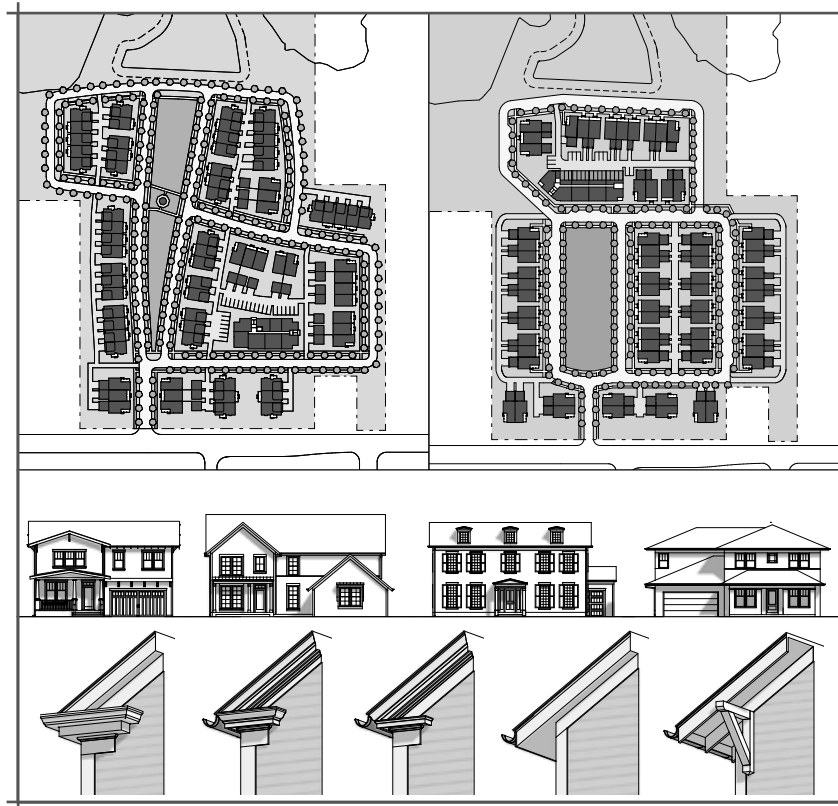


RESIDENTIAL DESIGN GUIDELINES



ACKNOWLEDGMENTS

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1 Introduction

A HELPFUL RESOURCE

The purpose of these guidelines is to provide property owners, project designers, and developers with a clear understanding of the Village's expectations for residential projects. While they will be used as criteria for approval during the Village's plan review process, the intention is that they are seen not as hindrances to overcome, but rather helpful guidance that can add value to projects without sacrificing marketability or constructibility.

A VISUAL APPROACH

Side-by-side comparisons that juxtapose typical design "mistakes" with alternative improved designs demonstrate how specific modifications can enhance the quality of the building and site and, by extension, the quality of the neighborhood. These guidelines are careful to recommend improvements that are largely cost-neutral and, in many cases, represent opportunities to reduce construction costs. By avoiding things that are expensive but add little value (and are more often than not counter-productive in terms of design quality) such as frivolous jogs in foundation walls and excessively complicated roof forms, owners can reallocate some of their budget to elements of the design that will deliver more bang for the buck.

MAKING GREAT NEIGHBORHOODS

Most residential design guidelines focus on preserving the character of existing neighborhoods through the regulation of infill, detached home designs. These guidelines, tailored to Mundelein's particular needs, reach beyond the design of individual homes to address how buildings, as an ensemble, relate to streets and open space.

With the expectation that the Village will see the proposed of new master-planned subdivisions in the coming years, staff needs the tools to ensure that developments meet a higher level of quality than has been typical in the past. It is with that in mind that this document places a high priority on the design of new subdivisions at the level of the site plan. They aim to establish a new baseline of design quality for Mundelein's neighborhoods.

2 Design Review Process

PATHS TO PROJECT APPROVAL

The Village acknowledges that time is of the essence and understands the risks associated with development. With that in mind, it is the intent to make the design review process as streamlined as possible, offering paths for expedited review.

In the case of new subdivisions / multiple buildings, applicants can take advantage of an expedited review process by following the ten (10) key **Traditional Neighborhood Design** (TND) Criteria outlined in these Guidelines (see Section 4.2).



Similarly, in the case of applications for the construction of individual buildings, owners can take advantage of an expedited review process by choosing to utilize a single **Authentic Architectural Style** (see Appendix Section 6.1).

Applicants are free to submit designs that do not follow the Traditional Neighborhood Design and Authentic Architectural Style Criteria outlined in these guidelines, but doing so triggers the requirement for an external design review, including in-person meeting(s).

HOW TO USE THIS GUIDE

Ten key TND Criteria are mandatory for achieving expedited approval (see Design Review Process Chart on p. 7) are numbered 1 through 10, and called out in shaded text boxes when they appear in this document.

Items not in the 10 Key TND Criteria can be thought of as “guidance” rather than strict guidelines, intended to help owners, designers, and developers understand how specific decisions can enhance the quality of their projects.

Design choices are presented in “apples-to-apples” terms to the greatest extent possible, with features that tend to detract from project quality labeled “discouraged” with a cross icon  and those that tend to enhance project quality labeled “encouraged” with a check icon .

OTHER RESOURCES

[Get Your House Right: Architectural Elements to Use & Avoid](#) by Marianne Cusato, Ben Pentreath, and Richard Sammons.

(Every designer and developer should have their own copy of this timeless resource. Look for references to this treasure trove of rules-of-thumb and specific details throughout these guidelines, where you see the abbreviation **GYHR**.)

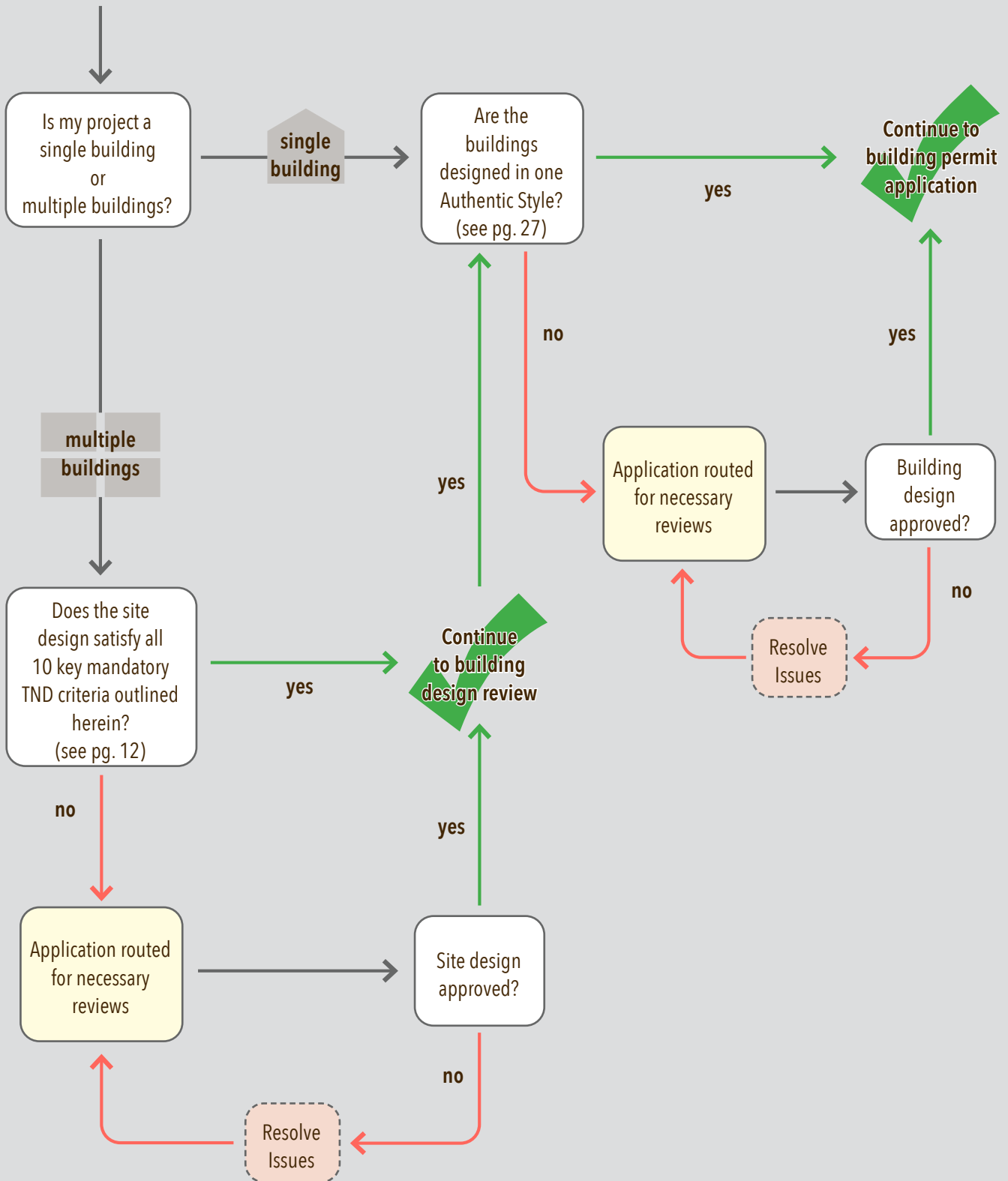
[Architectural Design for Traditional Neighborhoods](#) by Korkut Onaran, Fernando Pagés Ruiz, Ronnie Pelusio, and Tom Lyon.

[What Not to Build: Architectural Options for Homeowners](#) by Sandra Edelman, Judy Gaman, and Robby Reid.

[Traditional Construction Patterns: Design and Detail Rules-of-Thumb](#) by Steve A. Mouzon.

Design Review Process Chart

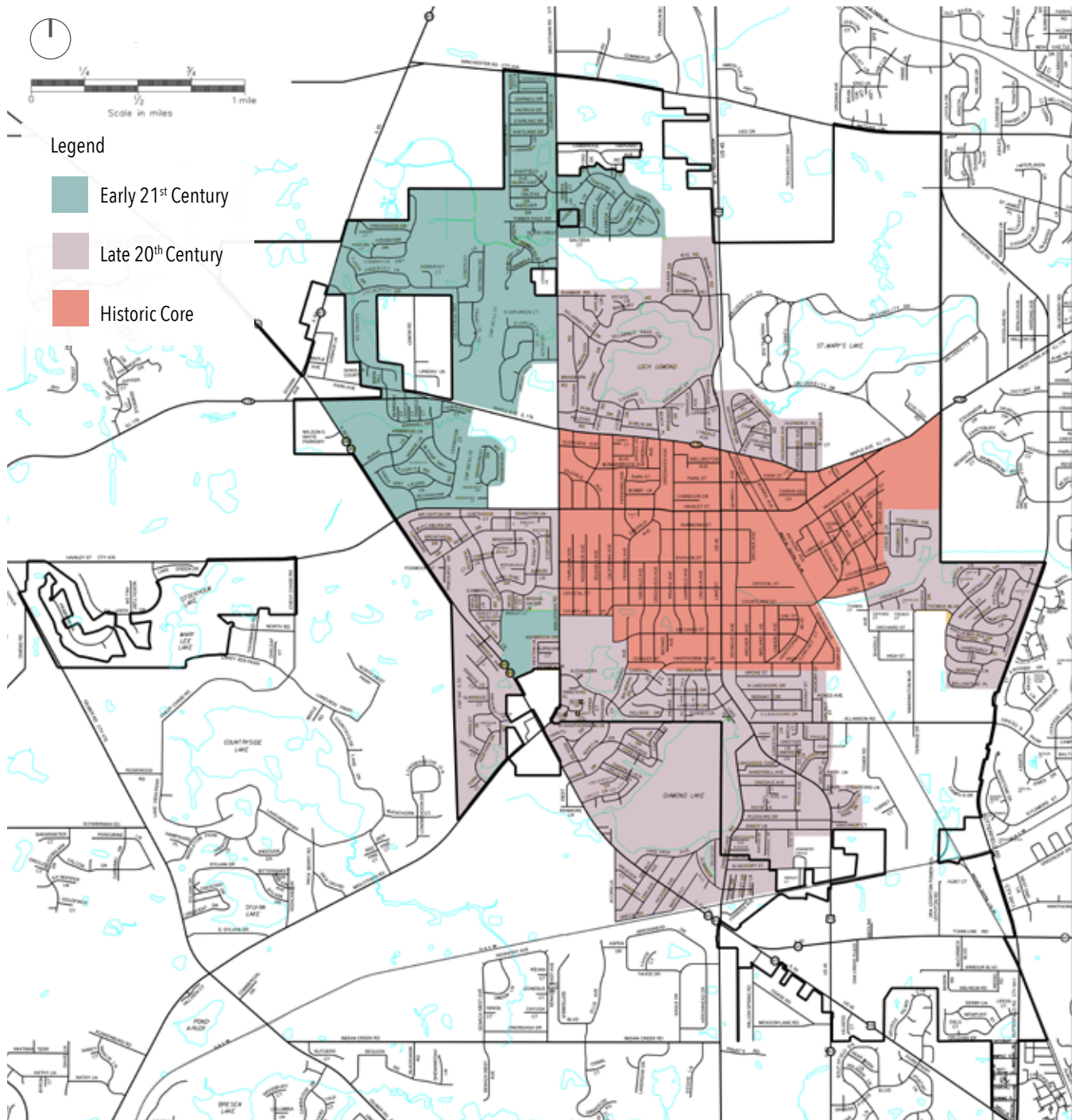
Start Here



3 Context

Traditional neighborhood design incorporates a mix of land uses and residential densities, with a center and edge or boundary, a modified grid system of streets with short blocks that diffuse traffic and encourage pedestrian and bicycle circulation. In contrast, post-war developments tend to consist

of isolated land uses with few direct connections, separated uniform residential densities, curved residential streets, and longer blocks. This type of conventional neighborhood development tends to mandate the use of arterial roads and discourage pedestrian and bicycle circulation between uses.



Map of Mundelein's neighborhood character areas.

MUNDELEIN'S NEIGHBORHOODS

A history of Mundelein establishes a fundamental understanding of the factors that influence residential design in the existing portions of the Village. The Mundelein of today was built out over more than a century. Its neighborhoods and subdivisions reflect predominant national development trends at the time they were developed. Mundelein's older downtown neighborhoods feature small, gridded blocks with shallow building setbacks. (This traditional grid remains the optimal pattern for accommodating walking, biking, and vehicles today.) These older neighborhoods tend to have lots approximately 50 feet wide with detached garages located at the back of the property, accessed by a driveway. Those conditions require homes to be relatively narrow with relatively small side yard setbacks (see Traditional Street Grid graphic below).

Newer Mundelein subdivisions from the later 20th and early 21st Century were designed around cars and driving and are not pedestrian-friendly. These cul-de-sac subdivisions feature dead ends, misaligned streets, wider lots, and deeper building setbacks (see Cul-de-Sacs Subdivision graphic below). In early 21st Century, poorly-connected developments the lots got smaller while the blocks got longer (see Poorly Connected Subdivision graphic below).

PURPOSE STATEMENT

For years Mundelein has watched as developers propose lower quality plans and housing designs than it offers to surrounding communities. These design guidelines were undertaken to address this inequity by improving the planning and design of new developments in the Village of Mundelein. The guidelines captures a consensus between council and staff on the quality and character they would like to see in future development in the Village.



4 New Subdivisions

If building designs could ensure only the finest materials and exquisite details were used in the construction of buildings it would not be enough. Unless the arrangement of buildings—their relationship to streets and open spaces—also follow sound principles, the result may fail to produce characteristics of great neighborhoods.

Residential developments should provide site plans that place a strong emphasis on the relationship between streets, buildings, open spaces, entry features, and landscaping. What follows are recommendations that should help guide the preparation of site plans for new neighborhoods.

Quality place-making depends on a dynamic interplay of design at many scales, but **the most important decisions occur at the level of the site plan.**

PLANS AT DIFFERENT SCALES



4.1 PATTERN COMPARISON



	Conventional	Hamlet	Traditional
# Units	67	97	95
Development Footprint Area	10.5 ACRES	10.7 ACRES	10.3 ACRES
Units per Acre	6.4	9	9.2
Open Space Amenity Area	1 ACRE	1 ACRE	1 ACRE
Pavement Area (streets)	37,160 SF	74,896 SF	61,142 SF
Pavement Area (alleys & driveways)	49,811 SF	39,093 SF	35,055 SF
Total Pavement Area	86,971 SF	113,989 SF	96,197 SF
Pavement Area per Unit	1,298 SF	1,175 SF	1,013 SF

4.2 KEY DESIGN CRITERIA

A neighborhood can be considered the basic planning unit of a town. Traditional Neighborhood Design (TND) incorporates a mix of land uses and residential densities, with a center and edge or boundary, a modified grid system of streets, with relatively short blocks that diffuse traffic and encourage pedestrian and bicycle circulation. This is in contrast to sprawl development patterns, which create pod-like clusters that are disconnected from surrounding areas.

Non-traditional development patterns, which make up the vast majority of post-war neighborhood developments, tend to consist of isolated land uses with few direct connections, separated uniform

residential densities, curved residential streets, and longer blocks. This type of neighborhood development tends to mandate the use of arterial roads and discourage pedestrian and bicycle circulation between uses.

New subdivision designs are encouraged to support the creation of high quality neighborhoods, as described above as TND. These Guidelines have distilled the fundamental aspects of good neighborhood design into ten (10) Key TND Criteria. Meeting these criteria will make the project application **eligible for fast-track processing**.

TEN KEY TND CRITERIA

STREET NETWORK

- 1 streets shall be designed for speeds not to exceed 25 miles per hour.
- 2 maximum 800' between intersections & minimum one (1) intersection per two (2) acres.

LIVABLE COMMUNITIES

- 3 key lots to provide enhanced architectural design elements.
- 4 90% of dwellings should be no more than 3-minute walk to formal open space.

WALKABLE STREETS

- 5 minimum of 90% of buildings shall have a principal functional entry facing a public space, such as a street, park, paseo, or plaza.
- 6 maximum street frontage of 20% may be faced by garage doors / service bays.
- 7 continuous sidewalks on at least one side of every street.

COMPACT & MIXED

- 8 minimum of 3 product types with a minimum of 10% and maximum of 60% of any given product type.
- 9 minimum density of seven (7) dwelling units per acre.
- 10 no home should be constructed which is similar in appearance to any dwelling which is adjacent to it or directly across the street.

4.2.1 STREET NETWORK

1 STREETS SHALL BE DESIGNED FOR SPEEDS NOT TO EXCEED 25 MILES PER HOUR.

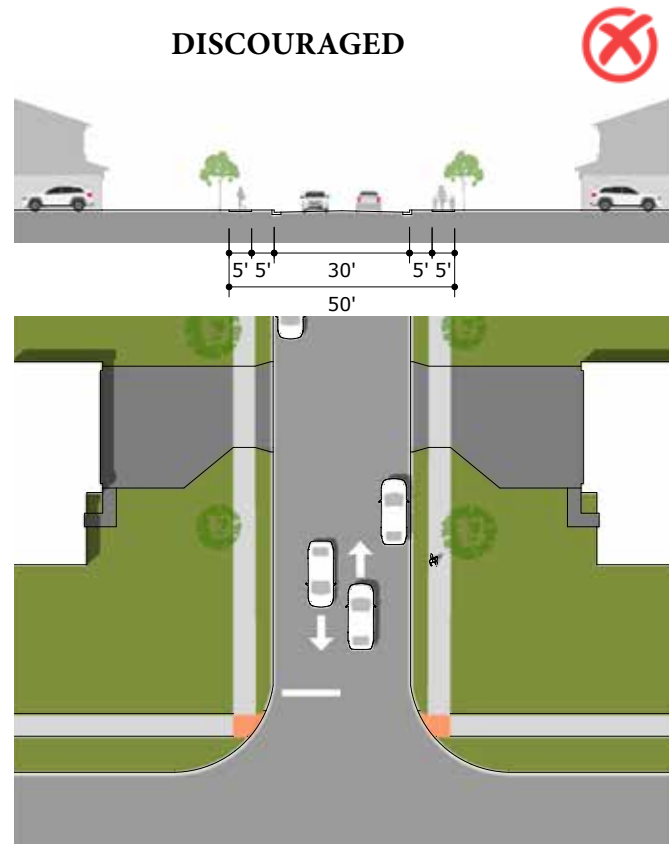
Neighborhoods should be designed with an interconnected street system that will diffuse traffic within the neighborhood and connect to the existing street network.

Residential streets (local and collector) should be designed for low speeds and low volumes by utilizing the smallest possible street design to accommodate daily traffic volumes. The intent is to discourage the oversizing of residential streets.

Generally, new residential streets shall comply with the Village’s street standards as outlined in the Municipal Code. However, alternative designs to improve the aesthetics, pedestrian experience, or circulation are encouraged with the condition that minimum pavement width for both public and private streets shall be consistent with Mundelein’s adopted residential street standards. Examples of alternative designs include narrow sections/curb extensions to slow traffic and other approved traffic calming devices, including landscaping, pathway treatment, and multi-use paths.

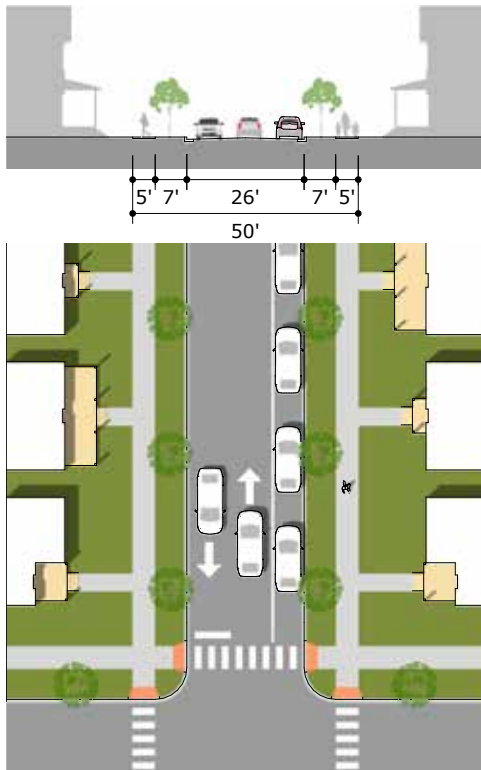
Designated pedestrian crossings should be located where primary residential streets intersect or to access neighborhood gathering places, such as schools, parks, and non-residential uses. To make these crossings as safe as possible, the following features are encouraged:

- Minimize crossing distance and slow traffic for pedestrians at intersections by utilizing the smallest curb radii at the intersection and incorporating landscape planters or hardscape at corners to narrow the street section.
- Incorporate pedestrian islands.
- Innovative use of paint striping and pattern, signage, and/or lighting to delineate crossings.
- Stamped/colored concrete or other decorative pavers.
- Raised crosswalk section to visually and functionally call attention to the crossing and slow traffic.

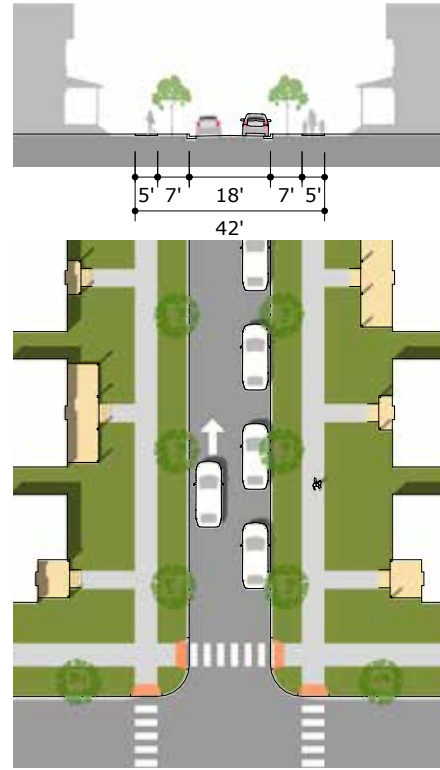


Two-way Street	
Right-of-Way Width	50 feet
Pavement Width	30 feet
Design Speed	30 MPH
Pedestrian Crossing Time	9 seconds
Traffic Lanes	2 lanes
Parking Lanes	both sides 8 feet unmarked
Curb Radius	22 feet
Walkway Type	5 foot sidewalk
Landscape Type	4 foot continuous planter

ENCOURAGED



ENCOURAGED



Two-way Street

Right-of-Way Width	50 feet
Pavement Width	26 feet
Design Speed	20 MPH
Pedestrian Crossing Time	7.4 seconds
Traffic Lanes	2 lanes
Parking Lanes	one side 8 feet marked
Curb Radius	10 feet
Walkway Type	5 foot sidewalk
Landscape Type	7 foot continuous planter

One-Way Street

Right-of-Way Width	42 feet
Pavement Width	18 feet
Design Speed	20 MPH
Pedestrian Crossing Time	5 seconds
Traffic Lanes	2 lanes
Parking Lanes	one side 8 feet unmarked
Curb Radius	10 feet
Walkway Type	5 foot sidewalk
Landscape Type	7 foot continuous planter



Example of 50 ft wide right-of-way.
Source: Claremont Ave, Elmhurst IL - Google Streetview



Example of 42 ft wide right-of-way.
Source: Winthrop Ave, Elmhurst IL - Google Streetview

2 MAXIMUM 800' BETWEEN INTERSECTIONS & MINIMUM ONE (1) INTERSECTION PER TWO (2) ACRES.

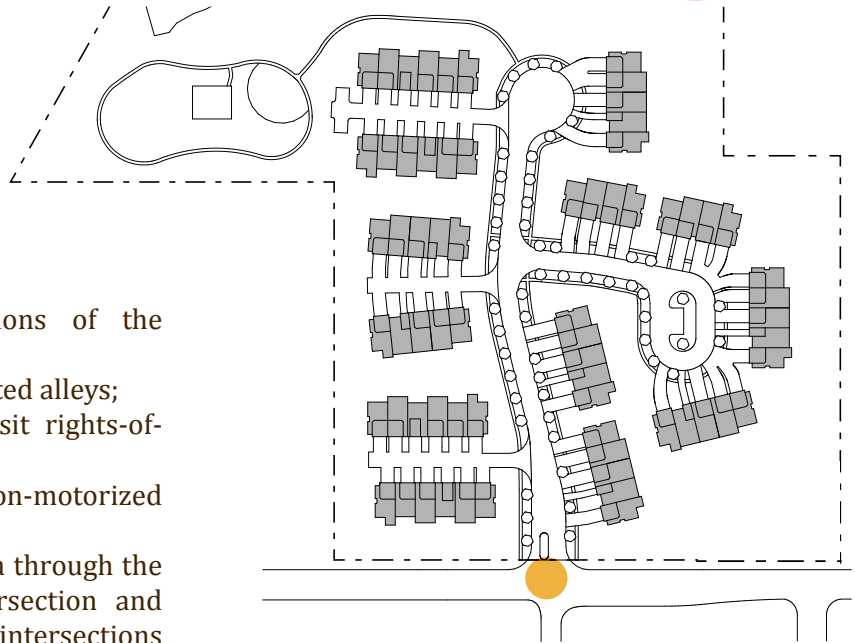
Design and build the project such that its internal connectivity is at least 140 intersections per square mile (LEED ND, 2018). In order to achieve a walkable neighborhood with the optimum intersection density, developers should aim for 800' between intersections and at least one intersection per two acres.

Count publicly accessible intersections of the circulation network, including:

- intersections of streets with dedicated alleys;
- intersections of streets with transit rights-of-way; and
- intersections of streets with non-motorized rights-of-way.

If one must both enter and exit an area through the same intersection, exclude that intersection and any intersections beyond that point; intersections leading only to cul-de-sac are also not counted.

DISCOURAGED



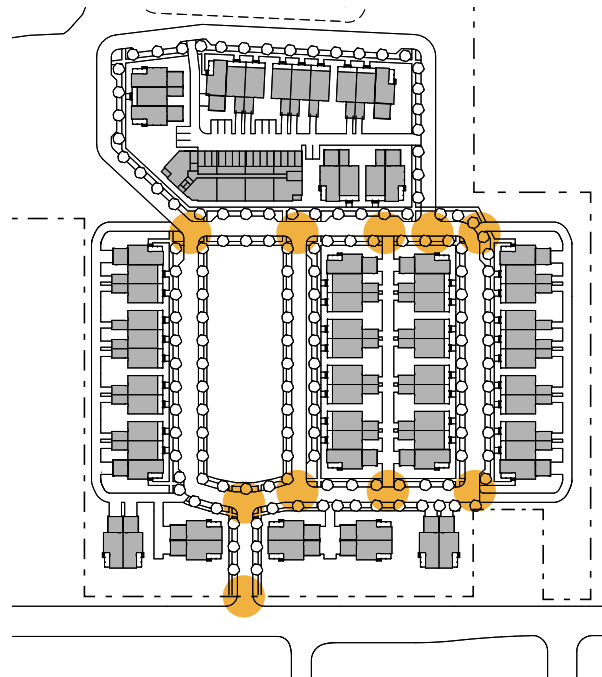
CONVENTIONAL CAR-ORIENTED DEVELOPMENT PATTERN

ENCOURAGED



ALTERNATIVE EXAMPLE: "HAMLET" DEVELOPMENT PATTERN

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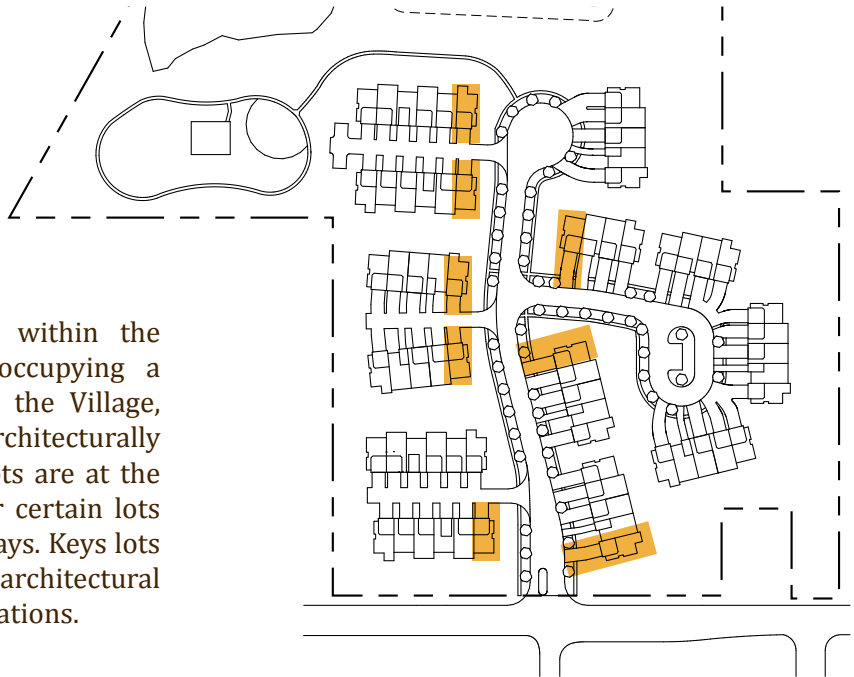
ALTERNATIVE EXAMPLE: "TRADITIONAL GRID" DEVELOPMENT PATTERN

4.2.2 LIVABLE COMMUNITIES

3 KEY LOTS TO PROVIDE ENHANCED ARCHITECTURAL DESIGN ELEMENTS

 SPECIAL LOT

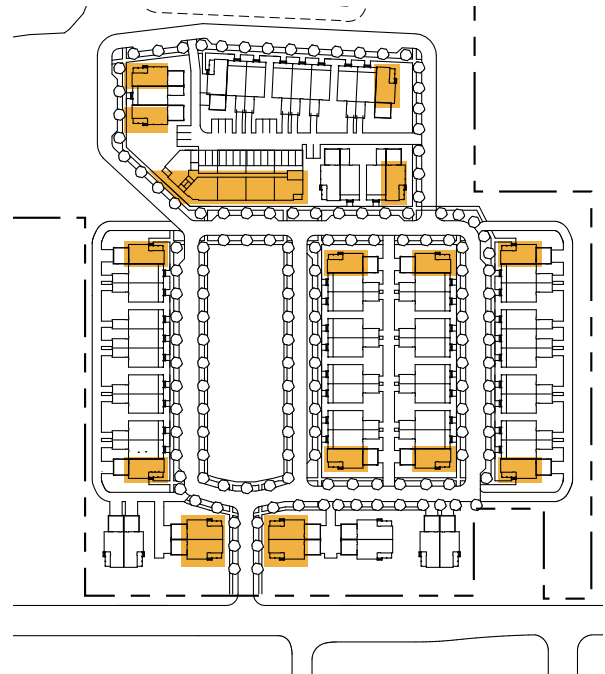
Plans should designate special lots within the development. Such lots are those occupying a significant location as determined by the Village, which will therefore be treated in an architecturally significant manner. Examples of key lots are at the intersections of streets, corner lots, or certain lots on long uninterrupted blocks or pathways. Key lots will be required to provide enhanced architectural design elements on all appropriate elevations.



CONVENTIONAL CAR-ORIENTED DEVELOPMENT PATTERN



ALTERNATIVE: "HAMLET" DEVELOPMENT PATTERN



ALTERNATIVE: "TRADITIONAL GRID" DEVELOPMENT PATTERN

DISCOURAGED 



Poorly composed side elevation

CONVENTIONAL CAR-ORIENTED DEVELOPMENT PATTERN

ENCOURAGED 



Architectural feature terminates key vista

Highly visible and exposed facades with architectural features

Architectural feature on all visible elevations

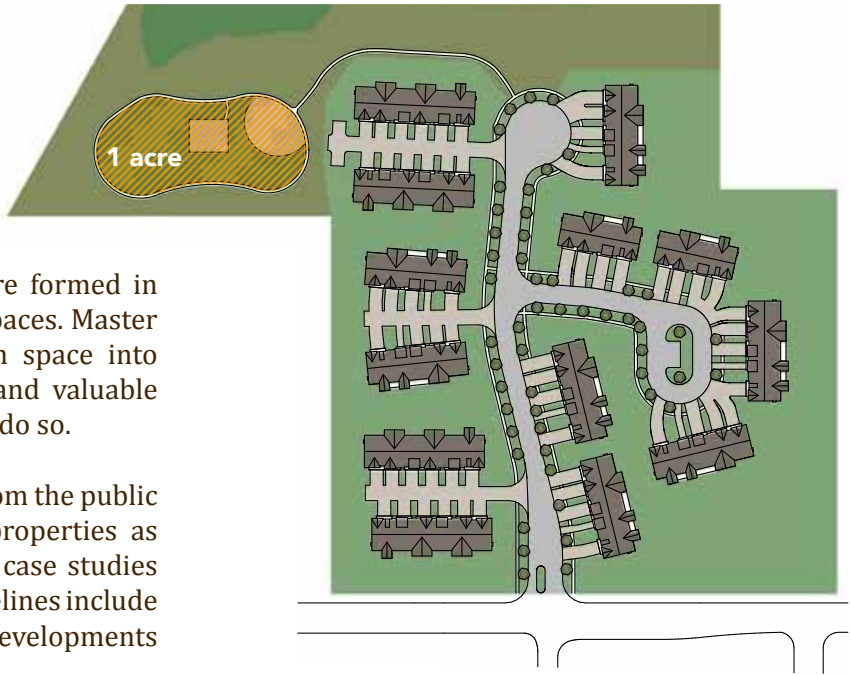
ALTERNATIVE EXAMPLE: "TRADITIONAL GRID" DEVELOPMENT PATTERN

4 90% OF DWELLINGS SHOULD BE NO MORE THAT 3-MINUTE WALK TO FORMAL OPEN SPACE.



Our impressions of a neighborhood are formed in large part by the quality of it's public spaces. Master plans that thoughtfully integrate open space into their design tend to be more livable and valuable than those that miss the opportunity to do so.

Common spaces should be accessible from the public right of way (verses behind private properties as an extension of back yard space). The case studies presented in the Appendix of these guidelines include several good examples of master plan developments designed around formal open spaces.



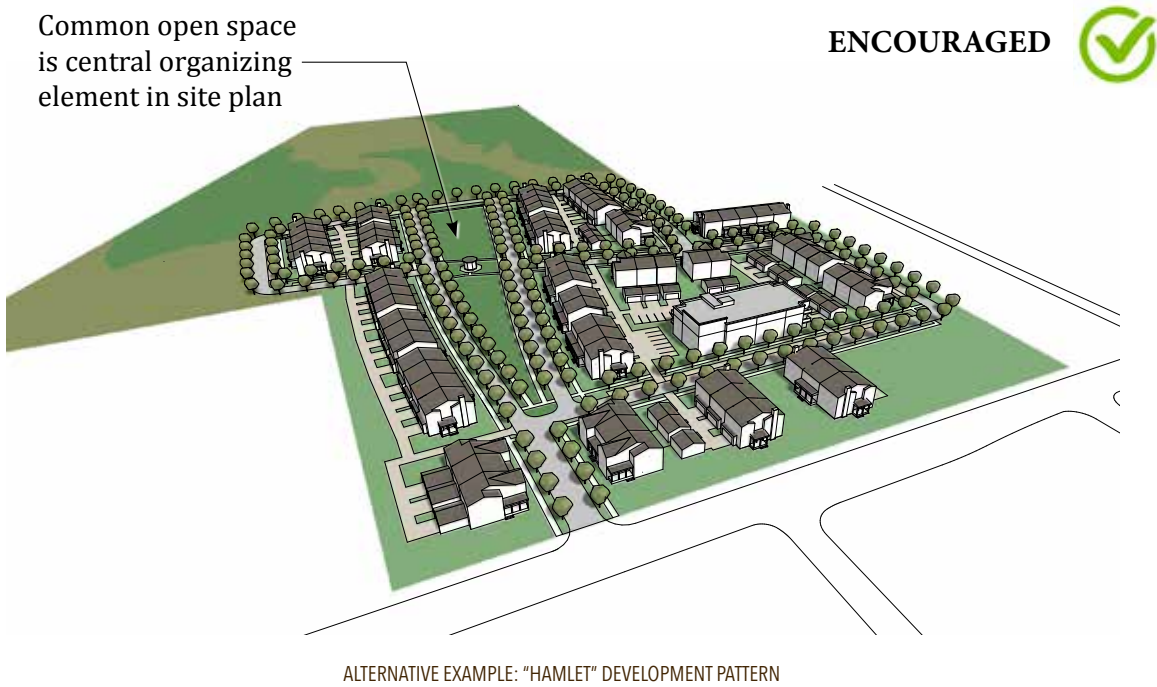
CONVENTIONAL CAR-ORIENTED DEVELOPMENT PATTERN



ALTERNATIVE: "HAMLET" DEVELOPMENT PATTERN



ALTERNATIVE: "TRADITIONAL GRID" DEVELOPMENT PATTERN



4.2.3 WALKABLE STREETS

- 5** MINIMUM OF 90% OF BUILDINGS SHALL HAVE A PRINCIPAL FUNCTIONAL ENTRY FACING A PUBLIC SPACE, SUCH AS A STREET, PARK, PASEO, OR PLAZA.
- 6** MAXIMUM STREET FRONTAGE OF 20% MAY BE FACED BY GARAGE DOORS / SERVICE BAYS.
- 7** CONTINUOUS SIDEWALKS ON AT LEAST ONE (1) SIDE OF EVERY STREET.

Arranging buildings so that they have primary functional entrances facing the street is the first and most fundamental step toward creating a walkable neighborhood.

The example below illustrates how a conventional “front-loaded” townhouse building creates a streetscape dominated by garage doors, whereas a building whose parking is accessed from the rear allows for a streetscape that is more safe and rewarding for pedestrians.



	Discouraged	Encouraged	Encouraged
	<p>REAR YARD</p> <p>STREET</p>	<p>ALLEY</p> <p>REAR YARD</p> <p>STREET</p>	<p>ALLEY</p> <p>STREET</p>
	Front-Loaded Garage	Alley-Loaded with Detached Garage	Alley-Loaded with Tuck-Under Garage
Walkability	LOW	HIGH	HIGH
Land Efficiency	HIGH	MEDIUM	HIGH
Rear Yard	YES	YES	NO

The main entrance to a home should be part of a clear entry sequence extending from the public sidewalk to the front door. Porches and covered entries improve the neighborhood streetscape by breaking down the scale and mass of the home. Porches also provide a transition zone from the public space to the private space and provide for informal socializing with neighbors. Furthermore, orienting the living spaces toward the front of the home contributes to public safety by putting “eyes on the street.”

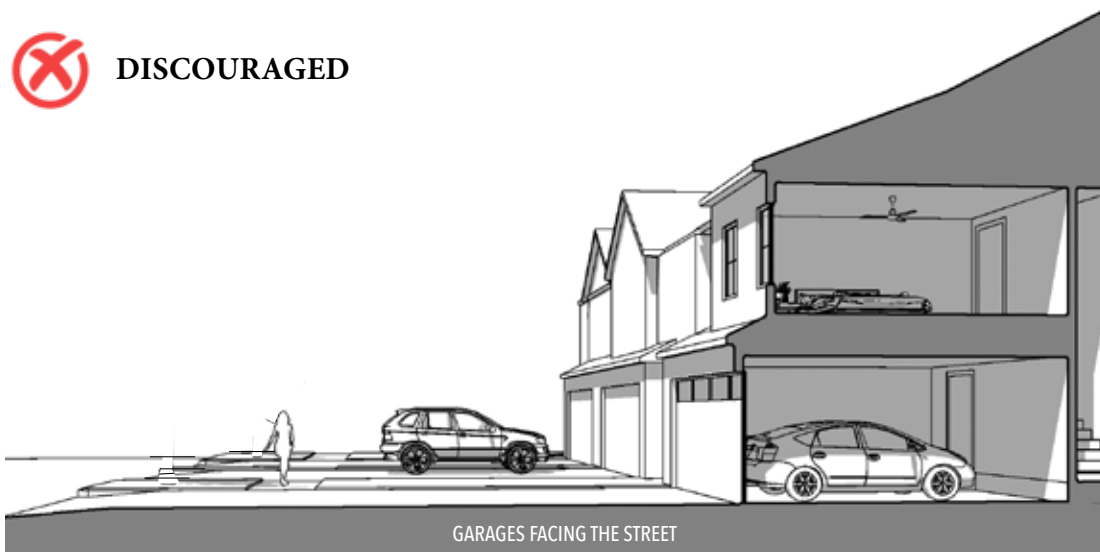
When parking is accessed from the street-side (verses rear-loaded alleys), sidewalks are frequently

interrupted by curb cuts, which compromises the walk-ability. Street frontages dominated by garage doors are also considered less aesthetically pleasing.

In addition to providing a rewarding pedestrian experience, efforts should be made to create continuous sidewalks throughout the neighborhood to provide pedestrians a safe and unobstructed walking path.

Furthermore, including landscaping as a buffer between the road and sidewalk enhances the pedestrian experience and provides additional protection from adjacent traffic.

 **DISCOURAGED**



 **ENCOURAGED**



4.2.4 COMPACT & MIXED

8 MINIMUM OF 3 PRODUCT TYPES WITH A MINIMUM OF 10% AND MAXIMUM OF 60% OF ANY GIVEN PRODUCT TYPE.

9 MINIMUM DENSITY OF SEVEN (7) DWELLING UNITS PER ACRE.

The intent is to promote socially equitable and engaging communities by enabling residents from a wide range of economic levels, household sizes, and age groups to live in a community. Including product types such as multi-family apartment buildings in a subdivision that otherwise consists exclusively of single-family detached homes helps the project achieve higher density and diversity.

The Village recognizes the following as different product types:

- Single Family (large lot)- homes built on a single lot with no shared walls. Garage can be attached or detached. Minimum 3,000 square feet.
- Single Family (small lot) - homes built on a single lot with no shared walls. Garage can be attached or detached. Maximum 3,000 square feet.
- Town House - multi-level homes, independently owned with shared walls with other homes on one or both sides.
- Duplex, triplex, fourplex - two/three/four units attached to each other, typically one owner with units available to rent out.
- Multi-family - multiple separate housing units that are contained within one building or several buildings within one complex. Units can be next to each other or stacked on top of each other.

A gentle increase in density through the introduction of townhomes, two- to - four multi-family homes, and small scale multi-family creates diverse, inclusive, and healthy neighborhoods.

LEED ND, 2018 recommends building residential components of a development at a density of seven (7) or more dwelling units per acre when the site is outside of walking distance to transit services. When the site is within walking distance of transit services, density should be increased to twelve (12) or more dwelling units per acre. Since these developments are not within walking distance, these guidelines specify the seven (7) dwelling units per acre.

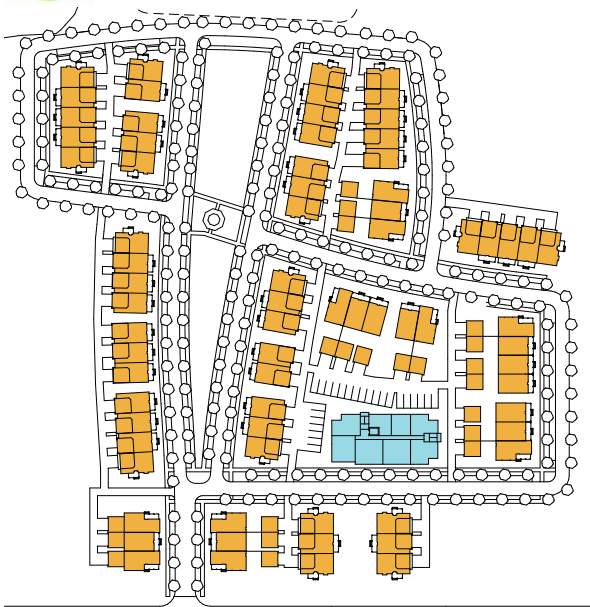
- TOWNHOUSE BUILDING TYPE
- MULTI-FAMILY BUILDING TYPE

 **DISCOURAGED**



CONVENTIONAL CAR-ORIENTED DEVELOPMENT PATTERN

 **ENCOURAGED**



ALTERNATIVE EXAMPLE: "HAMLET" DEVELOPMENT PATTERN

 **ENCOURAGED**



ALTERNATIVE EXAMPLE: "TRADITIONAL GRID" DEVELOPMENT PATTERN

10 NO HOME SHOULD BE CONSTRUCTED WHICH IS SIMILAR IN APPEARANCE TO ANY DWELLING WHICH IS ADJACENT TO IT OR DIRECTLY ACROSS THE STREET.

The Village desires that homes be constructed in a manner that is not repetitive and monotonous. A variety of architectural styles, floor plans and elevations should be offered to protect against monotony.

The Village will specifically control for monotony in the following manner:

No home should be constructed which is similar in appearance to any dwelling which is adjacent to it or directly across the street.

Two dwellings shall not be considered “similar in appearance” provided they meet all of the following criteria:

- The two dwellings have different elevations (can be the same model floor plan).
- The two dwellings are different colors.
- The two dwellings have opposite garage locations.

When adjacent lots contain different housing styles, the similarity standards delineated above do not apply except that the two houses should not be the same color. Architectural style is in and of itself a significant enough characteristic to constitute dissimilarity.

In order to achieve variation in subdivisions, master home plans for each subdivision shall include a minimum number of floor plans and elevations based on the number of units within the subdivision as follows:

- For subdivisions with less than 100 units, master home plans shall include a minimum of three floor plans with at least three elevations each.
- For subdivisions with 101 to 200 units, master home plans shall include a minimum of four floor plans with at least three elevations each.

- For subdivisions with more than 200 units, master home plans shall include a minimum of five floor plans with at least three elevations each.

# units	<100	101 - 200	>200
minimum # floor plans	3	4	5
minimum # elevations per plan design	3	3	3

The Village encourages color variety among homes within a neighborhood. To that end, each architectural style within a Master home plans series shall include at least three color schemes. The intent is to have distinct color palettes for different architectural styles.

Townhouses

In order to avoid long monotonous street façades the Village recommends townhouses are limited to a maximum of six (6) in a consecutive row.

Additionally, to provide visual interest in continuous townhouse façades the Village requires architectural elements to express each townhouses as a discrete dwelling.

These elements shall include at least three (3) of the following:

- Design strategies to highlight the entry such as recesses, small projecting roofs, and the like.
- Projecting elements that break the façade plane such as bays and/or balconies
- Roofline differentiation such as a gable or a dormer(s).

All end townhouse units are considered special lots (as described on pages 16-17) and shall be treated as

primary façades with the following elements:

- At least one large window per habitable room
- One or more elements that provide special visual interest such as a chimney, bay, balcony, or other architectural element consistent with the architectural style.

5 New Buildings

The Village recognizes and values the diversity of its existing neighborhoods. This section is not intended to dictate a single solution to every type of new building application. Rather, this section of the Guidelines introduces basic design concepts and general provisions that can be applied to varying degrees within distinct types of neighborhoods or subdivisions.

More than the particular style of an individual building or its facade materials, it is the urban form created by the placement of multiple buildings that can create attractive streetscapes, increase property values, establish desirable aesthetic conditions, and create overall better neighborhoods. Thus, the placement and orientation of a home is the first and most important consideration.

With that in mind, the following general guidelines are encouraged:

- Buildings should have a strong orientation to the street, with their primary entrances located in the front and visible from the public way.
- Home placement and orientation should minimize the visual impact of garages as they relate to the street. Rear-loaded, side-loaded, or recessed front load garages should be utilized wherever possible.
- Townhomes and other attached units are encouraged to be rear loaded with strong architectural elements that draws the eye to the non-vehicular portions of the unit.

5.1 ARCHITECTURAL STYLE

Designs should follow a simple rule: pick **one** authentic architectural style. This discipline will mitigate the risk of creating the kind of hodge-podge design that is often associated with the term “McMansion”.

A home is typically part of an ensemble of buildings and other elements which, together, make up a streetscape. Therefore, a home should not try to recreate the character of an entire village all on its own through excessive roof forms and facade features.

The block elevations shown at the bottom of these pages depict the same four homes designs transformed with only slight modifications to illustrate this point.

Projects can take advantage of a fast-track approval process by selecting one of the Authentic Architectural Styles from Section 6.1 (Appendix) of these Guidelines.



DISCOURAGED



“MCMANSION” WITH DISCORDANT AND EXCESSIVE ARCHITECTURAL FEATURES



ENCOURAGED



EXAMPLE OF HOME DESIGNED IN THE TRADITIONAL “CRAFTSMAN” STYLE



PASTING CONFLICTING ARCHITECTURAL STYLES ONTO A SINGLE BUILDING IS INAUTHENTIC, CUTS OFF TIES TO LOCAL BUILDING TRADITIONS, AND RESULTS IN VISUALLY INCOHERENT STREETSAPES AND BLOCKS.



WHILE THIS APPROACH MAY SEEM TOO PLAIN TO PEOPLE ACCUSTOMED TO THE VISUAL CHAOS OF MANY BUILDER-DESIGNED PRODUCTS, THE BEAUTY OF TRADITIONAL STREETS OFFER VISUAL REWARDS YEAR AFTER YEAR.

5.2 GENERAL ARCHITECTURAL REGULATIONS

These Architectural Regulations are to be applied in conjunction with the guidelines presented throughout this document, as well as the regulations of the Zoning section of the Municipal Code of Ordinances. Exceptions to these regulations will be granted on the basis of architectural merit / historical precedent.

Foundations

Foundations exposed more than 18" above grade must have an architectural finish such as brick, cut stone, fieldstone, smooth-finished poured concrete or synthetic stucco.

Openings

Windows shall not exceed 50% of the wall area, measured on each elevation.

Windows shall be made of painted or stained wood or clad in vinyl or metal.

Glass shall be clear and free of color or tinted film.

Each operable window shall be square or vertical in proportion.

Openings in walls clad in siding shall have minimum 4" nominal width trim.

Bay window projections shall extend to the ground. Cantilevered bays are only acceptable on structural brackets consistent with an Authentic Architectural Style.

Bay window projections shall be wide enough to accommodate a minimum of three (3) windows.

It is preferred that front doors be made of solid wood.

Sliding doors may only be used in back yard or side yard locations.

Garage Doors

Garage doors shall be plain (no pattern), and shall be built of wood, steel, or fiberglass with a wood veneer.

Whenever alleys are not available, it is encouraged that garage doors do not face the street.

In a condition that garage doors do face the street, it is encouraged that doors are or appear to be

separated for each vehicle.

Gutters & Downspouts

Downspout locations should be carefully considered relative to the natural vertical components of the house. In general, downspouts should be located at interior or exterior corners – preferably integrating with a major vertical element in that location.

Downspouts located randomly at the middle portion of the elevation should be avoided.

Ogee (K-profile) gutters deserve particular attention as they relate to eave returns at the gable end. The ogee gutter is shaped intentionally to emulate the crown molding at the eave. As such, the gutter becomes part of the profile of the eave. In cases where the ogee gutter is used, it should return with the eave and die into the face of the house.

Where it is not possible for ogee gutters to be used correctly - half round gutters suspended on hanging brackets are preferred.

Utility Box Placement

Where exterior utility boxes are required on-lot, efforts should be made so the utility boxes do not visually dominate the building façade or front yard, result in alterations to the building, or obscure the building's architectural features. Utility boxes should be located where they are not predominantly visible from public view. Appropriate locations include: basement areaway or window well, under stairs, at the side or rear of the property.

Neighborhood utility boxes should be placed in rear yards where possible, in circumstances where they are required to be in front yards, utility boxes should be placed at the corner of the lot. Rear-loaded townhouses' utility boxes should be placed on the sides and screened.

All utility boxes should adhere to the following recommendations:

Smallest possible utility boxes should be used.

Multiple units with separate utility boxes should be planned and designed to have one joint installation.

Screen exterior utility boxes with sustainable, evergreen landscaping.

Utility boxes should be painted to match or blend with the color of the building or surroundings.

Utility infrastructure and other appurtenances such as telecommunications and satellite dishes should not be placed on front yards or on primary elevations.

Façade Materials

Avoid using too many materials on one façade. Too many materials can create aesthetic confusion among the various elements - the goal is to unify the building composition.

These guidelines do not mandate a minimum percentage of masonry façade. When masonry is used, one should avoid using visually “heavier” material, i.e., brick or stone, above visually “lighter” materials, i.e., clapboards or shingles.

Vinyl siding must be a minimum of 0.044 inches, with thicker gauge product encouraged. Refer to Section 5.13 for more detailed specifications related to siding and trim.

Materials should wrap the façade and terminate into an inside corner of building mass. A common example to be avoided is treating masonry like wallpaper, applying it to a front façade and failing to properly continue the material around the side façade.

Landscaping

Landscaping provides a number of benefits to neighborhoods and communities ranging from environmental, beautification, and improving quality of life. The following guidelines will apply in accordance to the Village of Mundelein Zoning Ordinance Chapter 20.60 - Landscape & Screening.

Design site landscaping to be attractive, maximize stormwater infiltration, and provide privacy for residential units.

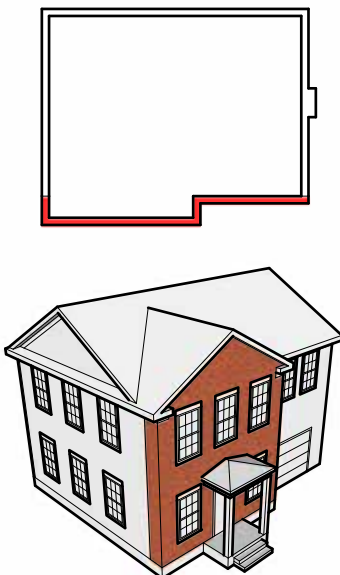
Recommended locations for landscaping:

- Along the property perimeter
- In-between buildings
- Between buildings and driveways
- Between buildings and parking

Use native plants, sized large enough at planting stage to take root and survive to maturity.

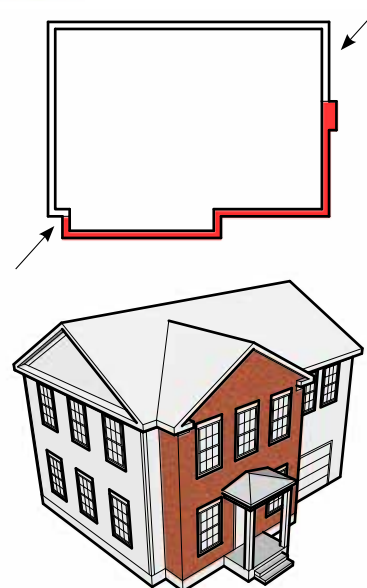
Provide plants enough space to grow into their natural size.

 **DISCOURAGED**



EXAMPLE OF IMPROPER TRANSITION FROM BRICK TO DIFFERENT FAÇADE MATERIAL

 **ENCOURAGED**

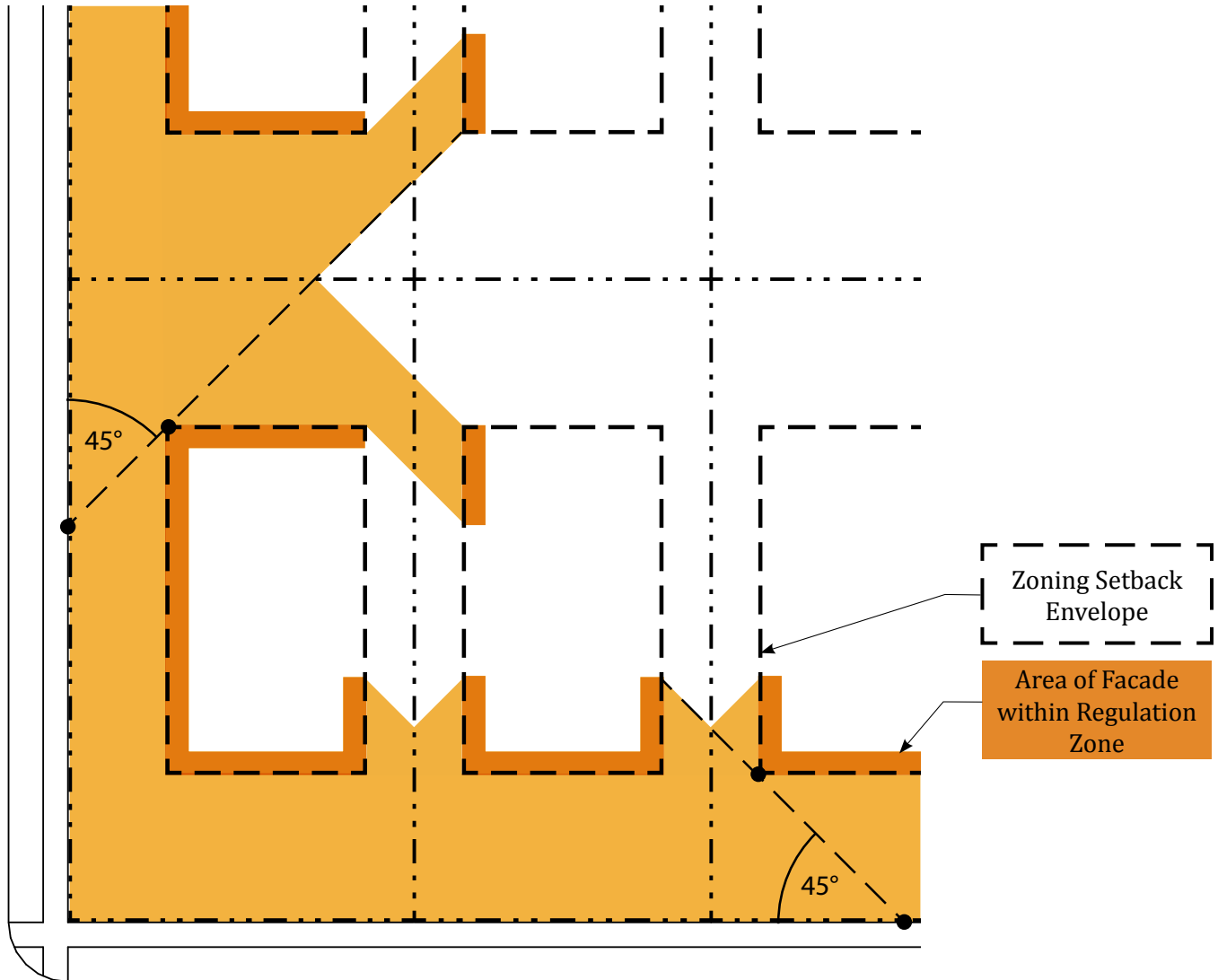


EXAMPLE OF BRICK TERMINATING AT INSIDE CORNERS

5.3 FACADE REGULATION ZONE

Building facades that are visible from the public realm should be treated with attention and care. The diagram below shows the areas of building that are subject to regulation. Walls that are blank, poorly composed, or mis-use materials, such as masonry, will not be permitted within this zone.

A common example of a mis-use of materials is where brick or stone masonry fails to wrap the corner, as illustrated in the image on page 29. These illustrations also show how a building with a side elevation that is in the Facade Regulation Zone (such as a corner lot) should consider window placement with care.





DISCOURAGED

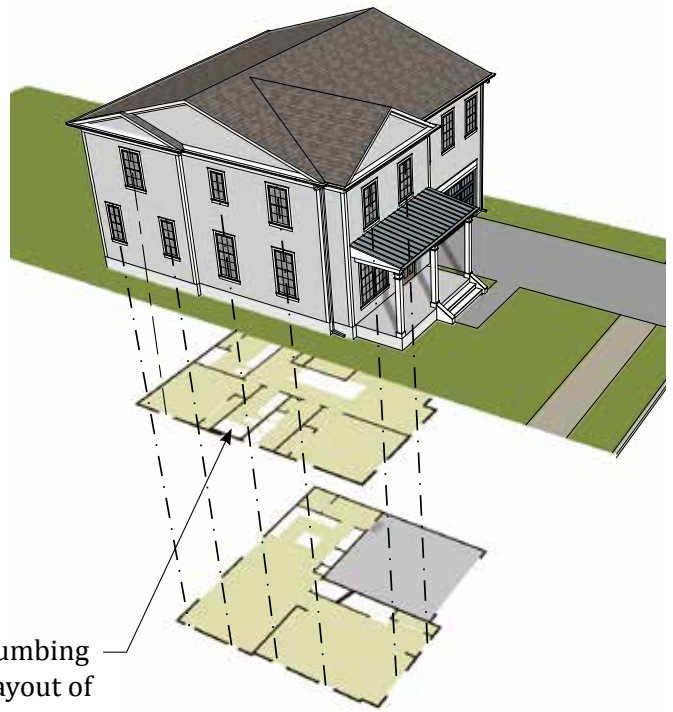
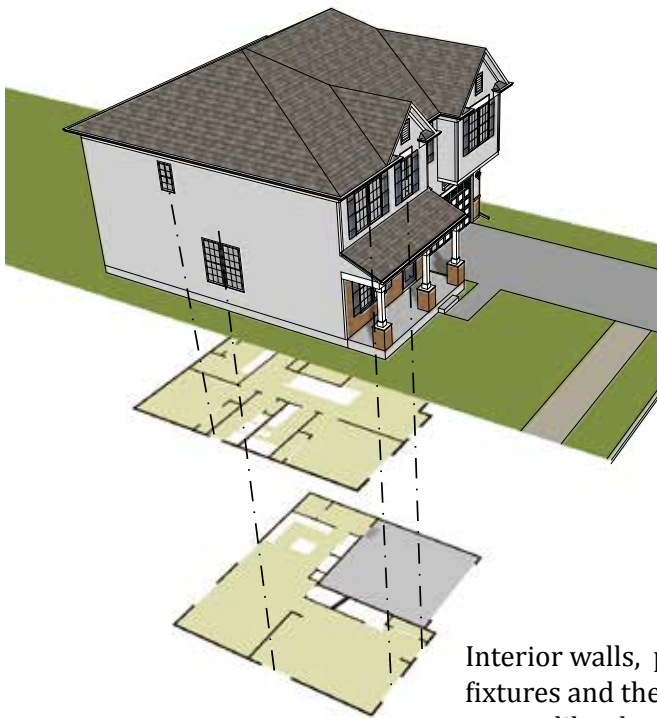


Brick does not wrap corner

Blank / poorly-composed side elevation.



ENCOURAGED


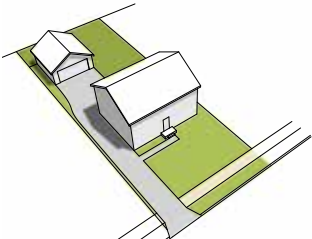

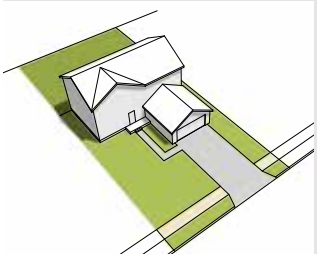

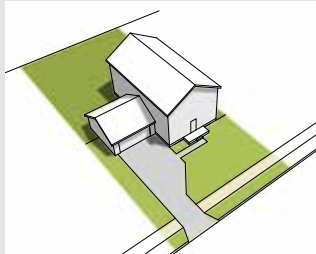

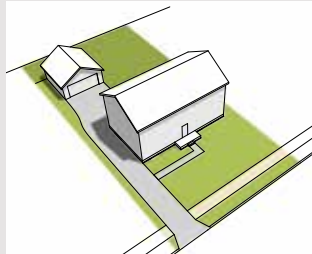
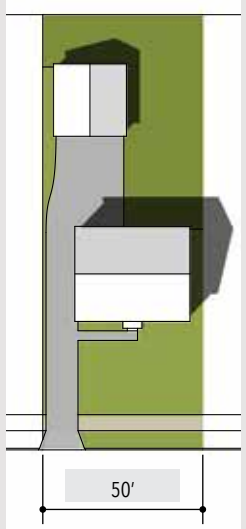
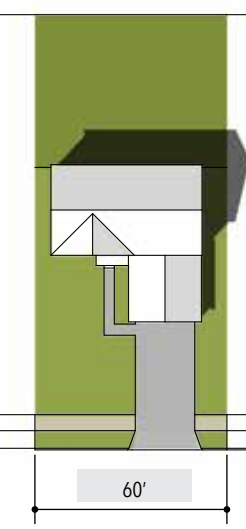
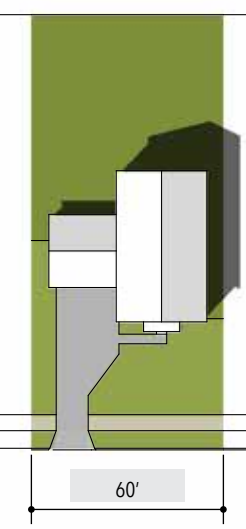
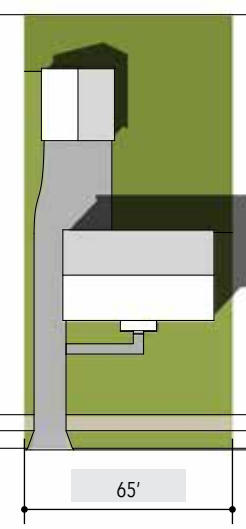


Interior walls, plumbing fixtures and the layout of spaces like closets may need to be adjusted to accommodate windows.

5.4 GARAGE LOCATION & ORIENTATION


Since most of the Village’s existing street network does not have alleys, homes in Mundelein tend to have garages accessed from the street-side. Traditionally, most were constructed so that their garages are located toward the rear of the property, accessed by a driveway that slips by the side of the house. This layout allows occupied living spaces to relate to the public realm and avoids a streetscape dominated by garage doors.

Newer developments have tended to have garages located at the front of the building. This results in a building facade that is dominated by the garage door, an arrangement of rooms that puts occupied spaces toward the back of the home (taking “eyes off the street”) and a streetscape less inviting to the pedestrian.

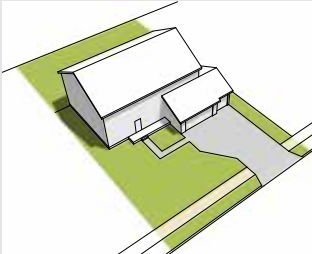
<p>Historic Core Typical Characteristics: 50' wide lots side driveway garages in rear yard</p> <p></p> <p>Encouraged (TYPICAL EXISTING CONDITION)</p>	<p>Late 20th Century Typical Characteristics: 60' – 85' wide lots street-facing garages</p>		
<p></p>	<p> Discouraged (TYPICAL EXISTING CONDITION)</p> <p></p>	<p> Encouraged</p> <p></p>	<p> Encouraged</p> <p></p>
<p>MINIMAL SIDEWALK INTERRUPTION GARAGE DETACHED AND SET BACK</p> <p></p> <p>50'</p>	<p>EXPANSIVE SIDEWALK INTERRUPTION STREET-FACING GARAGE DOOR</p> <p></p> <p>60'</p>	<p>MINIMAL SIDEWALK INTERRUPTION GARAGE SET BACK FROM FACADE</p> <p></p> <p>60'</p>	<p>MINIMAL SIDEWALK INTERRUPTION GARAGE DETACHED AND SET BACK</p> <p></p> <p>65'</p>

For new developments that have the opportunity to include alleys, homes should be planned so that their garages are accessed from the rear. This creates a higher quality streetscape by eliminating curb cuts through the sidewalk and allowing occupied spaces with windows to be located at the front.

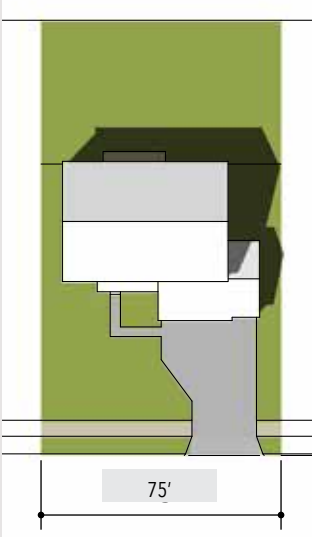
Late 20th Century
Typical Characteristics:
 60' – 85' wide lots
 street-facing garages




Discouraged
(TYPICAL EXISTING CONDITION)



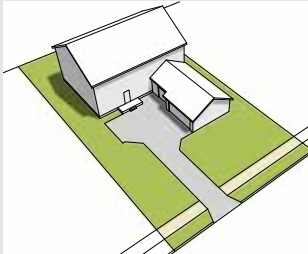
EXPANSIVE SIDEWALK INTERRUPTION
STREET-FACING GARAGE DOOR



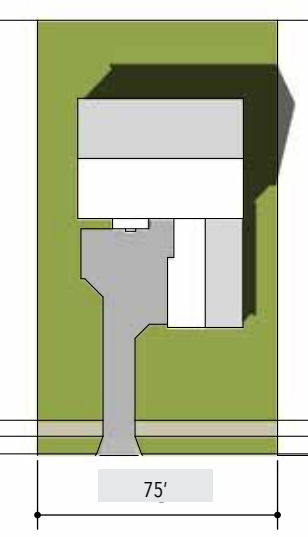
75'



Encouraged




MINIMAL SIDEWALK INTERRUPTION
GARAGE DOORS ROTATED

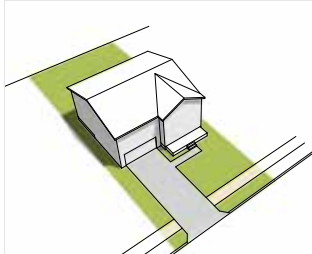


75'

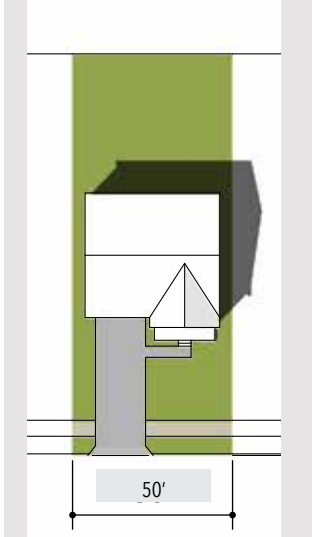
Early 21st Century
Typical Characteristics:
 narrower lots (50' – 60' wide)
 street-facing garages




Discouraged
(TYPICAL EXISTING CONDITION)



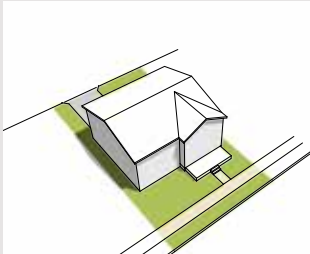
STREET-FACING GARAGE DOOR



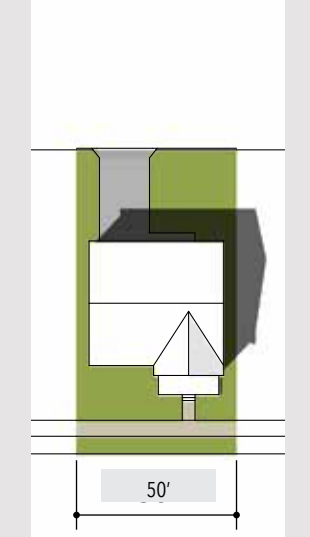
50'



Encouraged



PARKING ACCESSED FROM REAR ALLEY



50'

5.5 ROOF PLANS & BUILDING MASSING

To arrive at a building form that follows the basic architectural precepts of unity and ordered hierarchy, the roof plan should be kept front of mind from the start. A jumbled mess of hips and gables is a dead giveaway that a floor plan and building massing were reconciled late in the game.

Many contemporary residential examples stray from the beauty of simplicity and use overly complicated roof and massing forms. Generally, a single dominant roof form should be clearly legible, with the roofs of secondary volumes deferring in scale to the main body of the building. Smaller homes may be one single clear form and larger homes may incorporate a second or a third volume.

Another common mistake occurs with the pitches of roofs. A handy general rule of thumb is that a gabled roof pitched either greater or less than 45° will be more pleasing to the eye (avoid a 12:12 pitch).

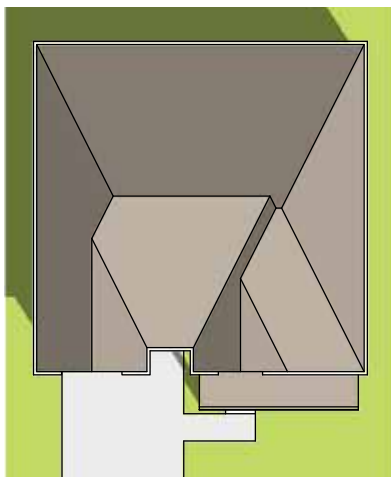
Most mistakes can be avoided simply by adhering to the standards of a particular Authentic Architectural Style (Refer to Section 6.2. in the Appendix). Authentic residential architecture is characterized by simple building shapes that tend to be reserved and well-proportioned. [For more guidance on building massing and roof design refer to GYHR p.20-22 and p.186-191.](#)



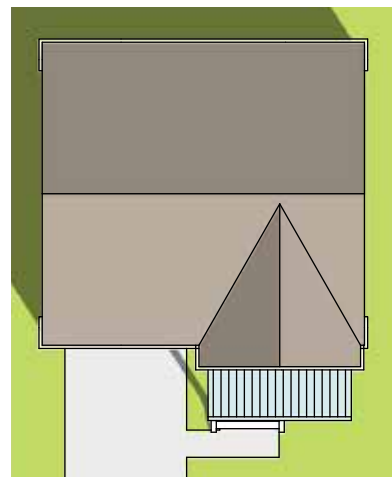
DISCOURAGED



ENCOURAGED



POORLY-RESOLVED ROOF PLAN



ALTERNATIVE ROOF PLAN

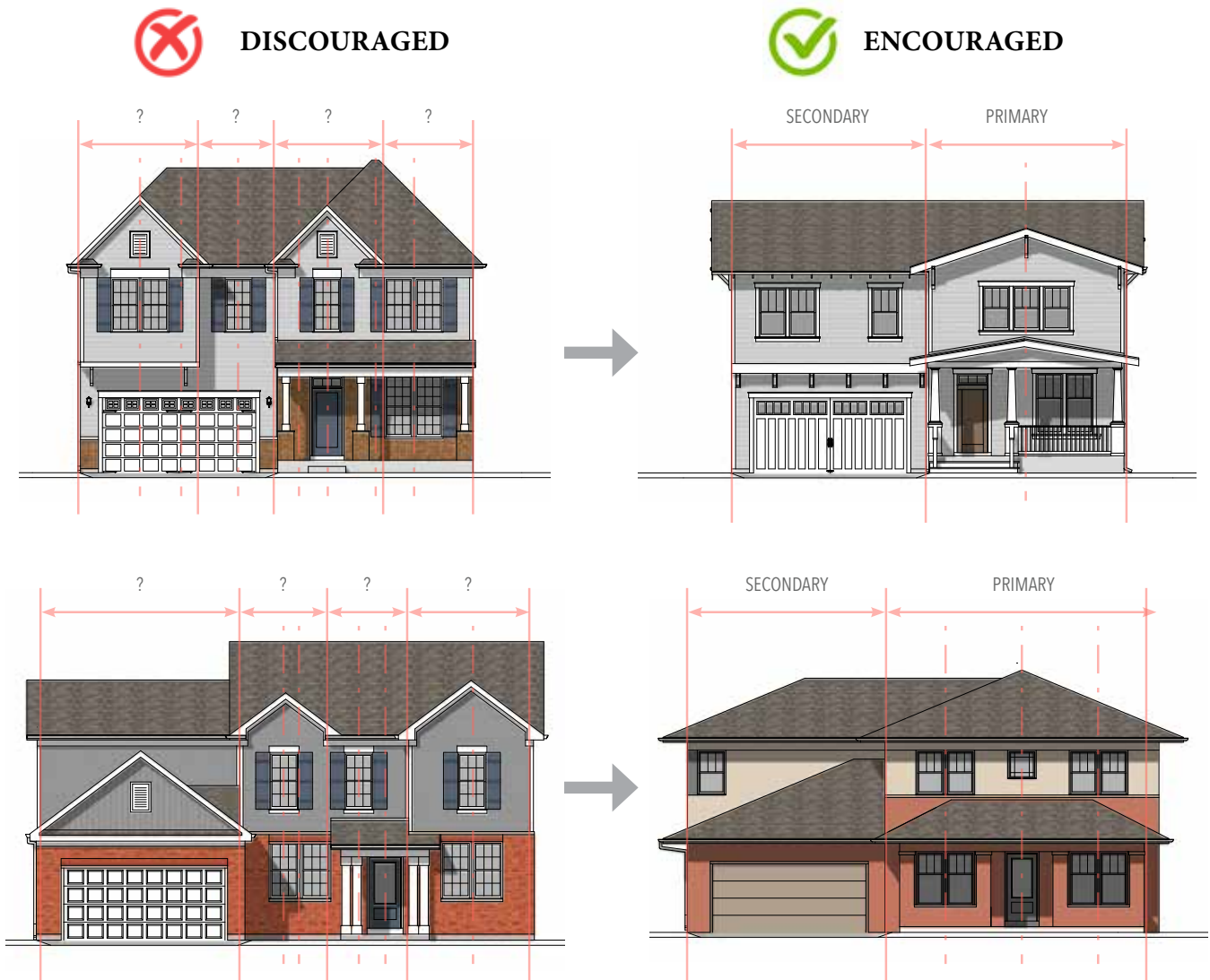
5.6 ORDERLY FACADES

Elevations and floor plans should be coordinated from the start. If left as an afterthought, a facade composition is likely to be too busy or too plain. Spaces like bathrooms and closets should be located so that they do not compromise the placement of windows.

A common mistake is to add unnecessary facade features in an effort to add visual interest. This is often counter-productive, resulting in the kind of cluttered, poorly-composed facades associated with McMansion homes.

“Ordered hierarchy” means that a building form should have a single dominant (primary) mass, with secondary and tertiary elements being clearly subordinate.

The examples below illustrates how the same floor plans can be expressed either as a discordant arrangement of facade elements or as a more thoughtful composition with coherent architectural expression. [For more guidance on building massing and roof design refer to GYHR p.23 -33\).](#)



5.7.1- EXAMPLE 1

 **DISCOURAGED**

Massing lacks order and hierarchy
(GYHR p.23)

Incorrect shutter size and detailing
(GYHR p.110)

Poorly detailed porch
(GYHR p.162-169)

Porch depth too shallow

Overly complicated roof plan (§5.5)

Side elevation not composed (§5.3)

Improperly scaled architectural elements

Masonry does not wrap corner (§5.2)

Facade dominated by garage door (§5.2)



The alternative designs depicted below share the same exact floor plans as this popular real-world model home example. This comparison is meant to illustrate how a few relatively minor adjustments, such as simplifying the roof form, balancing the

composition of windows on the facade, and working within a single Authentic Architectural Style can make a home both more economical to construct and enhance it's curb appeal.

 **DISCOURAGED**

 **ENCOURAGED**

 **ENCOURAGED**



TYPICAL FACADE



ALTERNATIVE COMPOSED IN "COLONIAL" STYLE



ALTERNATIVE COMPOSED IN "CRAFTSMAN" STYLE

 **BETTER**



 **ENCOURAGED**



5.7.2 EXAMPLE 2



DISCOURAGED

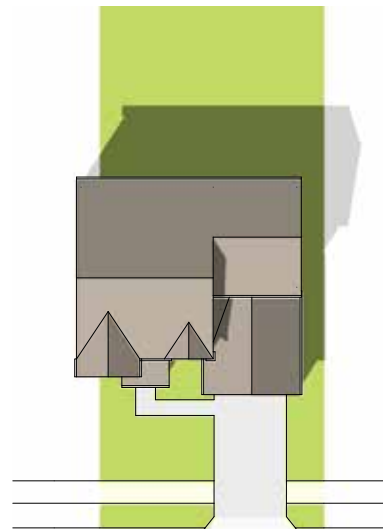


This real-world example suffers from several common design mistakes that can be avoided quite easily. First, the facade is dominated by the garage door, with the garage projecting beyond the rest of the home. The front elevation includes three (3) gable forms that are completely unrelated to any sort of overall composition. The windows are misaligned,

the entry porch is both too shallow to be useable and poorly detailed. The use of brick veneer on the bottom half of the street-facing portion of the home is an expensive investment with little payoff as executed here.



TYPICAL FACADE



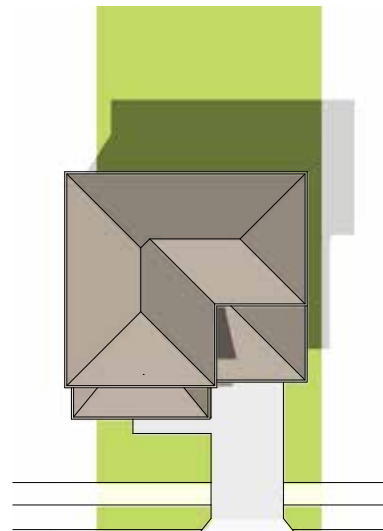
 **ENCOURAGED**



The alternative design presented here requires only very minor adjustments to the original floor plan. By simply re-arranging the mud room / utility area in this model floor plan, the garage can be pulled back so that it is recessed behind the primary mass of the building. This example shows how the model home can adopt an Authentic Architectural Style without fundamentally changing the floor plan. In this case, the Prairie Style offers a roof design that works well with the floor plan.



ALTERNATIVE COMPOSED IN "PRAIRIE" STYLE



5.7.3 EXAMPLE 3



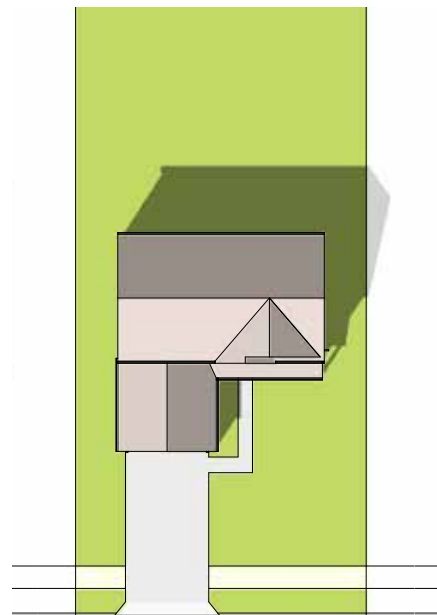
DISCOURAGED



Like the previous example, the front facade of this real world model home is dominated by the garage door, which projects well beyond the rest of the home. The roof plan is quite rational, but the nested gables confuse the hierarchy of the composition. Details like the porkchop eaves, manner in which the brick wraps the corners, cartoonish lintels above the windows, and poor detailing of the porch are opportunities for improvement.



TYPICAL FACADE



 **ENCOURAGED**

Details consistent with single Authentic Architectural Style (§6.2)

Front entry expressed as primary feature and properly detailed (GYHR p.23)

Balanced massing with order and hierarchy (GYHR p.23)

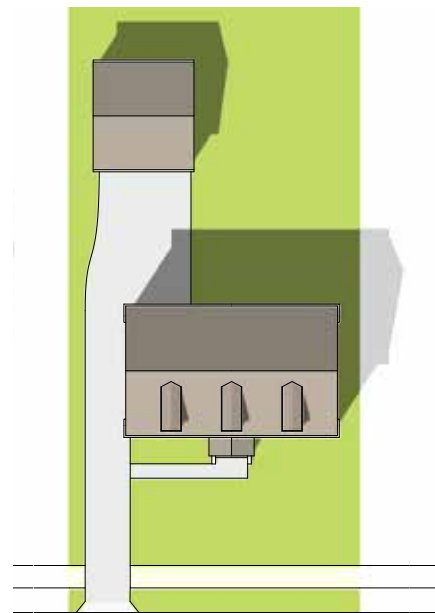
Garage relocated to rear yard



The alternative design presented here makes one change to the floor plan: it detaches the garage from the front of the home and relocates it to the rear of the property, accessing it with a side-drive as is typical in Mundelein's more historic neighborhoods. Once the garage is removed, it is easy to recompose the facade openings so that there is unity and balance. Simple, well executed details like the entry portico and dormers help give the building an aura of quality despite its simple form and materials. Note that the design avoids resorting to the ubiquitous strategy of applying a token area of brick to the front facade.



ALTERNATIVE COMPOSED IN "PRAIRIE" STYLE



5.7.4 EXAMPLE 4



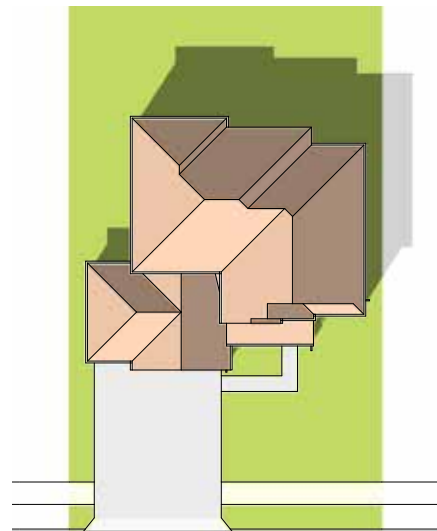
DISCOURAGED



This real world example is typical of the kind of design commonly referred to as “McMansion”. Its overly-complicated roof plan, with no less than four (4) street-facing gables, creates visual clutter at the expense of higher construction cost. This design also uses too many facade materials, including the strange application of stone over a brick watertable base.



TYPICAL “MCMANSION” FACADE





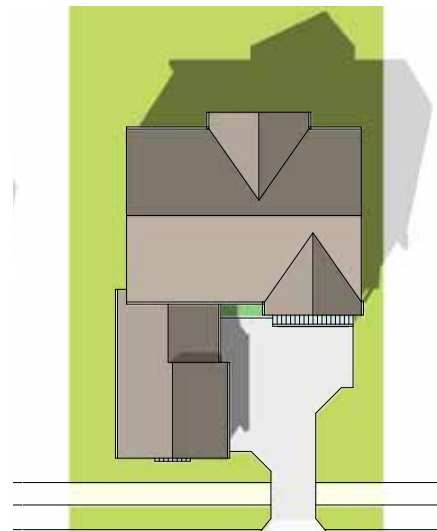
ENCOURAGED



The alternative design presented here requires only a small change to the floor plan to allow the garage to rotate 90 degrees so that its doors no longer face the street. The roof design is simplified in a way that is consistent with the Farmhouse style. Simple details also consistent with that style, are strategically placed where they will have the most bang for the buck, such as the awning with brackets on the facade of the garage close to sidewalk, and the posts and related elements at the front porch.



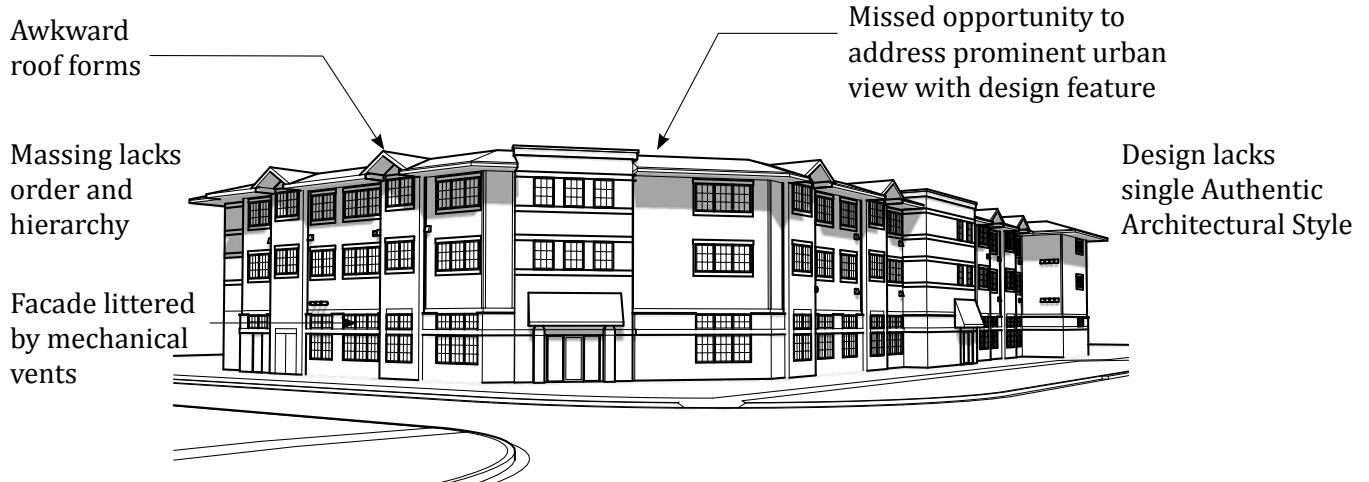
ALTERNATIVE COMPOSED IN "CRAFTSMAN" STYLE



5.8 Multi-Family Buildings



DISCOURAGED



This real-world example suffers from several common design mistakes. The building lacks a sense of hierarchy in its massing and misses the opportunity to architecturally address the highly visible corner on which it is sited. The diagram to the right shows how the facade is subdivided horizontally in a way that appears to create three equal size bands. The blank area of wall below the upper floor windows further detracts from the composition. Large buildings are likely to have service areas like elevators that impact the location of openings on the facade. This example fails to resolve those conditions architecturally.



 **ENCOURAGED**

Simple roof forms reinforce overall order hierarchy

Building massing addresses prominent urban view



Facade composition has rhythm and balance

Composition is reconciled despite elevator / stairs



These drawings depict the same exact building plan from the previous page, showing how relatively minor changes to the facade composition and roof design can create a more visually-appealing design. A key move in this example is adjusting the horizontal subdivision of the facade, creating a clear base pulled up to the sill of the windows. By simplifying the roofline, including removing the gable elements, the building mass achieves a greater sense of order and hierarchy. This example also shows how design can address its particular site with an iconic architectural feature, the tower element at the corner.

SUBDIVISION INTO BASE / MIDDLE / TOP
PRODUCES A MORE VISUALLY APPEALING FORM



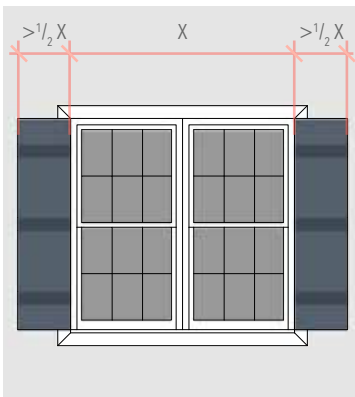
5.9 WINDOWS

Shutters should be sized to half of the sash dimension of the windows and should be mounted in such a fashion that they appear able to be closed. Shutters that appear too large or too small to cover the window opening when closed should be avoided. Shutters may be of either paneled or louvered type.

True divided lite windows - individual panes of glass held together by muntin bars - or SDL (simulated divided lite) windows are encouraged. SDL windows have permanent exterior and interior muntins and an integral spacer bar on a single pane. Snap-in or removable muntins should be avoided. [For more guidance on windows refer to GYHR Chapter 5.](#)

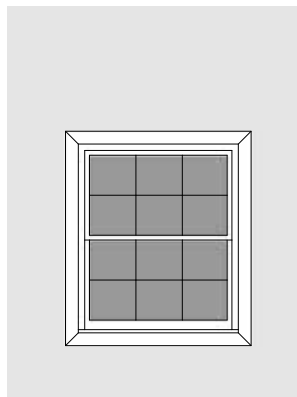


DISCOURAGED



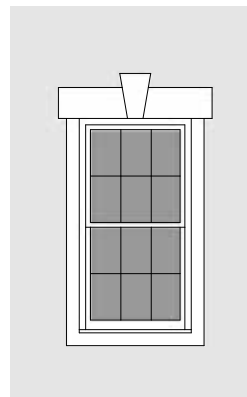
window units grouped without mullion.

shutters not properly sized for window opening.

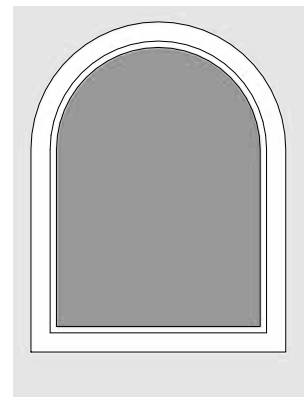


horizontal proportion generally discouraged.

picture frame trim & mitered corners are generally discouraged.



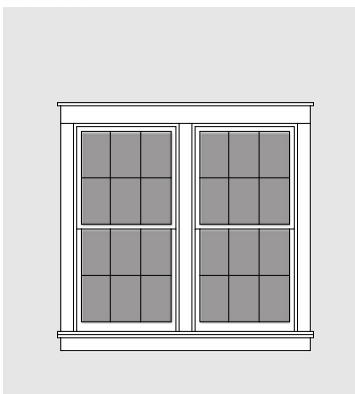
cartoonish ornamentation (this lintel is not of a particular architectural style).



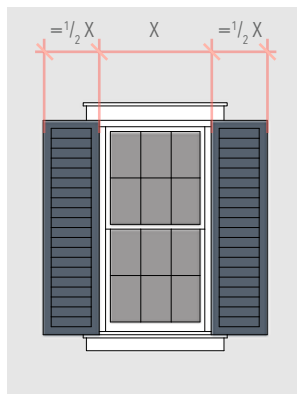
large windows, particularly those without divided lites, tend to look bad.



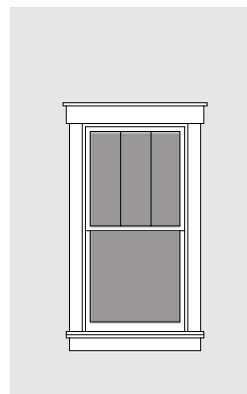
ENCOURAGED



mullion between window units.



shutters properly sized for window opening.



employ details that follow a traditional architectural style.

5.10 PORCHES & PORTICOS

Covered front entries can and should be one of a home's most expressive architectural features. Yet, they are often constructed with cartoonish proportions and poor details. Columns should be properly sized, and properly coordinated with an entablature on which the roof sits. Column spacing should also be considered.

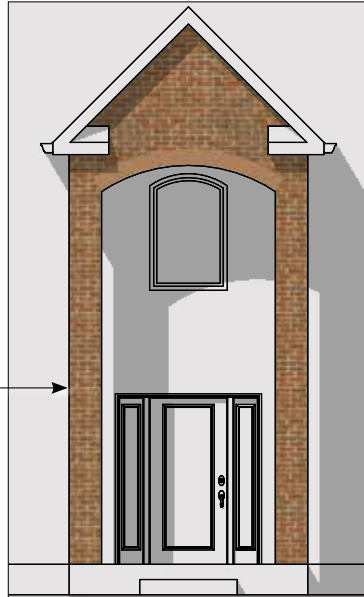
Columns poorly proportioned. (Too slender for masonry, in particular)

When creating a covered porch (as opposed to entry portico) the depth of the porch should be minimum six (6) feet deep to make the space usable.

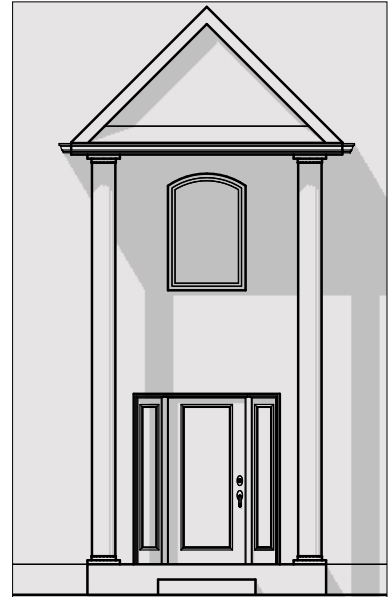
For more guidance on porches and porticos refer to [GYHR Chapter 7](#).



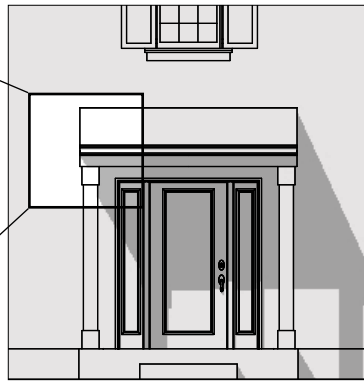
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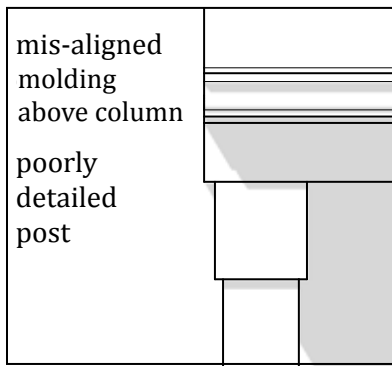
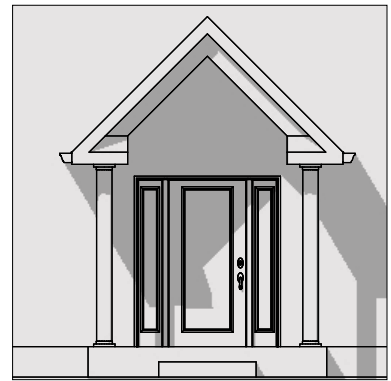
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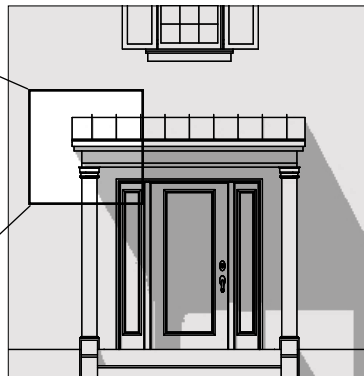
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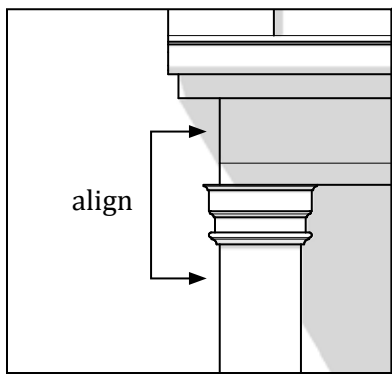
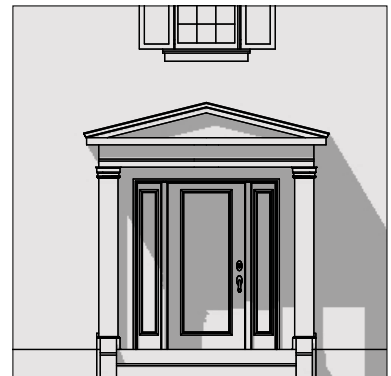
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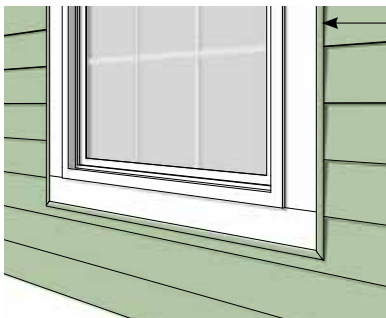
5.11 WINDOW & DOOR TRIM DETAILS

Several common mistakes associated with window and door trim should be avoided. A particular issue associated with the use of vinyl siding is the exposed j-channel. One solution is to cover the j-channel with additional trim board, as depicted in the detail on the opposite page.

Another common mistake is to surround the window opening with picture frame casing, which lacks a sill. This mistake is often compounded by using a miter detail at the corners. Trim board details should avoid mitered corners in general.



J-CHANNEL TRIM (TYPICAL VINYL SIDING DETAIL)

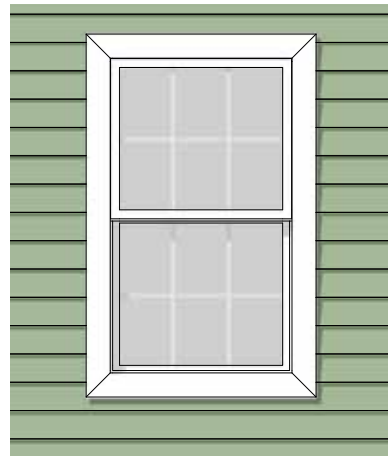


exposed j-channel is a tell-tale sign of vinyl siding material

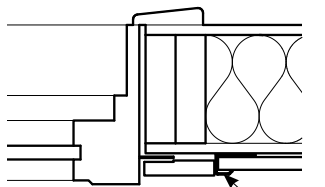
avoid picture frame casing (mitered corner)



PICTURE FRAME WINDOW CASING

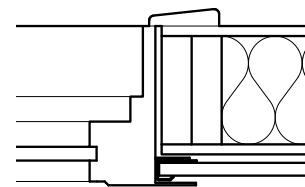


DETAIL AT WINDOW JAMB



j-channel trim piece butted against flat stock casing (vinyl siding detail)

DETAIL AT WINDOW JAMB



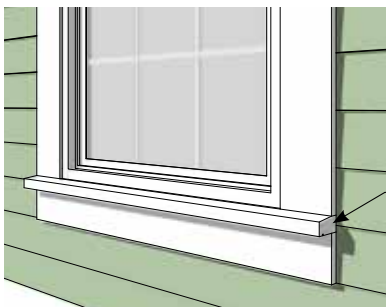
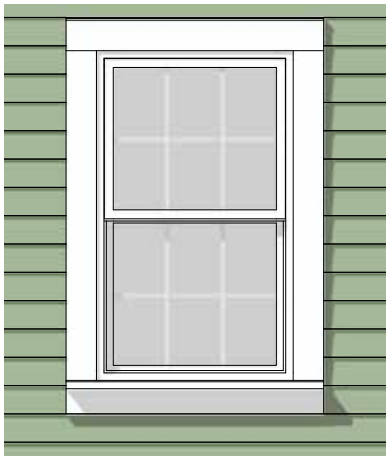
casing integral to vinyl window covers j-channel (thinness of edge is a vinyl giveaway)

For more guidance on window trim details refer to GYHR page 96.



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ALTERNATIVE WINDOW TRIM DETAILING FOR VINYL SIDING

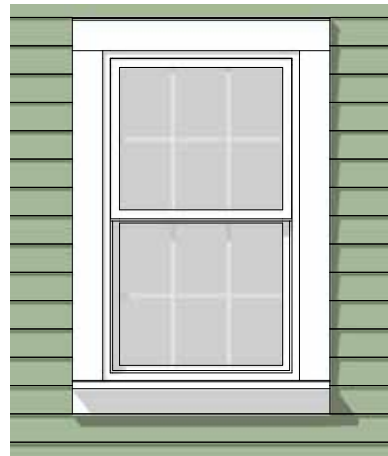


flat stock built-up to create pocket to cover j-channel



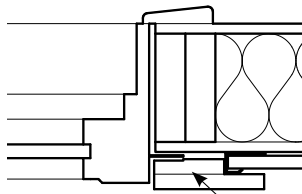
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TYPICAL WINDOW TRIM DETAILING FOR CEMENTITIOUS OR WOOD SIDING

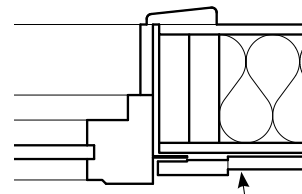


Window trim should include sill (and optional apron).

DETAIL AT WINDOW JAMB



DETAIL AT WINDOW JAMB



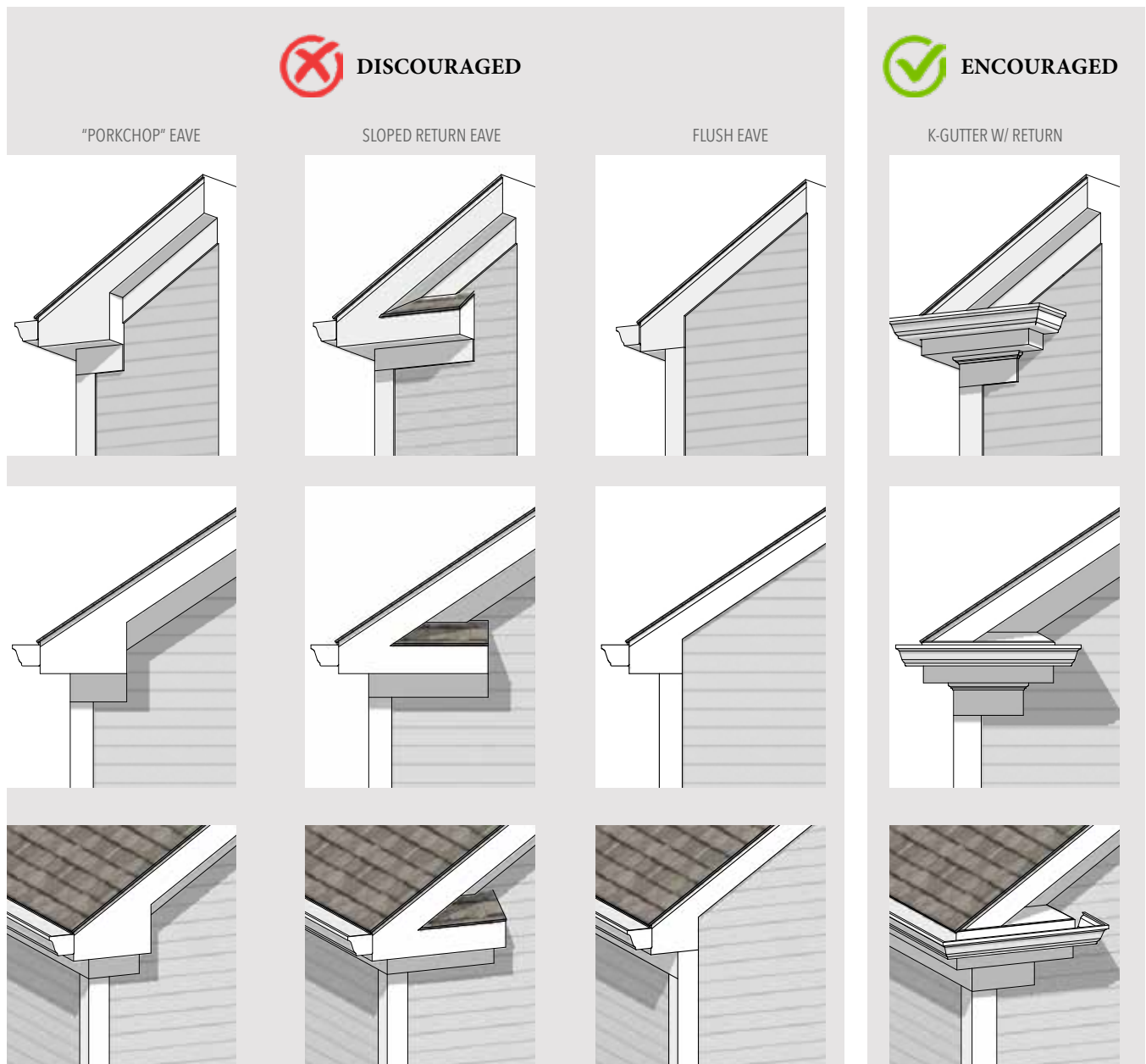
cement board siding does not require j-channel trim

5.12 ROOF EAVES

The roof eave is one of the most impactful and mishandled details in home design. The ubiquitous “porkchop” eave is a inelegant solution that does not relate to any Authentic Architectural Style and should be avoided in all cases.

Proper use of an ogee (K-profile) gutter simulates the look of a classical eave and can be a very practical solution that works with a range of architectural styles. Sloped eaves work well with Craftsman, Farmhouse, and Victorian architectural styles.

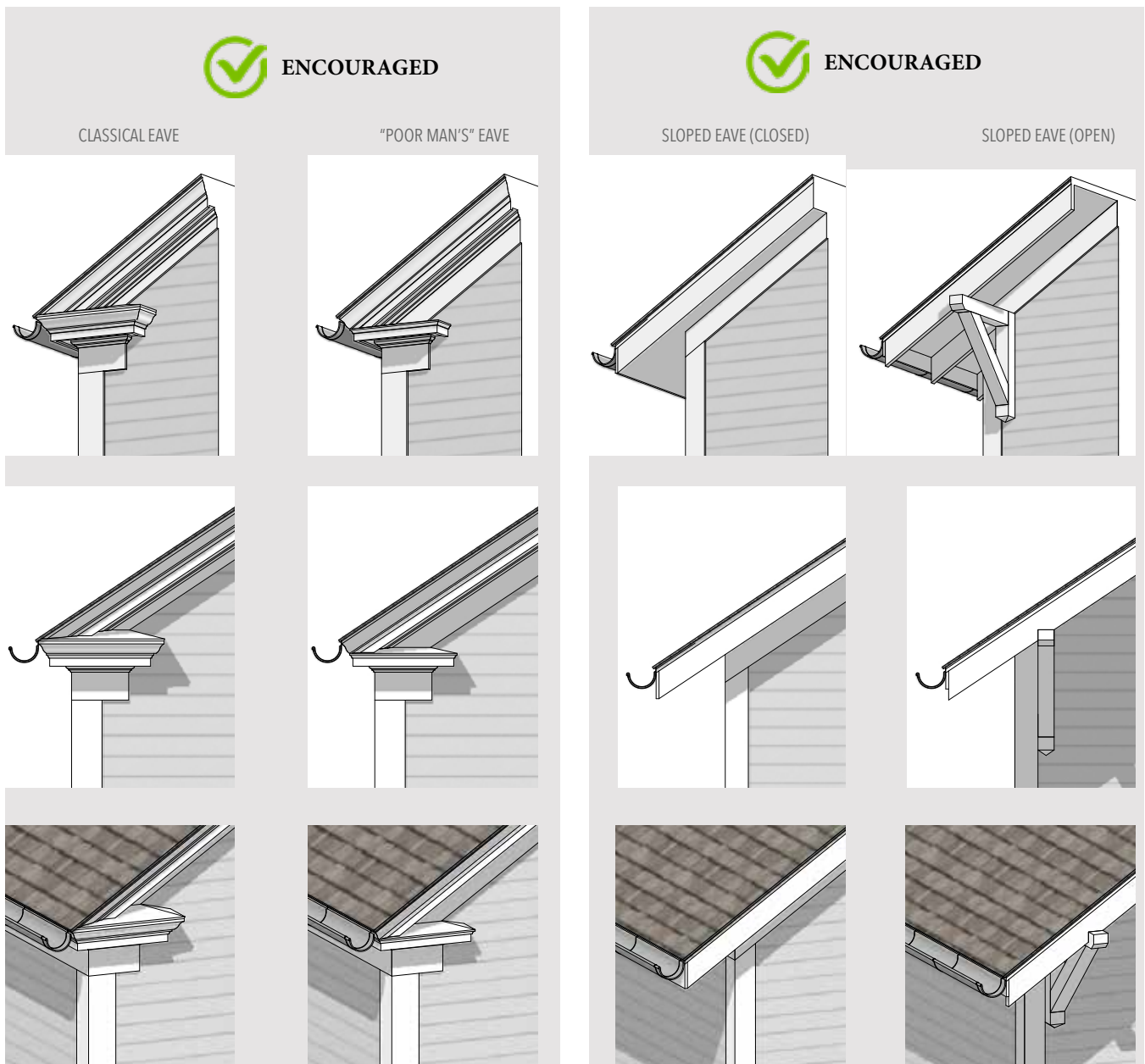
Typical Production Home Details



The classical eave return is elegant but very challenging to construct. As an alternative, the “poor man’s” eave return can achieve a similar look while being more constructable. These eave designs work well with the colonial architectural style.

For more guidance on roof eaves refer to [GYHR Chapter 10](#).

Traditional Architectural Details



5.13 SPECIFICATIONS FOR EXTERIOR MATERIALS

(The following specifications were developed by, and are reproduced with, the permission of Fernando Pages Ruiz)

Cladding and trim, including synthetic materials, must conform to the following guidelines:

Two levels of cladding and trim are recognized for placement in direct and indirect contact from a pedestrian level.

Level 1 Products – Are defined as siding and trim products that accurately reproduce the natural material at arm’s length (three (3) feet) for overall appearance, including siding, soffit or trim edges, joints, shadow lines, dimensions, contour proportions, texture and color tone; as well tactile quality; and sound quality (tap test).

Level 2 Products –Are defined as those siding and trim products that accurately reproduce the natural material at pedestrian perspective distance (twelve (12) feet) for overall appearance, including siding or soffit profile or trim edges, joints, shadow lines, dimensions, contour proportions, surface texture and color tone.

Siding Style Criteria

Siding style.

Siding systems approved correspond to siding profiles representative of early American architectural styles applicable to traditional neighborhood design standards. These include, but are not limited to traditional Clapboard, Dutch lap, Beaded, Board and Batten, Shake, and Shingle.

Dimensional accuracy.

Siding products should accurately reproduce lap and board dimensions of traditional millwork.

Profile accuracy.

Siding products should accurately reproduce milled board.

Rigidity.

Siding should reproduce surface resistance to deflection of traditional wood cladding for Level 1 approval.

Wood Grain / Gloss.

Siding products should have no surface texture if replicating milled siding and should have accurate depth of grain if reproducing shake or re-sawn siding. Slight (brush stroke) texture may be allowed on Level 2 product.

Edge accuracy.

Siding profiles should accurately reproduce millwork saw-cut edges, and relative proportions of edge depth and panel width.

Color.

Siding color and texture should accurately mimic painted wood surfaces, with optional slight brush or roller texture.

Joinery replication.

Siding laps, and the intersection with trim must accurately reproduce butt-joints typical of wood siding. Exceptions may be allowed on Level 2 product.

Shingle Siding Criteria

Shingles styles.

Shingle styles approved will include traditional shingle shapes, such as those found in historical architecture that incorporated shingles, including, but not limited to, Victorian architecture, including Italianate, Second Empire, Folk, and Chiloe architecture. As well as innovating shapes, given the tradition of milling unique shingles for traditional architecture.

Dimensional accuracy.

Shapes should accurately reproduce the width, exposed length, and depth, with accurate profiles that reproduce the cut, breaks and shadow lines of moderately aged traditional wood shingles. Note, the sides and butt of a shingle are often irregular; the sides may taper, and the butt may not be square with the sides. Shingles can have butts squared to the sides and when accurately reproducing rebuted, re-squared or rebuted and re-jointed shingles.

Wood Grain / Gloss.

Shape products should have surface texture and variegated coloring replicating moderately aged milled shapes and should have accurate depth of cuts

and overlap and width and length of exposed face. Under no circumstances should shingle products have gloss finishes. Innovative shapes will be judged on a case-by-case basis.

Shake Siding Criteria

Shake styles.

Shake systems approved must accurately reproduce split, rather than sawn shapes. Shakes may be tapered, straight, or split and any combination of these except straight-tapered. Different species and quality of wood are used, such as, but not limited to California redwood, Western Red Cedar, and Atlantic white cedar; as are different lengths and installation methods. The manufacturer must specify wood species, and manufacturing style (froe and mallet split, wedge split, bandsaw cut, etc.)

Dimensional accuracy.

Shake should approximately reproduce tradition, North American shake styles, such as eighteen (18) inch barn shake, twenty-four (24) inch lengths, or the forty-eight (48) inch shakes are typically used for siding. Although a natural product without specific dimensional requirements, the appearance of the shake should be tapered from end to end with a natural, hand-split appearance, usually 3/8-inch-thick to be 5/8 inch, although these dimensions are guidelines and not specifications.

Wood Grain / Gloss.

Shake products should have surface texture replicating severely aged, hand-hewn, edge-grain split, individual pieces, and should have aleatory depth of cracks, cuts and overlap with consistent, but varied width and length of exposed face. Under no circumstances should shake products have gloss finishes.

Soffit Criteria

Dimensional accuracy.

Soffit products should accurately reproduce profile, cut, and shadow lines of traditional wood ceiling panels.

Wood Grain / Gloss.

Soffit products should have no visible surface texture if replicating milled plank. Gloss finishes are discouraged.

Color.

Soffit color should accurately mimic painted surfaces.

Trim Criteria

Dimensional accuracy.

Trim products should accurately reproduce profile, cut, and shadow lines of traditional wood millwork. Edge Accuracy. Inside and outside edges of trim materials should accurately reproduce router shaped wood millwork.

Rigidity.

Trim should reproduce surface resistance to deflection of traditional millwork for Level 1 approval. Wood Grain / Gloss. Trim products should have no surface texture if replicating milled siding and should have accurate depth of grain if reproducing rough-sawn profiles or shake corners. Smooth surface trim can have gloss finishes.

Color.

Trim color should accurately mimic moderately aged painted surfaces.

Joinery Replication.

The intersection of trim profiles must accurately reproduce mitered, coped, and butt-joints typical of wood siding.

Accessories Evaluation Criteria

Utility accessories, such as J-channel and utility moldings, must remain invisible or incorporated into trim and/or cladding in such a way as to not disrupt the semblance accuracy of the siding surface.

Accessories Criteria

Architectural accessories, such as shutters, should accurately reproduce the style, dimensions, and exposed attachment methods of the wood accessories reproduced.

Utility accessories, such as J-channel and utility moldings, must remain invisible or incorporated into trim and/or cladding in such a way as to not disrupt the semblance accuracy of the siding surface.

Synthetic Materials

All polymeric products installed shall conform to the following standards:

Vinyl siding must meet or exceed the requirements of ASTM D3679 Standard Specification for Rigid Poly Vinyl Chloride (PVC).

Polypropylene siding must meet or exceed the requirements of ASTM D7254.

Insulated siding must meet or exceed the requirements of ASTM D7793.

Installation of polymeric siding and trim must meet or exceed the requirements of ASTM D4756 Standard Practice for Installation of Rigid Poly Vinyl Chloride (PVC) Siding and Soffit. Refer to 2018 Vinyl Siding Installation Manual, published by the Vinyl siding Institute (www.vinylsiding.org)

Additionally, installers must review local building codes and manufacturer's literature for variations that may apply to specific products and/ or geographic areas.

