In new subdivisions, the developer shall provide and install all the required traffic control devices after final plat approval. The City will assume maintenance of the traffic control devices after approval for new Public roadways.

For private streets the street name signs shall have the words ″Private Street″ in one-inch letters below the street name sign. Maintenance of the traffic control devices on private roads will be the responsibility of the property owner.

4.20 Right-of-Way Deviations

The right-of-way and street widths required by these Guidelines may need to be modified to accommodate special situations not foreseen when the Guidelines were developed. These special circumstances could include but are not limited to physical features, environmental considerations or historical considerations. Typically deviations will be limited to areas already platted with substandard right-of-way widths. Any deviation from the guidelines shall be approved by the SPRC. The Committee will only consider deviation recommended by the City Engineer. If a developer wants to request consideration of a deviation a written request with support documentation of the special circumstance to the City Engineer. If a deviation is approved by the SPRC there shall be a written record made of the decision.

4.21 Roadway Section Deviations

The roadway sections required by these Guidelines may need to be modified to accommodate special conditions not foreseen when the Guidelines were developed. These special circumstances could include, but are not limited to, existing physical features, environmental considerations, historical considerations or stormwater treatment requirements. A deviation will not be considered if it is strictly for economic reasons.

If a developer would like to request a deviation from the standard roadway section required by these Guidelines, then the developer must make a written request to the City Engineer prior to submitting civil plans for review. The request from the developer shall include a drawing showing the proposed roadway section along with a written narrative outlining the conditions that make the standard section unworkable and how the proposed alternative will address the issues caused by using the standard section. Once the City Engineer receives the request for roadway section deviation, the City Engineer will review the request for completeness. After the City Engineer’s review, the request will either be scheduled for review by the Site Plan Review Committee (SPRC) or returned to the developer for the correction. All requests for a deviation will be presented to the SPRC once the City Engineer indicates the deviation has sufficient information to make a decision.

Once the deviation request is deemed complete, the request will be scheduled for consideration at a SPRC meeting. The SPRC will hear the request and then make a decision. If the decision is to deny the request, it is final and the developer will have to proceed with

the project using the appropriate standard roadway section. If the decision is to approve the request, then the developer will be allowed to proceed with the submittal of the civil plans for approval, using the alternative roadway section that was approved.

The roadway section deviation process outlined in this Section of the Guidelines is to modify the standard roadway sections. This process cannot be used to eliminate any of the requirements of the Guidelines. For example, this process cannot be used to try to eliminate the requirement for a pedestrian facility. It could be used to change the location of where the walkway would be located or the construction requirements for the walkway.

CITY OF CENTRALIA
TESTING AND SAMPLING FREQUENCY GUIDE

ITEM	TYPE OF TESTS	MINIMUM NO.	FREQUENCY
GRAVEL BORROW	GRADING & SE	1 EACH	1 - 4000 TON
SAND DRAINAGE BLANKET	GRADING	1 EACH	1 - 4000 TON
CSTC	GRADING, SE & FRACTURE	1 EACH	1 - 2000 TON
CSBC	GRADING, SE & FRACTURE	1 EACH	1 - 2000 TON
BALLAST	GRADING, SE & DUST RATIO	1 EACH	1 - 2000 TON
BACKFILL/SAND DRAINS	GRADING	1 EACH	1 - 2000 TON
GRAVEL BACKFILL FOR:			
FOUNDATIONS	GRADING, SE & DUST RATIO	1 EACH	1 - 1000 TON
WALLS	GRADING, SE & DUST RATIO	1 EACH	1 - 1000 TON
PIPE BEDDING	GRADING, SE & DUST RATIO	1 EACH	1 - 1000 TON
DRAINS	GRADING	1 EACH	1 - 100 TON
PCC STRUCTURES: (Sidewalk, curb and gutter, foundations)			
COARSE AGGREGATE	GRADING	1 EACH	1 - 1000 TON
FINE AGGREGATE	GRADING	1 EACH	1 - 500 TON
CONSISTENCY	SLUMP	1 EACH	1 - 100 CY
AIR CONTENT	AIR	1 EACH	1 - 100 CY
CYLINDERS (28 DAY)	COMPRESSIVE STRENGTH	2 EACH	1 - 100 CY
CEMENT	CHEMICAL & PHYSICAL CERTIFICATION	1	1 - JOB
ASPHALT CEMENT CONCRETE:			
BLEND SAND	SE	1 EACH	1 - 1000 TON
MINERAL FILLER	S.G. & PI, CERTIFICATION	1	1 - JOB
COMPLETED MIX	FRACTURE, SE, GRADING, ASPHALT CONTENT	1 EACH	1 - 1000 TON
	COMPACTION	2 EACH	5 - 400 TON
ASPHALT TREATED BASE:			
COMPLETED MIX	SE, GRADING, ASPHALT CONTENT	1 EACH	1 - 1000 TON
	COMPACTION	1 EACH	5 - Control Lot*
ASPHALT MATERIALS	CERTIFICATION	1	1 - JOB
RUBBERIZED ASPHALT	CERTIFICATION	1	1 - JOB
COMPACTION TESTING:			
EMBANKMENT	COMPACTION	1 EACH	1 - 500 LF
CUT SECTION	COMPACTION	1 EACH	1 - 500 LF
CSTC	COMPACTION	1 EACH	1 - 500 LF
CSBC	COMPACTION	1 EACH	1 - 500 LF

CENTRALIA
Public Works

Date: **March 4, 2024**

From: **Patty Page, P.E.**
City Engineer

To: **Hillary Hoke**
Assistant Community Development Director

Subject: **Woodland Glen Variance Request**
Duffy Street Horizontal Curvature and Posted Speed Limit Deviation

I have reviewed the deviation request referenced above and attached. This request is a Roadway Section Deviation and falls under the requirements of Section 4.21 of the Development Guidelines. The existing roadway, Duffy Street, is significantly out of compliance with current road design and safety standards. The existing roadway width averages 12 feet wide with substandard roadway curvature and steep grades. It does not have a posted speed, advisory speed or warning signs for sight distance or curvature.

City Standards require roadways to be designed for 30mph with a posted speed of 25mph unless otherwise posted. The engineer has designed improvements to Duffy Street which will widen out the roadway surface, add pedestrian and bicycle facilities and add street lighting. The roadway will be realigned to intersect at Saxon Road/Seminary Hill Road to meet the separation requirements between intersections. The grade of the roadway will also be improved to meet the maximum 10 percent allowable grade.

Due to the existing topography, adjacent residential properties and right of way constraints of Duffy Street, meeting the roadway design standard of 30mph with a posted speed of 25mph through the curvature is not possible to accomplish. Although the developer is unable to bring the road up to current standards required for a 25mph curvature due to topography and right of way width, the improvements that are being made are significant and will result in a safer roadway than is there currently. The engineer was able to meet the curvature design standards for a posted speed limit of 15mph.

Mitigation proposed by the developer includes reducing the speed limit for the curvature to 15 miles per hour, which is adequate for the curve radius of 75 feet and is acceptable.

I recommend approval of this deviation request with the following conditions:

1. Assess roadside safety requirements in accordance with the WSDOT Design Manual Chapter 1600 to determine if adjacent slopes will necessitate guardrail installation or other mitigation measures along the length of Road A. Provide technical memorandum stamped by an engineer licensed in Washington State that provides the analysis and justification for mitigation measures proposed.

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CENTRALIA
Public Works

Date: March 4, 2024

From: Patty Page, P.E.
City Engineer

To: Hillary Hoke
Assistant Community Development Director

Subject: Woodland Glen Variance Request - Full Warp Pavement Section Deviation

I have reviewed the deviation request referenced above and attached. This request is a Roadway Section Deviation and falls under the requirements of Section 4.21 of the Development Guidelines. This deviation request is specific to Road C. The request is for allowing the roadway cross section to slope to one side of the roadway, instead of having a grade break at centerline per our Development Guidelines Standard Detail for local access streets.

I agree that the topography of the site, critical areas and open space requirements of the PUD make this site challenging for grading purposes. The developer is not requesting an exemption from the 2 percent cross slope requirement. However, in reviewing the cross section they provided, they do show installing a 4ft wide planter area between the curb and sidewalk, which does not match current City Standards cross section for Local Access streets. Due to the number of proposed dwelling units on Road C, and the utilities that will be associated with them, the sidewalk needs to be installed adjacent to the curb with the 6.5ft right of way width provided behind the sidewalk to allow for utilities as required by the City Standard Detail. Driveway entrances shall be in accordance with Standard Detail 5-03B.

Determination:

I recommend approval of the variance request for full warp of the pavement, maintaining the required 2 percent cross slope. The variance requested has no material significance to roadway design. I recommend approval of this variance request. However, we request that they modify their proposed road section to adhere to the standard detail for local access streets in every other aspect. Remove the proposed planter strip and provide the extra right of way behind the walk for utilities and use Standard detail 5-03B for all driveway entrances. Trees will be planted on private property, a minimum of 9.5 feet from the back of sidewalk.

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CENTRALIA
Public Works

Date: **March 4, 2024**

From: **Patty Page, P.E.**
City Engineer

To: **Hillary Hoke**
Assistant Community Development Director

Subject: **Woodland Glen Variance Request – Right of Way Width Deviation**

I have reviewed the deviation request referenced above and attached. This is a Right of Way Deviation request and falls under the requirements of Section 4.20 of the Development Guidelines. Although I agree that the topography of the site, critical areas and the open space requirements of the PUD development code make this site challenging, I am reluctant to reduce right of way widths from the City's standard 60-foot width without ensuring that all aspects of the City's standards are met. I will discuss each element of the deviation request below.

Pavement Width:

City Standards for local access streets requires a pavement width of 36 feet. This width allows for two lanes of travel and on-street parking on both sides of the roadway. Although there is no recent history of allowing narrower right of way widths on City public streets, alternative road widths have been approved in the past, including one that is similar to what the applicant is requesting. In the historic Edison District, there is parking only on one side of the roadway and the pavement width is narrower, except near the intersections, where it flares to 35 feet. All recent streets created that do not meet the City's current public roadway standards have been private streets.

There are a few notable differences between the Edison District and this development that should be recognized. First, the majority of residences within the Edison District have vehicular access to their properties from alleyways behind the homes and there are a limited number of driveway access points to the road right of way. This leads to more on-street parking availability. Second, the right of way width in the Edison District is 60 feet, with a large planter strip between the curb and sidewalk, which allows ample room for street trees and utilities in the right of way. Third, the lots in the Edison District are generally larger than the proposed development, and less homes per block and therefore less need for on-street parking. Finally, the Edison District streets were built prior to current fire code requirements, which requires a minimum 20 foot wide unobstructed travel way.

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Despite the differences noted above, I am in support of reducing the pavement width from the standard 36-foot width to 28 feet on the roads requested since the required 20ft wide fire access is provided along with an 8 foot wide parking lane. However, I would have the following conditions:

1. A 20 foot long flare from the 28ft pavement width to 35ft pavement width be provided at all intersection approaches and the curb is painted yellow for the flare length from the intersections.
2. Parking shall be provided on the side of the street that would allow for the most on-street vehicle parking and the other side of the street shall be signed "No Parking Any Time". Joint driveways, or adjacent driveways, for lots would be preferred.
3. Cul-de-Sacs are required to maintain the dimensions in City Standards for fire truck turnaround.
4. No parking shall be allowed at "T" intersections or within cul-de-sacs. Yellow curb and signs shall be installed.
5. Fire hydrants will be installed on the opposite side of the street from the on-street parking to allow unobstructed access.

Right of Way Width:

Current City Standards for local access streets require a right of way width of 60 feet. This width allows for the 36ft wide pavement width mentioned above, curb/gutter and sidewalk and an additional 6.5 feet on either side behind the sidewalk for utilities. Due to the reduced right of way width requested, the proposed deviation removes the majority of the area behind the sidewalk, installs a four foot wide planter strip between the curb and sidewalk and installs utilities within an easement behind the sidewalk. In contrast, for the roadway section in the Edison District mentioned above, the extra right of way is in the form of a large planter strip between the curb and sidewalk that provides ample room for trees, utilities and separation between the travel lanes and the sidewalk.

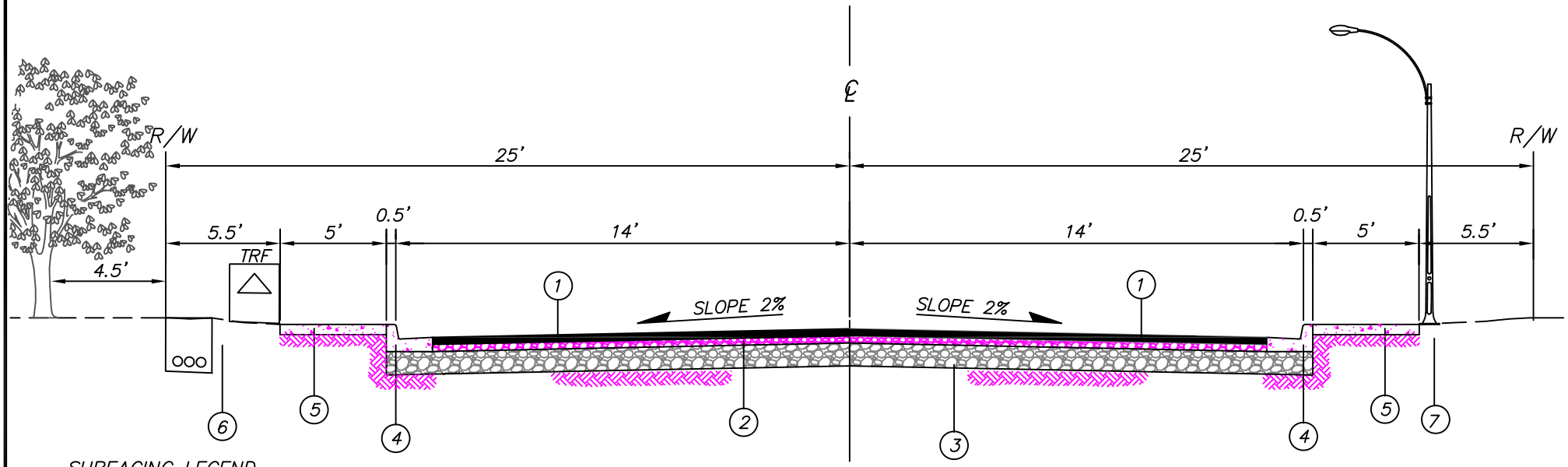
The proposed roadway cross section provides a four foot wide planter strip between the curb and sidewalk, which does not provide a wide planter strip for mature trees and utilities or additional separation for pedestrians. However, I believe a 50ft wide right of way width would be acceptable with the following conditions:

1. The sidewalk be installed adjacent to the curb per City Standards and all driveways be constructed in accordance with Standard Detail 5-03B.
2. The area in the right of way behind the sidewalk be reserved for utilities, with street light standards, water meter boxes, junction boxes and transformers being installed adjacent to the sidewalk and all conduit for electrical utilities be installed on the property side of those utility structures within the right of way.

3. Trees shall be planted on private property, a minimum of 9.5 feet from the back of the sidewalk. No trees shall be planted within the right of way. However, shrubs or vegetation shorter than 4ft tall would be acceptable where underground utilities are not located.
4. Mailboxes shall be provided in cluster neighborhood boxes and not individually at each lot.

I agree that the topography of the area makes the standard road section difficult. The alternate roadway cross section as modified above, will still provide a road section that meets the needs of the city, emergency services and the public and closely matches the section provided in other areas of town with parking on one side of the roadway.

I recommend approval of this deviation request for roads B, D, E, F and G with the modifications noted above and in accordance with the attached modified roadway section.



SURFACING LEGEND

1. SURCACE – 3" DEPTH CL 1/2" PG 64–22 HMA
2. TOP COURSE – 2" DEPTH CSTC (5/8" MINUS)
3. BASE COURSE – 8" DEPTH CSBC (1 1/4" MINUS)
4. CEMENT CONCRETE CURB & GUTTER (SEE CITY STD. 5–02)
5. CEMENT CONCRETE SIDEWALK (SEE CITY STD. 5–01)
6. POWER TRANSFORMER/CONDUIT – LOCATION TO BE DETERMINED BY CITY LIGHT
7. STREET LIGHTING (SEE CITY STD. 7–01, 7–02 and 7–03)

ALTERNATE SURFACING

1. SURCACE – 3" DEPTH CL 1/2" PG 64–22 HMA
2. TOP COURSE – 2" DEPTH CSTC (5/8" MINUS)
3. BASE COURSE – 8" DEPTH ASPHALT TREATED BASE (ATB)

STD. PLAN NO.	APPROVED BY	REVISED DATE	CITY OF CENTRALIA
4-09	CITY ENGINEER	02/2024	MODIFIED ROADWAY SECTION 50FT WIDE LOCAL ACCESS

CENTRALIA
Public Works

Date: **March 4, 2024**

From: **Patty Page, P.E.**
City Engineer

To: **Hillary Hoke**
Assistant Community Development Director

Subject: **Woodland Glen Variance Request – Road Grade Deviation**

I have reviewed the deviation request referenced above and attached. This request is a Roadway Section Deviation and falls under the requirements of Section 4.21 of the Development Guidelines. I agree that the topography of the site, critical areas and open space requirements of the PUD make this site challenging to ensure the City's standard requirement of maximum 10 percent road grade to be met throughout the development. The applicant has been able to meet that requirement throughout the development, except in three specific locations:

Road A – 12% between Stations 20+00 and 23+50
Road B – 14% between Stations 103+00 and 107+00
Road E – 12.4% between Stations 401+00 and 403+00

The maximum road grade allowed in our development guidelines is 10 percent in order to ensure the safety of the public and accessibility of emergency vehicles. However, due to topography, there are a number of roadways within the City that do not meet the maximum 10 percent grade requirement in our Standards. The only reason that a longitudinal grade steeper than 10 percent would be allowed, is due to site topography and the inability to meet the requirement. In those instances, meeting the requirement to the maximum extent possible is required and additional mitigation measures are often required.

For this development, there are a number of existing onsite grades that exceed the allowable roadway grade. However, the developer was able to remove those grade issues during the roadway design except for three locations noted above. The developer is requesting a deviation for each of those locations. I will discuss each roadway grade deviation request location separately:

Road A

There is a total length of 2,460 (+/-) linear feet on Road A. Currently, slopes exceed 15 and 20 percent for a large portion of the proposed roadway location. The developer has been able to meet the maximum 10% grade allowance except for a 350ft long section. This amounts to less than 15 percent of the total length of the roadway. The deviation request is for a 2 percent increase in the maximum allowable slope for that 350ft section. There are three vertical curves along this roadway alignment.

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Road B

Road B is 11,095 (+/-) feet long. Currently, steep slopes exist on the east side of the existing creek crossing and also at the east end of the proposed roadway location. The requested deviation is for a 400 foot long section of roadway east of the existing creek crossing. The remainder of the roadway length will meet the maximum 10 percent slope. There are two vertical curves along this roadway alignment.

Road E

Road E is an 920ft (+/-) long road that connects Road C on the west to Road G on the east, with a short extension to the east past Road G for future roadway continuation. Existing slopes through this area exceed 15% on the east side of the existing stream. The developer requests a 2.4% increase in allowable slope through 200 linear feet of this proposed roadway, east of Road C. There are three vertical curves along this roadway alignment.

Determination:

I have thoroughly reviewed the proposed overall roadway design as well as each of the roadway sections that have been submitted for a deviation request. There are two separate entrance roads to the development that ensures emergency services access, even if one entrance to the development is blocked. The primary access road extends from the intersection of Duffy Road realignment at Seminary Hill Road/Saxon Road to Road B. The second entrance extends from Byrd Street into the development at the intersection of Road F. The primary access road from Seminary Hill Road meets the maximum slope requirement. The secondary access road includes a section of roadway that has a deviation request for 350 linear feet.

After thorough review and consultation with the Riverside Fire Authority, I am in support of the three road grade deviations as long as the following conditions are met:

1. All construction within the development includes fire sprinkler systems to be installed throughout and maintained.
2. Fire hydrants are provided that meet City of Centralia maximum spacing requirements.
3. All sag vertical curves and crest vertical curves meet the length requirements specified in the WSDOT Design Manual Chapter 1220.
4. Assess roadside safety requirements in accordance with the WSDOT Design Manual Chapter 1600 to determine if adjacent slopes will necessitate guardrail installation or other mitigation measures along the length of Road A. Provide technical memorandum stamped by an engineer licensed in Washington State that provides the analysis and justification for mitigation measures proposed.

5. On sloping approaches at an intersection, landings shall be provided with grade not to exceed one-foot difference in elevation for a distance of 20 feet approaching a collector or local access street in accordance with Chapter 4.11.4.
6. All driveway accesses meet the maximum allowable slopes in the Development Guidelines Chapter 4.12.
7. Required site distance at driveways and intersections is met in accordance with Chapter 4.13 of the Development Guidelines.
8. All ADA requirements are adhered to for pedestrian facilities throughout the development.