SECTION 7200 – TECHNICAL REQUIREMENTS

Section 7200 – List of Figures

7200 TECHNICAL REQUIREMENTS

The purpose of Section 7200 is to outline the technical requirements and responsibilities for all developments including, but not limited to, requirements for street frontage improvements, right-of-way dedication, access, roadway design, stormwater, or other necessary improvements. The policies apply to both new development projects and to re-development projects submitted with a development application and are intended to provide for the safe and efficient movement of people, goods, and services on the Highway system within Ada County. These policies are also intended to allow for reasonable and safe mobility and access for today and in the future of all users of the public rights-of-way.

These policies apply when ACHD reviews development applications and plans. ACHD staff should use professional judgment in implementing this policy through development, and may consider ACHD plans, policies, land use agency plans and policies, national best practices and guidance and the long-term interest of the public. These policies shall be interpreted to ensure that any authorized access meets the safety needs of all users of the public rights-of way.

The term “Highway” is defined in Idaho Code 40-109, which is incorporated by reference. The term “roads”, “roadways”, or “streets” may be used interchangeably with the term “highway.”

7201 STREET CLASSIFICATION

7201.1 General

The functional classifications of new highways constructed under the District’s jurisdiction are as follows: Principal Arterial, Minor Arterial, Collector, Local, Commercial, and Industrial. The District should work with land use agencies to determine bicycle and pedestrian routes, including principal bicycle mobility corridors.

7201.2 Functional Street Classification

Urban and Rural Functional Street Classification maps are prepared by the Community Planning Association of Southwest Idaho (COMPASS) and adopted by its member agencies, including the District. The maps depict the current arterial and collector street designations.

Some future arterials are shown on the maps, but not all are indicated.

ACHD’s Master Street Map (Section 3111), Bike Master Plan and Neighborhood Plans establish the vision for all highways in Ada County. These plans are developed in consultation with land use agencies.

7202 ACCESS MANAGEMENT

7202.1 General

Access management is the control of the location, spacing, design and operation of driveways, median openings, and street connections to the public rights-of- way. Access

management principles also help guide decisions involving land use planning, corridor design, the movement of people, goods, and services by all modes of transportation, and land development.

7202.2 Purpose, Benefits, and Goals of Access Management

The purpose of access management is to support the desired land use patterns as identified in land use agency plans and support the safe and efficient movement of people, goods, and services by all modes of transportation.

Successful access management should support land use plans and priorities and enhance the improvements to benefit all modes of transportation. Access management benefits all modes of transportation, such as walking, biking, transit, and motorized vehicle use of all types.

Using a combination of strategies derived from land use planning, transportation planning, motorized and non-motorized transportation engineering, livable street design and performance measurements, and law, access management accomplishes the following:

- Advance land use and transportation plans and priorities of land use agencies by maintaining travel mobility for the efficient movement of people, goods, and services by all modes of transportation.
- Help preserve public investment in transportation facilities for all users by maintaining the functional performance of these facilities as intended.
- Promote~~s~~ sustainable land use patterns while preserving the investment in commercial, residential, and other developments that depend on all modes of safe and reliable transportation.
- Improve~~s~~ safety and capacity by the appropriate use of turn lanes to enter and exit the public right-of-way thereby limiting motor vehicle speed differences, decreasing the likelihood of traffic collisions, and promoting reasonable travel times.
- Increase safety by reducing the number of potential traffic collisions by reducing conflict points.

7202.3 Principles of Access Management

- Provide appropriate land use access based on desired street purpose. Different types of Highways serve different functions. It is important to design and manage Highways according to the primary functions by which they are expected to serve land use and transportation plans.
- Limit conflict points for all users. Driveways, unsignalized intersections, and commercial access provide more opportunity for different Highway users to cross paths. Access management seeks to limit these conflicts to only those locations necessary to support the adjacent land uses.
- Limit direct access onto Mobility Arterials defined in the Master Street Map. If ACHD and land use agencies designate specific principal arterials to serve high volumes of regional motor vehicle traffic over a long distance and that as a result may need more access control, those arterials are designated as Mobility Arterials in the Master Street Map. Mobility Arterials still seek to serve all users of the public right-of-way, but motor vehicle access should be primarily directed to lesser classified Highways.
- Be coordinated with land use plans. Frequent and direct property access is more

compatible with the function of local and collector streets. Some arterials support locations identified as activity centers by land use jurisdictions. ACHD should seek to balance access management principles with this vision as communicated by the land use agencies.

- Promote intersection hierarchy. An efficient transportation network that supports an efficient, diverse, and productive system of land uses provides appropriate transitions from one classification of street typology to another.
- Locate signals to support local land uses determined by the partner agency to promote reasonable travel times. Long, uniform spacing of intersections and signals on mobility arterials and some major roadways enhances the ability to coordinate signals and ensure continuous movement of motor vehicle traffic to promote reasonable travel times. Failure to carefully locate access connections or median openings can undermine land use values and public investment in those uses and may unreasonably increase travel times.
- Limit conflicts near intersections and interchanges. Intersections and interchanges require the greatest attention from all users. Safe movement is paramount in these locations as all users are at the greatest risk of conflicts. Limiting direct access in close proximity to intersections decreases complexity and promotes increased awareness of other users.
- Limit the number of conflict points and help drivers pay attention to the context of where they are driving. All users of the right-of-way make more mistakes and are more likely to have collisions when they are not given cues to expect the presence of people in or approaching the right-of-way.
- Separate conflict areas. All users traveling in the public rights-of-way need sufficient time to address one potential set of conflicts before facing another. The necessary spacing between conflict areas increases as travel speed increases, helping to provide drivers adequate perception and reaction time.
- Use non-traversable medians to manage left-turn movements in appropriate locations. Medians channel motor vehicle turning movements on mobility corridors and some arterials to designated locations. Therefore, non-traversable medians and other techniques that minimize left turns or reduce conflicts can be especially effective in improving safety. Full median openings, which allow left turns by motor vehicles from either direction, are best provided at signalized intersections and unsignalized junctions of arterial and collector streets. Full median openings in other unsignalized locations can adversely affect the safety of people in the public rights-of-way and travel time but may be appropriate in some areas where analysis indicates that traffic operations and the safety of people in the public right-of-way would be improved.
- Provide connectivity by a supporting street and circulation system. Well planned communities provide a supporting network of local and collector streets to accommodate development, as well as unified property access and circulation systems. The Master Street Map identifies the desired collector network, which should be preserved with rare exception. Interconnected street and circulation systems provide safe low-stress routes for people traveling by all modes of transportation. In locations where this connectivity has not been provided for, the arterial network bears an undue burden. Commercial strip development with separate driveways for each business and without the facilities to allow people to safely access and navigate those developments by non-motorized transportation modes forces even short trips to be made by motorized vehicle onto arterial Highways, thereby impeding safety and mobility and increasing travel times for all users of the public rights-of-way. Connectivity and access management together help provide for a well-functioning

Highway network for all users.

7202.4 Access Management Tools

7202.4.1 Cross Motor Vehicle Access Easements/ Shared Motor Vehicle Access

Cross motor vehicle access utilizes a single vehicular connection that serves two or more adjoining lots or parcels so that the driver of a motor vehicle does not need to re-enter the Highway system. While requiring cross access is a land use function, ACHD will recommend locations where the land use agency may promote preservation for cross access.

7202.4.2 Temporary Access

Access by people using any mode of transportation that is permitted for use until appropriate alternative access becomes available. Temporary access by people using any mode of transportation appropriate for the context may be granted through a development agreement or similar method, and the developer shall be responsible for providing a financial guarantee for the future closure of the driveway.

7202.4.3 Frontage/Backage and Local Access Service Roads

A frontage/backage road is an access road that generally parallels an arterial between the arterial and the front building setback line, or behind a building. A frontage/backage road provides direct lot access to private properties while separating them from the principal roadway. Access on frontage/backage roads may include access by pedestrians and people using non-motorized vehicles.

7203 DEVELOPMENT REQUIREMENTS

7203.1 General

Developers are responsible for providing acceptable access for all modes of transportation to and from a dedicated, improved Highway. Developers shall be required to improve their public street frontage as outlined in the forthcoming sections.

7203.1.1 Federal Accessibility Design Guidelines and Standards

The Developers shall follow the current version of the U.S. Access Board's Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG), 36 CFR Part 1190, September 7, 2023; (See also, https//www.access-board.gov/prowag and https//www.access-board.gov/files/prowag/planning-and-design-for-alterations.pdf for additional information).

7203.1.2 Alterations

Proposed alterations to existing facilities located in the public right-of-way must be readily accessible to and usable by individuals with disabilities and must comply with PROWAG. If full compliance with PROWAG's requirements for new construction cannot be met because the alterations are impractical due to existing physical constraints, technical infeasibility, or create safety issues, an Accessibility Exemptions Certification form,

available on ACHD's website, shall be completed by the Developer's engineer describing how the existing physical or site constraints or safety issues limit the extent to which the facilities can be made fully compliant with PROWAG. Existing physical constraints include, but are not limited to, underlying terrain, underground structures, adjacent developed facilities, drainage, or the presence of a notable natural or historic feature. This form should identify the specific locations that cannot be made fully compliant and provide specific reasons why full compliance cannot be achieved. Cost is not a basis for an infeasible alteration.

7203.1.3 Accessibility Exemptions Certificate

The Accessibility Exemptions Certification form shall be submitted with the proposed development application and is subject to approval of the District Engineer. Any alteration that cannot be made fully compliant should be clearly identified on the plans per the directions listed on the form. This form will be an ACHD permanent record and be retained in the project file.

7203.2 Exceptions to Usual Performance Requirements

If a proposed development abuts a street that has already been improved to current District standards, the developer will not have any requirement for Highway improvements except as required by Sections 7203.3 and 7300.

If a proposed development is for land uses with the potential of generating less than ten additional motor vehicle trips per day, the developer shall have no requirement except as required by Sections 7203.3 and 7300.

If a proposed development involves a land use of scale or nature that exceeds the motor vehicle, pedestrian, bicycle and/or transit rider capacity of the adjacent system or presents an unreasonable financial burden on the District or its partner land use agency, the development standards may be increased. The District reserves the right to set standards, require additional transportation facilities, or require extraordinary impact fees related to the scale of the proposed project and the capacity limitations of the existing facilities. (*See* Section 7300.)

If a proposed development abuts a Highway on which the District has a project for construction that has been bid and awarded and the project includes all features that the developer would otherwise be required to provide per this Policy Manual, the developer will have no requirement to construct all or part of the project on the adjacent street. Nothing in this policy precludes a developer from adding and paying for project features that increase its safety or value.

7203.3 Minor Improvements

Minor improvements to existing Highways adjacent to a proposed development may be required. These needed transportation facilities are to correct deficiencies or replace deteriorated facilities. Included are sidewalk and/or bike lane construction or replacement (with physical buffers if missing and needed); construction of transitional sidewalk segments; crosswalk construction or replacement; curb and gutter construction or replacement; repair, replacement or expansion of curb extensions; replacement of unused driveways with curb, gutter, sidewalk, repair or addition of traffic calming or speed

mitigation features; installation or reconstruction of pedestrian ramps; pavement repairs; signs; motor vehicle, pedestrian and bicycle traffic control devices; and other similar items. The current version of PROWAG will determine the applicable accessibility requirements for alterations and elements added to existing streets. ACHD staff is responsible for identifying the minor improvements that would be proportionate to the size and complexity of the development.

7203.4 Improvement Standards

All improvements shall be made in accordance with Subsection 7204, "Design Elements."

7203.5 Public Rights-of-Way Trust Fund

If the District determines that it is necessary or desirable to defer making some or all the required improvements, the developer shall contribute the estimated value of the improvements to the Public Rights-of-Way Trust Fund. The District will determine the value. In general, this will be limited to those Highways scheduled in the District's Integrated Five-Year Work Plan.

7203.6 Contributions for Needed Transportation Facilities

The District, with the consent of the developer, may increase the developer's construction program to add needed transportation facilities for motor vehicles, pedestrians, bicycles or transit users or other transportation facilities beyond those normally required of the developer by this Policy Manual. Those improvements must either be identified as impact fee eligible in the current Capital Improvement Plan or agreed to by the developer and the ACHD Commission through a Developer Cooperative Agreement.

Reimbursement to the developer for these needed transportation facilities may be made by any of the methods described below, and the District shall approve the repayment method in writing in advance of construction. All of the methods described below require that a development agreement be executed by both parties prior to engineering or construction of the needed transportation facilities.

Among the reimbursement methods may be an offset against future impact fees, according to Section 7300, or Developer Cooperative program funding. The District may make reimbursement by a cash payment on completion and acceptance of the need transportation facilities or conveyance of public right-of-way.

7203.7 Adopted and Referenced Plans

The District conducts corridor studies and participates in area plans that are led by the lead land use agencies. These studies and plans provide a more in-depth review and analysis of specific areas and corridors and often make specific recommendations regarding street sections, access control, spacing and other transportation needs to meet the land use and transportation priorities of the land use agencies. After these plans are adopted by the lead land use agencies and ACHD, the specific implementation strategies for access control or street design and layout identified in the plan will supersede standard ACHD policy. Development applications that are located within a specific area plan boundary or within the boundary of a corridor study shall be reviewed in accordance with the implementation strategies of these plans and studies. The ACHD Development

Services Department shall maintain a list of these adopted plans, including effective dates, as well as copies of the plan documents.

7203.8 Livable Streets Performance Measures

ACHD has adopted performance measures (level of traffic stress) for evaluating the experience of bicyclists and pedestrians. ACHD seeks to create a transportation network that serves all ages and abilities. Bike and pedestrian facilities built through development should achieve a bike and pedestrian level of traffic stress of 1 or 2, with no new bike lane below a minimum of 5'. A waiver of this policy may be provided by the Development Services Manager based on site specific and topographical considerations.

7204 DESIGN ELEMENTS

7204.1 General

The design elements in this section of the Policy Manual are to be used with the adopted District standards and specifications, along with the policies outlined in other sections of this Manual.

If the District, after consultation with the lead land use agency, determines that more stringent design elements are required due to terrain or other local conditions, the developer shall conform to the more stringent design standards. The more stringent design requirements shall be shown on the construction plans.

7204.2 Plan Requirement

The content of the Highway improvement plans shall be in accordance with Section 7105.

7205 ARTERIAL STREETS

7205.1 General

Principal arterials serve the major regional centers of activity of a metropolitan area, higher traffic volume corridors, and longer trips. Principal arterials carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements. To preserve the long-term functionality of such roadways, they should have more access control than a minor arterial.

Minor arterials interconnect with and augment the principal arterial system and provide service to trips of shorter length at a lower level of travel mobility than principal arterials. Minor arterials also distribute travel to geographic areas smaller than those identified with the higher systems. This classification includes all arterials not included in a higher classification and places more emphasis on land access than principal arterials. Such roadways should still have limited access with less access control than a principal arterial, but more than a collector.

Due to the higher volume of vehicular traffic expected on arterial roadways, additional care should be taken in providing safe facilities for bicyclists and pedestrians. The preferred treatment for bicyclists and pedestrians is a multi-use path based on ACHD's adopted Bike Master Plan, Neighborhood Plans, and Livable Streets Performance Measures. In

some situations, alternative facilities may be used based on existing roadway and land use conditions. The ACHD Staff will identify the bike and pedestrian facility that will be required through development. For purposes of this policy, a multi-use path qualifies as a sidepath as defined in Idaho Code.

7205.2 Development Requirements

7205.2.1 Adjacent Streets and Required Improvements

The developer is responsible for improving all street frontages adjacent to the site as identified below regardless of whether access is taken to all of the adjacent streets. Improvements shall include transitional segments in accordance with the current version of PROWAG.

All utility relocation costs associated with improving street frontages adjacent to the site shall be borne by the developer (See Section 7107).

a. Frontage Improvements – Pedestrian Facilities

Required improvements to an arterial shall consist of a 7-foot wide (minimum) sidewalk if located adjacent to the curb, or a 5-foot wide (minimum) sidewalk if located 8-feet or more behind the curb. Alternatively, on roadways identified for widening in the Capital Improvement Plan, a minimum 10' multi-use path may be required. ACHD Development Review staff will be responsible for determining the required facility. The path shall be placed in accordance with planned buildout in the Master Street Map with a minimum 8' planter strip as measured to the closest edge of the path. Street trees are encouraged between the pedestrian facility and the roadway when irrigation and maintenance will occur by the adjacent property owner or HOA through an approved license agreement. Refer to the District's Tree Planting Policy if trees are to be placed within the parkway strip. Vertical hardscape alternatives to street trees may be considered in the buffer space when street trees are not practicable.

Detached pedestrian facilities are encouraged and should be parallel to the adjacent roadway. Pedestrian facilities will only be allowed to deviate from a straight line parallel to the roadway when authorized by Development Review Staff to accommodate site specific conditions (i.e., street trees, utilities, etc.). This does not apply to the required offset of a multi-use path at intersections.

Easements shall be provided if pedestrian facilities are located outside of the right-of-way. The easement shall encompass the entire area from the right-of-way line to 2-feet behind the back edge of the sidewalk or multi-use path. Sidewalks and multi-use paths shall either be located wholly within the public right-of-way or wholly within an easement.

Outside a City's Area of Impact as approved by Ada County, the District may consider waiving the requirement to construct a sidewalk or multi-use path along the arterial roadway. If this waiver is granted by a Development Services Supervisor, other requirements may be established to accommodate pedestrians and non-motorized travel.

b. Frontage Improvements – Pavement Widening

The developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot-wide gravel shoulder adjacent to the entire site. Curb, gutter, and additional pavement widening may be required (See Section 7205.5.5).

c. Right-of-Way Dedication

The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

Standard Right-of-Way Widths
7-lane arterial = 124-feet
5-lane arterial = 100-feet
3-lane arterial = 78-feet

d. Off-Site Streets

If the proposed development is not served by a public street that is fully improved to urban standards (curb, gutter, pedestrian facilities) or a minimum 32-feet of pavement, then the developer shall provide 32-feet of pavement with 3-foot wide gravel shoulders from the site to the public street specified by the District, typically to the nearest public street that meets the District's minimum standards or a maximum of ¼ mile; OR shall provide 24-feet of pavement with 3-foot wide gravel shoulders and a minimum 5-foot wide detached asphalt/concrete pedestrian facility from the site to the public street specified by the District, typically to the nearest public street that meets the District's minimum standards or a maximum of ¼ mile.

Alternatives to pavement widening including sidewalks and multi-use paths, or other proposals may be considered by the District. The extent of roadway improvements (improvement type and length) will be determined by evaluating certain criteria. Criteria to establish improvement type and length include but are not limited to: traffic volumes (existing and projected); the posted speed limit; topography; accident history; potential need for bicycle and bus traffic/routes; number of pedestrians (existing and projected); location of pedestrian "attractors" and "generators" (i.e. parks and schools); number of access points/streets serving the proposed development; usable right-of-way; need for traffic calming; utilities and irrigation facilities. All utility relocation costs associated with the off-site street widening shall be borne by the developer.

Narrower street widths may be considered if pedestrian or bike facilities exist or if the proposed development is for ten (10) residential lots or fewer or will generate less than 100 vehicle trips per day (VTD).

e. Continuation of Streets

1. Consideration for Future Development

The street layout in a proposed development shall cause no undue hardship to adjacent property. An adequate and convenient access to adjacent property for use in future development may be required. If a street ends at the development boundary, it shall meet the requirements as described in this sub-section.

2. Existing Adjacent Development

An existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended into that development. The extension shall include provisions for continuation of storm drainage facilities and other improvements.

3. Stub Streets

Stub streets will be required to provide circulation or to provide access to adjacent properties. Stub streets will conform to the requirements described in Section 7205.2.1.4, except a temporary cul-de-sac will not be required if the stub street has a length of less than 150-feet. In all cases, a sign shall be installed at the terminus of the stub street stating that "THIS IS A DESIGNATED ARTERIAL STREET. THIS STREET WILL BE EXTENDED AND WIDENED IN THE FUTURE."

In addition, a stub street must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water toward that intersection; unless an alternative storm drain system is approved by the District.
- The District may require covenants guaranteeing that the stub street will remain free of obstructions.

When analyzing the need for a stub street, the District will consider the following:

- Adopted corridor plans.
- Property size and configuration.
- Property size and configuration of adjacent parcels.
- Potential for redevelopment of adjacent parcels.
- Location of vehicular and pedestrian attracting land uses (i.e., schools, neighborhood commercial, etc.).
- Comprehensive Plan and Zoning designations.
- Needs of emergency service providers.
- Location of existing stub streets.
- Location of canals and necessary crossings, and the cost/benefit.
- Functional Classification of adjacent and nearby streets.

Benefits of Street Connectivity include, but are not limited to, the following:

- Reduces vehicle miles traveled.
- Maintains the efficiency of the arterial street. Increases and promotes pedestrian and bicycle activity and connectivity.
- Increases access for emergency services.
- Reduces the need for additional access points to the arterial street system.
- Improved transit operations.
- Promotes the efficient delivery of services including trash and mail.
- Promotes intra-neighborhood circulation to schools, parks, neighborhood commercial centers, etc.
- Promotes orderly development.

4. Temporary Dead End Streets

   The design and construction requirements for cul-de- sac streets shall apply to temporary dead-end streets. The developer shall construct a temporary cul-de-sac. The temporary cul-de-sac shall be paved and shall meet the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

7205.3 Traffic Considerations

The efficiency of the arterial network is critical, and the District's policies outline the location, spacing, and control of access points to the arterial system. Local traffic circulation systems in land developments, including local streets and driveways, should not reduce the efficiency of nearby major streets.

7205.3.1 Level of Service Planning Thresholds

Level of Service Planning Thresholds have been established for principal arterials and minor arterials within ACHD's Capital Improvement Plan and are also listed in Section 7106. Unless otherwise required to provide a Traffic Impact study under Section 7106, a proposed development with site traffic less than 10% of the existing downstream roadway or intersection peak hour traffic shall not be required to provide mitigation for a roadway or intersection that currently exceeds the minimum acceptable level of service planning threshold or v/c ratio.

7205.3.2 Maximum Traffic on One Access

If a proposed development has only one access to a public street that is classified as an arterial, or if it proposes to extend public streets from existing developments with only one arterial access to the public street system, the maximum forecast ADT to be allowed at any point on the arterial is 5,000. This volume may be reduced or increased based on information received from the lead land use agency, and the applicable fire department, and/or emergency services. The District will also take into consideration the following items when determining whether or not to reduce or increase the maximum allowable

ADT: railroad crossings, canal crossings, and topography (level vs. rolling vs. mountainous).

7205.3.3 Street Patterns

To aid in the orderly development of an efficient transportation system, arterials are generally constructed in one-mile intervals located on section lines.

7205.3.4 Traffic Conflicts

Traffic volumes typically found on arterials can be in conflict with vehicular movements associated with adjacent land uses. Off-street parking, off-street maneuver areas, minimum direct lot access, and other circulation and design elements should be included in the layout of a development to minimize these conflicts.

7205.3.5 Pedestrians

Pedestrian-vehicle conflict points should be minimized. Pedestrian walkways or sidewalks are to provide access from all adjacent property, to assure safe pedestrian travel in the area. Pedestrian walkways or sidewalks adjacent to the development shall connect to all accessible elements, spaces, and facilities in the right-of-way including pedestrian pushbuttons, street furniture, transit stops, transit shelters, accessible on-street parking, parking meters and pay stations, accessible passenger loading zones, etc. New pedestrian facilities should seek to achieve the lowest pedestrian level of traffic stress practicable as defined by the most current ACHD Livable Streets Performance Measures Plan as adopted by the ACHD Commission.

7205.3.6 Bicycles

Generally, improved arterials will have sufficient pavement or a separated multi-use path to accommodate bicycle traffic on both sides of the roadway. Bike facilities should reflect the highest level of comfort feasible as defined by the Livable Streets Performance Measures. Efforts should be made to minimize conflict points (i.e., driveways) where possible.

7205.3.7 On-street Parking

On-street parking is typically prohibited on arterials. The District may consider on-street parking in central business districts. If on-street parking is allowed by the District, it may be removed in the future at the discretion of the District if safety conditions warrant. See Section 5104.4.4 for diagonal parking on public streets standards. ACHD requires a hold harmless agreement for parking within the right-of-way.

7205.4 Access Considerations and Requirements

7205.4.1 Access Points

All access points associated with development applications shall be determined in accordance with the policies in this section and Section 7202. Access points shall be reviewed only for a development application that is being considered by the lead land use agency. Approved access points may be relocated and/or restricted in the future if the land

use intensifies, changes, or the property redevelops. Notwithstanding any provision herein, the Supervisor of the Development Review team may approve access to be taken off of higher classified Highways to support corresponding land use plans and priorities after consultation with the lead land use agency. The Supervisor must find that allowing such access does not reduce the safety of users of the public rights-of-way.

7205.4.2 Signalized Collector Street Intersection Spacing on Minor and Principal Arterials Minor and Principal Arterials

The optimum spacing for new signalized collector roadways intersecting minor arterials is one half-mile. In order to maintain the function of the arterial street system, the goal is to allow no more than one signal per mile (with connectivity within the square mile to that signal location). The spacing of signalized intersections on arterials is critical to traffic progression and the optimization of the arterial street system.

Deviations from the ½ mile spacing may be considered:

- To accommodate the design and layout of an existing collector street system.
- Within existing central business districts.
- If specified by an adopted Corridor Study or Specific Area Plan.
- If there are no other reasonable site design, access or circulation alternatives eliminating the need for a signal; and if there is a proven public necessity for the intersection; and a traffic signal study and traffic analysis reviewed and approved by the District verifies the need.

7205.4.3 Local Street Intersection Spacing on Arterials

New local streets should not typically intersect arterials. Local streets should typically intersect collectors. If it is necessary, as determined by ACHD, for a local street to intersect an arterial, the minimum allowable offset shall be as identified in Tables 1a and 1b below.

7205.4.4 Number of Driveways on Arterials

The intent of this policy is to limit the number of access points to those that are warranted or necessary to serve the development, while maintaining the function and performance of the arterial. The guidelines below shall be used when more than one access point is being requested with a development.

Additional driveways may be considered when one or more of the following conditions are met:

- The daily volume using one driveway exceeds 5,000 vehicles (total volume for entering and exiting traffic).
- Traffic using one driveway exceeds the volume to capacity ratio (v/c) equal to or greater than 1.0 of a STOP controlled intersection during either the peak hour of the street or the peak hour of the site traffic generation.
- A District approved traffic impact study and analysis determines that conditions warrant additional driveways.

7205.4.5 Driveway Spacing on Minor Arterials from Existing or Future Signalized Intersections

To determine if there is a single or dual left turn lane planned, refer to the ACHD Capital Improvement Plan (CIP). If the intersection is not listed in the CIP, then assume a single left turn lane. Dimensions shall be measured from the centerline of the intersection to the centerline of the driveway.

Single Left Turn Lane

If a driveway is approved by the District based on the policies listed above, then driveways located near a signalized intersection with an existing or planned single left turn lane shall be located:

- A minimum of 330-feet from the intersection for a right-in/right-out driveway; and
- A minimum of 660-feet from the intersection for a full-movement driveway.

Dual Left Turn Lane

Driveways located near a signalized intersection with an existing or planned dual left turn lane shall be located:

- A minimum of 330-feet from the intersection for a right-in/right-out driveway; and
- A minimum of 710-feet from the intersection for a full-movement driveway.

7205.4.6 Driveway Spacing on Minor Arterials (away from a signalized intersection)

- Direct lot or parcel access to a minor arterial is typically prohibited.
- If a property has frontage on more than one street, access shall be taken from the street having the lesser functional classification.
- Driveways located on an arterial may be prohibited when the property has frontage on one or more other public streets.
- For property with frontage on more than one street, access shall be provided from the street having the lower current or projected Average Daily Traffic Volume (ADT), and/or the lesser functionally classified street (i.e., frontage on arterial and collector, access shall be from collector). ACHD shall determine which street has the lower volume.

If it is necessary to take access to the higher classified street due to a lack of frontage, the minimum allowable spacing shall be based on Table 1a below. The spacing shall be measured from all other existing or approved driveways or intersecting streets on either side of the Minor Arterial.

Table 1a: Access Spacing on Minor Arterials (away from a signalized intersection/ successive spacing)

Posted Speed Limit	Minimum Separation for Unsignalized Collector Streets	Minimum Separation for Local Streets	Minimum Driveway Separation
25 MPH	1,320‘	660‘	330‘
30 MPH	1,320‘	660‘	330‘
35 MPH	1,320‘	660‘	330‘
40 MPH	1,320‘	660‘	330‘
45 MPH	1,320‘	660‘	380‘
50 MPH	1,320‘	660‘	425‘

- Dimensions are to be measured centerline to centerline.

7205.4.7 Driveway Spacing on Principal Arterials

- Direct lot or parcel access to a principal arterial is typically prohibited.
- If a property has frontage on more than one street, access shall be taken from the street having the lesser functional classification.
- Driveways located on arterials may be prohibited when the property has frontage on one or more other public streets.
- For property with frontage on more than one street, access shall be provided from the street having the lower current and projected Average Daily Traffic Volume (ADT), and/or the lesser functionally classified street (i.e., frontage on arterial and collector, access shall be from collector). ACHD shall determine which road has the lower volume.
- If it is necessary to take access to the higher classified street due to a lack of frontage, the minimum allowable spacing shall be based on Table 1b below. The spacing shall be measured from any other existing or approved driveway or street on either side of the street.

Table 1b: Access Spacing on Principal Arterials (away from a signalized intersection/ successive spacing)

Posted Speed Limit	Minimum Separation for Unsignalized Public Streets	Minimum Driveway Separation (right-in/right-out)
30 MPH	1,320‘	355‘
35 MPH	1,320‘	355‘
40 MPH	1,320‘	400‘
45 MPH	1,320‘	450‘
50 MPH	1,320‘	520‘

- All dimensions shall be measured centerline to centerline of the proposed

driveway/street to the nearest driveway/street.

- Driveways, when approved on a principal arterial shall operate as right- in/right-out only. The District will require the construction of a raised median in the Principal Arterial to restrict the left turning movements on the principal arterial.
- The District may consider a temporary full access driveway when the following conditions are met:
- It is a single lane principal arterial (one lane in each direction of travel), AND
- The road has less than 24,000 ADT, OR
- Traffic safety, operations and site conditions provide reasonable access to a parcel without placing an undue burden on the surrounding road network, as determined by the District. Development and Technical Services Management level staff shall have authority to grant temporary full access under this policy, upon first making findings of fact, and conclusions based thereon, that:

    a. A parcel of real property proposed for development is so unusual in size, shape, location and/or physical condition that strict enforcement of one or more of the access standards contained in sections 7100 and 7200 of this Policy Manual would result in extraordinary economic and design hardships and practical difficulties, as distinguished from a mere inconvenience; and
    b. Modifications of such standards will not jeopardize pedestrian and motorist safety or otherwise be injurious to other adjacent property or detrimental to public safety, health, or welfare; and
    c. Conditions for the request for modification are unique to the property for which the modification is sought and are not applicable generally to other property; and
    d. The modification will not contravene the overall intent or effect of sections 7100 and 7200 of this Policy Manual.

- If granted, temporary access will be administered per Section 7202.4.2 (Temporary Access).

7205.4.8 Driveway Design Criteria

Driveways shall be designed in accordance with the criteria in Table 2 below. Additionally:

- All new driveways are required to be paved their full width and at least 30- feet into the site from the edge of pavement of the adjacent street.
- If a driveway is to be gated, the gate or keypad (if applicable) shall be located a minimum of 50-feet from the adjacent street and an on-site turnaround shall be provided.
- Driveways are to be identified on the construction drawings. The remaining frontage along an arterial roadway shall be identified as having no access.
- The throat length is measured from the back of curb of the intersecting street to the nearest drive aisle intersection. Adequate throat length allows stacking or queuing to occur on site. This reduces driver confusion, traffic problems, and unsafe conditions, such as vehicles backing out onto the arterial, interrupting traffic flow.
- Raised medians may be used for traffic control and regulation. The District may require raised medians on arterials to restrict access. The District will require raised medians for a 7-lane roadway and/or where the roadway volumes exceed 24,000 ADT. The raised median shall be constructed as a 6-inch concrete median with the

appropriate markings or reflectors and shall extend a minimum of 75 feet beyond the edge of the driveway, or as determined by Traffic Services staff.

Table 2: Driveway Design Criteria on Minor and Principal Arterials

Driveway Type	High Volume Driveways (100 VTD or more)	Low Volume Driveways (less than 100 VTD total entering and exiting)	Residential/ Agricultural/ Field Access	Industrial Driveways
Width	30 to 36-feet	24 to 30-feet	20 to 30-feet	24 to 40-feet
Minimum Radii (Back of curb)	30-feet	15-feet	15-feet	15 to 30-feet
Throat Length	50-feet (minimum)or greater based on anticipated volume and/or analysis in TIS	30 to 50-feet	n/a	50-feet (minimum)or greater based on anticipated volume and/or analysis in TIS

7205.4.9 Turn Lanes

If right or left turn lanes are warranted per a submitted Traffic Impact Study (See Section 7106), the storage and taper lengths shall be designed in accordance with the minimum AASHTO and MUTCD standards. The storage length shall be a minimum of 100-feet in length. The applicant will not be compensated by ACHD for the dedication of additional right-of-way and pavement widening.

7205.4.10 Miscellaneous Access (Out-Parcels, Emergency Access, etc.)

Where a property is being developed and there is a legal out-parcel (as determined by the lead land use agency) that is not part of the development application, the District will require that the applicant provide adequate access (i.e. stub street, cross access easement, or other as appropriate) to that parcel for future development and/or re-development in order to ensure that the District‘s access management goals are achieved.

7205.4.11 Multi-use Path (MUP) Setback at Intersections

As a multi-use path (MUP) approaches an intersection, the path should be deflected away from the intersection to improve visibility for vehicles, pedestrians, and cyclists. The following setback requirements measured from the lip of gutter or edge of asphalt of the mainline roadway to the near edge of the path entrance into the roadway shall be met:

- 6’ minimum for mainline roadways with a posted speed of 35 MPH or less
- 16’ minimum for mainline roadways with a posted speed of 40 MPH or greater
- 6’ minimum setback when adjacent to a right turn lane

Multi-use path details can be found in the ACHD Multi-Use Path Example Applications drawings as shown in the exhibits at the end of this section.

7205.5 Arterial Street Design

The design of improvements for arterials shall be in accordance with District standards, including the Master Street Map, Livable Streets Design Guide, and the most current ACHD Livable Streets Performance Measures Plan as adopted by the ACHD Commission. The developer or engineer should contact the District before starting any design.

7205.5.1 Master Street Map and Typologies

If the arterial street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then the sections listed below shall serve as the default.

7205.5.2 Street Sections and Right-of-Way Width

The standard 7-lane street section shall be 81-feet (back-of-curb to back-of- curb). This width typically accommodates three travel lanes in each direction, a continuous raised or landscaped median with intermittent turn lanes, and curbs and gutters. A 7-lane road shall also include a minimum 10’ multi-use path outside the curb line on both sides with a 8’ buffer from back-of-curb. Other Level 3 bike facility treatments as defined in the ACHD Bike Master Plan may be approved at the discretion of the ACHD Development Review Supervisor.

The standard 5-lane street section shall be 59-feet (back-of-curb to back-of- curb). This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane or landscaped median with intermittent turn lanes, and curbs and gutters. A 5-lane road shall also include a minimum 10’ multi-use path on both sides with at 8’ buffer from back-of-curb. Other bike facility treatments as defined in the ACHD Bike Master Plan may be approved at the discretion of the ACHD Development Review Supervisor. If an interim on-street bike lane is required in order to connect to existing facilities, the street section shall be 75’ to allow for a 5’ bike lane and 3’ painted buffer.

The standard 3-lane street section shall be 37-feet (back-of-curb to back-of- curb). This width typically accommodates a single travel lane in each direction, and a continuous center left-turn lane, and curbs and gutters. A 3-lane road shall also include a minimum 10’ multi-use path on both sides with at 8’ buffer from back-of-curb. Other bike facility treatments as defined in the ACHD Bike Master Plan may be approved at the discretion of the ACHD Development Review Supervisor. If an interim on-street bike lane is required in order to connect to existing facilities, the street section shall be 53’ to allow for a 5’ bike lane and 3’ painted buffer. Landscaped medians with intermittent turn lanes may be allowed when a minimum of 20’ of pavement on both sides of the median is provided.

If a landscaped median is included in any of these cross sections, the landscaping shall be maintained by license agreement with the adjacent HOA, property owner, or by interagency agreement with the corresponding land use jurisdiction.

At the discretion of Traffic Engineering staff, adjustments may be made to the street section, including removal of the continuous center turn lanes or modification to lane widths, where no driveways or intersections are present or to ensure adequate space for pathway and buffers.

7205.5.3 Pavement Thickness

The minimum pavement thickness on a principal arterial will be determined by the District.

The minimum pavement thickness on any arterial will be determined by ACHD at the time of application. An adequate base section is also required. Base thickness shall be determined by the following formula:

T = 0.0032 (T.I.) (100-R), where
T = total gravel equivalency
T.I. = traffic index
R = "R" value of subgrade material as determined through laboratory testing and approved by ACHD.

7205.5.4 Traffic Index

The District will calculate the traffic index for arterials on an as-needed basis.

7205.5.5 Curb Type and/or Roadside Borrow Ditch

Where curbs are required to be constructed on arterials, standard vertical curbs are required.

Where curbs are not required the design of the roadside borrow ditch shall be in accordance with the ISPWC standards.

7205.5.6 Auxiliary Turn Lanes

Where turn lanes are required to serve the development, the applicant may need to dedicate additional right-of-way and construct additional street improvements to accommodate the pavement width for the turn lane, tapers, and the increased drainage requirements. If the applicant is unable to fit a minimum 8-foot wide borrow ditch and 3-foot wide gravel shoulder between the edge of pavement and the face of pedestrian facility due to right-of-way constraints, then the applicant may need to construct vertical curb and gutter adjacent the site; or as an alternative, the applicant may need to move the pedestrian facility back and dedicate additional right-of-way to allow for the construction of a borrow ditch wide enough to accommodate the drainage. An easement will be required for any segment of the pedestrian facility located outside of the right-of-way. Coordinate the design of the drainage facility with District Development Review staff.

7205.5.7 Pedestrian Facilities

Concrete sidewalks at least five-feet wide are required on both sides of all arterial streets. A parkway strip at least 8-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection for pedestrians. Alternatively, on roadways identified for improvement in the Capital Improvement Plan, a

minimum 10' multi-use path may be required. The path shall be placed in accordance with planned buildout in the Master Street Map with a minimum 8' planter strip as measured to the closest edge of the path. Street trees are encouraged between the pedestrian facility and the roadway when irrigation and maintenance will occur by the adjacent property owner or HOA through an approved license agreement. Consult the District's planter width policy if trees are to be placed within the parkway strip. In some instances, to match existing conditions, a minimum 7' sidewalk may be constructed next to the back- of-curb. ACHD Development Review staff will be responsible for determining the required facility. Vertical hardscape alternatives to street trees may be considered in the buffer space when street trees are not practicable.

Detached sidewalks and multi-use paths are encouraged and should be parallel to the adjacent roadway. Pedestrian facilities will only be allowed to deviate from a straight line parallel to the roadway when authorized by Development Review Staff to accommodate site specific conditions (i.e., street trees, utilities, etc.).

Appropriate easements shall be provided if public pedestrian facilities are placed out of the right-of-way. The easement shall encompass the entire area between the right-of-way line and 2 feet behind the back edge of the pedestrian facility. Pedestrian facilities shall either be located wholly within the public right-of-way or wholly within an easement.

Curb ramps or blended transitions shall be provided to connect the pedestrian access route at each pedestrian street crossing in accordance with the current version of PROWAG. Provide detectable warning surface in accordance with the current version of PROWAG.

7205.5.8 Design Speed

The proposed design speed for arterials shall be submitted for approval by ACHD Traffic Engineering. The target speed in urbanized areas is no more than 35 mph but may be adjusted by the Traffic Engineering Supervisor based on site specific conditions. Vertical elements, such as street trees and landscaping, are encouraged to help traffic meet the target speed.

7205.5.9 Horizontal and Vertical Curves

All vertical and horizontal curves shall meet the minimum AASHTO standards per the design speed of the roadway.

7205.5.10 Maximum/Minimum Profile Grade

The maximum allowable grade for any arterial shall be in accordance with AASHTO standards and in no case shall it be greater than 10%. The minimum allowable grade is 0.4%.

7205.5.11 Minimum Centerline Radius of Curves

The minimum centerline radius for arterials shall be designed in accordance with the minimum AASHTO standards.

7205.5.12 Tangent Length Between Curves

The minimum tangent between horizontal reverse curves for arterials shall be designed in accordance with the minimum AASHTO standards.

7205.5.13 Tangent Length Approaching Intersections

Intersections located on horizontal curves should be avoided, particularly if the radius of either street is close to the minimum allowed or if the intersection occurs on the inside of the horizontal curve. A permanent sight distance easement based on the sight distance for the design speed shall be provided where one street must intersect with another on a curve.

The minimum centerline tangent length approaching an intersection shall be 360-feet from the near edge of the travel way. If the street is planned for future widening, then the tangent shall be measured from the near edge of the future travel way.

7205.5.14 Roadway Lighting

Each land use jurisdiction in Ada County establishes the requirements for roadway lighting. The applicant shall provide adequate lighting per the requirements of the land use jurisdiction.

7205.5.15 Landscape Medians

Landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12’ maximum for a minimum distance of 150‘. Beyond the 150’ the island may increase to a maximum width of 30‘.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb to prevent ponding.
- The clear width of pedestrian access routes within medians and pedestrian refuge islands shall be 5’ minimum. When the pedestrian access route within a median or refuge island connects multi-use paths on either side, the width of the pedestrian access route shall match the width of the path. At cut-through pedestrian refuge islands, detectable warning surfaces shall be placed at the edges of the pedestrian island and shall be separated by a 2’ minimum length of surface without detectable warnings per the current version of PROWAG. Where cut-through length is less than six feet, the requirement for a detectable warning surface shall be per the current version of PROWAG.

7206 COLLECTOR STREETS

7206.1 General

The primary function of a collector is to intercept traffic from the local street system and carry that traffic to the nearest arterial. A secondary function is to service adjacent property. Access will be limited or controlled.

Due to the higher volume of vehicular traffic expected on collector roadways, additional care should be taken in providing safe facilities for bicyclists and pedestrians.

7206.2.1 Adjacent or Internal Streets

The developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all the adjacent streets. Improvements shall include transitional segments in accordance with ADA and the current version of PROWAG.

All utility relocation costs associated with improving street frontages adjacent the site shall be borne by the developer.

The District requires dedication of additional right-of-way without compensation to provide the minimum width requirements according to District standards.

7206.2.2 Required Improvements

1. Adjacent Streets (Existing or New)

   Required improvements to an adjacent collector street shall consist of pavement widening to one-half the required width, including vertical curb, gutter, and concrete sidewalk (minimum 7-foot attached or 5-foot detached), plus 12-feet of additional pavement widening beyond the centerline established for the street to provide an adequate roadway surface, with the pavement crowned at the ultimate centerline. A 3-foot-wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff shall be constructed on the unimproved side. Alternatively, on roadways identified as low-stress bikeways in ACHD's Bike Master Plan, a minimum 10' multi-use path may be required in lieu of sidewalks. ACHD Development Review staff will be responsible for determining the required facility. The path shall be built 8' behind the top back of curb as measured to the closest edge of the path. Street trees are encouraged between the pedestrian facility and the roadway when irrigation and maintenance will occur by the adjacent property owner or HOA through an approved license agreement. Vertical hardscape alternatives to street trees may be considered in the buffer space when street trees are not practicable.

2. Internal Streets (Existing or New)

   Required improvements to an internal collector street shall consist of a complete street section with vertical curb, gutter, and sidewalk (minimum 7-foot attached or 5-foot detached) or multi-use path (minimum 10' with an 8' buffer behind top back of

curb) on both sides of the roadway.

3. Right-of-Way Dedication

   The District requires dedication of right-of-way without compensation to encompass the minimum width requirements according to District standards.

7206.2.3 Off-site Streets

If the proposed development is not served by a public street that is fully improved to urban standards (curb, gutter, sidewalk) or with a minimum of 30-feet of pavement, then the developer shall provide 30-feet of pavement with 3-foot gravel shoulders from the site to a public street specified by the District; OR the developer shall provide 24-feet of pavement with 3-foot gravel shoulders and a minimum 5-foot wide detached asphalt/concrete pedestrian facility, from the site to a public street specified by the District.

Alternatives to pavement widening including sidewalks and multi-use paths or other proposals, may be considered by the District. The extent of roadway improvements (improvement type and length) will be determined by evaluating certain criteria. Criteria to establish improvement type and length include but are not limited to traffic volumes (existing and projected); number of pedestrians (existing and projected); location of pedestrian "attractors" and "generators" (i.e., parks and schools); number of access points/streets serving the proposed development; usable right-of-way; need for traffic calming; utilities and irrigation facilities. All utility relocation costs associated with the off-site street widening shall be borne by the developer. All utility relocation costs associated with the off-site street widening shall be borne by the developer.

7206.2.4 Continuation of Streets

1. Consideration for Future Development

   The street design in a proposed development shall cause no undue hardship to adjoining property. An adequate and convenient access to adjoining property for use in future development may be required. If a street ends at the development boundary, it shall meet the requirements as described in this sub-section.

2. Existing Adjacent Development

   An existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities.

3. Stub Streets

   Stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7206.2.4.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that "THIS IS A DESIGNATED COLLECTOR ROADWAY. THIS ROADWAY WILL BE EXTENDED IN THE FUTURE."

In addition, a stub street must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water toward that intersection; unless an alternative storm drain system is approved by the District.
- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

The District will consider the following items when determining when to require a stub street:

- Identification of the roadway on the adopted functional classification map, a corridor plan, and/or a comprehensive plan.
- Property size and configuration of current application
- Property size and configuration of adjacent parcels
- Potential for redevelopment of adjacent parcels
- Location of vehicular and pedestrian attracting land use (i.e., schools, neighborhood commercial, etc.)
- Comprehensive Plan and Zoning designations
- Needs of the emergency service providers
- Location of existing stub streets
- Location of canals and necessary crossings
- Cost vs. benefit of requiring canal crossing
- Functional Classification of adjacent and nearby roadways (i.e., will requiring a stub street achieve the District's Access Management goals by reducing potential need for additional connection to a classified roadway)
- The Master Street Map

Benefits of Connectivity and Stub Streets include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increases and promotes pedestrian and bicycle activity and connectivity.
- Increases access for emergency services.
- Reduces need for additional access points to the arterial street system.
- Promotes the efficient delivery of services including trash and mail.
- Promotes appropriate intra-neighborhood traffic circulation to schools, parks, neighborhood commercial centers, etc.
- Promotes orderly development.

4. Temporary Dead End Streets

The design and construction requirements for cul-de-sac streets shall apply to temporary dead-end streets. The developer shall construct a temporary cul-de-sac. The temporary cul-de-sac shall be paved and shall meet the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

7206.3 Traffic Considerations

The District's policies outline the location, spacing, and control of access points to the collector street system. An efficient collector street system can reduce the burden on the critical arterial street system.

7206.3.1 Level of Service Planning Thresholds

The Level of Service Planning Thresholds for collector streets are listed within Policy Section 7104.

7206.3.2 Vehicle Access

Direct lot access to collector streets is normally controlled. Direct lot access to collector streets in residential areas is discouraged, but lot access may be allowed at the discretion of the District.

7206.3.3 Maximum Traffic on One Access

If a proposed development only has one access to a public street that is classified a collector, or if it proposes to extend public streets from existing development with only one collector street access to the public street system, the maximum forecast ADT to be allowed at any point on the collector street is 3,000. This volume may be reduced or increased based on information received from the lead land use agency, the applicable fire department, and/or emergency services. The District will also take into consideration the following items when determining whether or not to reduce or increase the maximum allowable ADT: railroad crossings, canal crossings, and topography (foothills vs. flat land).

7206.3.4 Through Traffic

The purpose of a collector street is to carry local traffic to an arterial roadway.

Collectors in residential areas may serve land uses that can increase traffic volumes during certain periods of the day or times of the year, such as neighborhood parks, community centers, elementary schools, and some mixed land uses. The design of a collector street in a residential area should promote safe pedestrian movement and lower speeds.

7206.3.5 Street Patterns

To aid in the development of an efficient vehicular transportation system and an accessible transit system, continuous collector streets are required at or near mid-section lines to achieve optimal ½ mile signal spacing.

It is not necessary for a continuous collector roadway in a residential area to be in a straight alignment. As identified in Section 7206.3.8, the District supports passive design elements to discourage excessive speeds. The collector street intersections with arterial streets are to be planned with potential short range or long-range needs for signal warrants and operation in mind. This will require consideration of other existing or future

traffic signal locations along the arterial street, a location that will serve both sides of the original street, and traffic volumes commensurate with signalization.

7206.3.6 Traffic Conflicts

Traffic volumes typically found on collector roadways can be in conflict with adjacent land uses. Off-street parking, off-street maneuver areas, minimum direct lot access, and other circulation and design elements should be designed to minimize these conflicts.

Collector streets in residential areas typically carry low to moderate volumes of traffic. The level of traffic should not interfere with an area's livability.

7206.3.7 Front-on Housing in a Residential Area

New collector roadways in residential areas with front-on housing shall be limited to a maximum ADT of 3,000. Driveway location and spacing will be controlled in accordance with Section 7207.4. Existing collector roadways in residential areas with front-on housing should not exceed 5,000 ADT. In some instances, a lower ADT for existing collectors in residential areas may be applied due to items such as grades, curves, etc.

7206.3.8 Speed Control and Traffic Calming

Collector streets should be designed to discourage speeds above 35 MPH. In a residential area, collector streets should be designed to discourage speeds above 30 MPH.

The design of collector street systems should discourage excessive speeds by using passive design elements. The traffic calming policy for existing residential streets is included in Section 5000. In the review of developments, the District will evaluate the potential need for future traffic calming. If the design or layout of a development is anticipated to necessitate future traffic calming implementation by the District, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e., stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement.

Passive design elements are to be considered the preferred method to calm traffic and achieve the desired travel speed for the roadway. Speed humps, valley gutters, stop signs, and cross drains are not an acceptable tool for traffic calming new collector streets.

7206.3.9 Pedestrians

Pedestrian-vehicle, bicycle-vehicle, and bicycle-pedestrian conflict points should be minimized. Pedestrian facilities are to provide direct access from all adjacent property, to assure safe pedestrian travel in the area. Pedestrian facilities within the extents of the improvement required by ACHD shall connect to all accessible elements, spaces, and facilities in the right-of-way including pedestrian pushbuttons, street furniture, transit stops, transit shelters, accessible on-street parking, parking meters and pay stations, accessible passenger loading zones, etc. New pedestrian facilities should seek to achieve the lowest pedestrian level of traffic stress practicable as defined by the ACHD Livable Streets Performance Measures.

7206.3.10 Bicycles

Generally, collector streets may have multi-use paths or bike facilities as described in the ACHD Bicycle Master Plan. Multi-use paths would be built 8' behind the top back of curb. Development Services Staff will be responsible for determining the appropriate facility on the collector roadway based on expected volumes, planned bike networks, and expected speeds. Bike facilities should reflect the highest level of comfort feasible as defined by the Livable Streets Performance Measures. Efforts should be made to minimize conflict points (i.e., driveways) where possible.

7206.3.11 On-Street Parking

The District may consider on-street parking on a case-by-case basis taking into consideration the anticipated roadway volumes and adjacent land uses. If on-street parking is allowed by the District it may be removed in the future at the discretion of the District if safety conditions warrant.

On-street parking on collector roadways in residential areas is typically prohibited. The District may consider on-street parking on a case-by-case basis where it is consistent with the adjacent land use (i.e., alley loaded lots needing on-street parking); where it achieves a goal(s) of the lead land use agency, and where sufficient pavement width is provided. If on-street parking is allowed by the District it may be removed in the future at the discretion of the District if safety conditions warrant.

7206.4 Access Considerations and Requirements

7206.4.1 Access Points

All access points associated with development applications shall be determined in accordance with the policies in this section and Section 7202. Access points shall be reviewed only for a development application that is being considered by the lead land use agency. Approved access points may be relocated and/or restricted in the future if the land use intensifies, changes, or the property redevelops.

7206.4.2 Signalized Intersection Spacing on Collectors

The preferred spacing for new collectors intersecting existing collectors is 1/4 mile to allow for adequate signal spacing and alignment. Access points on a collector that require signalization shall be public streets.

7206.4.3 Driveway Spacing on Collectors Near Existing or Future Signalized Intersections and Roundabouts

Access is typically prohibited within the influence area of the intersection. For roundabouts, the area of influence is generally considered the area from the intersection to the far end of the splitter islands.

Driveways located near a signalized intersection shall be located in accordance with one of the following, whichever is greater:

- Outside the area of influence; OR
- 220-feet for a right-in/right-out driveway and 440-feet for a full-movement driveway.

Dimensions shall be measured from the centerline of the intersection to the centerline of the driveway.

7206.4.4 Driveway Spacing on Collectors Near Stop-Controlled Intersections

Access is typically prohibited within the influence area of the intersection. For roundabouts, the area of influence is generally considered the area from the intersection to the far end of the splitter islands.

Driveways located near a STOP controlled intersection shall be located in accordance with one of the following, whichever is greater:

- Outside the area of influence; OR
- 150-feet.

Dimensions shall be measured from the centerline of the intersection to the centerline of the driveway.

7206.4.5 Driveway Spacing on Collectors (away from a signalized intersection)

Access restrictions to collectors shall be based upon the type of access that is being proposed according to Table 1 below. The spacing shall be measured from any other existing or approved driveway or street on either side of the street.

Table 1: Access Spacing on Collectors (away from a signalized intersection)/ Successive Driveway Spacing

Posted Speed Limit	Minimum Separation for Local Streets	Minimum Driveway Separation for More than 100 VTD	Minimum Driveway Separation for Less than 100 VTD
25 MPH	330‘	245‘	150‘
30 MPH	330‘	260‘	150‘
35 MPH	330‘	285‘	150‘

- All dimensions are to be measured centerline to centerline.

7206.4.6 Driveway Design Criteria

Driveways shall be designed in accordance with the criteria in Table 2 below. Additionally:

- All new driveways are required to be paved their full width and at least 30- feet into the site from the edge of pavement of the adjacent street.
- If a driveway is to be gated, the gate or keypad (if applicable) shall be located a minimum of 50-feet from the adjacent street and an on-site turnaround shall be provided.

- Driveways are to be identified on the construction drawings. The remaining frontage along an arterial roadway shall be identified as having no access.
- The throat length is measured from the back of curb of the intersecting street to the nearest drive aisle intersection. Adequate throat length allows stacking or queuing to occur on site. This reduces driver confusion, traffic problems, and unsafe conditions, such as vehicles backing out onto the arterial, interrupting traffic flow.
- Raised medians may serve as an effective means of traffic control and regulation. The District may require raised medians on collector roadways where site access creates operational problems. The raised median shall be constructed as a 6-inch concrete median with the appropriate reflectors and shall extend a minimum of 75-feet beyond the edge of the driveway.

Table 2: Driveway Design Criteria on Collectors

Driveway Type	High Volume Driveway (100 VTD or more)	Low Volume Driveway (less than 100 VTD total entering and	Residential/ Agricultural/ Field Access	Industrial Driveways
Width	30 to 36-feet	24 to 30-feet	20 to 30-feet	24 to 40-feet
Minimum Radii (Back of curb)	30-feet	15-feet	15-feet	15 to 30-feet
Throat Length	50-feet** (minimum)or greater based on anticipated volume and/or analysis in TIS	30 to 50-feet	n/a	50-feet (minimum)or greater based on anticipated volume and/or analysis in TIS

7206.4.7 Turn Lanes

If right or left turn lanes are warranted per a submitted Traffic Impact Study (See Section 7106), the storage and taper lengths shall be designed in accordance with the minimum AASHTO and MUTCD standards. The storage length shall be a minimum of 100-feet in length. The applicant will not be compensated by ACHD for the dedication of additional right-of-way and pavement widening.

7206.4.8 Miscellaneous Access (Out-Parcels, Emergency Access, etc.)

Where a property is being developed and there is a legal out-parcel (as determined by the lead land use agency) that is not part of the development application, the District will require that the applicant provide adequate access (i.e. stub street, cross access, or other as appropriate) to that parcel for future development and/or re-development in order to ensure that the District's access management goals are achieved.

7206.5 Collector Street Design

The design of improvements for collectors shall be in accordance with District standards,

including the Master Street Map, Livable Streets Design Guide, and the most current ACHD Livable Streets Performance Measures as adopted by the ACHD Commission. The developer or engineer should contact the District before starting any design.

7206.5.1 Master Street Map and Typologies

If the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then the sections listed below shall serve as the default. ACHD reserves the right to require bicycle and pedestrian facilities above those identified in the Livable Streets Design Guide and Master Street Map to ensure the safest facility possible based on current best practice.

7206.5.2 Street Sections and Right-of-Way Width

The standard right-of-way width for collector streets shall typically be 50 to 70- feet, depending on the location and width of the sidewalk or multi-use path and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk or multi-use path is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 47-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes. If a multi-use path is determined to be the required treatment, the street section shall be reduced to 37-feet. If it is determined a continuous center left-turn lane is not appropriate and a path is installed, the street section may be reduced to 26-feet.

Generally, collector streets will be designed with sufficient pavement width to accommodate both motorized and non-motorized traffic.

1. Street Section in Residential Areas

   The standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and taking into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

   At the discretion of Traffic Engineering staff, adjustments may be made to the street section, including removal of the continuous center turn lanes or modification to lane widths, where no driveways or intersections are present or to ensure adequate space for pathway and buffers.

7206.5.3 Pavement Thickness

A minimum thickness of 3-inches of pavement is required on collector streets.

An adequate base section is also required. Base thickness shall be determined by the following formula:

T = 0.0032 (T.I.) (100-R), where
T = total gravel equivalency
T.I. = traffic index
R = "R" value of subgrade material as determined through laboratory testing and approved by ACHD.

7206.5.4 Traffic Index

The District has pre-assigned a traffic index of 8 for collector streets.

7206.5.5 Curb Type

Standard vertical curbs are required on all collector streets.

7206.5.6 Pedestrian Facilities

Concrete sidewalks at least five-feet wide are required on both sides of all collector streets. A parkway strip at least 8-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection for pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back- of-curb shall be a minimum of 7-feet wide. Alternatively, on roadways identified as low-stress bikeways in ACHD's Bike Master Plan, a minimum 10' multi-use path may be required in lieu of sidewalks. ACHD Development Review staff will be responsible for determining the required facility. The path shall be built 8' behind the top back of curb as measured to the closest edge of the path. Street trees are encouraged between the pedestrian facility and the roadway when irrigation and maintenance will occur by the adjacent property owner or HOA through an approved license agreement. Vertical hardscape alternatives to street trees may be considered in the buffer space when street trees are not practicable.

Pedestrian facilities should be parallel to the adjacent roadway. Pedestrian facilities will only be allowed to deviate from a straight line when authorized by Development Review Staff to meet site specific conditions (i.e., street trees, utilities, etc.).

Appropriate easements shall be provided if public sidewalks or multi-use paths are placed out of the right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk or multi-use path. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

Curb ramps or blended transitions shall be provided to connect the pedestrian access route at each pedestrian street crossing in accordance with the current version of PROWAG. Provide detectable warning surface in accordance with the current version of PROWAG.

7206.5.7 Design Speed

The design speed for collectors shall be 25MPH. At the discretion of the Traffic Engineering Supervisor, a design speed of 30MPH may be approved to address site specific conditions.

7206.5.8 Stopping Sight Distance

A safe stopping sight distance is required for all vertical and horizontal curves. The minimum sight distance allowed is 200-feet.

7206.5.9 Maximum/Minimum Profile Grade

The maximum allowable grade for any public collector street is 10%. The minimum allowable grade is 0.4%.

7206.5.10 Minimum Centerline Radius of Curves

The minimum mid-block centerline radius allowed on collector streets is 180- feet.

The minimum mid-block centerline radius allowed on collector streets in residential areas is 150-feet.

7206.5.11 Tangent Length Between Curves

A minimum tangent of 100-feet is required between horizontal reverse curves unless the centerline radius exceeds 500-feet.

A minimum tangent of 50-feet is required between horizontal reverse curves unless the centerline radii exceed 300-feet.

7206.5.12 Tangent Length Approaching Intersections

Intersections located on horizontal curves should be avoided particularly if the radius of either street is close to the minimum allowed or if the intersection occurs on the inside of the horizontal curve. A permanent sight distance easement based on the sight distance of the design speed shall be provided where one street must intersect with another on a curve.

The minimum centerline tangent length approaching an intersection shall be 200-feet from the near edge of the travel way. If the street is planned for future widening, then the tangent shall be measured from the near edge of the future travel way.

7206.5.13 Roadway Lighting

Each land use jurisdiction in Ada County establishes the requirements for roadway lighting. The applicant shall provide adequate lighting per the requirements of the land use jurisdiction.

7206.5.14 Landscape Medians

Landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.

- The width of an island near an intersection is 12’ maximum for a minimum distance of 150’. Beyond 150’**,** the island may increase to a maximum width of 30’.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb to prevent ponding.

7207 LOCAL STREETS

7207.1 General

The primary function of a local street is to serve adjacent property. Adjacent property will usually have unrestricted access to the street and ADT will typically be less than 2,000. Access to local streets is generally unrestricted, except near intersections.

7207.2 Development Requirements

7207.2.1 Adjacent or Internal Streets

The developer is responsible for improving all local street frontages adjacent to the development site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

All utility relocation costs associated with improving street frontages adjacent the site shall be borne by the developer.

The District requires dedication of additional right-of-way without compensation to provide the minimum requirements according to District standards.

7207.2.2 Required Improvements

1. Adjacent Streets (Existing or New)

   Required improvements to an adjacent local street shall consist of pavement widening to one-half the required width, including curb, gutter, and concrete sidewalk (minimum 5-feet), plus 12-feet of additional pavement widening beyond the centerline established for the street to provide an adequate roadway surface, with the pavement crowned at the ultimate centerline. A 3-foot-wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff shall be constructed on the unimproved side.

2. Internal Streets (Existing or New)

   Required improvements to an internal local street shall consist of a complete street section with curb, gutter, and sidewalk (minimum 5-feet) on both sides of the roadway.

7207.2.3 Off-site Streets

Local Streets with Less than 400 VTD (existing + proposed)

If the proposed development is not served by a public street with at least 24- feet of pavement then the developer shall pave the street or widen the existing pavement to provide 24-feet of pavement with 3-foot gravel shoulders from the site to a public street specified by the District.

Local Streets with 400 to 1,000 VTD (existing + proposed)

If the proposed development is not served by a public street with at least 30- feet of pavement, then the developer shall pave the street or widen the existing pavement to provide a minimum 24 to 30-feet of pavement as determined by the District, with 3-foot gravel shoulders from the site to a public street specified by the District.

Local Streets with Greater than 1,000 VTD (existing + proposed)

If the proposed development is not served by a public street with a minimum of 30-feet of pavement, then the developer shall pave the street or widen the existing pavement to provide 30-feet of pavement with 3-foot gravel shoulders from the site to a public street specified by the District; OR shall provide 24-feet of pavement with 3-foot gravel shoulders and a minimum 6-foot wide detached asphalt/concrete pedestrian facility from the site to a public street specified by the District.

All Local Streets

Alternatives to pavement widening include sidewalks, pathways, or other proposals such as passive traffic calming measures or mitigation through design elements, may be considered by the District. The extent of roadway improvements (improvement type and length) will be determined by evaluating site specific criteria. Criteria to establish improvement type and length include but are not limited to: traffic volumes (existing and projected); number of pedestrians (existing and projected); location of pedestrian ‑attractors‖ and ‑generators‖ (i.e. parks and schools); number of access points/streets serving the proposed development; usable right-of-way; need for traffic calming; utilities and irrigation facilities. All utility relocation costs associated with the off-site street widening shall be borne by the developer.

7207.2.4 Continuation of Streets

1. Consideration for Future Development

   The street design in the proposed development shall cause no undue hardship to adjoining property. An adequate and convenient access to adjoining property for use in future development may be required. If a street ends at the development boundary, it shall meet the requirements as described in this sub-section.

   The District will consider the following items when determining when to require a stub street:

- Property size and configuration of current application
- Property size and configuration of adjacent parcels
- Potential for redevelopment of adjacent parcels
- Location of vehicular and pedestrian attracting land use (i.e., schools, neighborhood commercial, etc.)
- Comprehensive Plan and Zoning designations
- Needs of the emergency service providers
- Location of existing stub streets
- Location of canals and necessary crossings
- Cost vs. benefit of requiring canal crossing
- Functional Classification of adjacent and nearby roadways (i.e., will requiring a stub street achieve the District's Access Management goals by reducing the potential need for additional connection to a classified roadway)
- The Master Street Map

Benefits of Connectivity and Stub Streets include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increases pedestrian and bicycle connectivity. Increases access for emergency services.
- Reduces need for additional access points to the arterial street system.
- Promotes the efficient delivery of services including trash, mail, and deliveries.
- Promotes appropriate intra-neighborhood traffic circulation to schools, parks, neighborhood commercial centers, transit stops, etc.
- Promotes orderly development.

2. Existing Adjacent Development

   An existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities.

3. Stub Streets

   Stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7207.2.4.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that "THIS ROADWAY WILL BE EXTENDED IN THE FUTURE."

   In addition, a stub street must meet the following conditions:

   A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water toward that intersection; unless an alternative storm drain system is approved by the District.

   The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

4. Temporary Dead End Streets

The design and construction requirements for cul-de-sac streets shall apply to temporary dead-end streets. The developer shall construct a temporary cul-de-sac. The temporary cul-de-sac shall be paved and shall meet the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

Dead End Streets

If a stub street is not extended into an adjacent development the developer shall terminate the public street with construction of a standard cul-de-sac. Cul-de-sacs shall be paved and improved with curb, gutter, and sidewalk meeting the requirements described in Section 7207.5.8.

7207.3 Traffic Considerations

7207.3.1 Average Daily Traffic (ADT)

ADT on new and existing local streets should typically be less than 2,000. This ADT applies to both existing and new streets. For new streets that are stubbed to connect to adjacent land that is not fully developed, the allowable ADT for the new street will typically be no more than 1,000 ADT, to accommodate future additional traffic from the adjacent land, depending on the location and type of the stub street and the location and size of the adjacent undeveloped land. When stub streets are connected and properties fully developed, local streets should not exceed 2,000 ADT.

In developed areas where streets already exceed 2,000 ADT or are close to exceeding 2,000 ADT, the Commission may grant approval to exceed 2,000 ADT based on existing zoning of undeveloped properties or infill development. The Commission may also consider the need for additional roadway improvements or traffic calming to mitigate the additional traffic if necessary.

The ADTs listed above are desirable planning thresholds for local streets, not roadway capacities. Actual roadway capacities are much higher than the planning thresholds.

7207.3.2 Vehicle Access

Direct lot access to local streets from adjacent property is permissible.

7207.3.3 Maximum Traffic on One Access

If a proposed development only has one access to a public street that is a local street, or if it proposes to extend public streets from existing development with only one local street access to the public street system, the maximum forecast ADT to be allowed at any point on the local street access is 1,000 and is subject to fire department requirements for the provision of a secondary access. This volume may be reduced or increased based on information received from the lead land use agency, the applicable fire department, and/or emergency services. The District will also take into consideration the following

items when determining whether or not to reduce or increase the maximum allowable ADT: railroad crossings, canal crossings, topography (foothills vs. flat land), pedestrian connectivity, location of schools, etc.

7207.3.4 Through Traffic

Local street systems should be designed to minimize through traffic. Through traffic may be discouraged by creating breaks in the local street pattern; by off-setting local street intersections; or by controlling access to major streets.

New developments shall be designed to avoid increasing through traffic on existing local streets unless those streets have been previously designed for extension. Although through traffic is generally undesirable, street system interconnectivity between subdivisions is essential. This interconnectivity serves local residents, pedestrians, bicyclists, public transit, and emergency services.

7207.3.5 Cul-de-sacs

Ada County or the city in which the cul-de-sac is located shall determine the maximum length and number of dwelling units allowed to take access from the cul-de-sac, provided the maximum number of expected trips per day generated by those properties taking access from an individual cul-de-sac shall not exceed 400.

7207.3.6 Special Traffic Generators

Special types of developments, such as schools, day care centers, convenience stores and churches serve as focal points for traffic circulation within the neighborhood they serve. When designing the development, planners should consider both the benefits and impacts that their traffic will have on the development.

7207.3.7 Speed Control and Traffic Calming

Design of local street systems should discourage excessive speeds by using passive design elements. If the design or layout of a development regardless of the length of the streets is anticipated to necessitate future traffic calming implementation by the District, or streets extend greater than 750-feet in length, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e., stamped concrete) as a passive design element. Passive design elements are to be considered the preferred method to calm traffic and achieve the desired travel speed for the roadway. Speed humps, valley gutters, stop signs, and cross drains are not an acceptable tool for traffic calming on new local streets.

The District has developed a traffic calming policy for existing residential streets in Section 5000. In the review of developments, the District will evaluate the potential need for future traffic calming.

7207.3.8 Pedestrians

Pedestrian-vehicle conflict points should be minimized. Pedestrian walkways or sidewalks are to provide direct access from all adjacent property, to assure safe pedestrian

travel in the area.

7207.3.9 On-Street Parking

On-street parking is permissible on standard local roadways where adequate width exists. Parking shall be prohibited within 75 feet from any intersection. Emergency service providers must approve on-street parking on reduced width streets.

7207.4 Access Considerations and Requirements

7207.4.1 Driveway Spacing

Near Intersections

Driveways on a local street shall be located a minimum of 75-feet (measured centerline to centerline) from the nearest local street intersection, and 150-feet from the nearest collector or arterial street intersection. This is not applicable for single family dwelling units.

Successive Driveways

Away from an intersection there are no minimum spacing requirements for access points along a local street, but the District does encourage shared access points where appropriate.

7207.4.2 Local Street Intersections

Local streets intersecting other local streets shall either align with another street or provide a minimum offset of 125-feet from any other street (measured centerline to centerline).

7207.4.3 Driveway Design Requirements on Local Streets

- Where vertical curbs are required, residential driveways shall be restricted to a maximum width of 20-feet. These driveways may be constructed as curb-cut type driveways.
- All driveways are required to be paved their full width and at least 30-feet into the site from the edge of pavement of the adjacent street.
- If an access point is to be gated, the gate or keypad (whichever is closer) shall be located a minimum of 50-feet from the adjacent street and an on- site turnaround shall be provided.

7207.5 Local Street Design

7207.5.1 Right-of-Way Width

Right-of-way widths for all local streets shall generally not be less than 47-feet wide except for minor local streets (24-foot street sections), 27-foot street sections, or half street sections (paved or unpaved). Half-street improvements located adjacent to the property line shall be constructed in a minimum 40-foot right-of-way.

The Commission, at its discretion, may not require right-of-way dedication adjacent to an existing roadway where roadway improvements are not required with the development, or where improvements already exist. In lieu of additional right-of-way, a sidewalk easement will be required for any sidewalk located outside of the right-of-way.

7207.5.2 Urban and Rural Local Street Sections

The District allows a variety of street sections for urban and rural local streets. The street sections have varying criteria for their application within developments. Table 8 below summarizes the typical street sections. The following policies outline the specifics for the application, use, and requirements of each street section.

Table 8: Typical Local Street Sections

	Lot Size Requirement	Street Section	Right-of-Way Width	Curb Type	Sidewalk
Standard Local	Less than 1 acre	33-feet	47-feet	Vertical/ Rolled	5-foot on both sides
Standard Local (City of Kuna, City of Star)	Less than 1 acre	36-feet	50-feet	Vertical/ Rolled	5-foot on both sides
Reduced width Local	Less than 1 acre	27-feet	41-feet	Vertical/ Rolled	5-foot on both sides
Minor Urban	Less than 1 acre	24-feet	28-feet (minimum)	Vertical/ Rolled/ Ribbon	5-foot
Standard Rural	Greater than 1 acre, but less than 5 acres	30-feet with a minimum 8-foot drainage swale	52-feet (to encompass entire swale)	2-foot concrete ribbon	No Sidewalk 4-feet of the pavement on each side is striped for non-motorized travel
Standard Rural	Greater than 5 acres	24-feet of pavement	50-feet	3-foot gravel shoulder	No sidewalk

1. Standard Urban Local Street—33-foot Street Section

   The standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot concrete sidewalks on both

sides and shall typically be constructed within 47-feet of right-of-way. For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot-wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

2. Reduced Urban Local Street—27-foot Street

The width of a reduced urban local street shall be 27-feet (back-of-curb to back-of-curb) with curb, gutter, and minimum 5-foot concrete sidewalks on both sides and shall typically be within 41-feet of right-of-way. Unless approved in writing by the land use agency, this street section is not allowed by the City of Kuna or the City of Star. In some cases, this street width may not accommodate new utilities. A 29-foot street section within 43-feet of right-of-way may be constructed in lieu of a 27-foot street section if the applicant demonstrates that the additional roadway width is necessary to extend utilities. Although some parking is allowed by the following subsections, the District will further restrict parking on a reduced width street if curves or other physical features cause problems, if actual emergency response experience indicates that emergency vehicles may not be able to provide service, or if other safety concerns arise. One of the following three sets of design conditions shall apply.

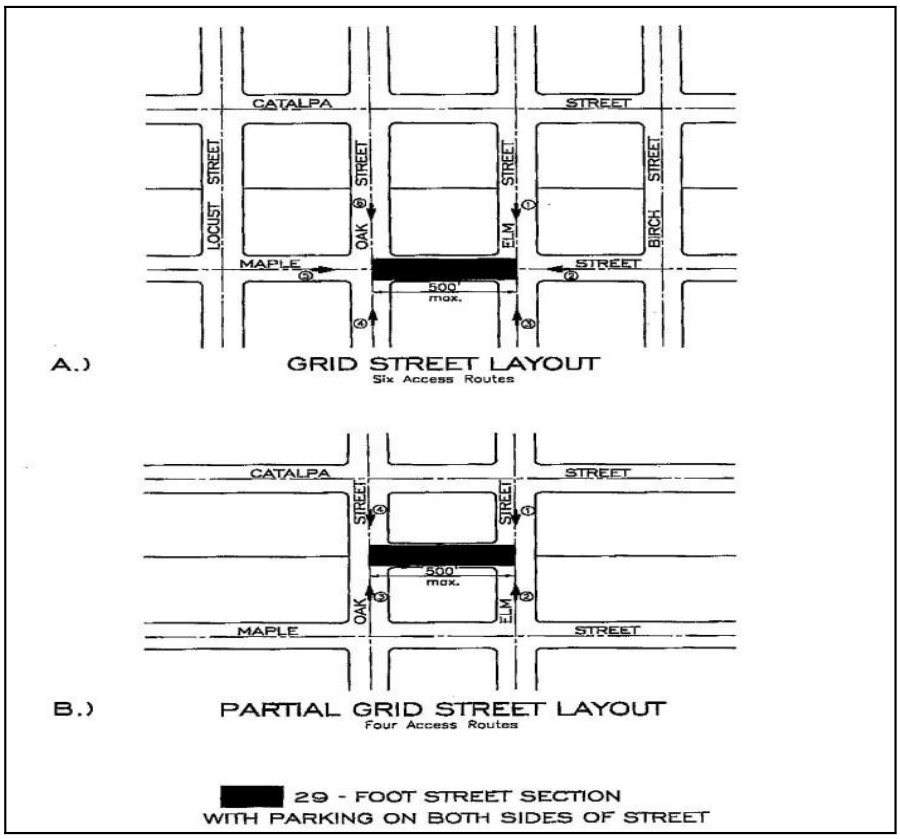
Design Condition #1: Parking is allowed on one side of a reduced width street when all of the following criteria are met:

- The street is in a residential area.
- The developer shall provide written approval from the appropriate fire department or emergency response unit in the jurisdiction.
- The developer shall install "NO PARKING" signs on one side of the street, as specified by the District and as specified by the appropriate fire department.
- This street section shall include curb, gutter, and minimum 5-foot-wide concrete sidewalks on both sides and shall typically be constructed within 41-feet of right-of-way.
- Traffic volumes on the street shall not exceed 1,000 vehicle trips per day. There shall be no possibility that another street may be connected to it in a manner that would allow more than 1,000 vehicle trips per day.

Design Condition #2: Parking is allowed on both sides of a reduced width street when the street layout has the qualities of a road grid system. This provides fire trucks and other emergency vehicles alternate routes of access since the ability to pass another vehicle may be compromised by placement of parked vehicles on both sides of the street. The following criteria shall be met:

- The street is in a residential area.
- The developer shall provide written approval from the appropriate fire department or emergency response unit in the jurisdiction.
- The block length of the street shall not exceed 500-feet, measured between centerlines.
- Traffic volumes on the street are not forecast to exceed 400 vehicle trips per day.

- A minimum of two street connections shall be provided to each end of the street with the reduced width. The two connecting streets shall each connect to the larger street system to provide the intended alternate routes of access. A street system that has one street connection to the larger street network on one end and a loop/circle street on the other end with no outlet shall not be approved.
- This street section shall include curb, gutter, and minimum 5-foot-wide concrete sidewalks on both sides and shall typically be constructed within 41-feet of right-of-way.

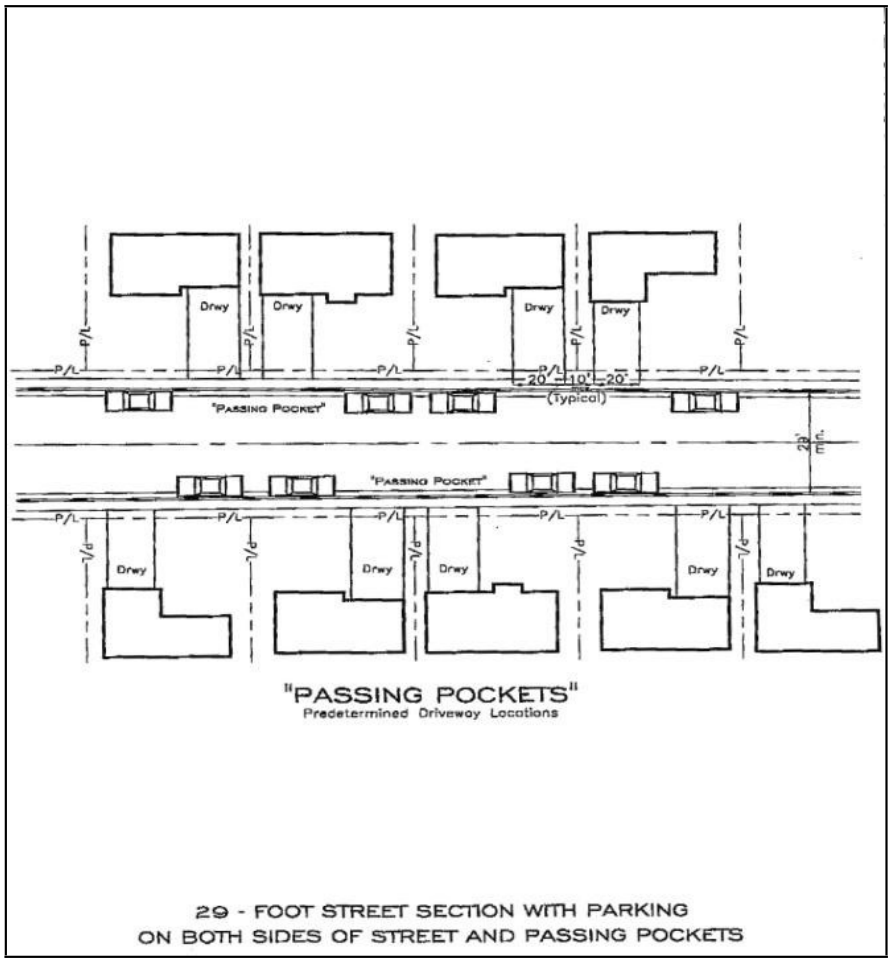


Design Condition #3: Parking is allowed on both sides of a reduced width residential street with passing pockets that are created when two driveways are constructed near the same property line, where a 50-foot segment will not have on–street parking on the side of the street with the driveways. This provides fire trucks and other vehicles areas to move to the side of the street to allow another vehicle to pass when vehicles are parked on the street. Parking is allowed on both sides of a reduced width street when the following criteria are met:

- The street is in a residential area.
- The developer shall provide written approval from the appropriate fire department or emergency response unit in the jurisdiction.
- Driveway locations are predetermined with curb cuts for the driveways to be installed when the street is constructed. The curb cuts shall be 20-foot-wide. Each lot on the street will be paired with an adjacent lot. If there are an odd number of lots, one lot at either end of the street will not be paired. Each

pair of lots shall locate its driveway 5-feet from the shared lot line of the pair.

- This street section shall include curb, gutter, and minimum 5-foot-wide concrete sidewalks on both sides and shall typically be constructed within 41-feet of right-of-way.
- The lots cannot abut an alley.
- Traffic volumes on the street are not forecast to exceed 400 vehicle trips per day.



"PASSING POCKETS"
Predetermined Driveway Locations

29 - FOOT STREET SECTION WITH PARKING
ON BOTH SIDES OF STREET AND PASSING POCKETS

3. Minor Urban Local Street—24-foot Street

   A minor local street is defined as a reduced width local street that provides direct lot access for residential land uses, and in limited circumstances, commercial or mixed uses as described below in this policy.

   Note: Due to the types of circumstances in which this street might be utilized (i.e., homes fronting on common space), it is either necessary for the lead land use agencies to have ordinances to address this type of design or to grant variances to current ordinance requirements. Therefore, it is critical that prior to submitting a development application utilizing this street section, the lead land use agency be consulted.

a. Pavement Width and Curb Type

A minor local street shall be constructed with a reduced width of 24-feet from back-of-curb to back-of-curb with curb and gutter In instances where the minor local street is utilized in a gridded street system with alleys, vertical curb shall be required, and direct lot access shall be restricted. In instances where the minor local street is utilized with residential open space scenarios, rolled curb or ribbon curbing (with an inverted crown), is allowed if access to the rear of the parcels is provided from the minor local street (see diagram below).

b. Sidewalk and Right-of-Way

Five-foot wide concrete sidewalks are required on both sides, unless as otherwise described below or approved by ACHD and the lead land use agency. The sidewalk for this street section may be located within an easement. If the sidewalk is located within an easement, the minimum right-of-way width for this street section is 28-feet, to allow for 2-feet behind the back-of-curb on each side. Sidewalk may not be required, or may be required on one side only as determined by the lead land use agency, if the minor local street is used in residential areas where houses accessing the minor local street are built with the front of the house (including the front door) facing the common or open space lots that include a connected system of sidewalks or paved pathways and the lotting pattern is mirrored on both sides of the street (see diagram below).

c. Parking

Parking is prohibited on both sides of this street section. "No Parking" signs are required. Alternative parking for guests, visitors, auxiliary residential parking, and deliveries shall be provided and shall be designed and located in coordination with the lead land use agency. Typically, this parking will be provided via community parking spaces located within walking distance of these types of residences. Walking distance shall be defined by the lead land use agency.

d. Requirements

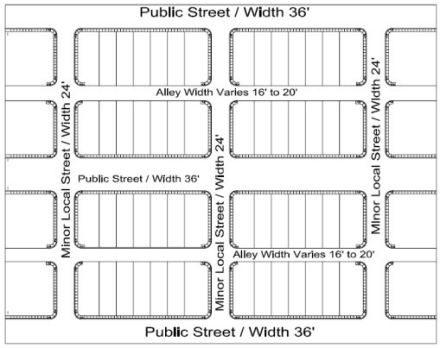
This street section may only be used in limited circumstances as described below:

- The maximum projected ADT is less than 400.
- The street connects to two other standard size streets.
- There is support from the lead land use agency (either from staff or Commission/Council).
- Maximum block length of 600-feet.
- In commercial or mixed-use areas where urban designs utilizing alleys are desirable but may be impractical due to access restrictions to classified roadways (arterials, collectors, and residential collectors). In this example, the minor local street would parallel the access-restricted roadway and

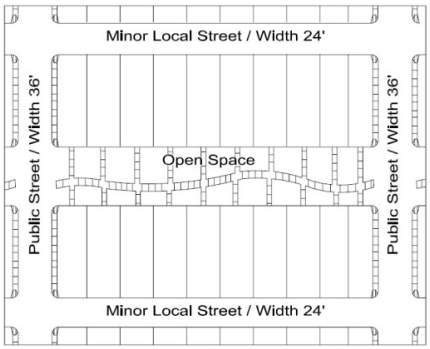
would provide direct access to the commercial or mixed-use lots.

- No portion of a building shall be over 30-feet in height. If any portion of a building is over 30-feet in height, aerial fire apparatus is required, and a 26-foot-wide street is required (International Fire Code Appendix D Section C105). However, a 26-foot-wide street, with a minimum right-of-way of 30-feet, is allowed if all other requirements for a minor local street are met.

Gridded Street System
Utilizing Minor Local Streets



Open Space and Alley Example
Utilizing Minor Local Streets



4. Standard Rural Local Street—30-foot Street Section

   The standard street width for rural developments with lot sizes of 1-acre or greater, but less than 5-acres per dwelling shall provide streets with a 30-foot-wide surface (26-feet of pavement with 2-foot concrete ribbon on each side), 4-feet of which will be striped for non-motorized travel on each side. The minimum right-of-way width for this street section shall be 52- feet in order to encompass the entire swale section. The developer shall construct on both sides of the road a 2-foot wide (minimum) concrete ribbon 8-inches thick and an 8-foot-wide drainage swale along the edge of the pavement to accommodate the runoff from the development. See Section 7207.5.6 for roadside swale requirements. Requests for variations of the provision for non-motorized travel (pedestrian and bikes) will be considered on a case-by-case basis.

5. Standard Rural Local Street—24-feet of pavement

   The standard street width for rural developments with lot sizes of 5-acres or greater per dwelling shall provide a minimum of 24-foot pavement width, with an additional 3-foot gravel shoulders and borrow ditches on each side. This street section does not require the construction of curbs, gutters, or sidewalks.

7207.5.3 Pavement Thickness

A minimum of 2-1/2 inches of pavement is required on all local streets.

An adequate base section is also required. Base thickness shall be determined by the following formula:

T = 0.0032 (T.I.) (100-R), where
T = total gravel equivalency
T.I. = traffic index
R = "R" value of subgrade material as determined through laboratory testing and approved by ACHD.

7207.5.4 Traffic Index

The District has pre-assigned a traffic index of 6 for local residential streets.

7207.5.5 Curb Type

7207.5.5.1 Standard Vertical curb

Standard vertical curb and gutter is required on all streets where curbs are required, except as allowed below in Section 7207.5.5.2 and 7207.5.5.3. This provides increased protection for pedestrians, street trees, utilities and signs and clearly identifies driveway depressions. It also provides drainage control and helps prevent runaway parked vehicles.

7207.5.5.2 Rolled Curb

The District allows 3-inch rolled curb and gutter where none of the following conditions exist:

- An area covered by hillside ordinances, regardless of the grade.
- A street where the grade is 3.0% or greater for more than 100-feet.
- A street where drainage control is needed.
- A vertical curb exists on both sides of the proposed improvements.
- Where Section 7208.4.6 does not require vertical curb for a 27-foot street section.

7207.5.5.3 Ribbon Curb

Ribbon curbs are allowed in rural developments with buildable lot areas of 1.0 acre or more. See Section 7207.5.6 below.

7207.5.6 Roadside Swale Drainage Treatment—For Lots 1-Acre or Greater

1. Development Agreement Requirement

The developer shall enter into a development agreement providing for the design and inspection of the roadside swale street section within the development and provide a financial surety to ensure compliance with the roadside swale street section standards and requirements.

2. Design Criteria

The swale section shall consist of a minimum 8-foot-wide swale a minimum of 1-foot deep on each side. The minimum roadway cross slope is 2%. The maximum

longitudinal slope is 6%. A 1-foot wide 8-inches thick ribbon curb is required at the top back of the swale. For specific design criteria refer to the ACHD supplement to the ISPWC.

3. Swale Location

   Swales shall be located within the public right-of-way; sidewalk may be placed in an easement.

4. Driveway Requirements

   Maximum driveway width of 30-feet for lot frontage greater than or equal to 100-feet wide, maximum driveway width of 20-feet for lots with frontage less than 100-feet wide.

5. Landscaping and Maintenance

   Landscaping within the swale requires a license agreement. For specific landscaping criteria refer to the ACHD supplement to the ISPWC.

   Swales shall be maintained in common by the Homeowner's Association. Design engineer shall provide Maintenance and Operation Manual outlining required periodic maintenance.

7207.5.7 Sidewalks

Five-foot wide concrete sidewalk is required on both sides of all local streets, except those in rural developments with net densities of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

Appropriate easements shall be provided if public sidewalks are placed out of the right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

7207.5.8 Cul-de-sac Streets

The minimum radius permitted for a turnaround is 50-feet; in rural areas or for temporary cul-de-sacs the emergency service providers may require a greater radius.

1. Alternative Turnarounds

   The District will consider alternatives to the standard cul-de-sac turnaround on a case-by-case basis. This will be based on turning area, drainage, maintenance considerations and the written approval of the agency providing emergency fire service for the area where the development is located.

2. Landscaping and Parking

   Landscaping and parking islands may be constructed in turnarounds if a minimum 29-foot street section is constructed around the island. The pavement width shall be sufficient to allow the turning around of a standard AASHTO SU design vehicle without backing. The developer shall provide written approval from the appropriate fire department for this design element.

7207.5.9 Design Speed

The minimum design speed for local urban and rural streets shall be 25 MPH.

7207.5.10 Stopping Sight Distance

A safe stopping sight distance is required for all vertical and horizontal curves. The minimum sight distance allowed is 150-feet on local streets.

7207.5.11 Maximum/Minimum Profile Grade

The maximum allowable grade for any public street is 10%, and the minimum allowable grade is 0.4%.

7207.5.12 Minimum Centerline Radius of Curves

The minimum mid-block centerline radius allowed on a local street is 100-feet.

7207.5.13 Tangent Length Between Curves

A minimum tangent length of 50-feet is required between horizontal reverse curves unless the centerline radii are at least 300-feet.

7207.5.14 Tangent Length Approaching Intersections

Intersections located on horizontal curves should be avoided particularly if the radius of either street is close to the minimum allowed or if the intersection occurs on the inside of the horizontal curve. A permanent sight distance easement based on the sight distance of the design speed shall be provided where one street must intersect with another on a curve.

The minimum centerline tangent length approaching an intersection shall be 150-feet from the near edge of the travel way. If the street is planned for future widening, then the tangent shall be measured from the near edge of the future travel way.

7207.5.15 Roadway Lighting

Each land use jurisdiction in Ada County establishes the requirements for roadway lighting. The applicant will provide adequate lighting per the requirements of the land use jurisdiction.

7207.5.16 Landscape Medians

Landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12’ maximum for a minimum distance of 150’. Beyond 150’, the island may increase to a maximum width of 30’.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb to prevent ponding.

7208 COMMERCIAL STREETS

7208.1 General

Commercial streets are classified as local streets, but they carry higher volumes of vehicle and truck traffic than local residential streets. Special design considerations are made necessary by the unique character of the roadway and traffic volumes.

The District encourages shared access points and cross access in order to minimize conflicts. Shared access points are particularly desirable where on- street parking is proposed.

7208.2 Development Requirements

7208.2.1 Adjacent or Internal Streets

The developer is responsible for improving all commercial street frontages adjacent to the development’s site or internal to the development as required below, regardless of whether access is taken to all of the adjacent or internal commercial streets.

All utility relocation costs associated with improving street frontages adjacent the site shall be borne by the developer.

The District requires dedication of additional right-of-way without compensation to provide the minimum requirements according to District standards.

7208.2.2 Required Improvements

1. Adjacent Streets (Existing or New)

   Required improvements to an adjacent commercial street shall consist of pavement widening to one-half the required width, including curb, gutter, and concrete sidewalk (minimum 5-feet), plus 12-feet of additional pavement widening beyond the centerline established for the street to provide an adequate roadway surface, with the pavement crowned at the ultimate centerline. A 3-foot-wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff shall be constructed on the unimproved side.

2. Internal Streets (Existing or New)

   Required improvements to an internal commercial street shall consist of a complete street section with curb, gutter, and sidewalk (minimum 5-feet) on both sides of the roadway.

7208.2.3 Off-site Streets

If the proposed development is not served by a paved public street, the developer shall pave the street or widen the existing pavement to provide a 30- foot wide (minimum) paved street with 3-foot gravel shoulders from the proposed development to the public street specified by the District. Wider street widths may be required depending on the magnitude of the development and other factors, including the potential for bicycle, bus, and pedestrian traffic.

If the proposed development is served by a paved public road less than 30-feet wide, the developer shall widen the pavement to a minimum of 30-feet wide or add 3-feet of additional pavement plus 3-foot gravel shoulders to the existing road, whichever is greater. The road shall be widened from the site to the public street specified by the District. All utility relocation costs associated with the off-site street widening shall be borne by the developer.

7208.2.4 Continuation of Streets

1. Consideration for Future Development

   The street design in a proposed development shall cause no undue hardship to adjoining property. An adequate and convenient access to adjoining property for use in future development may be required. If a street ends at the development boundary, it shall meet the requirements as described in this sub-section.

   The District will consider the following items when determining when to require a stub street:

   - Property size and configuration of current application
   - Property size and configuration of adjacent parcels
   - Potential for redevelopment of adjacent parcels
   - Location of vehicular and pedestrian attracting land use (i.e., schools,

neighborhood commercial, etc.)
- Comprehensive Plan and Zoning designations
- Needs of the emergency service providers
- Location of existing stub streets
- Location of canals and necessary crossings
- Cost vs. benefit of requiring canal crossing
- Functional Classification of adjacent and nearby roadways (i.e., Will requiring a stub street achieve the District's Access Management goals by reducing potential need for additional connection to a classified roadway?)

Benefits of Connectivity and Stub Streets include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increases access for emergency services.
- Reduces need for additional access points to the arterial street system.
- Promotes the efficient delivery of services including trash, mail, deliveries, water, and sewer.
- Promotes orderly development.

2. Existing Adjacent Development

An existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities.

3. Stub Streets

Stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7208.2.4.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that "THIS ROADWAY WILL BE EXTENDED IN THE FUTURE."

In addition, a stub street must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water toward that intersection; unless an alternative storm drain system is approved by the District.

- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

4. Temporary Dead End Streets

The design and construction requirements for cul-de-sac streets shall apply to temporary dead-end streets. The developer shall construct a temporary cul-de-sac. The temporary cul-de-sac shall be paved and shall meet the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a

buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

Dead End Streets

If a stub street is not extended into an adjacent development the developer shall terminate the public street with construction of a standard cul-de-sac. Cul-de-sacs shall be paved and improved with curb, gutter, and sidewalk meeting the requirements described in Section 7207.5.8

7208.3 Traffic Considerations

7208.3.1 Average Daily Traffic

ADT for commercial streets typically ranges up to 8,500 vehicles. Peak-hour traffic varies, depending on the type of development.

7208.3.2 Vehicle Access

Lot access to local commercial streets from adjacent property is permitted. Controls for driveway and intersection placement shall be required.

7208.3.3 Maximum Traffic on One Access

If a proposed development only has one access to a public street that is a commercial street, or if it proposes to extend public streets from existing development with only one commercial street access to the public street system, the maximum forecast ADT to be allowed at any point on the local commercial street access is 3,000. This volume may be reduced or increased based on information received from the lead land use agency, the applicable fire department, and/or emergency services. The District will also take into consideration the following items when determining whether or not to reduce or increase the maximum allowable ADT: railroad crossings, canal crossings, and topography (foothills vs. flat land).

7208.3.4 Through Traffic

Through traffic in commercial developments is permitted.

7208.3.5 Street Patterns

Street patterns in commercial developments should not adversely affect nearby residential development. Street connectivity to adjacent residential land uses is important in order to provide access from the residential uses to the commercial uses. Consideration shall be given to designing these connections to discourage the commercial traffic from adversely impacting the residential land uses.

7208.3.6 Traffic Considerations

Commercial streets will typically carry a higher percentage of truck traffic than local residential streets in order to accommodate deliveries, etc. Therefore, off-street parking and maneuvering areas, defined access points and other on-site circulation elements should be taken into consideration.

7208.3.7 Speed Control and Traffic Calming

Design of local commercial street systems, where higher pedestrian activity is anticipated, should discourage excessive speeds by using passive design elements. If the design or layout of a development regardless of the length of the streets is anticipated to necessitate future traffic calming implementation by the District, or streets extend greater than 750-feet in length, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e., stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement. Passive design elements are to be considered the preferred method to calm traffic and achieve the desired travel speed for the roadway. Speed humps, valley gutters, stop signs, and cross drains are not an acceptable tool for traffic calming new local streets.

The District has developed a traffic calming policy for existing streets in Section 5000. In the review of developments, the District will evaluate the potential need for future traffic calming.

7208.3.8 Pedestrians

Pedestrian/vehicle conflict points should be minimized. Pedestrian walkways or sidewalks are to be provided to allow direct access from all adjacent property, to assure safe pedestrian travel in commercial developments.

7208.3.9 Bicycles

The commercial street section typically provides sufficient width to accommodate motorized vehicles and bicycles.

7208.3.10 On-Street Parking

On-street parking is typically permissible on roadways serving primarily commercial uses and where adequate width exists. Parking shall be prohibited within 75 feet from an intersection.

7208.4 Access Considerations and Requirements

7208.4.1 Access and Driveway Spacing

Direct lot access to a commercial roadway near an intersection shall be located a minimum of 75-feet (measured centerline to centerline) from the nearest local intersection, and 150-feet from the nearest collector/arterial or arterial street intersection. There are no minimum spacing requirements for access points along a commercial street, but the District does encourage shared access points where appropriate.

7208.4.2 Commercial Street Intersections

Commercial streets intersecting other local streets (residential, industrial, or commercial) shall provide a minimum roadway offset of 125-feet from any other roadway

or intersection (measured centerline to centerline).

7208.4.3 Driveway Design Requirements

- Commercial driveways shall be restricted to a maximum width of 40 feet.
- Most commercial driveways will be constructed as curb-cut type facilities if located on commercial streets.
- All new driveways are required to be paved their full width and at least 30- feet into the site from the edge of pavement of the existing road.
- If an access point is to be gated, the gate or keypad (if applicable) shall be located a minimum of 50-feet from the near edge of the intersection and a turnaround shall be provided.
- Raised medians may serve as an effective means of traffic control and regulation. The District may require raised medians on commercial roadways where site access creates operational issues. The raised median shall be constructed as a 6-inch concrete median with the appropriate reflectors and shall extend a minimum of 75-feet beyond the edge of the driveway.

7208.5 Commercial Street Design

7208.5.1 Right-of-Way Width

The standard right-of-way width for new commercial roadways shall typically be 50 and 70-feet.

7208.5.2 Street Section

The standard street section for commercial streets will vary depending on the need for a center turn lane, bike lanes, volumes, percentage of truck traffic, and/or on-street parking.

A 36-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes and on-street parking.

A 40-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes and a center turn lane.

A 46-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes, a center turn lane and bike lanes.

7208.5.3 Pavement Thickness

A minimum thickness of 3-inches of pavement is required on collector streets.

An adequate base section is also required. Base thickness shall be determined by the following formula:

T = 0.0032 (T.I.) (100-R), where
T = total gravel equivalency
T.I. = traffic index
R = "R" value of subgrade material as determined through laboratory testing and approved by ACHD.

7208.5.4 Traffic Index

The District has pre-assigned a traffic index of 8 for commercial streets.

7208.5.5 Curb Type

Standard vertical curbs are required on all commercial streets.

7208.5.6 Sidewalk

Concrete sidewalks at least five-feet wide are required on both sides of all commercial streets. If a separated sidewalk is proposed, a parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection for pedestrians. Consult the District's Tree Planting Policy if trees are to be placed within the parkway strip.

7208.5.7 Cul-de-sac Streets

The minimum radius permitted for a turnaround is 55-feet to back-of-curb.

7208.5.8 Design Speed

The design speed for commercial streets shall be 30 MPH.

7208.5.9 Stopping Sight Distance

A safe stopping sight distance is required for all vertical and horizontal curves. The minimum sight distance allowed is 200-feet.

7208.5.10 Maximum/Minimum Profile Grade

The maximum allowable grade for any public commercial street is 10%. The minimum allowable grade is 0.4%.

7208.5.11 Minimum Centerline Radius of Curves

The minimum mid-block centerline radius allowed on commercial streets is 180-feet.

7208.5.12 Tangent Length Between Curves

A minimum tangent of 100-feet is required between horizontal reverse curves unless the centerline radii exceed 500-feet.

7208.5.13 Tangent Length Approaching Intersections

Intersections located on horizontal curves should be avoided particularly if the radius of either street is close to the minimum allowed or if the intersection occurs on the inside of the horizontal curve. A permanent sight distance easement based on the sight distance of the design speed shall be provided where one street must intersect with another on a curve.

The minimum centerline tangent length approaching an intersection shall be 200-feet from the near edge of the travel way. If the street is planned for future widening, then the tangent shall be measured from the near edge of the future travel way.

7208.5.14 Roadway Lighting

Each land use jurisdiction in Ada County establishes the requirements for roadway lighting. The applicant will provide adequate lighting per the requirements of the land use jurisdiction.

7208.5.15 Landscape Medians

Landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12’ maximum for a minimum distance of 150’. Beyond 150’ the island may increase to a maximum width of 30’.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median.
- Gutters shall slope away from the curb to prevent ponding.

7209 INDUSTRIAL STREETS

7209.1 General

Industrial streets are classified as local streets, but they carry higher volumes of vehicle and truck traffic. Special design considerations are made necessary by the unique character of the roadway and traffic volumes.

The District encourages shared access points and cross access in order to minimize conflicts. Shared access points are particularly desirable where on- street parking is proposed.

7209.2 Development Requirements

7209.2.1 Adjacent or Internal Streets

The developer is responsible for improving all industrial street frontages adjacent the development’s site or internal to the development as required below, regardless of whether access is taken to all of the adjacent or internal collector streets.

All utility relocation costs associated with improving street frontages adjacent the site shall be borne by the developer.

The District requires dedication of additional right-of-way without compensation to provide the minimum width requirements according to District standards.

7209.2.2 Required Improvements

1. Adjacent Streets (Existing or New)

   Required improvements to an adjacent industrial street shall consist of pavement widening to one-half the required width, including curb, gutter, and concrete sidewalk (See Section 7209.5.6), plus 12-feet of additional pavement widening beyond the centerline established for the street to provide an adequate roadway surface, with the pavement crowned at the ultimate centerline. A 3-foot-wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff shall be constructed on the unimproved side.

2. Internal Streets (Existing or New)

   Required improvements to an internal industrial street shall consist of a complete street section with curb, gutter, and sidewalk (See Section 7209.5.6).

7209.2.3 Off-site Streets

If the proposed development is not served by a paved public street, the developer shall pave the street or widen the existing pavement to provide a 30-foot wide (minimum) paved street with 3-foot gravel shoulders from the proposed development to the public street specified by the District. Wider street widths may be required depending on the magnitude of the development and other factors, including the potential for bicycle, bus, and pedestrian traffic. If the proposed development is served by a paved public road less than 30-feet wide, the developer shall widen the pavement to a minimum of 30-feet wide or add 3-feet of additional pavement plus 3-foot gravel shoulders to the existing road, whichever is greater. The road shall be widened from the site to the public street specified by the District. All utility relocation costs associated with the off-site street widening shall be borne by the developer.

7209.2.4 Continuation of Streets

1. Consideration for Future Development

   The street design in a proposed development shall cause no undue hardship to adjoining property. An adequate and convenient access to adjoining property for use in future development may be required. If a street ends at the development boundary, it shall meet the requirements as described in this sub-section.

   The District will consider the following items when determining when to require a stub street:

   - Property size and configuration of current application

- Property size and configuration of adjacent parcels
- Potential for redevelopment of adjacent parcels
- Location of vehicular and pedestrian attracting land use (i.e., schools, neighborhood commercial, etc.)
- Comprehensive Plan and Zoning designations
- Needs of the emergency service providers
- Location of existing stub streets
- Location of canals and necessary crossings
- Cost vs. benefit of requiring canal crossing
- Functional Classification of adjacent and nearby roadways (i.e., will requiring a stub street achieve the District's Access Management goals by reducing potential need for additional connection to a classified roadway)

Benefits of Connectivity and Stub Streets include but are not limited to the following:

- Reduces vehicle miles traveled.
- Increase access for emergency services.
- Reduces need for additional access points to the arterial street system.
- Promotes the efficient delivery of services including trash, mail, deliveries, water, and sewer.
- Promotes orderly development.

2. Existing Adjacent Development

   An existing street, or a street in an approved preliminary plat, which ends at a boundary of a proposed development shall be extended in that development. The extension shall include provisions for continuation of storm drainage facilities.

3. Stub Streets

   Stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7209.2.4.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that "THIS ROADWAY WILL BE EXTENDED IN THE FUTURE."

   In addition, a stub street must meet the following conditions:

   - A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water toward that intersection; unless an alternative storm drain system is approved by the District.
   - The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

4. Temporary Dead End Streets

   The design and construction requirements for cul-de-sac streets shall apply to temporary dead-end streets. The developer shall construct a temporary cul-de-sac. The temporary cul-de-sac shall be paved and shall meet the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement

to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

Dead End Streets

If a stub street is not extended into an adjacent development the developer shall terminate the public street with construction of a standard cul-de-sac. Cul-de-sacs shall be paved and improved with curb, gutter, and sidewalk meeting the requirements described in Section 7207.5.8

7209.3 Traffic Considerations

7209.3.1 Average Daily Traffic

ADT for industrial streets typically ranges up to 8,500 vehicles. Peak-hour traffic varies, depending on the type of development.

7209.3.2 Vehicle Access

Lot access to local industrial streets from adjacent property is permitted. Controls for driveway and intersection placement shall be required. See Section 7209.4 for guidance.

7209.3.3 Maximum Traffic on One Access

If a proposed development only has one access to a public street that is an industrial street, or if it proposes to extend public streets from existing development with only one industrial street access to the public street system, the maximum forecast ADT to be allowed at any point on the industrial street access is 3,000. This volume may be reduced or increased based on information received from the lead land use agency, the applicable fire department, and/or emergency services. The District will also take into consideration the following items when determining whether or not to reduce or increase the maximum allowable ADT: railroad crossings, canal crossings, and topography (foothills vs. flat land).

7209.3.4 Through Traffic

Through traffic in industrial developments is permitted. Through industrial traffic to or from residential areas will normally not be allowed.

7209.3.5 Street Patterns

Street patterns in industrial developments should not adversely affect nearby residential development.

7209.3.6 Traffic Considerations

Industrial streets typically carry a high percentage of truck traffic in industrial areas. Therefore, off-street parking and maneuvering areas, defined access points and other on-site circulation elements should be taken into consideration.

7209.3.7 Speed Control

Streets in industrial areas should be designed to discourage speeds above 35 MPH.

7209.3.8 Pedestrians

Pedestrian/vehicle conflict points should be minimized.

The District will review pedestrian facilities in industrial developments on a development-by-development basis. See Section 7209.5.6 for guidance.

7209.3.9 Bicycles

The industrial street section typically does not provide sufficient width to accommodate bicycles. Bicycle lanes may be required if the roadway provides an important connection for bicycles or is on a designated bicycle route.

7209.3.10 On-Street Parking

On-street parking is typically permissible on roadways serving industrial uses where adequate width exists. The street section shall be increased from the standard (See Section 7209.5.2) if on-street parking is proposed. Parking shall be prohibited within 75 feet from an intersection.

7209.4 Access Considerations and Requirements

7209.4.1 Access and Driveway Spacing

Direct lot access to an industrial roadway near an intersection shall be located a minimum of 75-feet (measured centerline to centerline) from the nearest local street intersection, and 150-feet from the nearest collector or arterial street intersection. There are no minimum spacing requirements for access points along an industrial street, but the District does encourage shared access points where appropriate.

7209.4.2 Industrial Street Intersection Spacing

Industrial streets intersecting other local streets (residential, industrial, or commercial) shall provide a minimum roadway offset of 125-feet from any other roadway or intersection (measured centerline to centerline).

7209.4.3 Driveway Design Requirements

- Industrial driveways shall be restricted to a maximum width of 40 feet. A wider access point may be considered if it is demonstrated to be necessary with turning templates based on the design vehicle.
- Most industrial driveways will be constructed as curb-cut type facilities if located on industrial streets.
- All new driveways are required to pave their full width and at least 30- feet into the site from the edge of pavement of the existing road.
- If an access point is to be gated, the gate or keypad (if applicable) shall be located a minimum of 50-feet from the near edge of the intersection and a turnaround shall

be provided.

- Raised medians may serve as an effective means of traffic control and regulation. The District may require raised medians on industrial roadways where site access creates operational problems. The raised median shall be constructed as a 6-inch concrete median with the appropriate reflectors and shall extend a minimum of 75-feet beyond the edge of the driveway.

7209.5 Industrial Street Design

7209.5.1 Right-of-Way Width

The standard right-of-way width for new industrial roadways shall be 50-feet.

7209.5.2 Street Section

The standard street section for industrial streets will vary depending on the need for a center turn lane, bike lanes, and/or on-street parking.

A 40-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes and a center turn lane.

A 52-foot street section (back-of-curb to back-of-curb) will typically accommodate two travel lanes, a center turn lane, and on-street parking.

The width may need to be wider if the developer proposes all the roadway components.

7209.5.3 Pavement Thickness

A minimum thickness of 3-inches of pavement is required on industrial streets.

An adequate base section is also required. Base thickness shall be determined by the following formula:

T = 0.0032 (T.I.) (100-R), where
T = total gravel equivalency
T.I. = traffic index
R = "R" value of subgrade material as determined through laboratory testing and approved by ACHD.

7209.5.4 Traffic Index

The District has pre-assigned a traffic index of 8 for industrial streets.

7209.5.5 Curb Type

Standard vertical curbs are required on all industrial streets.

7209.5.6 Sidewalk

Concrete sidewalks at least five feet wide are required on one side of all new industrial streets. If a separated sidewalk is proposed, a parkway strip at least 6-feet wide between

the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's Tree Planting Policy if trees are to be placed within the parkway strip.

In some existing industrial developments or expansions of those developments, the District will allow deviations from the typical street standards by not requiring the construction of sidewalks. These developments include primary uses of storage facilities, trucking terminals, contractor shops, utility shops and selective heavy manufacturing facilities in which significant pedestrian movement is not anticipated. Deviations from the standards will not be allowed in new industrial developments, technological parks or on designated collector or arterial streets.

7209.5.7 Cul-de-sac Streets

The minimum radius permitted for a turnaround is 55-feet to back-of-curb.

7209.5.8 Design Speed

The design speed for industrial streets shall be 35 MPH.

7209.5.9 Stopping Sight Distance

A safe stopping sight distance is required for all vertical and horizontal curves. The minimum sight distance allowed is 200-feet.

7209.5.10 Maximum/Minimum Profile Grade

The maximum allowable grade for any industrial street is 10%. The minimum allowable grade is 0.4%.

7209.5.11 Minimum Centerline Radius of Curves

The minimum mid-block centerline radius allowed on industrial streets is 180-feet.

7209.5.12 Tangent Length Between Curves

A minimum tangent of 100-feet is required between horizontal reverse curves unless the centerline radii exceed 500-feet.

7209.5.13 Tangent Length Approaching Intersections

Intersections located on horizontal curves should be avoided particularly if the radius of either street is close to the minimum allowed or if the intersection occurs on the inside of the horizontal curve. A permanent sight distance easement based on the sight distance of the design speed shall be provided where one street must intersect with another on a curve.

The minimum centerline tangent length approaching an intersection shall be 200-feet from the near edge of the travel way. If the street is planned for future widening, then the tangent shall be measured from the near edge of the future travel way.

7209.5.14 Roadway Lighting

Each land use jurisdiction in Ada County establishes the requirements for roadway lighting. The applicant will provide adequate lighting per the requirements of the land use jurisdiction.

7209.5.15 Landscape Medians

Landscape medians are permissible where adequate pavement width is provided on each side of the median to accommodate the travel lanes and where the following is provided:

- The median is platted as right-of-way owned by ACHD.
- The width of an island near an intersection is 12’ maximum for a minimum distance of 150’. Beyond 150’ the island may increase to a maximum width of 30’.
- At an intersection that is signalized or is to be signalized in the future, the median width shall be reduced to accommodate the necessary turn lane storage and tapers.
- The Developer or Homeowners Association shall apply for a license agreement if landscaping is to be placed within these medians.
- The license agreement shall contain the District's requirements of the developer including, but not limited to, a "hold harmless" clause; requirements for maintenance by the developer; liability insurance requirements; and restrictions.
- Vertical curbs are required around the perimeter of any raised median. Gutters shall slope away from the curb to prevent ponding.

7210 ALLEYS

7210.1 General

An alley is defined as vehicular access way through the middle of a block giving public access to the rear of residential, non-residential, and mixed-use lots or buildings. Alleys are not considered part of the traffic circulation system. An alley may serve as the primary vehicular access to a lot or building, but an alley should not provide the sole public right-of-way frontage. A lot served by an alley shall also have public street frontage. Alleys should connect to a public street at each end and should not terminate in permanent dead-ends. Access is allowed to and from a fully improved alley. A fully improved alley is defined as an alley that is paved the required width (as determined by 7210.2 and 7210.3.1)

7210.2 Existing Alleys

If a proposed development abuts an existing alley, the dedication of additional right-of-way to obtain a minimum width from the centerline of the alley of 8-feet for residential uses and 10-feet for non-residential or commercial uses may be required. Each development will be reviewed by the District on a case-by-case basis. If the proposed development takes access from an alley, the developer will be required to pave the entire width of the right-of-way from the nearest public street to and adjacent the development.

7210.3 New Alleys

7210.3.1 Right-of-Way and Pavement Width

The minimum right-of-way width for all new residential alleys shall be a minimum of 16-feet or a maximum of 20-feet. If the residential alley is 16-feet in width building setbacks required by the land use agency having jurisdiction shall provide sufficient space for the safe backing of vehicles into the alley (see Section 7210.3.3). The minimum right-of-way width for all new commercial or mixed-use alleys shall be 20 feet. All alleys shall be improved by paving the full width and length of the right-of-way.

Dedication of clear title to the right-of-way and the improvement of the alley, and acceptance of the improvement by the District as meeting its construction standards, are required for all alleys contained in a proposed development.

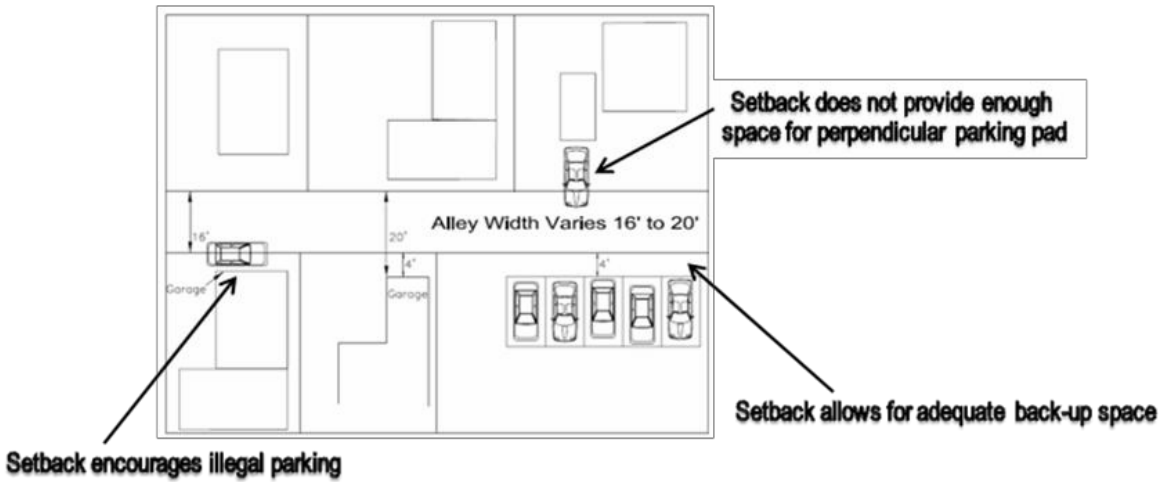
7210.3.2 Length

Alleys shall be no longer than 700-feet in length. If the lead land use agency having jurisdiction requires a shorter block length, the alley shall be no longer than the agency's required block length.

7210.3.3 Parking and Setbacks

Parking within the alley right-of-way is prohibited. "No Parking" signs may be required to be installed by the developer at the discretion of the District. When required, the signs should be located at the alley/street intersections.
Parking which is entered from the alley shall be designed so the minimum clear distance from the back of the parking stall to the opposite side of the alley is 20-feet for perpendicular parking.

Setbacks for structures taking access from the alley should be closely coordinated with the lead land use agency. The setbacks shall either discourage parking within the alley (where it may partially block or occur within the right-of-way) or allow adequate area for one perpendicular parking pad. In order to discourage parking, building setbacks shall be minimal from the alley right-of-way line, while still achieving the required 20-feet of back-up space from a garage or other parking structure to the opposite side of the alley (i.e., 4- foot setback + 16-foot alley= 20-feet for back-up space). In order to allow for one perpendicular parking pad, the setbacks shall be great enough from the alley right-of-way line to allow for one perpendicular parking pad (length of pad shall be as defined by the applicable land use agency, typically 19 to 20-feet for a 90 degree parking stall) plus the necessary length to achieve 20-feet of back- up space to the opposite side of the alley. Parking stalls angled at 30, 45, or 60 degrees have different requirements for back-up distances and require coordination with the lead land use agency. Note: Some lead land use agencies may require a greater back-up space for 90-degree parking.

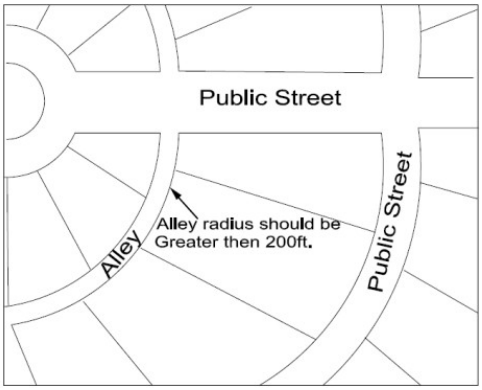


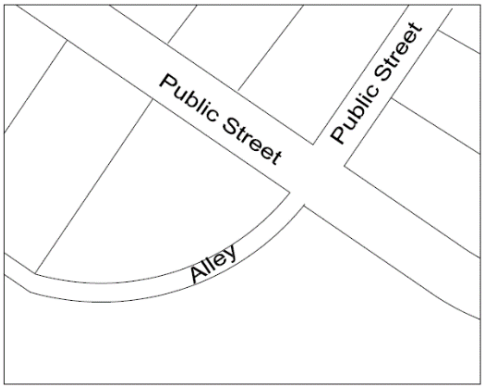
Developments with alleys shall demonstrate that adequate parking for guests, visitors, deliveries, etc. is provided within the development. This will require coordination with the lead land use agency. Additional parking may be provided either in common areas or by the provision of adequate on-street parking.

7210.3.4 Curves

Alleys shall generally be linear in design, but the District will consider large radius curves (with a radius greater than 200-feet) in alleys on a case-by-case basis.

- Curves in alleys will be considered if the land use pattern is desired by the lead land use agency and if the alley parallels the roadway to which the residential lots are fronting. (Note: the support from the lead land use agency may come in the form of a staff letter or analysis of codes and/or the comprehensive plan or a letter of support from the Council/Commission).
- Large radius curves may also be considered in areas where the alley needs to intersect the street at a 90°angle. In each instance, the District may require open space lots in strategic locations to ensure that appropriate sight distance is attained. The sight triangles shall either be identified as common spaces with landscaping restrictions or permanent easements identified on the plat.
- Ninety-degree turns are prohibited within alleys.





7210.3.5 Alleys as Stubs

Alleys may be constructed as stubs to adjacent properties if the same land use pattern is desired by the lead land use agency and the continuation of the alley is associated with a parallel stub street with an appropriate turnaround. The District will only consider an alley as a stub street if there is full support from the lead land use agency (indicated either by staff or Commission/Council support). Some lead land use agencies may require a temporary turnaround at the end of the stubbed alley. Typically support will be granted from the lead land use agency if the property being stubbed to is either zoned similarly or has the same comprehensive plan designation as the property being developed (i.e., densities and land use layout are anticipated to be similar). Prior to the District approving an alley as a stub, the applicant shall seek comment and/or a conceptual plan from the adjacent property owner.

If an alley is to be stubbed to an adjacent property for future development the area should have an established circulation plan that supports the temporary dead-end. An alley may be stubbed as part of a phasing plan for an approved preliminary plat. If an alley is stubbed to an adjacent property, there may be interim restrictions on building lots, turnarounds, sanitary service provision, emergency access provision, and other related items.

7210.3.6 Vacations of Alleys

Vacations of alley rights-of-way are discouraged and shall not result in dead-end alleys.

7210.3.7 Intersections and Offsets

Alleys should intersect public streets at each end. In specific circumstances as outlined in the policies below, the District may consider allowing an alley to intersect a public street at only one end. A 90-degree angle of intersection shall be designed where practical. In no case shall the intersecting angle be less than 75-degrees, as measured from centerline of intersecting street. An access to an alley shall be located a minimum of 50-feet from the nearest street (as measured centerline to centerline).

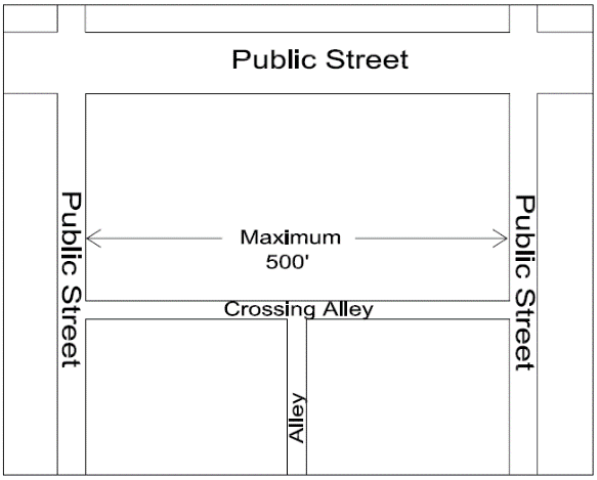
1. Alley/Alley Intersections

   Alley to alley intersection may only be considered or allowed under the specific circumstances identified below:

   - The lead land use agency supports the land use proposing an alley-to-alley intersection.
   - The intersecting alleys provide access to residential uses. On a case-by-case basis the District will consider allowing the alley-to-alley intersections for mixed use areas within a development.
   - For alley/alley intersections, base the sight triangle on the 10x20 and use ACHD Policy 7200 Figure 3, but decrease the driver's eye location to 10' from the edge of travel way.
   - For the horizontal curves in an alley base the clear sight triangle on AASHTO equation 3-38. HSO=R(1-cos(28.65*S/R)). The value for S shall be based on a

single vehicle approaching a nonmoving object at 15 mph.

- Appropriate radii and site distances are accommodated at the alley/alley intersection. The minimum inside radius at the alley/alley intersection shall be 28-feet and the minimum outside radius shall be 48-feet. The radii at the intersection shall accommodate the planned design vehicle, most typically a sanitary services vehicle. The sight triangles shall either be identified as common spaces with landscaping restrictions or permanent easements identified on the plat.
- A coordination meeting is held with the applicable agency staff (fire department, police department, sanitary service provider, land use agency, and ACHD) to discuss and resolve potential issues.
- The crossing alley has a maximum block length of 500-feet (measured near edge to near edge of the intersecting streets). The crossing alley shall intersect a public street at each end and shall not terminate at another alley. The crossing alley is the alley that has intersections with two public streets and an intersection with the perpendicular alley.



2. Alley/Local Street Intersections

   Alleys may intersect all types of local streets including minor local streets. Alleys shall generally be designed with a curb cut type approach when intersecting a local street. Alleys shall generally intersect streets in the middle of the block equally offsetting the intersecting streets. Alleys shall either align with alley/street intersections or provide a minimum 100-foot offset (measured centerline to centerline) from other local street intersections. For alley intersections with local streets, the District may consider a reduced offset if the lead land use agency's required lot size allows for shorter buildable lots.

3. Alley/Collector Street Intersections

   Alleys may intersect collector roadways. Alleys intersecting collector roadways shall generally be designed with a curb return type approach with a minimum back of curb radius of 28-feet. Typically, alleys will only intersect classified collector roadways within a downtown gridded street system setting. Alleys shall generally intersect the residential collector or collector streets in the middle of the block equally offsetting

the intersecting streets. If the alley/collector intersection does not occur within a gridded street system, then alley/collector intersection shall offset any other intersection by the standard driveway offset requirements as outlined in Section 7206.4

4. Alley/Arterial Street Intersections

   Alleys may intersect classified arterial roadways in a downtown gridded street system setting. Alleys shall generally intersect the arterial in the middle of the block equally offsetting the intersecting streets. Alleys intersecting arterials shall generally be designed with a curb return type approach with a minimum back of curb radius of 28-feet. The radius may need to be greater depending on the planned design vehicle (i.e., garbage trucks, delivery vehicles, etc.) utilizing the alley.

5. Drainage Design

   Alleys shall generally be designed with an inverted crown section. The storm drain system shall be designed to meet the requirements of Section 8000.

7211 INTERSECTION DESIGN

7211.1 Approach Speed

A minimum design approach speed of 20 MPH is required for all intersections.

7211.2 Clear Sight Distance

The developer shall design local street intersections to safely operate without any traffic control device. A clear vision triangle, according to Figure 3 and Idaho Code will be required.

The clear vision triangle shall include restrictions on the height of embankments, shrubbery, fences or trees and the location of buildings. No obstruction to vision will be allowed between 36-inches and 120-inches above the elevation of the adjacent roadway surface. The area in a clear vision triangle shall be given to the District by dedication or permanent easement.

7211.3 Vertical Alignment Within an Intersection

Intersections should be designed with minimum or near minimum grades. The maximum intersection grade allowed will be 2%. The allowable length of the connecting tangent grade may be zero, with the finished grade of the roadway having the flatter grade (2% or less) only at the intersection of the two street centerlines. The grade of the intersection and the steeper ascending grade approaching the intersection must be connected with a crest vertical curve with a “K” value of 15 or greater. The steeper ascending grade departing the intersection must be connected with a sag vertical curve with a “K” value of 20 or greater.

The design grade of intersecting streets shall be designed so as to extend from the intersection with a maximum grade of 2%, connected to the steeper grade departing the intersection with a vertical curve having a “ K” value of 15 or greater for crest vertical

curves and 20 or greater for sag vertical curves. The tangent of the intersecting street grade will begin no closer to the intersection than the extension of the curb line of the street being intersected.

7211.4 Minimum Angle of Intersection

A 90-degree angle of intersection should be designed where practical. In no case will the intersection angle be less than 75-degrees as measured from centerline of intersecting street.

7211.5 Drainage Structures

Inlets and catch basins should be avoided within the corner radius of any intersection. They shall not be located in front of a pedestrian ramp or driveway approach under any circumstance.

7212 PRIVATE ROADS

7212.1 General

The lead land use agencies in Ada County establish the requirements for private streets. The District retains authority and will review the proposed intersection of a private and public street for compliance with District intersection policies and standards.

7212.2 Requirements

Private roads should be designed to discourage through traffic between two public streets.

Private roads shall be graded to drain away from the public street intersection.

If a private road is gated, the gate or keypad (if applicable) shall be located a minimum of 50-feet from the near edge of the intersection and a turnaround shall be provided.

7212.3 Process to Dedicate an Existing Private Road to ACHD

7212.3.1 Application

The party requesting to dedicate a private road to the public shall be required to submit an application letter specifying the proposed portion of road to be dedicated, the public benefit of the road, and the reasons why the District should accept the road into the public system. An application fee is required to pay for staff time to review the application, the road, site history, and make a report to the Development Services Manager. The fee shall be as established in the Right-of-Way and Development Services Fee Schedule. The Development Services Manager may accept or deny the application based on the data provided in the application and a determination of any public benefit to acceptance of the road into the public system. If the Development Services Manager determines that there is no public benefit to accepting the road, the application shall be denied with no further action required by staff. An applicant may appeal the decision of the Development Services Manager to the ACHD Commission.

7212.3.2 Review and Inspection

If the Development Services Manager accepts the application, the applicant shall be required to provide all required documentation verifying the road was designed and constructed to current public standards. The burden of proof is on the applicant to prove the road meets public standards, not on the District to prove otherwise. Required documentation includes design plans, as-built plans, testing and inspection records and any other information or data that the District may reasonably require including additional testing of the storm drain system to verify that it has not been compromised by lack of maintenance or sedimentation from past construction activity within the development. If plans and/or testing and inspection records are not available, the applicant shall contract with an engineer and a testing laboratory and pay for the required additional testing to verify the design and condition of the road and storm drain system.

7212.3.3 Costs to be Paid by Applicant

The applicant shall be required to reimburse the District for all staff time and charges to review the documentation and inspect the road prior to scheduling the public hearing.

7212.3.4 Public Hearing

After reviewing the required documentation and conducting a site inspection, staff shall prepare a report for the Commission and schedule a public hearing. At the public hearing, the Commission will accept public testimony and review the findings of staff to determine if the road will be accepted into the public system. The Commission may: (i) accept the road, (ii) accept the road with conditions if remedial work is required to bring the road up to current public standards, or (iii) deny the request for acceptance of the road if the road does not meet current District standards and the applicant is unwilling or unable to perform the work necessary to bring the road up to current District standards.

7212.3.5 Acceptance with Conditions

If remedial work is required to bring the road up to current District standards, the applicant shall provide construction plans prepared by a professional engineer licensed in the State of Idaho to the District for review and acceptance. Prior to commencing construction, the applicant shall enter into an Inspection Agreement with the District and provide an inspection deposit in an amount to be calculated by District staff based on the amount of work required to be performed. The applicant's contractor shall be required to obtain a permit from the Development & Technical Services Division and schedule inspections with the Division Inspection Personnel. All required remedial work shall be completed to District standards prior to final acceptance of the road.

7212.3.6 Acceptance

After Commission approval of the request to accept the road into the public system the applicant shall dedicate the right-of-way for the road by donation to the District free of all liens and encumbrances. The applicant shall provide a legal description for the road right-of-way prepared by a professional land surveyor licensed in the State of Idaho. The District will prepare the deed and obtain a title report. The applicant shall be responsible for removing all encumbrances not acceptable to the District prior to recordation of the deed. The official date of final acceptance of the road by the District for public maintenance shall be the date the deed is recorded by the District.

7213 PRIVATE NON-REGULATED UTILITIES

A private non-regulated utility is defined as a privately owned and operated utility that is not regulated by the Public Utilities Commission, nor owned and operated by a municipality, water, sewer, or irrigation district. Examples include community water or sanitary sewer systems that serve a single development. This section applies to utilities installed parallel to and within public right-of-way.

7213.1 Developments Without Street Connectivity (Private Roads)

Developments proposing to install private non-regulated utilities, which do not provide street connectivity to adjacent properties, shall not be accepted as public roads and public right-of-way, but may be developed as private roads with agency (city or county) approval.

7213.2 Developments with Street Connectivity (Public Roads)

Developments proposing to install private non-regulated utilities, which provide street connectivity to adjacent properties, may be accepted as public roads and public right-of-way, if they enter into a Development Agreement with the District. Requirements of the Development Agreement shall include the following:

The owner of the land being developed shall enter into a Development Agreement with the District prior to final plat approval. The agreement shall be recorded and shall run with the land in perpetuity, or until the private utility is taken over by a public agency or other regulated entity.

The developer shall include all requirements listed in the Development Agreement as a part of the Covenants, Codes and Restrictions (CC&Rs) for the development, which shall be reviewed and approved by the District prior to acceptance of the roads. The CC&Rs shall contain a provision prohibiting the dissolution of the Homeowners Association or the modification of the CC&Rs without the expressed written consent of the District.

The developer shall provide certification by a professional engineer licensed in the state of Idaho that the utilities have been constructed in accordance with the District approved construction plans, and shall include record drawings, and copies of test results that verify trench compaction, and pressure tests per accepted industry standards for all water and sanitary sewer lines.

The developer or their contractor shall provide a three-year warranty to the District for the utility construction and associated construction and materials. The developer or their contractor shall provide a financial surety held by and in the name of the Ada County Highway District, in an amount determined by the District, for a period of three years following acceptance of the roads by the District. This surety is to guarantee the developer, or their contractor, shall complete any needed roadway repairs caused or necessitated by the private utility within the three-year warranty period.

The developer shall provide a letter from a municipality, water, or sewer district, indicating that they will accept ownership and operation of the private utility, if the utility is built to the standards of the municipality/district. This letter requirement shall not apply to

Planned Communities, as defined by the Ada County government.

In the event that no public agency or other regulated entity will accept the utility in the future, the private utility shall be located outside of the public right-of-way. Perpendicular crossings of the public right-of-way may be allowed subject to a license agreement and the following requirements: Utilities crossing the public right-of-way shall be placed with a valve or manhole constructed at the right-of- way line on both sides of the crossing. Pressurized lines crossing public right- of-way shall comply with Section 6007.11.8.6.

The developer shall require in the CC&Rs that the Homeowners Association shall become a member of Digline, and shall be responsible for marking the location of the underground private utilities.

Any future relocation of the private utilities (that lie within public right-of-way) deemed necessary by the District shall be moved at the sole expense of the developer or their successor.

7214 STORMWATER

The District controls stormwater within the public rights-of-way under its jurisdiction, as necessary for public safety or right-of-way maintenance.

Ada County and the municipal governments have authority to control some functions of storm drainage management. Normally the County and cities administer the plan and plat review process, flood plain permitting, ordinance enforcement, and on-site drainage improvements.

Stormwater policies and guidelines are included in Section 8000 of this manual. They shall be used in study and design of drainage facilities that are located within the public rights-of-way. They also apply to those facilities that are to be connected with facilities for which the District has control or maintenance responsibility.

Should stormwater policies and guidelines stated or referenced in this Manual be inconsistent or conflict with the requirements of the governing jurisdiction, the more stringent requirements shall apply.

7215 MISCELLANEOUS REQUIREMENTS

7215.1 Bridges, Culverts, Headwalls, Retaining Walls, and Other Structures

All structures proposed for location in the public right-of-way, or which affect District facilities, must be designed by a qualified Professional Engineer registered to practice in the State of Idaho and be properly detailed on the construction drawings. All structures shall be designed and constructed in accordance with Section 3000.

Appropriate engineering calculations are required. They shall accompany the construction drawings when submitted to the District for review. If the proposed structure is to accommodate anything owned or to be owned by someone other than the District (such as irrigation water or retained earth on private property) the District requires evidence of the Owner's approval before granting District approval.

7215.2 Gravity Irrigation Facilities

All irrigation facilities must be located outside the public right-of-way except where system distribution lines cross perpendicular to the right-of-way, unless otherwise approved by the District. A shutoff valve or manhole shall be installed on both sides of all crossings at the right-of-way line. If the District approves the location of irrigation facilities within the public right-of-way, a maintenance agreement will be required with the entity that owns the irrigation facilities.

7215.3 Idaho Standards for Public Works Construction (ISPWC)

All roadway and stormwater facilities to be constructed with a proposed development, and to be owned and maintained by the District, must be constructed according to the latest District approved edition of ISPWC and the District's Supplemental Standard Specifications.

7215.4 Hillside Ordinances

The development of hillside and foothills areas poses special problems and possible hazards. In order to allow development and minimize potential hazards, local public entities have adopted regulations called "Hillside Ordinances."
The Hillside Ordinances require the submittal of certain reports and plans. When proposed District facilities are involved, the reports are necessary for proper evaluation of District facilities. The developer shall submit a copy of each report to the District at the same time they submit the reports to the governing jurisdiction. The developer shall keep the District informed of revisions to the report. He shall submit a copy of all approval action(s) by the governing jurisdiction(s) to the District.

7215.5 Signs

The developer shall provide a copy of the street name evaluation sheet approving the street names of all streets within the development. The District will make the signs and provide them for a cost to the developer for installation according to District policy and the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). Sign installation shall be inspected by District personnel for proper construction and placement. If the signs are installed according to MUTCD and District policy, they will be accepted for maintenance by the District. Alternatively, upon request the District will install the signs for a cost to the developer. If it becomes necessary to replace the signs because of erroneous street name information provided to the District, the developer shall reimburse the District for all costs incurred.