/solar impacts: step buildings down, limit vertical sidewall height.	
	Parking	Alley loaded parking/garages/carports where possible.	
	Landscaping	Emphasize street trees, sustainable storm-water management, and sidewalks. Where fiscally feasible, maintain existing ditches and resurface piped ditches.	
	Connectivity	Improve priority multi-modal corridors as described in the Mobility Plan Element with sensitivity to street character/ context and width.	
	Location/context	Town grid and early annexation areas where mixed multi-family and single-family has evolved.	
Residential Traditional	Relationship of development to streets	Emphasize pedestrians more than cars and bring vehicles to internal site to promote walkable frontages. Modest front yards provided where possible.	
	Uses	Diverse mix of single-family, multi-family, accessory dwelling residential units and home occupations.	
	Building mass and scale and architecture	Avoid monotonous, box-like multi-family buildings. Multi-family similar in scale/size to the neighborhood.	
	Parking	Alley or side-loaded parking/garages/carports where possible.	
	Landscaping	Emphasize street trees, sustainable storm-water management, and sidewalks.	
	Connectivity	Improve priority multi-modal corridors as described in the Mobility Plan Element with sensitivity to street character/ context and width.	

Attachment D

DESIGNATION	CHARACTER ELEMENT	DESCRIPTION		
	Location/context			
Residential Mixed	Relationship of development to streets	Emphasize pedestrians more than cars and provide pedestrian access on neighborhood streets. Provide modest front, rear or side yards where possible.		
	Uses	Diverse mix of single-family and attached housing, multi-family, and Accessory Dwelling Units.		
	Building mass and scale and architecture	Provide a transition between higher density housing, commercial activity nodes and older smaller-scale neighborhoods. Site design is compatible with surrounding uses.		
	Connectivity	Build a mobility network around the original town grid pattern. Incorporate connectivity with adjacent uses and nearby pathways, landscaping screening and/or a unique landscape design.		
Downtown North	Location/context	These large parcels with industrial/warehouse uses north of downtown that have two possible futures: 1) they may remain a light industrial center for decades to come, 2) it is an ideal location for mixed use redevelopment complementary to downtown. This designation describes option 2, the mixed use redevelopment option.		
	Relationship of development to streets	Development orients itself to the Rio Grande Trail by opening frontages or accesses to the path and not turning a back to it. Locate buildings and entrances close to the sidewalk and/or street.		
	Uses	Focus on form and design of buildings rather than specific uses. Encourage distinct mix of activities separate from Downtown. Central common/public gathering space or green open space. Light storage, industry and warehousing that supports manufacturing jobs. Makerspace supporting the creative industry and arts. Types of housing may include a mix of townhomes, duplexes/triplexes, apartments, to diversify the Town's affordable, rental or ownership housing offerings.		
	Building mass and scale and architecture	Harmonize development with the scale and pattern of Downtown and has a level of activity and residents that builds on Downtown vitality. Accommodate a transition from the Downtown edge/Rio Grande Trail to the Colorado Meadows single family neighborhood. Limit to three stories. Break up building massing and rooflines to avoid monotonous, box-like structures		
	Parking	Combine surface lots, parking shelters, and tuck-under parking garages. Site parking on sides and behind buildings in smaller scale lots divided by landscaping. Integrate parking structures into the primary building's architecture. Utilize alley loaded parking, shared driveways and parking lots to minimize the number of needed curb cuts through sidewalks.		
	Landscaping	Usable, landscaped open space and a central public feature should be integrated as an organizing element in the site design. Connect greenways via green stormwater infrastructure (to facilitate movement of pedestrians or vehicles through the site).		
	Connectivity	Scale right of way to accommodate automobiles, bicycles, pedestrians and street trees depending on the use of the street. Connect to the historic town grid to the greatest extent possible with an emphasis on pedestrian and bicycle connections and establish a street connection to Highway 133 via Industry Place/ Merrill Avenue. Facilitate multi-modal connections Downtown to the Rio Grande Trail to establish public trail connections to the Carbondale Nature Park.		

2022 Attachmentennsive Plan





|Existing residential |

Intent: Old Town is considered the oldest residential neighborhood in town. This designation encompasses the portion of the historic residential town grid that was zoned as Old Town Residential in 2008. This zone district emphasizes the historic character of the Old Town neighborhood. Single-family dwelling units are the predominant development type and this designation presents an opportunity to preserve the small-town feel of a town-grid historic residential neighborhood.

Top priorities include:

- Single-family dwelling units are predominant
- Street emphasis on sidewalks, trees, and homes not off-street parking
- Opportunity for accessory dwellings-need simplified permitting process
- Use naturalized storm water treatment practices instead of curb and gutter on most streets
- Improve priority multi-modal corridors with sensitivity to street character/context and width
- Alley loaded parking/garages/carports where possible

Relationship of development to streets:

- Emphasize pedestrians more than cars
- As viewed from the street, emphasize sidewalks, green space, trees and the buildings themselves more than off-street parking, garages and carports



|Existing residential|

- Buildings should be the focal point of the site by locating them close to the sidewalk and/or street
- Modest front yards should be provided where possible
- Utilize the town streets right-of-way to accommodate sidewalks, trees and other elements of the streetscape

Uses:

- Single-family dwelling units continue to be the predominant development type in this portion of the original town site
- Explore the possibilities for a simplified review/permitting process for smaller, lower occupancy accessory dwelling units (ADUs) that are attached and/or visually accessory to the primary dwelling
- Allow low-impact home occupations to encourage citizens to live and work in Carbondale

Building Mass and Scale:

- Mitigate impacts of structures on adjacent properties and streets and maintain open access to sunlight and air flow
- Step buildings down in scale as they approach alleys
- Limit height on vertical sidewalls



| Parking configuration example: Town grid alleyloaded parking and garages for single family homes |

- Detached ADUs should be scaled to be visually secondary to the main dwelling
- Encourage architectural variety in new buildings and redevelopment of existing buildings
- Avoid prominent garages facing streets

Parking:

- Encourage alley loaded parking/garages/ carports as properties redevelop
- Alley loaded parking/ garages/carports, shared driveways and shared parking lots can be utilized to minimize the number of needed curb cuts and increase the function and safety of sidewalks and streets
- On-street parking can include parallel and diagonal parking configurations, depending on the available street right-of-way
- On-street parking should be designed to accommodate the system of multi-mobility corridors described in the Mobility Plan Element
- Link parking requirements to the size and/or likely occupancy of the ADU
- The 2 space per unit standard in place for ADUs today should be reduced to one space per unit for smaller, lower-occupancy ADUs



| Parking configuration example: Town grid alleyloaded parking and garages for single family homes |

Landscaping:

- Plant and maintain large shade trees in front along the street
- Work in partnership with irrigation water entities to maintain existing ditches and uncover and expand the ditch system so that irrigation water can be made more readily available
- Utilize sustainable storm water practices such as detention areas, bio-swales, rain gardens, terracing and porous pavements

Connectivity:

- Utilize the town streets right-of-way to accommodate improvements called for in this plan's Mobility Plan Element
- Site specific conditions such as street rightof-way width, neighborhood character, and traffic volumes, all need to be taken into consideration when designing and installing sidewalks, pathways and other multi-modal improvements
 - For example, right-of-way width on many streets may accommodate detached sidewalks, but landscaped drainageways would be more consistent with neighborhood character and naturalized storm water treatment practices than a traditional curb, gutter and sidewalk configuration
- Curb cuts should be limited to avoid pedestrian and bike traffic conflicts

Residential Traditional



|Existing|



|Existing|

Intent: Provide an opportunity for a variety of housing types with similar scale and architectural character, which is largely traditional (mostly one- to three-story buildings). Create opportunities to incorporate missing middle housing and affordable units with high levels of urban services.

Relationship of development to streets:

- Emphasize pedestrians more than cars and bring vehicles to internal site to promote walkable frontages
- Modest front yards provided where possible

Uses:

- Single family detached homes, attached townhouses and duplexes with individual external entrances
- Apartment buildings and other multifamily attached units, condominiums, and accessible units if appropriately scaled
- Accessory Dwelling Units

Building mass and scale:

- Create "Transition Areas" within this designation to ensure neighborhood context and compatible design
- Ensure site design is compatible with surrounding uses through buffering, smooth density transitions and other site design features
- · Building heights must be context-sensitive

Parking:

- Place parking structures where they can be disguised, screened and/or integrated into the building architecture
- Use parking to provide a transition between unlike land uses
- Link parking requirements to the size and/or likely occupancy of ADUs.

Landscaping:

• Emphasize street trees, sustainable stormwater management, and sidewalks

Connectivity:

- Build the mobility network around the original town grid pattern and early annexations adjacent to the town grid.
- Incorporate design and access to connect adjacent uses and nearby pathways, landscaping screening and a sense of place created through placement of amenity and gathering spaces
- Pedestrian connectivity is direct to nearby mixed use or commerce nodes

Residential Mixed



|Existing|



|Existing|

Intent: Create a vision that works with existing conditions and help to transition between different uses without an enhanced future vision. Provide a wider range of housing flexibility than single-family areas while maintaining historic scale and density. Designation contributes to compact areas within larger neighborhoods and may be located near centers of commerce or employment to provide walkable access to services and workplaces.

Relationship of development to streets:

- Emphasize pedestrians more than cars and provide pedestrian access on neighborhood streets.
- Provide modest front, rear or side yards where possible.

Uses:

- Single- and multifamily attached units, townhouses, condominiums, cottages that incorporate universal design concepts.
- Accessory Dwelling Units (ADUs).
- Acts as a transitional land use between commercial properties and therefore this future use supports revisions to the UDC's transitional zoning standards for areas with unlike adjacent uses.
- Expands to unlike uses across rights-of-way, rather than adjacent property lines.

Building mass and scale:

- Provide a transition between higher density housing, commercial activity nodes and older smaller-scale neighborhoods.
- Site design is compatible with surrounding uses through buffering, smooth density transitions and other site design elements.

Parking:

- Provide on-site parking in infill developments, but not in large parking lots that front the street
- Encourage alley loaded parking/ garages/ carports, shared driveways and shared parking lots
- Where inactive alleys cannot be reclaimed or do not exist, encourage side-loaded or courtyard parking and/ or shared driveways where practical.
- Link parking requirements to the size and/or occupancy of ADUs.
- On street parking includes parallel and diagonal parking configurations, depending on the available street right-of-way but should be integrated into a system of multi-modal mobility. Allow the guest parking portion of the off-street parking requirements to be accommodated along streets with enough right-of-way.

Developed Neighborhoods



| River Valley Ranch |



| Keator Grove |

The Developed Neighborhoods designation is intended to provide for neighborhood stability while allowing remodeling, replacement and new construction in established residential neighborhoods. Developed neighborhoods consist of residential subdivisions, condominium developments, multi-family developments, and planned unit developments that are unlikely to change significantly over the twenty-year planning horizon of this Comprehensive Plan.

Top priorities include:

- Protect existing zoning/approvals/permits
- Allow remodeling, replacement and new units on vacant lots
- Encourage Accessory Dwelling Units
- Improve bike/pedestrian connectivity

Uses and Intensities:

- Continuation of the approved/existing uses
- Where the original approvals do not prohibit accessory dwelling units (ADU), they will continue to be allowed on lots that can accommodate these units and the required offstreet parking
- Private covenants, although generally not enforced by the town, are also a factor in how future development will occur in stable neighborhoods where they are in place

Landscaping:

• Encourage and invest in street trees

Connectivity:

- Future multi-modal improvements to pathways, sidewalks and street/highway crossings will provide connections between stable neighborhoods, other residential neighborhoods and commercial/institutional destinations throughout town
- Emphasize connecting the east and west sides of town across Highway 133

Recommendations

The following housing policies are aimed to increase supply of needed unit types and costs. But to help Carbondale further supply housing, more must be done to boost housing policy flexibility (e.g., land use standard relaxations for affordable projects).

- Explore programs and policy tools to prevent displacement (e.g., rent stabilization, commercial linkage fees, impact fees, or rent review boards) for all susceptible communities.
- 2. Ensure that land use regulations governing Planned Unit Development (PUDs) and subdivision covenants facilitate and remove barriers to construction of more affordable housing.
- Allow Accessory Dwelling Units (ADUs) for single-family residential zones, to add housing capacity and increase financial flexibility for owners. Consider adding an educational component to inform homeowners with guidance on ADU construction/conversion. Research best practices from peer communities for enforcement and monitoring.
- Refine and evolve inclusionary zoning regulations to ensure they do not discourage mixed-use developments that would otherwise include needed housing. Explore programs allowing limited sale/transfer of unit requirements in such cases.
- Partner with Garfield County to leverage County efforts to encourage production of affordable housing, including participation in State (CHFA) and federal (HUD/HOME, USDA) programs including Low-Income Housing Tax Credit (LIHTC) subsidies.
- Convene a town-wide and/or regional task force to develop a comprehensive policy to address multi-generational housing, displacement, and social equity issues and considerations including topics of smallbusiness retention, housing affordability, and anti-displacement policies in the community.
- 7. Assist in the formation of non-English-speaking business groups or commerce associations.
- Consider adoption of recent Garfield County modifications to the County's Land Use & Development and Building Codes to allow for "Tiny Homes."

- 9. Support and expand the Carbondale Affordable Creative Space effort to promote and fund arts-oriented space.
- 10. Expand deed-restricted housing through Community Land Trusts (CLTs) either by partnering with an existing CLT (e.g., Elevation CLT, primarily active in the Front Range today) or by helping to organize a similar partnership in the Roaring Fork Valley.
- 11. Evaluate strategies to actively engage with regional housing providers to address affordable housing opportunities.
- 12. Continue to engage with affordable housing providers and agencies to develop actionable strategies and programs to deliver affordable housing in Carbondale.
- 13. Re-assess affordable housing needs, land development opportunities, funding, partnerships, site selection criteria, and design guidelines for possible affordable housing initiatives for the Town of Carbondale.
- 14. Explore creating a facade improvement program and funding source to support local businesses and jobs.

With good design standards and conversion policies, ADUs will continue to supply viable housing



5.6 | Historic Preservation

Overview

The Plan Update process included opportunities to engage the Carbondale Historic Preservation Commission (CHPC) to discuss their specific vision and priorities, preservation strategies, and ideas for the Downtown, historic commercial core, Downtown North and other areas of historic and cultural resources in the community.

Community Input

During the planning process, the questions were asked:

- Balance between historic scale and new development is necessary for the Historic Commercial Core's and the community's success, but is the current framework preventing economic development?
- How can we implement or extend the historic design guidelines to residential neighborhoods? Does this go beyond Old Town future land use designations?



| Figure 11: Vacant Parcels in the Downtown |

Recommendations

- Develop a dedicated funding source such as a revolving loan program to fund preservation efforts and building/interior improvements.
- Update the Downtown historic design guidelines and expand for residential uses, particularly into the Old Town Residential (OTR) neighborhood.
- 3. Create a courtesy review for the CHPC for projects within OTR neighborhoods.
- 4. Consider form-based residential infill development standards to ensure new development, building additions and new elements like ADUs are compatible with adjacent contributing historic resources and neighborhood context.
- 5. Work with property owners to ensure future historic area boundaries are accurate and clear.
- 6. Consider ways to encourage and incentivize future development toward key areas of vacant or underutilized parcels Downtown.
- 7. Consider meaningful ways to promote pedestrian and bicycle connectivity between the Historic Commercial Core (HCC) and other areas of Carbondale.
- 8. Consider ways to promote the HCC zone district as the primary hub of activity for the town of Carbondale by encouraging local and essential businesses, food and beverage establishments, entertainment destinations and a diverse mix of housing in the HCC.
- 9. Consider ways to adopt form-based code language that places larger emphasis on character, massing, and scale, building articulation and adjacencies rather than enforcing building use as the basis of requirement.

2022 Attachmenten Isive Plan

GOAL TOPIC 1: COMMUNITY CHARACTER							
CATEGORY	#	STRATEGY / ACTION	RESPONSIBILITY	TIMELINE			
Gateways	1.1	Protect and enhance the gateways into Town.					
	1.1.1	Consider placemaking and community character features when doing the Highway 133 Corridor Study and other future studies.	Town, Arts + Culture Organizations	••			
Arts + Culture	1.2	Support Carbondale's identity as a place that fosters creativity, collaboration, innovation, and artistic exploration.					
	1.2.1	Continue and further the work done on the one-mile stretch of the Rio Grande Trail known as the Rio Grande Art Walk.	Town, Arts + Culture Organizations	••			
Historic + Cultural Resources	1.3	Continue to expand historic preservation opportunites and cultural resources and maintain the historic scale of Downtown Carbondale.					
	1.3.1	Develop a historic preservation program that includes an asset inventory study and strategies to help ongoing historic preservation resource needs backed by a dedicated funding source.	Town, CHPC, Town Board	••			
	1.3.2	Update the historic design guidelines for both additions to existing buildings and new infill projects.	CHPC, Plannning Commission	•			
	1.3.3	Adopt form-based residential infill development standards to ensure new development, additions and ADUs are compatible with adjacent historic and neighborhood context.	Planning Commission & Planning Department	•			
	1.3.4	Create a facade renovation improvement program and funding source.	CHPC & Town Board	••			
	1.3.5	Continue to create opportunities for public spaces and green spaces in the Downtown, Downtown North + Rio Grande Trail and include policy and CIP updates to the Town's Parks and Recreation Master Plan.	Town, Parks & Rec Commission	••			
	1.3.6	Review and update Carbondale's Historic Preservation Code to strengthen preservation efforts that are balanced with property owners' rights.	CHPC, Plannning Commission	• •			

Near-term (0 to 3 Yrs)
Medium-term (0 to 6 Yrs)
Long-term (0 to 10 Yrs)

Ongoing

GOAL TOPIC 3: HOUSING + JOBS							
CATEGORY	#	STRATEGY / ACTION	RESPONSIBILITY	TIMELINE			
Land Use + Zoning	3.4	Evaluate the UDC to identify and remove barriers to affordable and accessible housing supply.					
	3.4.1	Ensure that land-use regulations governing Planned Unit Development (PUD's) and subdivision covenants facilitate and remove barriers to construction of more affordable housing.	Planning Department & Planning Commission	• •			
	3.4.2	Educate homeowners on Accessory Dwelling Units (ADU) regulations and provide guidance on permitting and construction conversion. Research best practices from peer communities for enforcement and monitoring.	Planning Department	••			
	3.4.3	Consider amending the UDC to allow detached ADUs.		•			
	3.4.4	Amend the UDC to define and allow tiny homes.	Planning Department & Planning Commission	•			
	3.4.5	Consider residential infill design standards / guidelines to address design compatibility, form, scale and character, specifically to address, adjacencies, roof line forms, solar access, entry and window alignments, setbacks, upper level stepbacks and privacy and other mass and scale standards to ensure compatibility of structures between low and high- density uses and protection of neighborhood character as changes occur over time.	Planning Department & Planning Commission	•			
	3.4.6	Consider revisions to the "Transitions between unlike land uses" (UDC 3.7.5) in the Town's Unified Development Code that strengthen design compatibility in areas where R/HD zones abut or are across the street from R/LD zones.	Planning Department & Planning Commission	•			
	3.4.7	Continue to negotiate with developers when rezoning to address phasing, diversity in housing, and affordable housing requirements.	Planning Department & Planning Commission	Q			
	3.4.8	Monitor short-term rentals (STRs) to ensure that local/ workforce housing is not converted into STRs. Amend the UDC to prohibit STRs where inappropriate.	Planning Department & Planning Commission	•			
Land Use + Zoning	3.5	Support and expand the Carbondale Affordable Creative Space effort to promote and fund arts-oriented space.					
	3.5.1	Duplicate 2018 pilot survey for that identified preliminary demand potential for 42 live-work artist units, 11 shared creative workspaces, and other arts-oriented space that could be pursued further in plans for redevelopment throughout Carbondale - particularly in conjunction with infill redevelopment of Downtown and Downtown North.	Carbondale Arts, Art & Culture Organizations, Town Board	••			
	3.5.2	Continue to pursue diversity in housing types by encouraging live/work space for artists.	Planning Department, Carbondale Arts, Art & Culture Organizations,	Q			