

**CITY OF RICHLAND DEVELOPMENT SERVICES DIVISION  
STAFF REPORT TO THE HEARING EXAMINER**

**GENERAL INFORMATION:**

PROPOSAL NAME: South Orchard – Major Plat Amendment

LOCATION: 2700 Allison Way

APPLICANT: Darrin Sweeney (applicant) on behalf of Badger Communities, LLC (property owner).

PROPERTY OWNER: Badger Communities, LLC

FILE NO.: SA2023-102

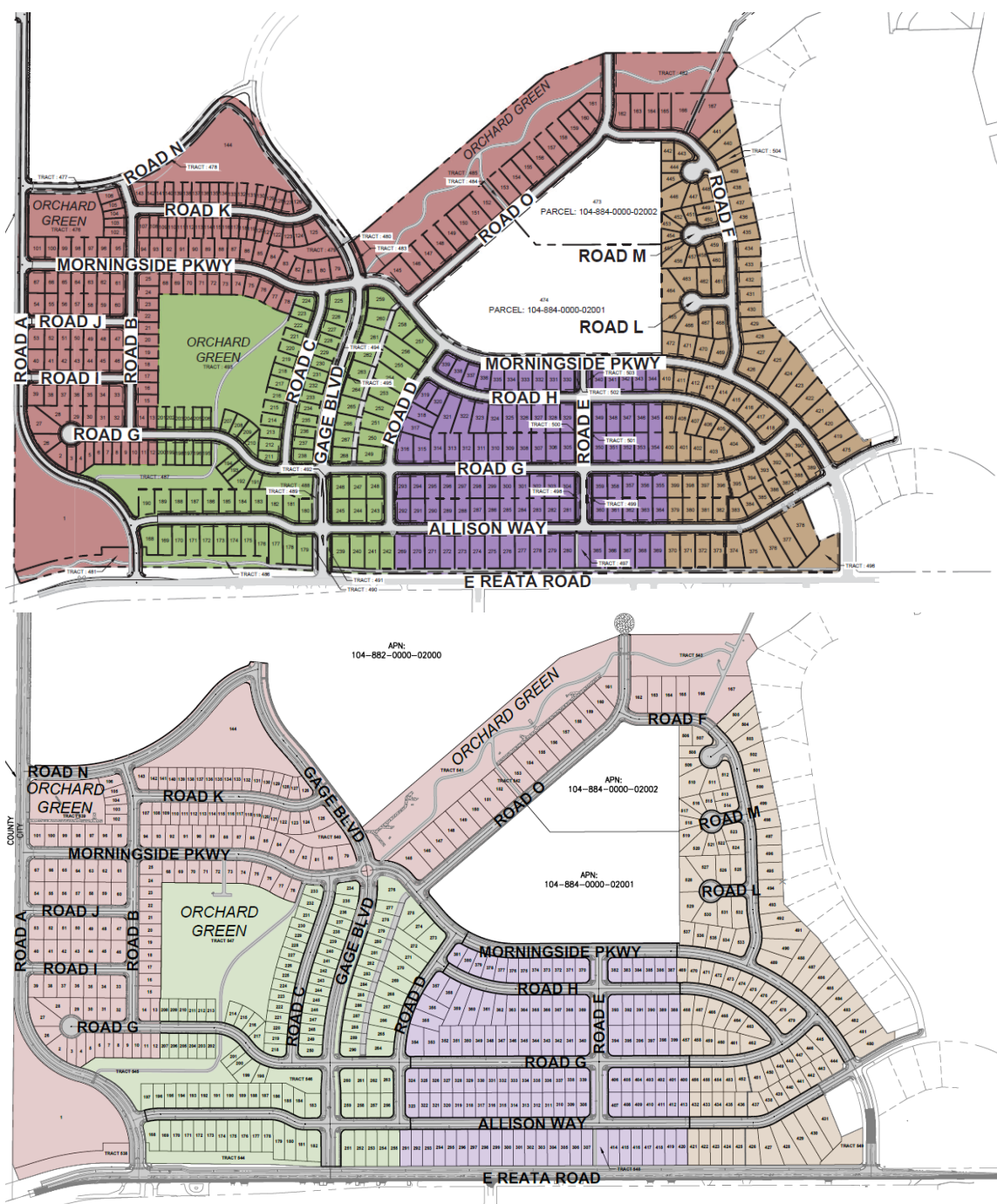
DESCRIPTION: Request to amend prior preliminary plat (S2021-104 475 lots on 194.5 acres) to now place 535, single-family residential lots, 2 multi-family lots, and 12 public amenity tracts on 174.37 acres.

PROJECT TYPE: Type III Preliminary Plat Major Amendment

HEARING DATE: June 12, 2023

REPORT BY: Matthew Howie, Senior Planner

RECOMMENDED ACTION: Approval subject to completion of proposed conditions



**Figure 1 – Proposal Overview  
(S2021-104 Above, SA2023-102, Below)**



## Vicinity Map

Item: 2700 Allison Way - South Orchard Major Plat Amendment  
Applicant: Derrin Sweeney  
File #: SA2023-102

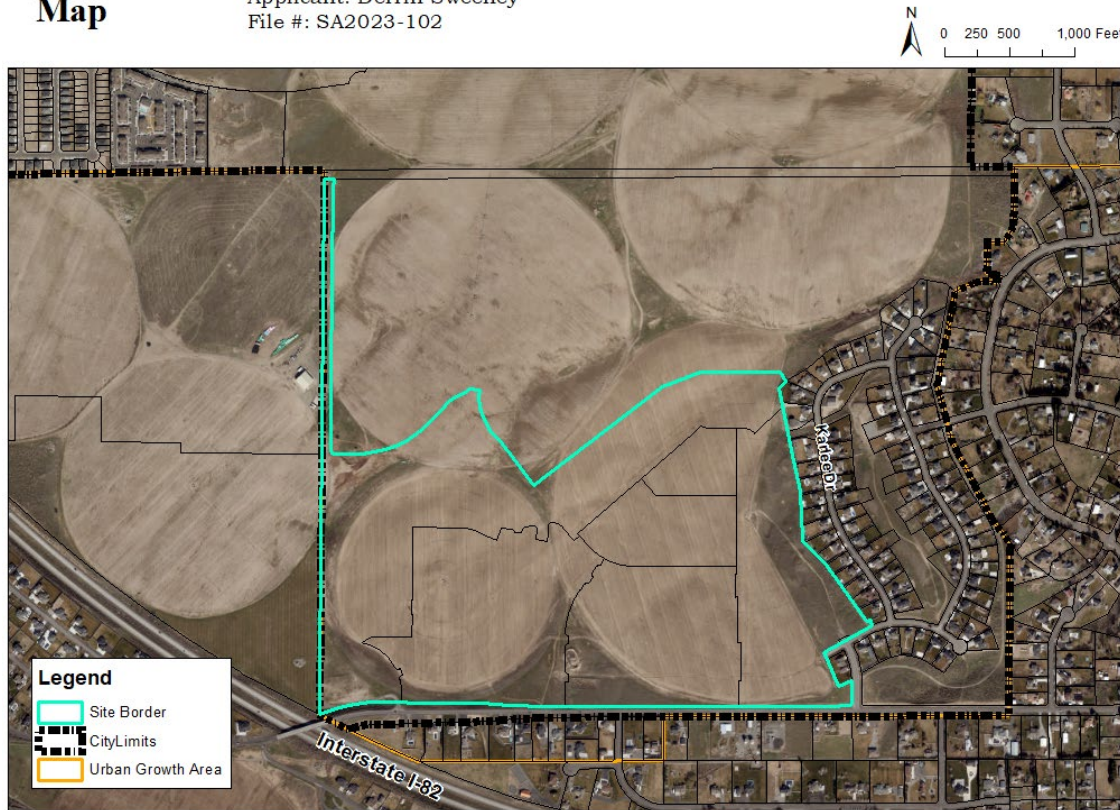


Figure 2 – Vicinity Map

### **PROJECT DATA**

Gross Plat Area:	174.37 acres
Net Planning Area:	132.62 acres
Number of Lots:	549 lots
Land for Streets/Other:	41.75 acres
Gross Density:	3 units/acre
Net Density:	4 units/acre

### **DESCRIPTION OF PROPOSAL**

Darrin Sweeney, applicant, on behalf of Badger Communities, LLC has submitted a Preliminary Plat Major Revision Application (*Exhibit 1*) for the development of an approximately 174.37-acre site, with 537 residential lots and 12 tracts for greenspace, walking trails and the like. The plat includes several residential blocks, civic/open-space, new roadways, and pedestrian trails. *Figure 2* (above) shows the site within its larger context and *Figure 1* (previous page) shows the phasing of the project and plat layout for both the original, approved plat (S2021-104) and the current plat amendment proposal.

Phase 1 (in red) has already begun preliminary grading and other surface site improvements. It will continue as originally proposed in the approved S2021-104 preliminary plat for South Orchard with 325 lots. With this amendment the applicant is requesting an increase in the number of lots on Phases 2 (by 22 lots), 3 (by 29 lots), and 4 (by 13 lots).

The South Orchard site spreads across four (4) parcels (APN 1-04882000006000, 1-04882000003000, 1-04882000004000, 1-04882000005000) north of East Reata Road and west of Karlee Drive. The plats' location is applied with several (primarily residential) Badger Mountain South land use districts. Plat drawings (*Exhibit 1*) include plans detailing the contiguous network of public roadways and utilities serving the proposed lots.

### Background

This item was previously the subject of two prior public hearings held before the City of Richland Hearing Examiner on July 12, 2021 and November 17, 2021. Based on the content of the initial July 2021 proposal, the Hearing Examiner remanded the application back to the applicant with a September 29, 2021 Remand Order. *Note, both hearings fell under the same master file number (S2021-104).* The Hearing Examiner's Remand Order focused on the interim status of a BMS-wide traffic impact analysis [TIA]. Because the TIA was not in its final form and not finally approved by the City, the Hearing Examiner was unable to assert that, as proposed, the preliminary plat was in the public interest in terms of transportation infrastructure improvements' mitigating for the impacts of South Orchard on the affected road network. Further, the Hearing Examiner concurred with Staff, finding that no underlying Badger Mountain South Land Use Development Regulations [LUDR] provisions were in place for lots exclusively accessed from private drives or alleys.

In response to the remand, the plat was revised, excluding those lots proposed to be accessed via private drive or alley. In doing so, the lot count was reduced by two. On the topic of the incomplete TIA, revised application materials included a memo from Transportation Engineering NorthWest [TENW] (author of the TIA) suggesting certain transportation improvements would be reasonable to mitigate traffic impacts of the South Orchard proposal. The information provided at that time was sufficiently robust for the Hearing Examiner to approve the preliminary plat with conditions (*Exhibit 3*).

### REASON FOR REQUEST

Richland Municipal Code [RMC] Chapter 24.24.055(B)(2) requires that major amendments to preliminary plats are approved by the Hearing Examiner whenever any proposed amendment would result in increasing the number of lots in the subdivision beyond the number previously approved. RMC 24.24.055(C) describes the process to be followed by the Hearing Examiner and Staff regarding Major Plat Amendments:

If the subdivision administrator determines that the proposed amendment is major, the hearing examiner shall hold a public hearing on the proposed major

amendment in accordance with the requirements for preliminary plat approval found within this title; provided, however, that any public hearing on a proposed major amendment shall be limited to whether the proposed major amendment should or should not be approved. Within 30 days following receipt of the hearing examiner's written recommendation, the city council shall approve or disapprove any proposed major amendment and may make any modifications in the terms and conditions of the preliminary plat approval to the extent that they are reasonably related to the proposed amendment. If the applicant is unwilling to accept the proposed major amendment under the terms and conditions specified by the city council, the applicant may withdraw the proposed major amendment and develop the subdivision in accordance with the original preliminary plat approval (as it may have been previously amended).

Additional guidance, as it relates to plat review is below:

24.12.053 Preliminary plat – Required findings.

The hearing examiner shall not approve any preliminary plat application, unless the approval is accompanied by written findings that:

- A. The preliminary plat conforms to the requirements of this title;
- B. Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;
- C. The public use and interest will be served by the platting of such subdivision and dedication; and
- D. The application is consistent with the requirements of RMC 19.60.095.

24.12.055 Preliminary plat – Hearing examiner consideration and action.

- A. The application for preliminary plat approval shall be approved, disapproved or returned to the applicant for modification or correction within 90 days of the date of acceptance.
- B. Hearing examiner approval of a preliminary plat shall not guarantee final approval of the plat or subdivision and shall not constitute an acceptance of the subdivision, but shall authorize the subdivider to proceed with the preparation of the final plat along the lines indicated in the preliminary plat.
- C. Approval of the preliminary plat shall be operative for five years from the date of approval by the hearing examiner during which time a final plat or plats may be submitted.
- D. The subdivision administrator may extend the approval period or may require that the preliminary plat must be resubmitted after the expiration of the approval period.

19.60.095 Required findings.

No development application for a Type II or Type III permit shall be approved by the city of Richland unless the decision to approve the permit application is supported by the following findings and conclusions:

- A. The development application is consistent with the adopted comprehensive plan and meets the requirements and intent of the Richland Municipal Code.
- B. Impacts of the development have been appropriately identified and mitigated under Chapter 22.09 RMC.
- C. The development application is beneficial to the public health, safety and welfare and is in the public interest.
- D. The development does not lower the level of service of transportation facilities below the level of service D, as identified in the comprehensive plan; provided, that if a development application is projected to decrease the level of service lower than level of service D, the development may still be approved if improvements or strategies to raise the level of service above the minimum level of service are made concurrent with development. For the purposes of this section, "concurrent with development" means that required improvements or strategies are in place at the time of occupancy of the project, or a financial commitment is in place to complete the required improvements within six years of approval of the development.
- E. Any conditions attached to a project approval are as a direct result of the impacts of the development proposal and are reasonably needed to mitigate the impacts of the development proposal.

Review Authority

RMC Section 19.20.030 designates the Hearing Examiner as the hearing body responsible for conducting the review of preliminary plat approval applications.

**SITE DESCRIPTION & ADJACENT LAND USES**

The South Orchard Preliminary Plat is comprised of four parcels totaling approximately 174.37-acres along the southerly edge of Richland's incorporated territory, generally in the southwest sector of the City, south of Badger Mountain.

The site consists of gently rolling hills that were under agricultural production until just recently. South Orchard abuts the existing single-family residential neighborhood of Sunshine Ridge to the east and is adjacent to City limits along the west plat boundary. *Note, since the 2021 preliminary plat approval, the City has taken over responsibility for the section of East Reata Road immediately south.*

Properties to the north and to the west are currently vacant. Parcels on the south side of East Reata Road (within Benton County) contain single-family homes, the Badger Mountain Irrigation District (BMID) office, and an electric sub-station. This segment of developed land narrowly separates East Reata Road from Interstate-82.

CURRENT LAND USE DESIGNATION AND USES:

**North:** BMS various land use designations, former farmland

**East:** BMS various land use designations, single-family residential

**South:** UGAR and RL-1, Benton County, single-family residential

**West:** RL-1, Benton County, farmland

COMPREHENSIVE PLAN

The City of Richland Comprehensive Plan designates this area as a part of the Badger Mountain South Subarea Plan and subject to the Badger Mountain South Master Agreement. The Agreement calls for the development of a master planned community known as Badger Mountain South for the development of a mixed-use, walkable, and sustainable community with up to 5,000 dwelling units. “Mixed-use” in this case is largely small lot residential in nature, with some multi-family, commercial, and office uses, with generous open spaces and extensive pedestrian trails alongside more traditional automobile infrastructure.

To achieve a more “unique” character within the Subarea Plan, the City partnered with Nor Am Investment, LLC on the Badger Mountain South Master Agreement. This agreement shapes land use via Exhibit C, or, the Land Use and Development Regulations [or LUDR]. Lastly, the City also adopted a Planned Action Ordinance (RMC 19.50.030) for the subarea based on a supplemental environmental impact statement (the 2010 Badger Mountain South Final Supplemental EIS [FSEIS]) which was prepared for the master planned community.

Note that the traditional distinction between Land Use and Zoning is not applicable. Instead, the Master Agreement has its own moniker, “Districts”, of which a number are represented here within South Orchard, including Neighborhood Edge [BMS-NE], Neighborhood General [BMS-NG], Neighborhood Collector [BMS-NC], Civic [BMS-Civic], and, the Special Designation “-P” Overlay District. See the BMS Land Use Map of the LUDR in *Figure 2*, along with District descriptions in *Figure 3* (both on Sheet 2-2), and, this proposal’s contemporary application of the District designations as appears in the *Exhibit 1* application materials in *Figure 4*.

2.B REGULATING PLAN FOR LAND USE AND URBAN FORM

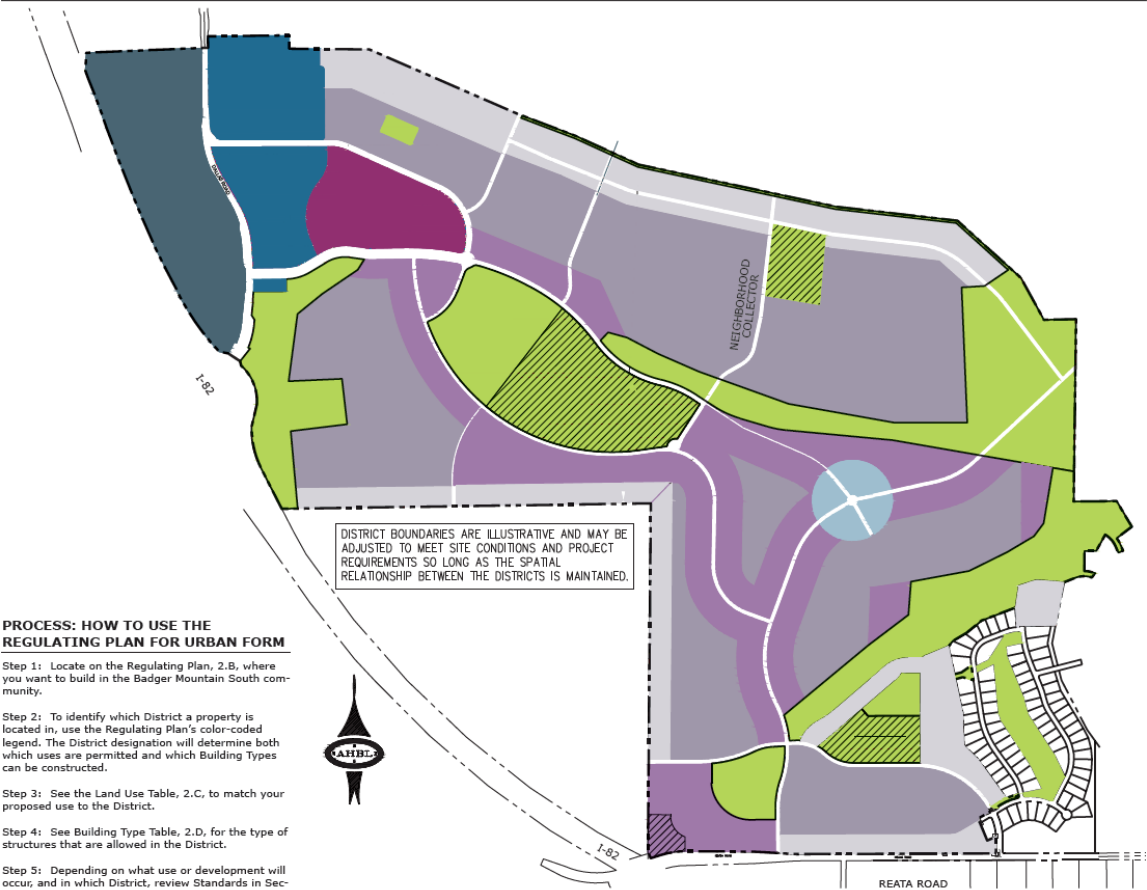


Figure 3 – BMS Land Use Map



## DISTRICT LEGEND

The legend identifies the color associated with each District and provides a short introduction to the District intent. The Regulating Plan for Land Use and Urban Form, 2.B, shows where each District is located within Badger Mountain South.

### **BMS-VMU: VILLAGE MIXED-USE (3.B)**

The Village Mixed-Use (VMU) Districts are the most urban areas of Badger Mountain South. They allow commercial uses, housing located above ground floor commercial spaces, Live/Work, Stacked Units and Row Houses.

### **BMS-NC: NEIGHBORHOOD COLLECTOR (3.C)**

The Neighborhood Collector District allows a variety of Multi-family attached housing options as well as smaller scale commercial and Mixed-Uses.

### **BMS-NG: NEIGHBORHOOD GENERAL (3.D)**

The Neighborhood General District makes up the largest area of Badger Mountain South. This District allows Single-Family detached residential with a mix of smaller scale attached housing options.

### **BMS-NE: NEIGHBORHOOD EDGE (3.E)**

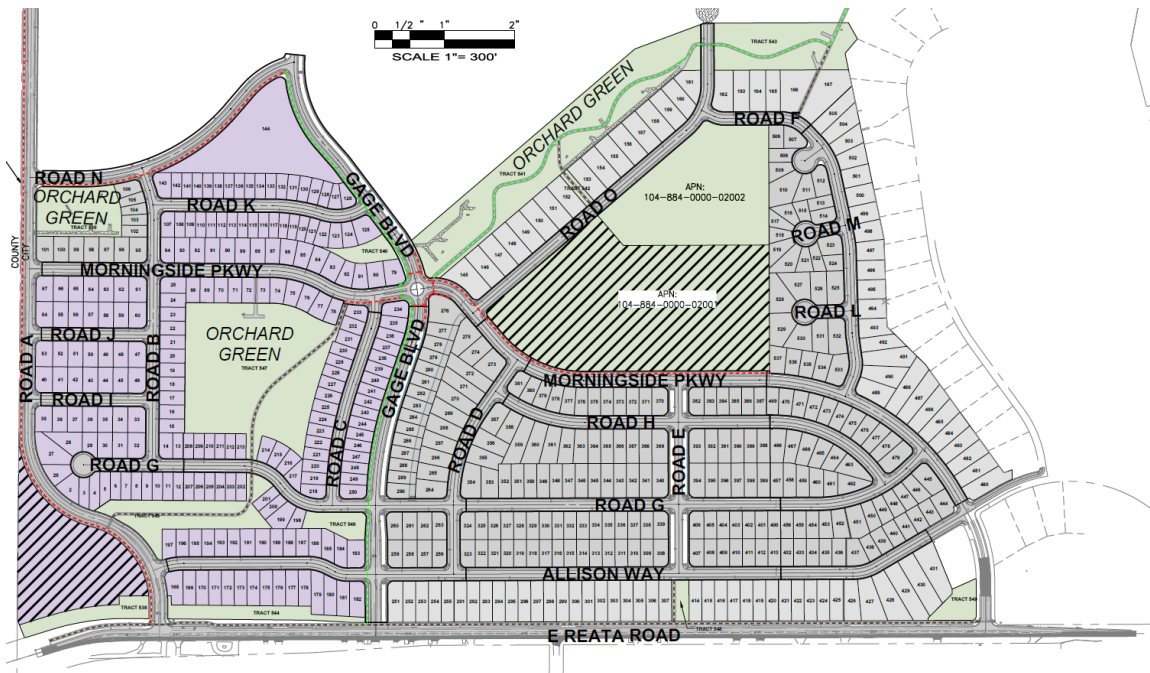
The Neighborhood Edge District allows residential uses in detached Single-Family houses and related uses that are compatible and common to Single-Family houses.

### **BMS-CIVIC (3.F)**

The Civic District contains the open space, parks, schools, civic and community spaces. Development in this District is primarily intended for Civic, Community and Institutional Facilities. See also Illustrative Plan for Civic Space Layout, 5.B for detail.

### **SPECIAL DESIGNATION "P" OVERLAY DISTRICT**

**Figure 4 – BMS District Descriptions**



**Figure 5 – Site Plan**

Applicable Goals & Policies

Provided below is a set of Comprehensive Plan goals & policies which are particularly applicable to the subject residential subdivision.

*Land Use Goal 1:* Plan for growth within the urban growth area and promote compatible land use.

*Policy 2:* Facilitate planned growth and infill developments within the City.

*Land Use Goal 2:* Establish land uses that are sustainable and create a livable and vibrant community.

*Policy 3:* Ensure that the intent of the land use and districts are maintained.

*Land Use Goal 3:* Maintain a broad range of residential land use designations to accommodate a variety of lifestyles and housing opportunities.

*Policy 1:* Distribute residential uses and densities throughout the urban growth area consistent with the City's vision.

Provided below is a set of Badger Mountain South Subarea Plan goals & policies which are particularly applicable to the subject residential subdivision.

*Comprehensive Plan Land Use Goal 5.* The City will encourage efficient use and location of municipal and public facilities such as transportation centers, utility facilities, schools, parks and other public uses.

*BMLU Policy 5.3* – Locate school facilities using sound urban design principles and work with the school districts to identify future school sites that are walkable.

*Comprehensive Plan Urban Design Goal 1.* The City will create a well-planned community with an aesthetically pleasing environment.

*BMUD Policy 1.3* – Support the development of the Badger Mountain South area by encouraging a development pattern that resembles traditional neighborhood design.

**LUDR Provisions**

In lieu of the traditional development standards and special requirements associated with the City's zoning classifications, the LUDR has highly detailed (though often not sufficiently precise) Urban Form Standards within Section 3. For sake of brevity, Staff will not attempt to replicate those details here. However, see the following intent statements associated with the respective Districts represented within South Orchard.

Neighborhood Collector [BMS-NC]

The Neighborhood Collector [BMC-NC] District is found within each of the five residential neighborhoods that comprise Badger Mountain South. These Districts add diversity to the housing found in Badger Mountain South, complement future transit expansion, and provide opportunities to establish intergenerational neighborhoods. They are located primarily along Collector Streets and at the primary entrances to the neighborhoods as shown on the Regulating Plan in Section 2.B. The Neighborhood Collector District is primarily residential that provides a variety of housing. Mixed-Use and Live/Work Buildings in this District provide the flexibility for these areas to accommodate neighborhood-scale commercial uses that respond to the evolving

needs of the community as it grows. Stand-alone, smaller-scale Neighborhood Goods and Services Buildings that serve the needs of the residents, such as churches and day cares, are encouraged in this District (LUDR Section 3.C.B).

Neighborhood Collector [BMS-NC] with Special Designation “-P” Overlay District

The Neighborhood Collector [BMC-NC] District with Overlay is applied to the southwesterly-most corner of the South Orchard preliminary plat site. The LUDR land use table (LUDR Section 2.C) limits this zone to development with “storage” uses exclusively. The LUDR defines storage as “A building or facility that is designed to leave or place materials or other items in” (LUDR Sheet 14-4).

Neighborhood General [BMS-NG]

The Neighborhood General [BMC-NG] District comprises the majority the Badger Mountain South community. This District is primarily residential in character. A variety of housing options are provided to meet the needs of the community. The residents of these Districts are within walking distance of schools, parks, trails, and commercial centers supporting the vision of the community. Single-family houses are accommodated on a variety of lot sizes allowing a range of housing options from cottages to large, detached structures. Smaller scale Multi-family housing options such as Mansion Apartments, Duplexes and Courtyard Housing, are also accommodated when certain siting conditions are met. Additional housing units are permitted in this District through the use of Accessory Units (LUDR Section 3.D).

Neighborhood Edge [BMS-NE]

The Neighborhood Edge [BMC-NE] District is solely residential in character. The houses and lots in this District tend to be a larger scale than the Neighborhood General District. These Districts are typically located along the periphery of the community. Single-family houses and lots are provided in a range of sizes up to large custom homes on 1/4 to 1 acre lots. Houses are typically accessed by streets, on lots without Alleys. Lots are larger to accommodate front street access driveways. Setbacks are deeper to create a more verdant character (LUDR Section 3.E).

BMS Civic

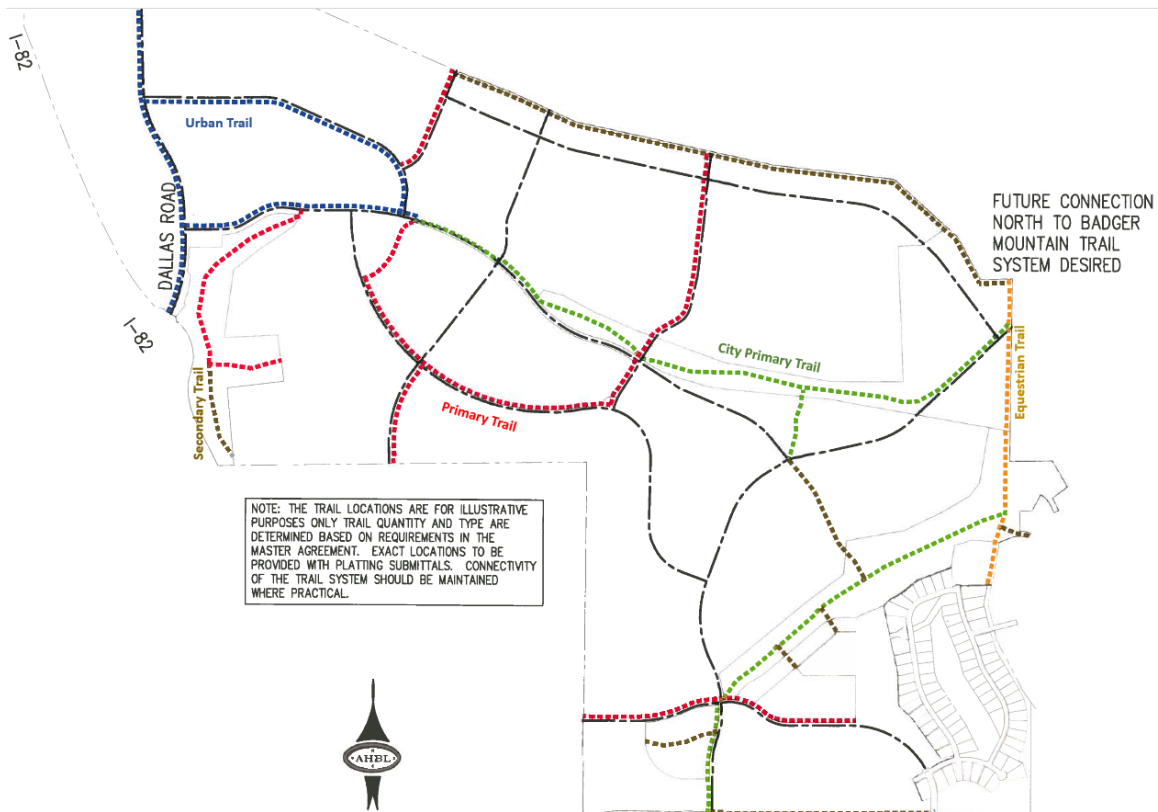
Permitted land uses in the Civic District are limited public facilities (schools), public & private recreation and cultural facilities, places of worship, solar panel arrays, vineyards, telecommunication facilities and parking lots (LUDR Section 3.F).

*The Land Use Table on LUDR Sheet 2-3 lists permitted uses in each BMS zone. Section 3 of the LUDR lists development standards including dimensional requirements such as minimum setbacks, to guide development in each District.*

**Figure 6 – LUDR Dimensional Standards**

		<b>BMS-NC</b>	<b>BMS-NG</b>	<b>BMS-NE</b>	<b>CIVIC</b>
Front Build-to-Line	Minimum Maximum	10 feet 20 feet	10 feet 20 feet	15 feet 35 feet <sup>3</sup>	None
Side Street Setback	Minimum	10 feet	10 feet	10 feet	None
Side Yard Setback	Minimum	5 feet <sup>1</sup>	5 feet <sup>1</sup>	6 feet	None
Rear Setback (w/o Alley)	Minimum	15 feet	15 feet	15 feet <sup>4</sup>	None
Alley Setback	Minimum	4 feet or 16 feet min <sup>2</sup>	4 feet or 16 feet min <sup>2</sup>	4 feet or 16 feet min <sup>2</sup>	None
Height	Maximum	35 feet	30 feet	30 feet	40 feet <sup>5</sup>
Parking	Minimum	1 per unit 1 per 2 units for Senior/ Afford.	1 per unit 1 per 2 units for Senior/ Afford.	1 per unit	3 per 1,000 sf of GFA <sup>5</sup>

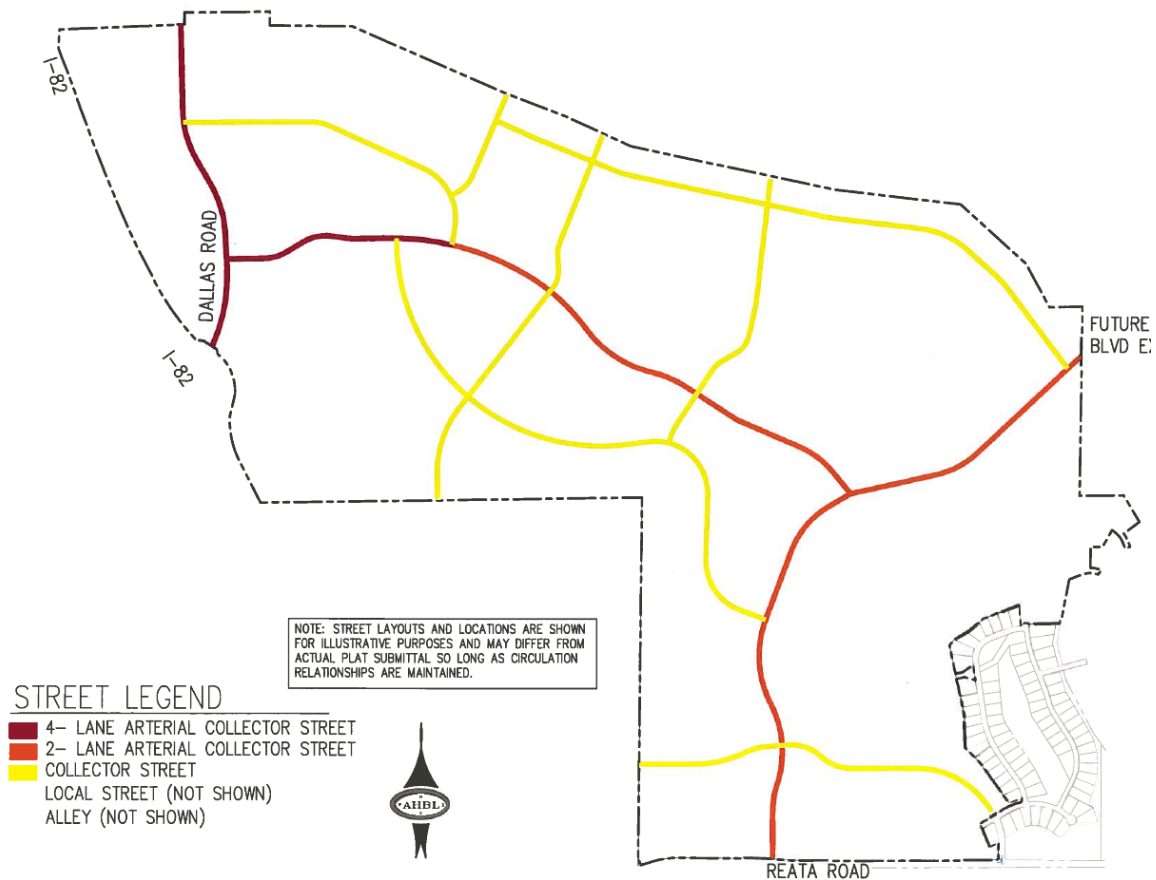
1. Structures may be built with no setback on one side:
  - a. When having a shared common wall at the property line with each structure on an adjacent lot under separate fee ownership; and
  - b. When multiple successive structures on a block face are each placed on the lot with no setback on one side; in this case the other Side Yard setback will be 12 ft. min.
2. Alley setback is measured from edge of Alley easement. To ensure that parking locations off Alley are adequate, buildings shall either be placed at 4 ft. (no parking OR 16 ft. min. (parking).
3. Maximum setback does not apply to lots equal-to or greater than ¼ acre.
4. For lots in the BMS-NE District that border commercial orchards active at the time these development standards are adopted, no residential structures or swimming pools shall be located within 150 feet, measured from the rear property line, bordering such uses. If active agricultural uses cease, then this requirement shall no longer apply.
5. With caveats.



**Figure 7 – BMS Master Agreement Trail Layout Plan**

#### LUDR Trail Standards

The LUDR requires a connected system of pedestrian trails be placed throughout the master planned community. South Orchard proposes a total of 20,473 linear feet of such trails (*Exhibit 1*). The Master Agreement Consistency Recommendation [MACR] submitted for the initial preliminary plat application (S2021-104) indicated a Master Agreement credit of 17,497 linear feet of trails which translates to the availability of 1,094 residential units (*Exhibit 2*). Additional length of trails has now expanded the credit to some 1,121 units. Combined with the 441 residential units made available through the provision of 6.6 acres of parks, this plat is allotted a maximum of 1,562 residential units on a concurrency basis as established in the BMS Master Agreement. Sheet 5 of the included site plan (*Exhibit 1*) provides a detailed breakdown of each trail-type and their associated lengths, trail credits and parks credits. The design standards for trails are provided in Section 5.I of the LUDR. Page 4 of the 2021 MACR (*Exhibit 2*) outlines green infrastructure concurrency calculations in fulfilling the plats' obligation schedule. In this case, construction of the new trails fulfills the plats' green infrastructure obligations. The improvement schedule is likewise outlined in Exhibit D of the BMS master agreement.



**Figure 8 – Regulating Plan for Streets**

### LUDR Street Standards

The plat includes a planned half-mile segment of Gage Blvd which is planned to be a 2-lane arterial collector street. Eventually, Gage Blvd will extend from the southern boundary of the proposed plat at East Reata Road and continue northeast where it will connect to the preliminary plat of Sienna Hills. The segment in South Orchard will be the southernmost connection point at East Reata Road. In total, South Orchard proposes approximately 6 miles of new roadways.

### *Block Standards*

Section 7.B of the LUDR establishes requirements for the configuration of blocks. This section of the LUDR restricts block length from exceeding 1,000 feet. The maximum block length proposed by South Orchard is approximately 985 feet. As allowed in Section 7.B.3 of the LUDR, portions of the site include non-orthogonal street networks in response to topographical and site constraints. Road "O" between intersections of Road "F" and Morningside Parkway has a length of 1,220 feet between roadways; however, one location along its length gives way for trail access to the Orchard Green open space. Considering the trail access to green space, school site, and park site, Planning Staff believe the block length is acceptable with proposed improvements.



The block on the south side of Alison Way between tract 251 and Morningside Parkway measures approximately 1,250 feet. Tract 548 (for landscape & trail) serves to interrupt this block. This method of reducing block length is acceptable and has been used in other BMS plats for the same purpose.

#### *Density Requirements*

The South Orchard project will result in 537 lots available for, but not exclusively limited to, residential development. Two of these lots are designated for multi-family development and twelve (12) parcels are designated for open space/civic land uses. Chapter 7.C of the LUDR establishes density targets for each of the neighborhoods within the Badger Mountain South community. The South Orchard site falls within the South Orchard neighborhood (page 7-3 of the LUDR) which sets a minimum target of 540 units and up to a maximum of 650 units with at least 10% of the areas designated as Neighborhood Collector to be used for multi-family developments or commercial space. In practice, the 10% standard was measured not by the number of lots assigned as single, or, multifamily, but instead on a per-unit basis. Applicant and Staff are aware of two prospective developers proposing no fewer than 160 multi-family residential units on the two proposed multifamily lots, which is well above 10% of the overall residential share required for the Neighborhood Collector area of South Orchard. If built-out as proposed, the 535 single-family homes along with 160 units in multi-family housing would bring the total number of units in South Orchard to 697, above the listed maximum density. However, the boundaries for this plat exceed (are larger than) those proposed originally in the LUDR. Some of this area was originally in the East Market community. Applicant notes that the LUDR (7.C, Note b.) does allow reapportionment of density. Staff believes the expansion of South Orchard beyond its original acreage in the LUDR justifies the 47-unit increase in housing unit density as proposed.

The 2021 MACR (*Exhibit 2*) indicates lots will be developed with a combination of single-family and multi-family residential homes. Page 4 of the 2021 MACR indicates a total of 631 residential units (RU) are anticipated. This figure falls well below the 1,121 residential units available on a concurrency basis. Pursuant to the LUDR Section 1.G(5), final plats must identify housing types allowed on each lot. Section 7.C of the LUDR sets an overall BMS-wide community goal of achieving a composition of 60 percent single-family housing and 40 percent multi-family housing. Currently, a majority of the developed BMS land area is comprised of single-family homes. Development of this plat will contribute toward meeting the stated 40 percent multi-family housing goal as allowed per BMS districting and lots in the Neighborhood Collector district within the current phase. An estimated 160 units are anticipated per the Badger Mountain South Master Plan Administrator [MPA]. Planning Staff and the MPA will need to periodically examine the single-family/multi-family development ratio based on permit-types, to ensure South Orchard achieves the 60/40 ratio.

#### *Procedural Requirements*

Section 1H of the LUDR together with RMC 19.50, requires that a Master Agreement Consistency Determination [MACD] be issued by the Planning Department for any

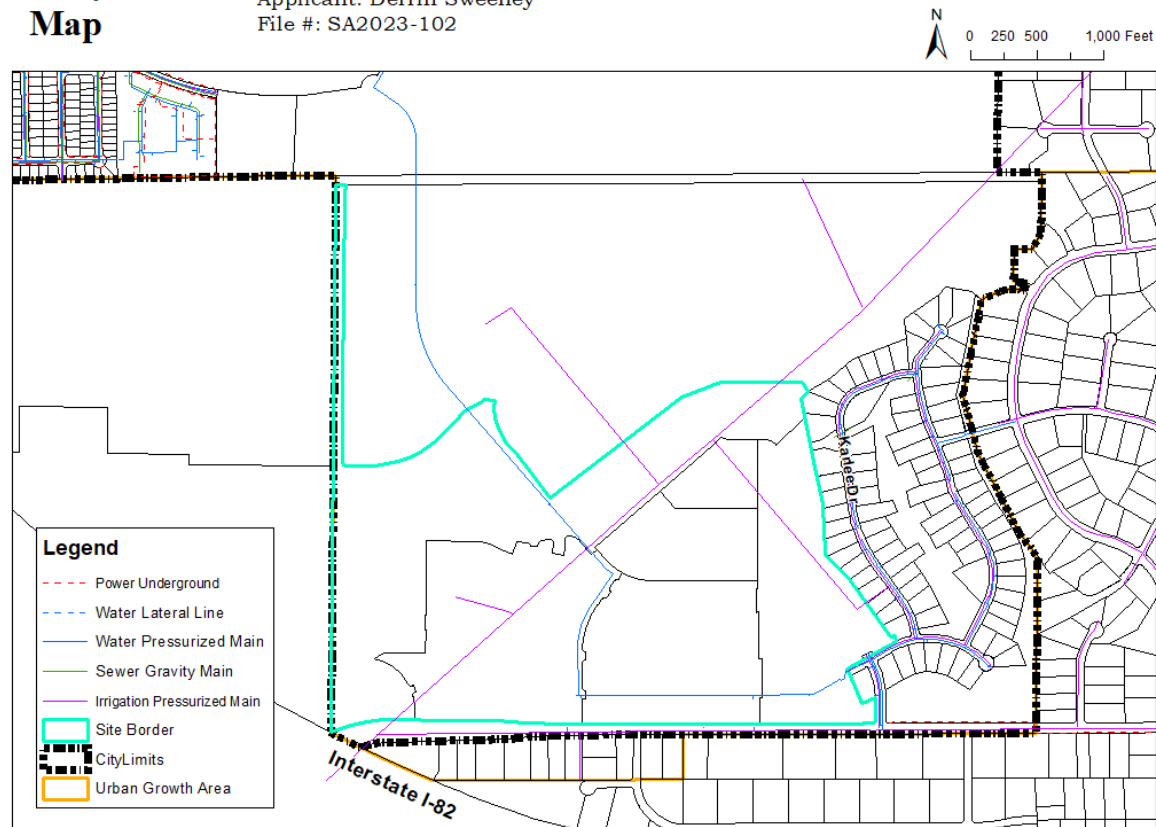
development proposal located within the Badger Mountain South Master Planned Community. This determination is made after consultation with the MPA. An updated Master Agreement Consistency Recommendation was included with this plat application (*Exhibit 1*). Staff has reviewed the current MACR (*Exhibit 1*) and has decided to issue a Master Agreement Consistency Determination (*Exhibit 4*) as justified through the application of recommended approval conditions.

### **UTILITY AVAILABILITY**

There are existing domestic water, sewer, storm, irrigation, and electrical power line connections in place, available within existing rights-of-way near the site with adequate capacity to supply the proposed project.

#### **Utility Map**

Item: 2700 Allison Way - South Orchard Major Plat Amendment  
Applicant: Derrin Sweeney  
File #: SA2023-102



**Figure 9 – Utilities Map**

#### **Sewer**

Available City maps do not indicate the current presence of connected sewer service within the direct vicinity of the South Orchard plat, though the developer is required to connect to City service during construction. Staff does not doubt the applicant's commitment to connecting to City service. Connection can only proceed after the completion of a new sewer pump station and other Dallas Road improvements. Public

Works' Staff has an updated Subarea sewer service plan to reflect current design expectations.

#### Water

City maps do indicate the current presence of water mains within the South Orchard preliminary plat, including a 16-inch ductile iron distribution main under future Gage Blvd., Morningside Parkway and Road D connecting to a 12-inch PVC distribution main under Allison Way, ending at the intersection of Morningside Parkway and East Reata Road. This network will expand as development proceeds, as each house will not only require potable water for domestic consumption, but also to supply residential sprinkler systems. It will be the applicant's responsibility to ensure that waterflows and pressures are sufficient.

#### Power

The City has a 6" conduit with electrical service along East Reata Road to the immediate east of the Morningside Parkway intersection. Power supply will be available to the location to meet future demands. Development interests will be required to make necessary improvements to connect to surrounding network.

#### Stormwater

No stormwater improvements are currently in place or otherwise shown on City maps. That said, per state and local permits, the developer is responsible for retaining stormwater on site. The plat, as conditioned, will meet the various stormwater requirements applicable.

#### Irrigation

There is an existing 18-to-20-inch distribution main (with easement) operated by the Badger Mountain Irrigation District running under the future Road O right-of-way and straight in either direction at the termination of said road. Perpendicular to that alignment, two 10-inch distribution mains lead off from there, with one to the east connecting back to Karlee Drive while the other terminates some 1,700 feet to the west. Reference the pinkish lines in *Figure 9*. These were formerly a part of the irrigation for farming interests in the area. It is understood that connections to this system will be made for future residential use.

### **TRANSPORTATION & ACCESS**

Initially, the plat will have four points of access; they are: 1) from the East Reata Road/Gage Blvd. intersection, 2) from Morningside Parkway at Allison Way, 3) the Road A/East Reata Road intersection, and 4) Road A from the north. As future plats are developed on land to the north, Gage Blvd. will eventually connect to Queensgate Drive/Bermuda Road which will accomplish the first City street connection between BMS and the existing neighborhoods in greater south Richland. Other roads in the plat will tie into the BMS road network, adding three other points of connection.

This area is largely characterized as single-family housing in transition from undeveloped and agricultural uses. As such, there are no significant nodes of employment or shopping amenities via suburban scale commercial, office or industrial

development within close proximity. That said, the City does have a pocket of anticipated neighborhood commercial some 2,000-feet to the north on Gage Blvd. This area already has a Badger Mountain South District designation of Village Mixed Use.

Sidewalks will be installed on streets in accordance with City and LUDR street improvement and street cross-section standards. Existing trails and on-street bicycle lanes are also designated by the LUDR and are appropriately provisioned throughout this current proposal. There are no nearby, current (nor proposed) Ben Franklin Transit bus routes.

#### Traffic Impact Analysis Update

As of May 26, 2023 City Staff have issued their proposed acceptance of the Traffic Impact Analysis [TIA] performed by Transportation Engineering NorthWest [TENW] the previous year (*Exhibit 6* and *Exhibit 7*, respectively). In a letter addressed to the applicant, Staff offer a few recommended changes to the 2022 TIA but otherwise accept the bulk of the analysis, conclusions, and mitigations. The original transportation study was commissioned along with the 2010 Badger Mountain South Final Supplemental EIS [FSEIS] and was subsequently adopted with the aforementioned Badger Mountain South Subarea Plan and approved BMS Master Agreement (2015).

The 2010 study only considered 11 off-site study intersections and 4 on-site study intersections only for the PM peak hour, whereas the 2022 TIA examined future traffic impacts on 26 off-site study intersections and 12 on-site study intersections, considering both AM *and* PM peak hours. All but three studied intersections currently meet the Level-of-Service [LOS] “D” standard with the exception of Dallas Road/I-82 Ramps and the Dallas Road/Arena Road westbound approach.

The 2022 TIA report and 2023 Staff letter agree that every additional 500 p.m. trip milestone reached by the ongoing BMS build-out will trigger a new traffic analysis to be completed. Staff’s recommendations propose improvements to lift certain conflict points above the minimum LOS “D” standard and reimburse more robust improvements to BMS developer, Nor Am. Likewise, the City plans to use the TIA analysis to update its own planning efforts in the area and notify all parties (to include Benton County, City of West Richland, and WSDOT) when new trip milestones are reached via tracking approved building permits. (Note that approved building permits, not approved lot subdivision is the means by which the City tracks p.m. peak trip hours.) Negotiations between Nor Am and the City are ongoing. Nor Am has through June 25, 2023 to respond to the City’s letter.

Staff has compiled the City’s recommended changes to the 2022 TIA as applicable to South Orchard intersections in *Figure 10*. Note at least three of these directly address this Plat (via recommended conditions) as being the trigger for improvements.

**Figure 10 – TIA City Analysis**

#	Study Intersection	TIA Proposed Mitigation	City Recommended Mitigation	Reason for Difference
I	Gage Boulevard / Morningside Parkway	Two-way stop control - Morningside Parkway Approach	Single lane mini-roundabout	Per South Orchard plat conditions.
24	Morningside Parkway / East Reata Road	TIP/Frontage	Stop control on Morningside approach and TWLTL and right-turn lane onto Morningside.	3-lane design per design standard for this road and EB right-turn lane per WSDOT guidance.
25	Gage Boulevard / East Reata Road	TIP/Frontage	Roundabout - single lane	Per South Orchard plat conditions, meets need for roundabout.
26	Unnamed N/S (aka Southgate) / East Reata Road	TIP/Frontage	Stop control on Unnamed N/S (Road A) approach and TWLTL and right-turn lane on East Reata.	Per South Orchard plat conditions.

#### Parking

Off-street parking requirements are determined by District-specific standards found within the Badger Mountain South Master Agreement, Exhibit C, also known as the Land Use Development Regulations, or, LUDR.

#### EASEMENTS

There are several easements currently encumbering the property. A few appear to be in place to reserve area for rights-of-way near East Reata Road, including Allison Way and Morningside Parkway. There is an easement associated with the 10-inch irrigation connection back to Karlee Drive as well. Finally, the “-P” special district has two easements, one for utilities and a second for a SEVA access. Developers will need to contemporize these easements going forward.

#### FIRE SAFETY

The City of Richland Fire Department will provide fire protection services to the subject property and resulting development. Currently, according to City maps, there are only two hydrants within the plat. One hydrant is along Allison Way in front of lot 431 and the other is inside of the Road D/Allison Way intersection, which will need to be repositioned for future build-out. This development is conditioned on the installation of a number of fire safety assets, including fire hydrants.

**SCHOOLS**

The plat falls within the boundaries of the Kennewick School District. The school district anticipates the siting of a future elementary school within the plat. Secondary education is anticipated to be placed immediately to the west of Road A in Benton County.

**PARKS**

There are at least 19.71 acres of planned park and open space, 20,473 linear feet of trails, and 5.66 acres of miscellaneous open space associated with this plat. Additionally, each home will contribute to the development of parks through payment of parks impact fees. Staff concludes park and park-related amenities satisfy the requirements of the various development standards applicable to South Orchard and the requirements of LUDR Section 1.F.1(c) also known as the “3-block proximity rule”.

**SEPA**

A Supplemental Final Environmental Impact Statement was completed for this site at the time the City adopted the subarea plan for the Badger Mountain South area in 2010. The property was annexed and the City adopted a Planned Action Ordinance (RMC 19.50). The effect of the Planned Action Ordinance is that standard SEPA review is not required, provided that any project proposed within the boundaries of the master planned community is consistent with the master plan and with the mitigation measures identified in the adopted SEPA documents/process. Projects determined to be consistent with the subarea plan, the Master Agreement between the City and Nor Am Investment, and the mitigation measures enumerated in the adopted SEPA documents are issued a Planned Action Consistency Determination (PACD) (*Exhibit 5*).

**Critical Areas**

Part of the subject site does lie within an existing, recognized 10-year Aquifer Recharge Area. This was within the scope of the original EIS performed for BMS and any impacts have since been accounted for. See 2010 Badger Mountain South Final Supplemental EIS [FSEIS], page 16.

**Shoreline Master Program**

The subject site lies outside of the jurisdiction of the Shoreline Master Program. This project will have no effect on shorelines of statewide significance. Shoreline permitting requirements are not applicable with this proposal.

**AGENCY COMMENTS**

A variety of public agencies and City departments were given an opportunity to comment on the proposal. Copies of all agency comments received by the City are included as *Exhibit 9*.

**PUBLIC NOTICE**

Application Date:

May 9, 2023

Notice of Hearing Mailed:

May 22, 2023

Notice of Hearing Posted:

May 22, 2023



Notice of Hearing Published:  
Public Hearing:

May 28, 2023  
June 12, 2023

A combined notice of application and SEPA Optional DNS determination was provided by mailing notices to property owners within 300 feet. Public hearing notices were distributed through posting of the property, mailing of notice to property owners within 300 feet of the site and publication in the Tri-City Herald newspaper. Copies of the notices and affidavits are included in *Exhibit 8*.

### **PUBLIC COMMENTS**

At the time this report was prepared, the City has received public comment. In particular, neighbors are concerned about the scope of the future Gage/East Reata intersection. See *Exhibit 10* for the submitted comments.

### **ANALYSIS**

The criteria for approval of a preliminary plat application (RMC 24.12.053) are reprinted here, with a summary of how the application complies with the requisite standard:

- A. *The preliminary plat conforms to the requirements of this title (RMC Title 24)*
- Section 24.04.060 of the RMC specifies that when the City enters into a development agreement governing the development of a master planned community of over 1,000 acres, the provisions of the agreement supersede the provisions of the City's subdivision regulations. In this case, the Badger Mountain South LUDR takes precedence over the standards contained in the subdivision regulations.
  - That said, the City's subdivision regulations set forth specific requirements for the filing of a plat application, giving public notice of the application, and requiring that the Hearing Examiner conduct a public hearing and make a final decision. These steps have and will be followed by City Staff.
  - Certain LUDR provisions can only be addressed at the time home building permits applications are received by the City. Notice of these LUDR requirements will be provided through notes on the final plat document, thereby informing future lot purchasers that homes constructed within the plat will have to be provided with fire sprinkler systems; that home builders will be subject to park mitigation fees; and that future construction will have to meet the sustainability standards contained in Section 12 of the LUDR and with the design requirements established within Sections 3 and 8 of the LUDR.
- B. *Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;*
- Several parks and other recreational amenities will be developed within the project site.

- The plat will be served by City domestic water lines currently existing within the project site. Water lines shall have capacity to provide for the proposed project.
  - The plat will be served by City sanitary sewer service currently existing adjacent to the project site. Sewer lines shall have capacity to provide for the proposed project.
  - The plat will be served by Richland Energy Services currently existing adjacent to the project site. Electric service shall have capacity to provide for the proposed project.
  - The plat will be served by Badger Mountain Irrigation District. In the recent past, the district provided water to the agricultural uses on-site. Conversion of the property from agricultural to residential uses will not result in an increase in the amount of irrigation water usage.
  - The site is located within the Kennewick School District. The District owns property surrounded by the plat site, which it intends to develop with a future school.
  - The proposed plat proposes roughly 19.71 acres of open spaces and parks. Additionally, each home will contribute to development of parks through payment of parks impact fees.
  - The plat includes a plan for grading and drainage. The provisions of the planned action for Badger Mountain South requires that the Department of Ecology Stormwater Management Manual for Eastern Washington be used in the design of drainage plans.
  - The proposed street system will provide access from East Reata Road, Gage Blvd. and other new roadways coming in from the north. Richland's Comprehensive Plan indicates East Reata Road is classified as a major collector roadway in the Badger Mountain South community. All streets within the project will be public streets built to the standards identified in the proposed LUDR amendment.
  - The plat will create a segment of Gage Blvd. connecting to East Reata Road.
  - Roadways will also be developed within the plat with sidewalks built to LUDR standards. A contiguous sidewalk network throughout the Badger Mountain South area will contribute to recreational opportunities for residents. The LUDR regulations call for the payment of a park mitigation fee for each dwelling unit constructed within the plat.
  - The project provides for walking paths and sidewalks throughout the subdivision which will accommodate and provide safe walking routes and conditions for school children walking to and from the future planned school site.
- C. *The public use and interest will be served by the platting of such subdivision and dedication;*
- The proposed project is consistent with the Comprehensive Plan and Badger Mountain South Subarea Plan, the Badger Mountain South Master Agreement (including Exhibit C, or, the LUDR), and City design and development regulations. It proposes, parks, trails, housing, and space for a new school, all greatly sought-after amenities (if not desperately needed)

in the area. As conditioned, the proposed project is in the best interest of the public for the reasons of expanding the City's utility and transportation network, enhancing transportation connectivity, increasing parks/open-spaces, providing place for expanded education services, and by contributing to meeting housing demands.

- D. *The application is consistent with the requirements of RMC 19.60.095, which states: No development application for a Type II or Type III permit shall be approved by the City of Richland unless the decision to approve the permit application is supported by the following findings and conclusions:*
- a. The development application is consistent with the adopted comprehensive plan and meets the requirements and intent of the Richland Municipal Code..*
  - The proposal is generally consistent with the intent of the Comprehensive Plan, Badger Mountain South Subarea Plan, the Badger Mountain South Master Agreement, Exhibit C (or LUDR), and as conditioned will meet requirements of the Municipal Code as outlined above.
  - b. Impacts of the development have been appropriately identified and mitigated under RMC Chapter 22.09.*
  - The Chapter 22.09 is the City's adoption of the State Environmental Policy Act provisions. The project falls under the Planned Action Ordinance (RMC 19.50.030) adopted by the City in 2010, which is based on the Supplemental Final Environmental Impact Statement adopted in the Badger Mountain South Subarea Plan. The City intends to apply certain road improvement conditions to project approval.
  - c. The development application is beneficial to the public health, safety and welfare and is in the public interest.*
  - The project is consistent with the City's Comprehensive Plan, the Badger Mountain South Subarea Plan, the Badger Mountain South Master Agreement (including Exhibit C, Land Use Development Regulations [LUDR], and, customary City development regulations. It proposes not only to add much needed housing inventory but also educational and recreational amenities. It is considered by Staff to be beneficial to public health, safety and welfare and in the public interest. As mentioned above, Staff is recommending development requirements in the form of conditions, aimed at ensuring the development does not generate any significant impacts which would be detrimental to the peaceful enjoyment of existing land uses in the surrounding vicinity.
- E. *The development does not lower the level of service of transportation facilities below the level of service D, as identified in the Comprehensive Plan; provided, that if a development application is projected to decrease the level of service lower than level of service D, the development may still be approved if improvements or strategies to raise the level of service above the minimum level of service are made concurrent with development. For the purposes of this section, "concurrent with development" means that required improvements or strategies are in place at the time of occupancy of the project, or a financial commitment is in place to complete the required improvements within six years of approval of the development.*

- The project must follow the environmental mitigation as specified in the City's adopted Planned Action Ordinance. As such, the development is tasked with improving transportation facilities to prevent affected roadways from falling below a level of service D. The BMS Master Agreement, Exhibit B, lists a series of transportation-related improvements and study requirements and their associated triggers in terms of peak p.m. vehicle trip volumes. As previously discussed, Exhibit B is nearing a complete update following a 2022 Traffic Impact Analysis by Transportation Engineering NorthWest [TENW]. As discussed in *Transportation & Access*, the City has recently approved this TIA with a limited number of modifications. South Orchard preliminary plat conditions of approval borrow recommendations from said transportation improvements and are applied as recommended conditions of approval. Nor Am is currently reviewing City comments on the TIA. Public Works Staff are confident their recommended conditions of approval adequately mitigate the transportation impacts of the plat.
- F. *Any conditions attached to a project approval are as a direct result of the impacts of the development proposal and are reasonably needed to mitigate the impacts of the development proposal.*
  - The conditions of approval recommended for this project are as a direct result of imposing City design standards and development standards as contained in City Code, the Master Agreement, including the LUDR, and in the environmental mitigation conditions identified in the FSEIS, and, are directly related to the impacts of the proposed development.

## **FINDINGS, CONCLUSION, AND RECOMMENDATION:**

### **Findings of Fact**

1. The property owner in this matter is Badger Communities, LLC. The applicant and lead contact in this matter is Darrin Sweeney.
2. The proposal area is within the jurisdiction of the Richland Comprehensive Plan and the Badger Mountain South Subarea Plan. The project site is located within the Badger Mountain South Master Planned Community. The property is subject to the provisions of the Land Use and Development Regulations [LUDR] adopted for this planned community.
3. All proposed developments subject to the Badger Mountain LUDR regulations are required to be reviewed by the Badger Mountain South Master Plan Administrator [MPA]. The Administrator has issued a Master Agreement Consistency Recommendation (as provided for in Section 1.H of the LUDR) stating that the application meets the terms and obligations of the approved Master Agreement and the requirements of the LUDR.
4. The City has adopted a Planned Action Ordinance for the Badger Mountain South Master Planned Community.
5. The proposed plat lies within the South Orchard neighborhood area identified in section 7.D of the Badger Mountain South LUDR.
6. The project calls for the development of trails in a schedule which is consistent with the green infrastructure improvements called for in the Master Agreement between the City and Nor Am investment, LLC.

7. The proposed plat includes provisions for sidewalks and trails as set forth in the LUDR.
8. The proposed preliminary plat consists of a 174.37-acre site into 537 residential lots and twelve (12) tracts.
9. Improvements proposed to serve the preliminary plat will be consistent with the City's development standards by applying municipal code provisions.
10. The proposed preliminary plat includes provisions for the extension of domestic and irrigation water lines, electrical power lines, and sewer lines to serve the project.
11. The preliminary plat of South Orchard was previously approved via S2021-104.
12. RMC 19.60.095(D) requires that development not lower the level of service standard for transportation facilities below a level of service D.
13. According to Richland Municipal Code (Chapter 22.12), the project is subject to payment of park mitigation fees, which will be used to fund future park improvements within the Badger Mountain South Master Planned Community.
14. The plat illustrates three park sites (Orchard Green) totaling 19.71 acres.
15. No bus service is currently provided in the vicinity of the project site. The Benton Franklin Transit Authority was given an opportunity to comment on the project but did not provide any comments.
16. City Staff and other agencies reviewed the project and have recommended specific conditions of approval as listed in this report.
17. Section 24.12.053 of the RMC sets forth standards for review of preliminary plats that require the Hearing Examiner to consider whether appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.
18. The site is located within the Kennewick School District. The District owns property surrounded by the plat site, which it intends to develop with a future school.
19. The Badger Mountain Subarea Plan identifies sites for future public schools. This South Orchard plats amendment surrounds, but does not include, a future 14-acre school site currently the benefit of the Kennewick School District.
20. Pursuant to RCW 43.21C.440.3(b) a county, city, or town is not required to make a threshold determination and may not require additional environmental review, for a proposal that is determined to be consistent with the development or redevelopment described in the Planned Action Ordinance.
21. Under the provisions of the Planned Action Ordinance, projects are not reviewed through standard State Environmental Policy Act provisions. Rather, review is conducted to determine if the proposed project is consistent with the mitigation measures enumerated in the Master Agreement.
22. The Badger Mountain South Final Supplemental Environmental Impact Statement did not address potential impacts of the development on cultural/historic resources.

23. The subject site is within a 10-year Aquifer Recharge Area. Separate Critical Area requirements are not applicable with this proposal since it was within the scope of the FSEIS.
24. The subject site lies outside of the jurisdiction of the Shoreline Master Program. This project will have no effect on shorelines of statewide significance. Shoreline permitting requirements are not applicable with this proposal.
25. Both the MACR and the preliminary plat document indicate 20,473 linear feet of trails to be constructed.
26. The comment letter from the Washington State Department of Archaeology and Historic Preservation dated June 24, 2021 as included in the S2021-104 Staff Report, requested a professional archaeological survey be performed and the results thereof to be submitted to the Department for review prior to beginning ground-disturbing activities. The Hearing Examiner's December 16, 2021 Decision (*Exhibit 4*) Condition L chose to require an Inadvertent Discovery Plan. Staff would ask the Hearing Examiner to continue that Condition in the upcoming decision on this item, if approved.
27. The MPA issued a Master Agreement Consistency Recommendation [MACR] for the revised plat on May 8, 2023 (*Exhibit 1*).
28. Planning Staff issued a Master Agreement Consistency Recommendation [MACD] for the revised plat, on May 30, 2023 (*Exhibit 4*).
29. Planning Staff issued a Planned Action Consistency Determination [PACD] on May 30, 2023 (*Exhibit 5*).
30. The plat drawing does not represent transportation improvements required by the BMS Master Agreement nor those proposed in the traffic impact analysis by TENW and as contained in the traffic impact analysis letter and report (*Exhibit 6* and *Exhibit 7*). This discrepancy is addressed by way of recommended approval conditions.

#### Conclusions of Law

1. The proposed preliminary plat is consistent with the Badger Mountain South Subarea Plan and would provide for development of the subject property in conformance with the density and type of land use envisioned in the land use and transportation elements of the adopted BMS master plan.
2. Pursuant to RMC Chapters 19.50, 22.09 and 22.10, the procedures required under the State Environmental Policy Act have been followed.
3. As conditioned, the proposed preliminary plat makes appropriate provisions for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.
4. Pursuant to Chapters 22.09 and 22.10 of the RMC, the procedures required under the State Environmental Policy Act and the City's Critical Areas Ordinance are complete.
5. Recommended approval conditions ensure consistency with the provisions of RMC 19.60.095(D). Mitigating transportation improvements derived from the



2022 traffic impact analysis by TENW and as further recommended by Public Works Staff, are applied as approval conditions.

### Recommendation

Staff has completed its review of a proposed major amendment for the South Orchard preliminary plat (SA2023-102) and recommends approval of the request subject to conformance with the recommended conditions of approval, below, which are warranted because the project shall conform to the City's adopted Comprehensive Plan, the Badger Mountain South Subarea Plan, the Badger Mountain South Master Agreement (including Exhibit C, or, the Land Use Development Regulations [LUDR]); and is consistent with the requirements of the City's subdivision regulations. City Staff has likewise issued a Planned Action Consistency Determination [PACD] and a Master Agreement Consistency Determination [MACD] for the plat, also subject to the recommended conditions of approval listed herein.

## **RECOMMENDED CONDITIONS OF APPROVAL**

### **PUBLIC WORKS CONDITIONS**

#### **Pre-Plat Specific Conditions**

1. The following street names have previously been approved for this preliminary plat, and should be reflected on the submitted pre-plat amendment:
  - "Road A" = Southgate Way
  - "Road B" = Tarragon Ave.
  - "Road F" = Sumac Ave.
  - "Road G" = Nuthatch St.
  - "Road I" = Scout St.
  - "Road J" = Boxberger St.
  - "Road K" – Stardust St.
  - "Road N" = Grapeview St.
  - "Road O" = Savanna St.
  - Proposed road names for Roads "L" and "M" need to be submitted for review.
2. If any of the tracts have the potential to one day become building lots, utility stubs should be provided to them to avoid the need to cut new streets.
3. Any future storm drainage tracts will be dedicated to the city for ownership. The "Tract Note" on sheet 5 of the pre-plat should be amended to include this.

#### **General Conditions**

4. All final, approved plans for public improvements shall be submitted prior to pre-con on a 24" x 36" hardcopy format and also electronically. Addendums are not allowed, all information shall be supplied in full size (and electronic) format. When construction of the public infrastructure has been substantially completed, the applicant shall provide paper and electronic record drawings in accordance with the City's "Record Drawing Requirements". The electronic record drawings shall be submitted in an AutoCAD format compatible with the City's CAD software. The final record drawings shall be submitted and approved by the City

- before the final punchlist inspection will be performed. All final punchlist items shall be completed or financially guaranteed prior to final plat.
5. A copy of the construction drawings shall be submitted for review to the appropriate jurisdictions by the developer and his engineer. All required comments / conditions from all appropriate reviewing jurisdictions (e.g.: Benton County, any appropriate irrigation districts, other utilities, etc.) shall be incorporated into one comprehensive set of drawings and resubmitted (if necessary) for final permit review and issuance. Any and all necessary permits that may be required by jurisdictional entities outside of the City of Richland shall be the responsibility of the developer to obtain.
  6. Any work within the public right-of-way or easements or involving public infrastructure will require the applicant to obtain a right-of-way construction permit prior to beginning work, per RMC Chapter 12.08. The applicant shall pay a plan review fee based on a cost-per-sheet of engineering infrastructure plans. This public infrastructure plan review fee shall apply each time a project is submitted for review. Please visit the published fee schedule on the City's webpage to find the current per-sheet fee. A permit fee in the amount equal to 3% of the construction costs of the work within the right-of-way or easement will be collected at the time the construction permit is issued.
  7. Public utility infrastructure located on private property will require recording of a City standard form easement prior to final acceptance of the infrastructure. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final platting. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City.
  8. A pre-construction conference will be required prior to the start of any work within the public right-of-way or easement. Contact the Public Works Engineering Division at 942-7500 to schedule a pre-construction conference.
  9. The contractor and developer shall be responsible for any and all public infrastructure construction deficiencies for a period of one year from the date of the letter of acceptance by the City of Richland.
  10. All plan sheets involving construction of public infrastructure shall have the stamp of a current Washington State licensed professional engineer.
  11. A copy of the preliminary plat shall be supplied to the Post Office and all locations of future mailbox clusters approved prior to installation or final platting.

#### Design Standards

12. Public improvement design shall follow the following general format:
  - A. All materials and workmanship shall be in conformance with the latest revision of the City of Richland Standard Specifications and Details, Public Infrastructure Design Guidelines and the current edition of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction. Please confirm that you have the latest set of standard specs and details by visiting the City's web page.

- B. Fire hydrant location shall be reviewed and approved by the City Fire Marshal.
  - C. All utilities shall be extended to the adjacent property (properties) at the time of construction.
  - D. The minimum centerline finish grade shall be no less than 0.30% and the maximum centerline finish grade shall be no more than 10.0% for local streets. 12% can be allowed for local streets for short distances.
  - E. The minimum centerline radius for local streets shall be 100-feet.
  - F. Final design of the public improvements shall be approved at the time of the City's issuance of a Right-of-way Construction Permit for the proposed construction.
  - G. All public improvements shall comply with the State of Washington and City of Richland requirements, standards and codes.
13. If the City Fire Marshal requires a secondary emergency vehicle access, it shall be included in the construction plan set and be designed to the following standards:
- A. 2-inches compacted gravel, minimum (temp. SEVA only).
  - B. 2% cross-slope, maximum.
  - C. 5% slope, maximum. Any access road steeper than 5% shall be paved or be approved by the Fire Marshal.
  - D. Be 20-feet in width.
  - E. Have radii that are accommodating with those needed for City Fire apparatus.
- Secondary emergency vehicles accesses (SEVA's) shall be 20-feet wide, as noted. Longer secondary accesses can be built to 12-feet wide with the approval of the City of Richland Fire Marshal, however turn-outs are required at a spacing acceptable to the Fire Dept. Temporary SEVA's shall be constructed with 2-inches of compacted gravel, at a minimum. Permanent SEVA's shall be paved with 2-inches of asphalt over 4-inches of gravel, at a minimum.
14. SURVEY MONUMENT DESTRUCTION: All permanent survey monuments existing on the project site shall be protected. If any monuments are destroyed by the proposed construction the applicant shall retain a professional land surveyor to replace the monuments and file a copy of the record survey with the City.
- A. No survey monument shall be removed or destroyed (*the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible*) before a permit is obtained from the Department of Natural Resources (DNR). (WAC 332-120-030(2) and RCW 58.09.130).
  - B. Any person, corporation, association, department, or subdivision of the state, county or municipality responsible for an activity that may cause a survey monument to be removed or destroyed shall be responsible for ensuring that the original survey point is perpetuated. (WAC 332-120-030(2)).

- C. Survey monuments are those monuments marking local control points, geodetic control points, and land boundary survey corners. (WAC 332-120-030(3)).

When a monument must be removed during an activity that might disturb or destroy it, a licensed Engineer or Land Surveyor must complete, sign, seal and file a permit with the DNR.

It shall be the responsibility of the designing Engineer to identify the affected monuments on the project plans and include a construction note directing them to the DNR permit.

#### Traffic & Streets

15. The South Orchard preliminary plat is subject to the City's traffic impact fee program (RMC 12.03). The program includes street and intersection improvements sufficient to mitigate the off-site impacts of this project. The developer of this proposed project may receive credit for construction of the improvements listed in RMC 12.03.
16. The developer provided a Badger Mountain South Traffic Impact Analysis dated February 16, 2022 as required in Exhibit B, Section 5.3 of the Master Development Agreement. The City has accepted the analysis with City proposed changes and transmitted such to the developer. The developer has 30 days upon receipt to contest the proposed changes. If no rebuttal from the developer is received, the City considers the requirements in Exhibit B, Section 5.3 of the Master Development Agreement satisfied for this plat. Final plat approval will not be granted for the first phase of this project until the Badger Mountain South Traffic Impact Analysis is accepted by the Public Works Department.
17. This project will create impacts that shall be mitigated with the following improvements:
  - A. The Gage Blvd./Reata Road intersection improvements shall include the construction of a roundabout designed for the 2040 anticipated full build-out traffic volumes. This intersection should be completed with the phase of construction that connects Gage Boulevard to Reata Road.
  - B. The Gage Blvd./Morningside Parkway intersection improvements shall include a roundabout or mini-roundabout to account for both on-site and planned off-site future peak traffic volumes related to development traffic from the west. These intersection improvements shall be completed along with the phase that constructs the Gage/Morningside intersection.
  - C. The Road A ("Southgate Way")/Reata Road intersection improvements shall include a westbound right turn lane from Reata onto Road A, and a southbound right turn lane from Road A onto Reata. These intersection improvements shall be completed along with the phase that constructs the Road A/Reata Road intersection.
  - D. The Morningside Parkway/Reata Road intersection improvements shall include a westbound right turn lane from Reata onto Morningside, an eastbound left turn lane from Reata onto Morningside, and a southbound right turn lane from Morningside onto Reata. These intersection

improvements shall be completed along with the phase that completes the Morningside Parkway corridor.

- E. Allison Way and Morningside Parkway shall have frontage improvements installed on these existing roadways beginning from Lot 431, proceeding around the corner to the intersection with Reata Road. The east side of Morningside Parkway shall also have frontage improvements installed from Reata Road to the SE corner of the intersection. Frontage improvements shall consist of curb & gutter, sidewalk (or separated pedestrian pathway), additional paving as needed, storm drainage facilities, and street lighting. Pedestrian connectivity is needed from the South Orchard plat to Reata Road.
- 18. The Gage Blvd./Road N ("Grapeview St.") intersection is anticipated as needing a roundabout when future development continues the extension of Gage Blvd. to the north. Adequate right-of-way shall be provided at this intersection for the anticipated roundabout.
- 19. The developer shall conduct a preliminary design of the horizontal and vertical alignment of Gage Blvd. and Road A ("Southgate Way") to a point at least 500-feet offsite to the north, or to its next northerly intersection, whichever is further, to confirm the most appropriate alignment. These designs shall be completed concurrent with phase 1.
- 20. Gage Blvd., Road A ("Southgate Way") and Road N ("Grapeview St.") will be classified as "Major Collectors". On-street parking and driveway accesses for single family lots will not be permitted onto Major Collector streets. Morningside Parkway will be classified as a Minor Collector.
- 21. A note will be included on the face of the final plat stating that no driveways will be allowed directly onto Reata Road with the exception of Lot 1. Proposed driveways from Lot 1 onto Reata Road will need to be approved by the City of Richland Traffic Engineer.
- 22. Lots fronting on Gage Blvd. shall take access from a rear alley easement. Single family residential driveway access to Gage Blvd. will not be permitted.
- 23. The City anticipates an update to the LUDR in the near future that will revise the standard street cross sections throughout Badger Mountain South. The developer is requested to consult with Public Works regarding the anticipated cross section changes and to utilize them in anticipation of the LUDR update being completed. Alternatively, this project shall utilize street cross section designs in the LUDR as it exists at the time of infrastructure permitting.
- 24. Benton County has transferred the Reata Road right of way adjacent to the South Orchard plat to the City's jurisdiction. The intersection designs and Reata Road widening shall be reviewed and approved by the City.
- 25. Traffic calming measures may be required, as approved by the Traffic Engineer.
- 26. The entire road section of Morningside Parkway shall be constructed full-width when the phase that constructs it adjacent to the vacant parcel is developed ("APN 1-0488-400-0002-001"). Sidewalks and street lights can be installed when that vacant parcel is developed.
- 27. A ten-foot public utility easement adjacent to the Reata Road frontage shall be provided on the face of the final plat.

28. Sidewalks shall be installed along all public right-of-way frontages that building lots do not front on during construction of those phases (e.g., storm drainage ponds, parks, HOA tracts, etc.).
29. The developer and his engineer shall demonstrate on the construction plans that all future driveways, sidewalks and pedestrian ramps will meet City and ADA requirements, and also provide at least 5-feet of separation between driveway and/or pedestrian ramp transitions.
30. Pedestrian ramps shall be designed to current City standard details and A.D.A. standards. Adequate right-of-way shall be provided at corners to allow for at least 1-foot of ROW behind the ped. ramp landing. Crosswalks between pedestrian ramps shall be designed to City standards. Crosswalks at stop-controlled intersections shall have cross-slopes less than 2%. Crosswalks crossing thru-streets shall have cross-slopes less than 5%. The road profile shall be designed to accommodate this.
31. The vision-clearance triangle shall be shown on all corner lots (including access easements that serve multiple homes) on both the construction plans and the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in or within 500-feet of a curve, it will have to be evaluated per AASHTO guidelines. The assumed speeds for sight triangle evaluation are 35 mph for Major Collectors, 30 mph for Minor Collectors and 25 mph for local streets. This information shall be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
32. All private roads (alleys) shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements.
33. The proposed "alley" road section shall be a private access which is for the use and benefit of the homeowners that abut it, and are to be maintained by the adjacent property owners and/or the HOA. The City of Richland accepts no maintenance responsibility for these rear alley easements.
34. All intersections of private shared driveways and alleys with City streets shall be standard commercial driveway drops constructed to City standards.
35. Street signs indicating any restricted parking areas shall be installed prior to final platting at the developer's expense. The restricted parking areas shall be indicated on the construction plans and the final plat. All signage will be installed by the developer prior to final platting.
36. All roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements. Homes whose sole access is the proposed "rear alley" road section may have to place their garbage cans at locations acceptable to City solid waste collection vehicles.
37. If the project is to be constructed in phases, all dead-end streets longer than 150-feet that will be continued later need to have temporary turnarounds built at the end of them. If the temporary turnaround is not located within the final plat an easement with a 50-foot radius will be required.

#### Domestic Water

38. Any grading operations that take place near or over the top of the existing domestic water main shall ensure that adequate cover remains over the water main so as to protect it from breakage or freezing. It shall be the responsibility

- of the developer to re-install any water mains that have too little (or too much) cover over them as a result of grading operations, or that will result in this water main being in a building lot. This water main needs to be within the roadway whenever possible. The existing main shall be exposed and surveyed at multiple locations as part of the grading permit application.
39. The proposed preliminary plat is located within the "Tapteal IV" water pressure zone. It shall be the responsibility of the developer to extend a watermain to and through this property to serve domestic water at the time of plat construction. The water system shall be sized to adequately supply domestic water and fire flows to the proposed development. These water mains shall be extended to the boundaries of the pre-plat.
  40. If the homes within this preliminary plat are required to install residential fire sprinkler systems the sprinkler systems shall be the flow-through type in compliance with the City's cross connection control program.
  41. The fire hydrant layout shall be approved by the City Fire Marshal.
  42. In accordance with Richland Municipal Code Chapter 18.16.080, an irrigation source and distribution system, entirely separate from the City's domestic water system, shall be provided for this development. *Construction plans will not be accepted for review until adequate and viable proof of an irrigation source is made available by the developer.* The designing Engineer shall submit plans for the proposed irrigation system to the Irrigation District with jurisdiction over the property at the same time that they are submitted to the City for construction review. Plans shall be reviewed and accepted by said irrigation district prior to issuance of a Right-of-Way permit by the City. Easements shall be provided on the final plat for this system where needed.

#### Sanitary Sewer

43. It shall be the responsibility of the developer to extend a sewer main to this property to serve sanitary sewer at the time of plat construction.
44. This preliminary plat may receive City sanitary sewer service only after completion of a new sewer pump station and required improvements to the existing Dallas Road sewer pump station are completed. The developer shall complete the sewer system design and construction required to serve this project. If the developer constructs capacity beyond the needs of this project it will be eligible for a latecomer agreement per Richland Municipal Code.
45. A 10-foot wide exclusive sanitary sewer easement shall be provided for any sewer main that is outside of the public Right-of-Way. Wider easements are required for mains that are buried deeper than 10-feet. If any manholes are located outside of the public Right-of-Way, maintenance truck access to said structure may be required.
46. Sanitary sewer shall be extended to the adjoining properties adjacent to the preliminary plat, where appropriate and where grade allows.

#### Stormwater

47. All construction projects that don't meet the exemption requirements outlined in Richland Municipal Code, Section 16.06 shall comply with the requirements of the Washington State Department of Ecology issued Eastern Washington

- NPDES Phase II Municipal Stormwater Permit. The Developer shall be responsible for compliance with the permit conditions. All construction activities subject to this title shall be required to comply with the standards and requirements set forth in the Stormwater Management Manual for Eastern Washington (SWMMEW) and prepare a Stormwater Site Plan. In addition, a Stormwater Pollution Prevention Plan (SWPPP) or submission of a completed erosivity waiver certification is required at the time of plan submittal. The City has adopted revised standards affecting the construction of new stormwater facilities in order to comply with conditions of its NPDES General Stormwater Permit program. This project, and each phase thereof, shall comply with the requirements of the City's stormwater program in place at the time each phase is engineered. The project will require detailed erosion control plans.
48. All public storm drainage systems shall have their flow rate and storage capacity designed by a professional engineer following the core elements defined in the latest editions of the Stormwater Management Manual for Eastern Washington, the current Richland municipal codes, the Phase II Municipal Stormwater Permit, and the City's "Public Infrastructure Construction Plan Requirements and Design Guidelines". The storm water calculations shall be stamped by a professional engineer and shall include a profile of the storm system showing the hydraulic grade line. The calculations should include an accurate delineation of the contributing drainage area to accurately size the stormwater facilities. Passing the storm water downhill to an existing storm system will require an analysis of the downstream storm system to determine its capability of accepting the storm water without being overwhelmed. The applicant's design shall provide runoff protection to downstream property owners.
  49. If any existing storm drainage or ground water seepage drains onto the proposed site, said storm drainage shall be considered an existing condition, and it shall be the responsibility of the property developer to design a system to contain or treat and release the off-site storm drainage.
  50. If there are any natural drainage ways across the proposed pre-plat, the engineered construction plans shall address it in accordance with Richland Municipal code 24.16.170 ("Easements-watercourses").
  51. Any proposed storm drainage retention facilities within the boundary of the proposed preliminary plat shall not adversely affect neighboring properties.
  52. Prior to or concurrent with the submittal of the first phase the developer shall provide a Geotechnical report including the percolation rate of the soils in the area of any storm retention ponds. If the project constructs a storm retention pond then the engineer will need to demonstrate that the pond will drain itself within 72 hours after the end of a storm event, and not have standing water in it longer than that. Engineering solutions are available for retention ponds that do not percolate within 72 hours.
  53. As per RMC chapter 24.20.070 and the City of Richland's Comprehensive Stormwater Management Plan, the storm drainage system installed as part of this plat may need to be oversized in order to handle the additional flow from future developments in the vicinity. The storm drainage system for this development, both its conveyance and retention / infiltration components, shall



be designed to effectively manage runoff from upstream properties that can be anticipated to convey stormwater onto this property because of a pre-development runoff condition, or as a result of flows discharged that are in excess of the design storm from the upstream property. Additionally, as this property is upslope of developed properties the stormwater system shall include provisions for possible discharge of runoff onto downslope properties from storms in excess of the design storm as described above. Those provisions may be required to include off-site downslope conveyance facilities and/or flowage easements allowing for the conveyance of stormwater to and across downslope properties.

54. The amount of post-development storm runoff from the proposed site shall be in compliance with RMC Chapter 16.06.
55. Stormwater collection pipes shall be extended to the adjoining properties adjacent to the plat, where appropriate and where grade allows.
56. The parcel occupied by the stormwater basin shall be identified as a separate parcel or tract on the final plat and shall be dedicated to the City stormwater utility. The design of the basin shall include access features meeting the city's needs for maintenance.
57. The developer shall consider the long-term appearance of the storm basin, particularly if it will occupy a prominent location in the development. The City's typical storm pond maintenance practices consist of semi-annual vegetation trimming and silt and debris removal. If the pond location is deemed by City staff as being in a prominent location the developer shall design and install fencing and/or landscaping to mitigate the pond's visible character for the surrounding properties. If the City requires this type of treatment to the pond site the developer may propose landscaping treatments consistent with the development and establish maintenance responsibilities to remain with the development. These maintenance responsibilities shall be noted on the final plat. Basins designed as detention and evaporative basins need to include plantings that will tolerate or thrive in standing water. Planting designs for areas not routinely exposed to water shall include plants that will thrive without irrigation unless the developer intends to maintain an irrigated pond site. At a minimum the landscaping plan should be consistent with the City's intended maintenance standard as described above.
58. The developer shall be responsible for landscaping the storm pond and for its maintenance and the plantings through the one-year infrastructure warranty period. At 11 months after the final acceptance date the developer shall clean the storm system and basin of all accumulated oil, sediment, and debris. After this maintenance is completed and inspected the City will begin routine maintenance of the system and basin. The developer shall replace any plantings that have failed to survive the warranty period. The developer shall also perform trimmings required to control weeds in excess of 18-inches in height for the 12-months following the date of final plat acceptance.

#### Final Platting / Project Acceptance Requirements

59. When the construction is substantially complete a paper set of "record drawings" shall be prepared by a licensed surveyor and include all changes

- and deviations. Please reference the Public Works document "RECORD DRAWING REQUIREMENTS & PROCEDURES" for a complete description of the record drawing process. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
60. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of a certificate of occupancy. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final acceptance. Off-site ("third party") easements or right-of-ways for City infrastructure are the responsibility of the developer to obtain. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to final platting.
  61. Any off-site easements or permits necessary for this project shall be obtained and secured by the applicant and supplied to the City at the time of plat construction and prior to final plat acceptance by the City.
  62. Ten-foot wide public utility easements will be required on the final plat along both sides of all Right-of-Ways within the proposed plat.
  63. The vision-clearance triangle needs to be shown on all corner lots on the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
  64. The final plat shall include notes identifying all common areas including the private streets and tracts and acknowledging the ownership and maintenance responsibility by the homeowners association. A note shall be added to the face of the final plat that states: "*The proposed rear alley easements shall be private roadways which are for the use and benefit of the homeowners that abut said roads, and are to be maintained by the adjacent property owners or the HOA. The City of Richland accepts no maintenance responsibility for rear alley easements*".
  65. A note shall be added to the face of the plat that states: "The private rear alley easements within this plat are fire lanes and parking is restricted. The required no-parking signs shall be installed by the developer where applicable."
  66. All landscaped areas within the plat that are in the public Right of Way shall be the responsibility of the property owners to maintain.
  67. A one-foot "No access / screening easement" will be required along the Reata Road, Gage Blvd., Grapeview St., and the Southgate Way Right of Ways.
  68. The intended use and ownership of all tracts within the plat shall be noted on the final plat.
  69. Property with an unpaid L.I.D. assessment towards it must be paid in full or segregated per Richland Municipal Code 3.12.095.
  70. Any restricted parking areas shall be indicated on the final plats.

## PLANNING CONDITIONS

71. Ownership and maintenance of privately held open space/park, and other common areas should be included in specific covenants, conditions, and restrictions for the subdivision, sometimes called CC&Rs or CCRs.

## **EXHIBIT LIST**

1. Application Materials
2. S2021-104 Master Agreement Consistency Recommendation [MACR]
3. S2021-104 Hearing Examiner Decision [Packet]
4. Master Agreement Consistency Determination [MACD]
5. Planned Action Consistency Determination [PACD]
6. Traffic Impact Analysis Letter
7. Traffic Impact Analysis Report
8. Public Notice and Affidavits
9. Agency Comments
10. Public Comments
11. Applicant Request for Continuance
12. Correspondence Between Applicant and Public Works Staff



## Exhibit I

# Application Materials



## Plat Amendment Application

☒ Major

☐ Minor

**Note:** A Pre-Application meeting is required prior to submittal of an application.

### PROPERTY OWNER INFORMATION

☒ Contact Person

Owner: **Badger Communities, LLC**

Address: **P.O. Box 1307, Gig Harbor, WA 98335**

Phone: **253-677-3402**

Email: **thefourcs@comcast.net**

### APPLICANT/CONTRACTOR INFORMATION (if different)

☐ Contact Person

Company:

UBI#:

Contact:

Address:

Phone:

Email:

### SURVEYOR INFORMATION

Contact: **Rogers Surveying, Inc.**

Address: **1455 Columbia Park Trail, Suite 201, Richland, WA 99352**

Phone: **509-783-4141**

Email: **ContactUs@rogerssurveying.com**

### ENGINEER INFORMATION

Contact: **Barghuasen Consulting Engineers, Inc.**

Address: **18215 72nd Avenue South, Kent, WA 98032**

Phone: **425-251-6222**

Email: **cvisintainer@barghausen.com**

### PROPERTY INFORMATION

Parcel #: **See Sheet 1 of the attached plat map**

Zoning: **Badger Mountain South Area**

Legal Description:

**See Sheet 4 of the attached plat map**

Preliminary Plat Name: **BMS-South Orchard**

☐ Changing

Gross Plat Acreage: **174.37**

Number of Lots: **549**

Smallest Lot Size: **4,581 sf**

Net Lot Area Acreage: **132.62**

Avg. Lot Size: **10,523 sf**

Largest Lot Size: **341,293 sf**

Domestic Water Supply: ☒ City ☐ Private Well

Sewage Disposal: ☒ City ☐ Septic

Irrigation Source: ☐ City ☐ Private Well ☐ Columbia Irrig. District ☐ Kennewick Irrig. District ☒ Other

SEPA Checklist Submitted? ☐ Yes ☒ No

Title Report (Subdivision Guarantee) Submitted? ☐ Yes ☒ No

### DESCRIPTION OF ALTERATION

**Alterations are lot count with an increase of 64 lots (single family) from the previously entitled 471. Total lot count (including tract, multi-family, single family) is now 549.**

**APPLICATION MUST INCLUDE**

1. Completed application and filing fee
2. Refer to RMC 24.24.055

I authorize employees and officials of the City of Richland the right to enter and remain on the property in question to determine whether a permit should be issued and whether special conditions should be placed on any issued permit. I have the legal authority to grant such access to the property in question.

I also acknowledge that if a permit is issued for land development activities, no terms of the permit can be violated without further approval by the permitting entity. I understand that the granting of a permit does not authorize anyone to violate in any way any federal, state, or local law/regulation pertaining to development activities associated with a permit.

I hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

1. I have read and examined this permit application and have documented all applicable requirements on the site plan.
2. The information provided in this application contains no misstatement of fact.
3. I am the owner(s), the authorized agent(s) of the owner(s) of the above referenced property, or I am currently a licensed contractor or specialty contractor under Chapter 18.27 RCW or I am exempt from the requirements of Chapter 18.27 RCW.
4. I understand this permit is subject to all other local, state, and federal regulations.

*Note: This application will not be processed unless the above certification is endorsed by an authorized agent of the owner(s) of the property in question and/or the owner(s) themselves. If the City of Richland has reason to believe that erroneous information has been supplied by an authorized agent of the owner(s) of the property in question and/or by the owner(s) themselves, processing of the application may be suspended.*

Applicant Printed Name: Darrin Sweeney

Applicant Signature: \_\_\_\_\_ Date \_\_\_\_\_



# BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

## LEGEND

	EXISTING	PROPOSED
CURB AND GUTTER		
CONCRETE		
ASPHALT		
GRAVEL		
RIPRAP		
PAINT STRIPING		
DIRECTIONAL ARROW		
SIGN		
CONTOURS		
WATER LINE		
FIRE HYDRANT		
WATER METER		
WATER VALVE		
IRRIGATION LINE		
IRRIGATION METER		
STORM LINE		
CATCH BASIN TYPE 1		
CATCH BASIN TYPE 2		
SANITARY SEWER LINE		
SANITARY SEWER FORCE MAIN		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEANOUT		
POWER OVERHEAD LINE		
POWER UNDERGROUND LINE		
POWER VAULTS		
UTILITY POLE		
FIBER LINE		
FIBER VAULT		
RIGHT-OF-WAY LINE		
PROPERTY LINE		
EASEMENT LINE		

## CIVIL SHEET INDEX

1	OF 18	COVER SHEET
2	OF 18	ROAD SECTIONS
3	OF 18	ROAD SECTIONS
4	OF 18	LEGAL DESCRIPTIONS
5	OF 18	BMS DISTRICTS AND GREEN SPACE CALCS
6	OF 18	LOT LAYOUT
7	OF 18	LOT LAYOUT
8	OF 18	LOT LAYOUT
9	OF 18	LOT LAYOUT
10	OF 18	LOT TABLES
11	OF 18	GRADING AND DRAINAGE PLAN
12	OF 18	GRADING AND DRAINAGE PLAN
13	OF 18	GRADING AND DRAINAGE PLAN
14	OF 18	GRADING AND DRAINAGE PLAN
15	OF 18	UTILITY PLAN
16	OF 18	UTILITY PLAN
17	OF 18	UTILITY PLAN
18	OF 18	UTILITY PLAN

## TOPOGRAPHIC NOTE

THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, BARGHAUSEN CONSULTING ENGINEERS, INC. CANNOT ENSURE ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

## PHASING LEGEND

PHASE	LOTS	UNITS	TRACTS
1	167	325	6
2	123	123	4
3	130	130	1
4	117	117	1

\*DOES NOT INCLUDE PARCELS 104-884-0000-02001 AND 104-884-0000-02002

## LAND USE TABLE

	ENTITLED	AMENDED
TOTAL SITE AREA	194.54 ACRES	174.37 ACRES**
TOTAL LOTS	475	549**
SINGLE FAMILY LOTS	471	535
MULTI-FAMILY LOTS	2	2
CIVIC LOTS	2	2***
TRACTS	29	12
MIN. SINGLE FAMILY LOT AREA	4,581 SF (LOT 118)	4,581 SF (LOT 118)
MAX SINGLE FAMILY LOT AREA	29,627 SF (LOT 167)	29,627 SF (LOT 167)
AVERAGE SINGLE FAMILY LOT AREA	9,177 SF	8,066 SF
PARK AREA (CIVIC)	286,505 SF	286,505 SF
SCHOOL AREA (CIVIC)	610,678 SF	597,465 SF
MULTI-FAMILY AREA	359,681 SF	356,956 SF
SINGLE-FAMILY AREA	4,315,286 SF	4,315,286 SF
TRACT AREA	30.59 ACRES	25.36 ACRES
ROW AREA	35.65 ACRES	41.75 ACRES
**DOES NOT INCLUDE PARCELS 104-884-0000-02001 AND 104-884-0000-02002		
***EXISTING CIVIC PARCELS 104-884-0000-02001 AND 104-884-0000-02002		

## LUDR NOTES

- ALL RESIDENTIAL STRUCTURES LOCATED WITHIN THIS PLAT SHALL CONFORM TO THE BUILDING STANDARDS CONTAINED IN SECTIONS 2 AND 3 OF THE LAND USE AND DEVELOPMENT REGULATIONS FOR BADGER MOUNTAIN SOUTH COMMUNITY (LUDR).
- ALL RESIDENTIAL STRUCTURES LOCATED WITHIN THIS PLAT SHALL CONFORM TO THE SUSTAINABILITY STANDARDS CONTAINED IN SECTION 12 OF THE LUDR.
- THE LOT SIZES SHOWN DO NOT REFLECT THE ALLOWED MINIMUM OR MAXIMUM SIZES PERMITTED WITHIN BADGER MOUNTAIN SOUTH. SMALLER OR LARGER LOTS THAT MEET CODE MAY BE PRESENT AT THE TIME OF FINAL PLAT.
- ALL TRACTS SHOWN WILL BE OWNED AND MAINTAINED BY A HOMEOWNER'S ASSOCIATION INSTITUTED BY THE DEVELOPER AND SHALL CONFORM TO THE USES DESIGNATED AT THE TIME OF FINAL PLAT.

## VERTICAL DATUM

NAVD 88  
BENCHMARK 1 - ELEVATION = 801.875' PER CITY OF RICHLAND SURVEY DEPARTMENT.  
SOUTHWEST CORNER OF SECTION 29, TOWNSHIP 9 NORTH, RANGE 28 EAST OF THE WILLAMETTE MERIDIAN.  
BRASS DISK WITH "X" IN CASE, CENTERLINE OF DALLAS ROAD, APPROXIMATELY 0.75 MILES NORTH OF INTERSTATE 82, EXIT 104.  
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION.  
ALSO DESIGNATED AS "ERIE AZI", POINT IDENTIFICATION NUMBER 2668.  
BRASS DISK STAMPED "ERIE" SET AT GROUND LEVEL, ATOP FIRST SADDLE EASTERLY OF RADIO TOWERS AT THE PEAK OF BADGER MOUNTAIN, APPROXIMATELY 10 FEET NORTH OF THE GRAVEL ACCESS ROAD.

## BASIS OF BEARING

DATUM - NAD 83/91  
BASIS OF BEARING - NORTH 77°19'12" EAST ALONG A LINE BETWEEN THE FOLLOWING TWO POINTS:  
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, MONUMENT DESIGNATED AS "ERIE AZI", POINT IDENTIFICATION NUMBER 2668. BRASS DISK STAMPED "ERIE" SET AT GROUND LEVEL, ATOP FIRST SADDLE EASTERLY OF RADIO TOWERS AT THE PEAK OF BADGER MOUNTAIN, APPROXIMATELY 10 FEET NORTH OF THE GRAVEL ACCESS ROAD.  
N = 330320.261'  
E = 1940161.471'

**CALL BEFORE YOU DIG:**  
1-800-424-5555 OR "811"

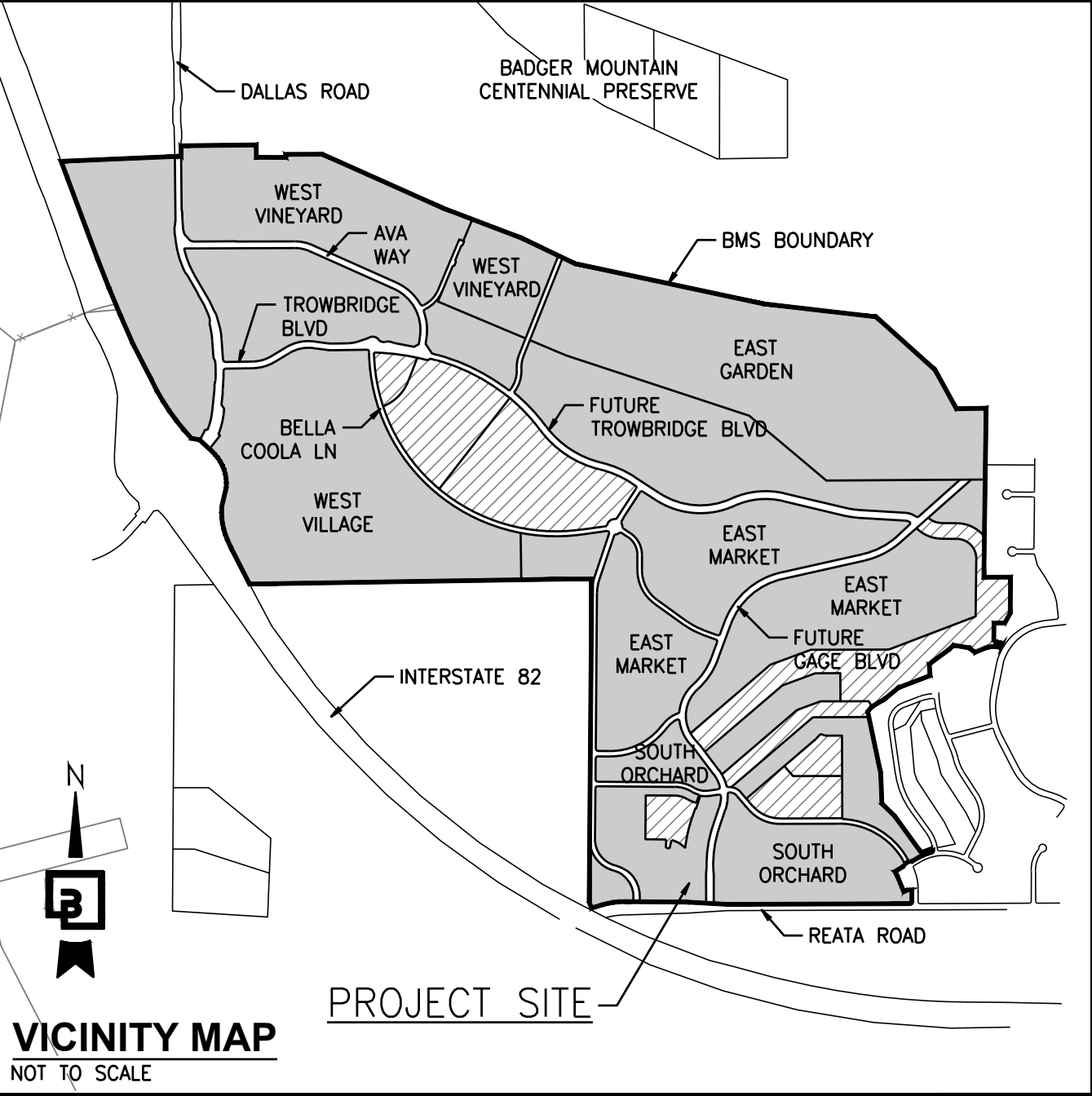
## UTILITY CONFLICT NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS NOR NOT BY POTHOLES THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-5555 AND THEN POTHOLES ALL OF THE EXISTING UTILITIES AT LOCATION OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

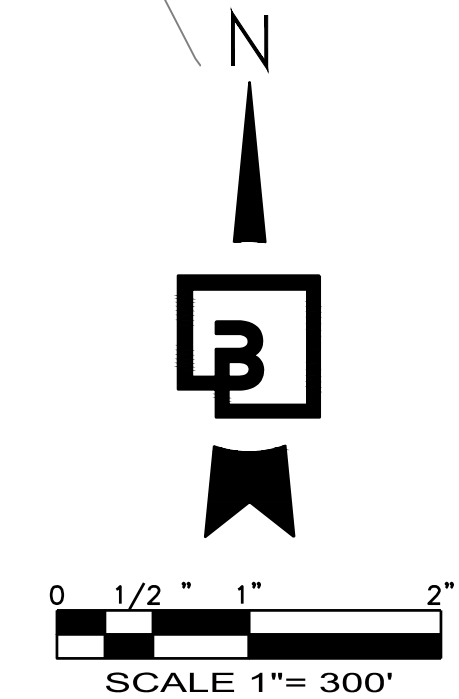
CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES FOR REMOVING AND REPLACING ALL SURVEY MONUMENTATION THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITY, PURSUANT TO WAC 332-120. APPLICATIONS MUST BE COMPLETED BY A REGISTERED LAND SURVEYOR. APPLICATIONS FOR PERMITS TO REMOVE MONUMENTS MAY BE OBTAINED FROM THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, OR BY CONTACTING THEIR OFFICE BY TELEPHONE AT (206) 902-1190.

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES  
PUBLIC LAND SURVEY OFFICE  
1111 WASHINGTON STREET S.E.  
P.O. BOX 47060  
OLYMPIA, WASHINGTON 98504-7060

UPON COMPLETION OF CONSTRUCTION, ALL MONUMENTS DISPLACED, REMOVED OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.



VICINITY MAP  
NOT TO SCALE



## APPLICANT

BADGER COMMUNITIES, LLC.  
P.O. BOX 1307  
GIG HARBOR, WA 98335  
(253) 677-3402  
CONTACT: GEOFF CLARK

## ENGINEER

BARGHAUSEN CONSULTING ENGINEERS, INC.  
18215 72ND AVE SOUTH  
KENT, WA 98032  
(425) 251-6222  
CONTACT: CARA VISINTAINER, PE

## LAND SURVEYOR

ROGERS SURVEYING, INC.  
1455 COLUMBIA PARK TRAIL, SUITE 201  
RICHLAND, WA 99352  
(509) 783-4141  
CONTACT: DAVE BAALMAN, PLS

## SITE ADDRESS

UNDETERMINED  
RICHLAND, WA 99352

## PARCEL NUMBER

104-882-0000-03000  
104-882-0000-04000  
104-882-0000-05000  
104-882-0000-06000

## UTILITIES

WATER: CITY OF RICHLAND  
SEWER: CITY OF RICHLAND  
IRRIGATION: BADGER MOUNTAIN IRRIGATION DISTRICT  
TELEPHONE: CHARTER / ZIPLY  
POWER: RICHLAND ENERGY SERVICES  
GAS: CASCADE NATURAL GAS CORPORATION

Revision  
No. Date By Cld. Appr.  
Title:  
COVER SHEET  
FOR  
BADGER MOUNTAIN SOUTH  
SOUTH ORCHARD MAJOR AMENDMENT

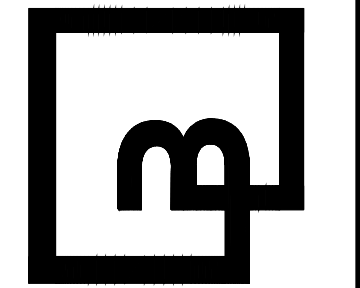
For:  
BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:  
Horizontal 1" = 300'  
Vertical N/A

Designed KDM  
Drawn KDM  
Checked CW  
Approved CW  
Date 5/8/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

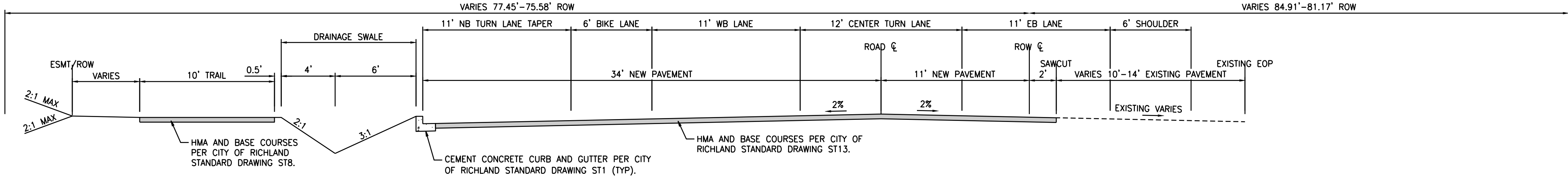


Job Number  
22467.6  
Sheet  
1 of 18



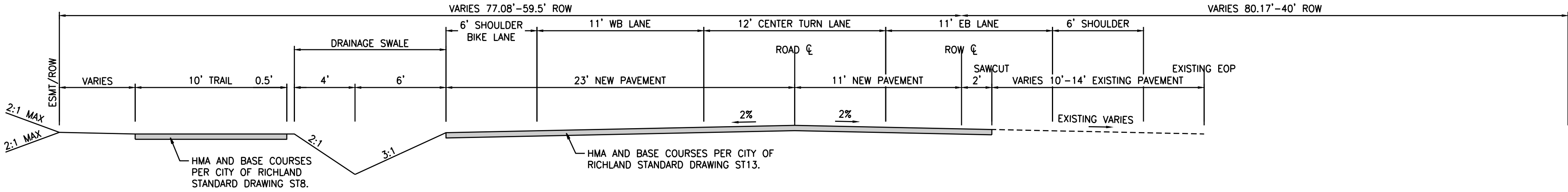
BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



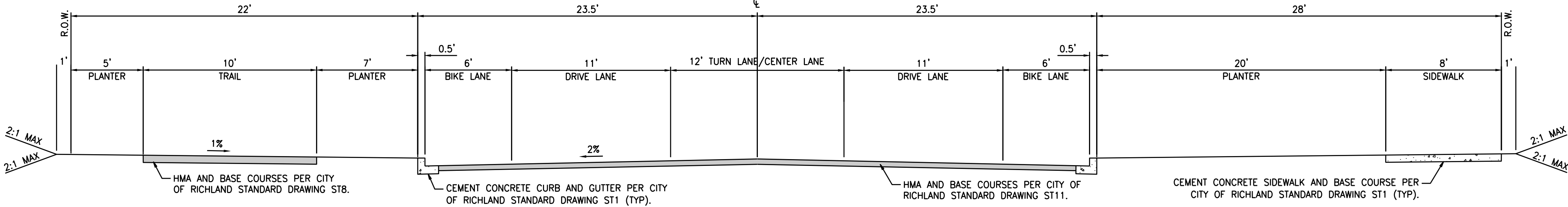
1 REATA ROAD TURN LANE SECTION

2 SCALE: NOT TO SCALE (REATA ROAD)



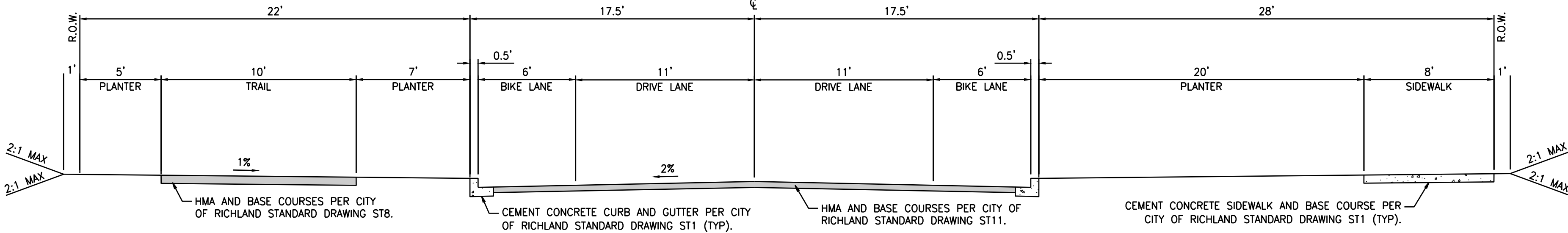
2 REATA ROAD SECTION

2 SCALE: NOT TO SCALE (REATA ROAD)



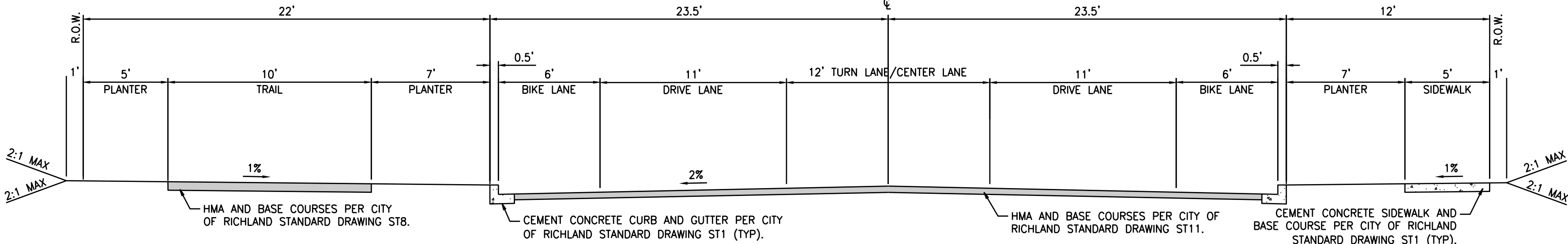
3 MAJOR COLLECTOR 3 LANE EDGE TYPE B

2 SCALE: NOT TO SCALE (GAGE BLVD)



4 MAJOR COLLECTOR 2 LANE EDGE TYPE B

2 SCALE: NOT TO SCALE (GAGE BLVD)



5 MAJOR COLLECTOR 3 LANE EDGE TYPE A AND B

2 SCALE: NOT TO SCALE (ROAD A)

CALL BEFORE YOU DIG:  
1-800-424-5555 OR "811"

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-5555 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

No.	Date	By	Chd.	Appr.	Revision

Title: ROAD SECTIONS FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT

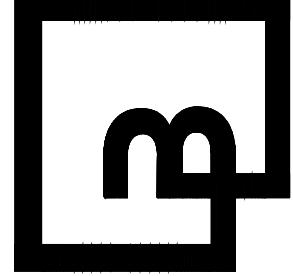
For: BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale: Horizontal N/A Vertical N/A

KDM	KDM	CW	CW	Date
Designed	Drawn	Checked	Approved	5/8/23

Barghausen Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

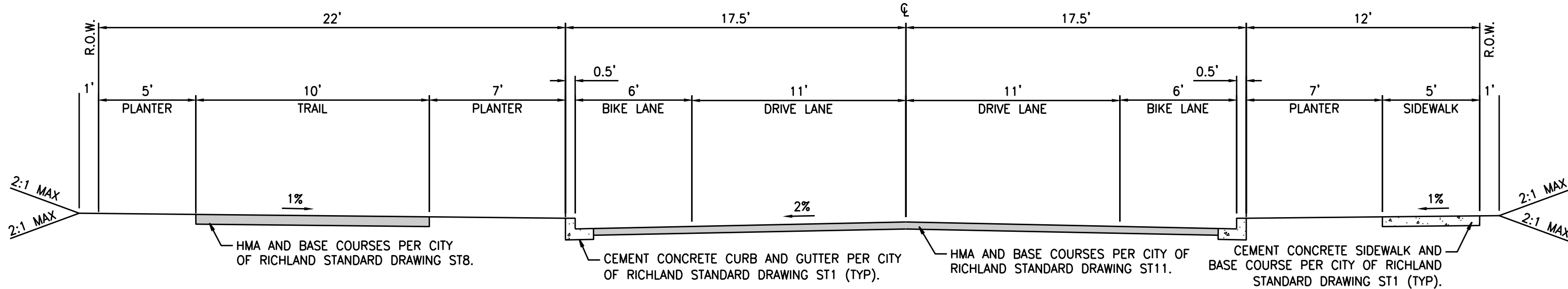


Job Number 22467.6	Sheet 2 of 18
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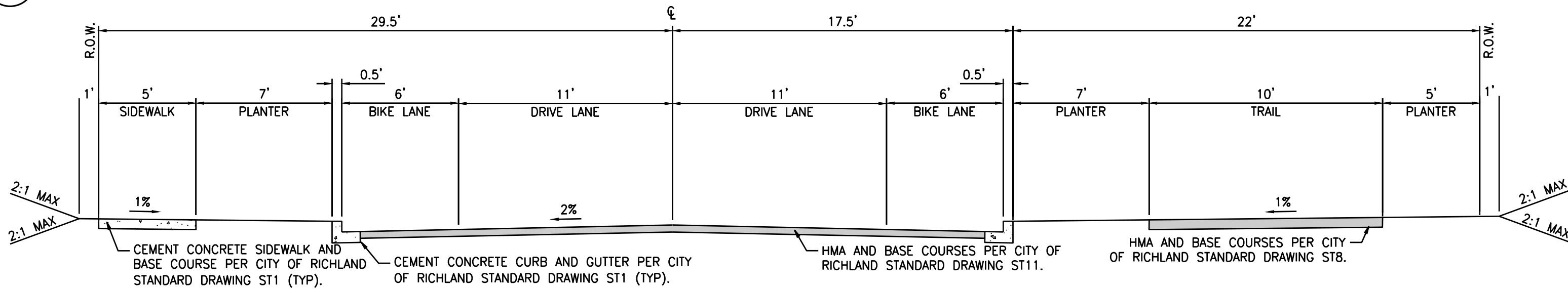
# BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



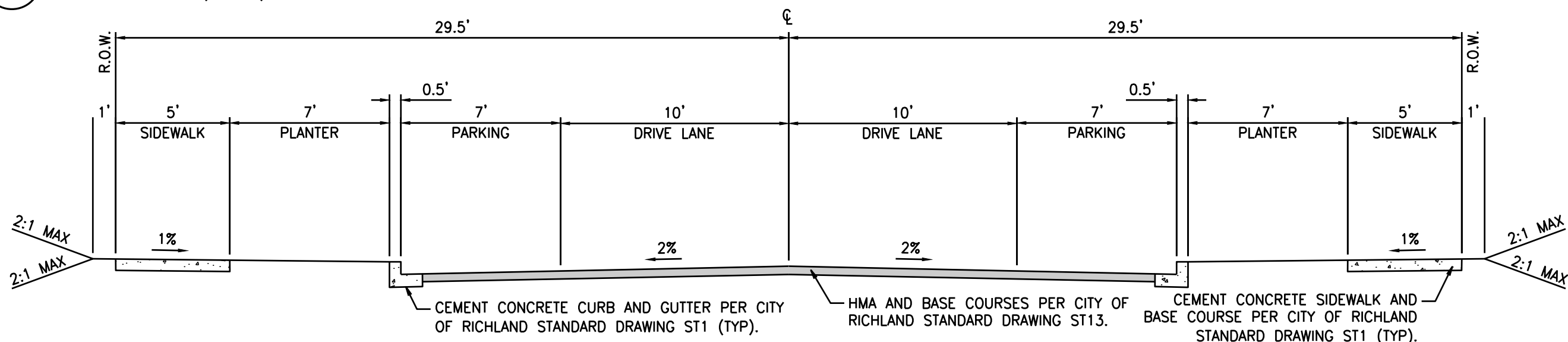
6 MAJOR COLLECTOR 2 LANE EDGE TYPE A AND B

3 SCALE: NOT TO SCALE (ROAD A)



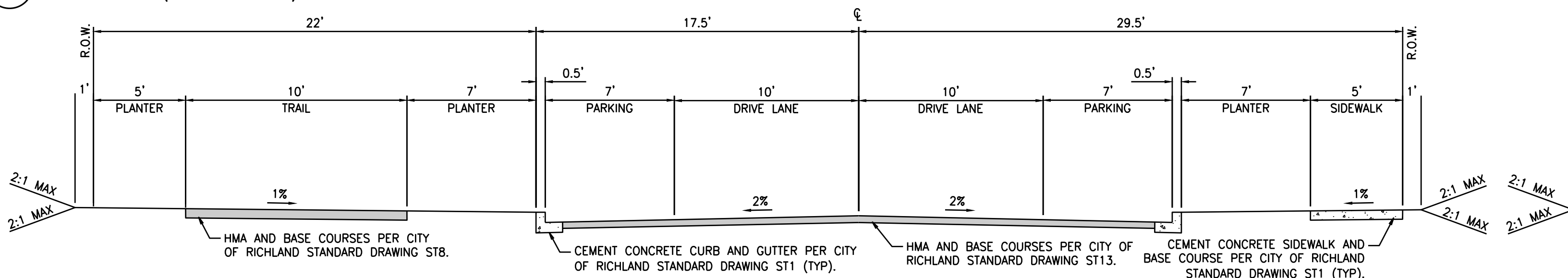
7 MAJOR COLLECTOR 2 LANE EDGE TYPE B AND A

3 SCALE: NOT TO SCALE (ROAD N)



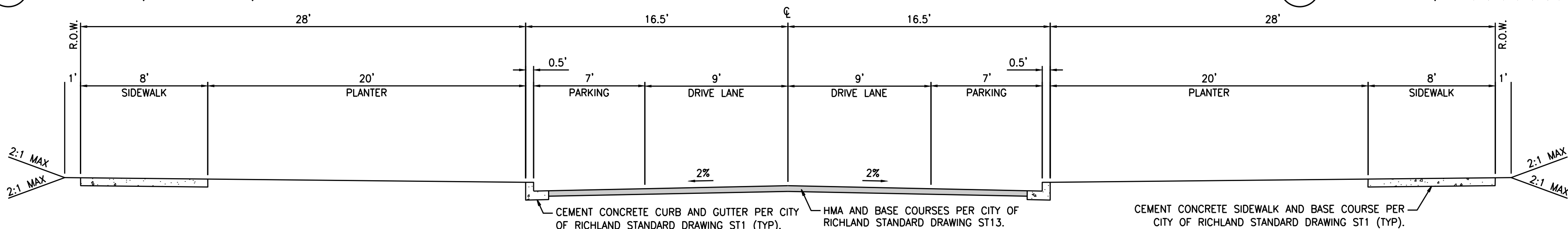
8 MINOR COLLECTOR EDGE TYPE A

3 SCALE: NOT TO SCALE (MORNINGSIDE PARKWAY)



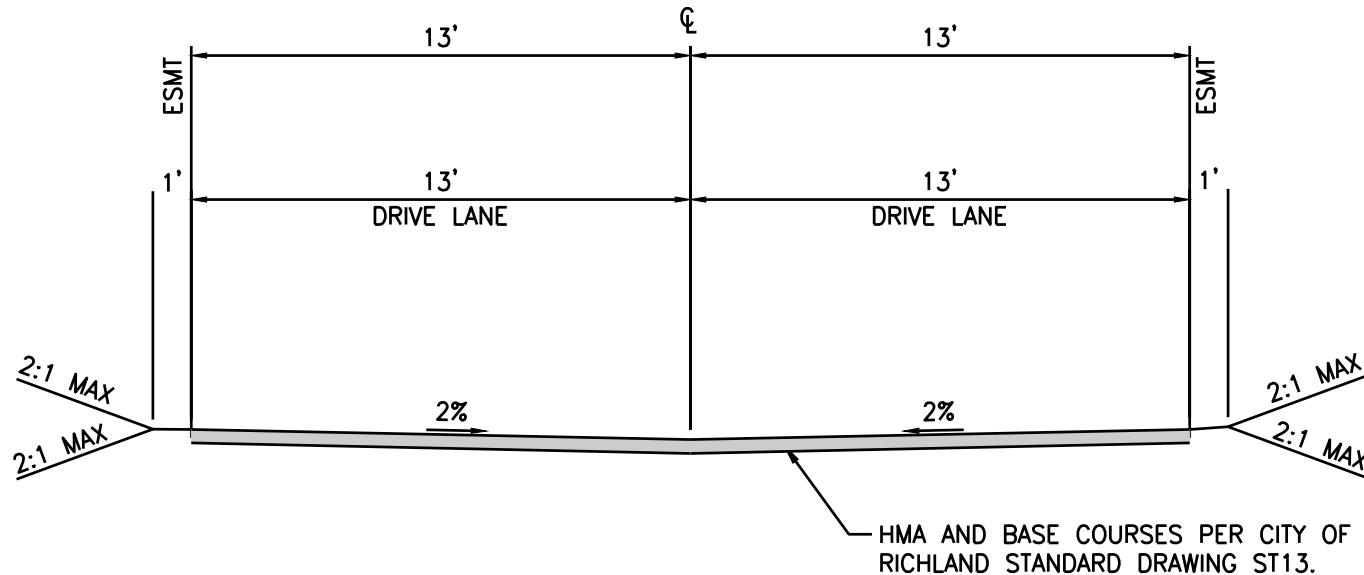
9 MINOR COLLECTOR EDGE TYPE B AND A

3 SCALE: NOT TO SCALE (MORNINGSIDE PARKWAY)



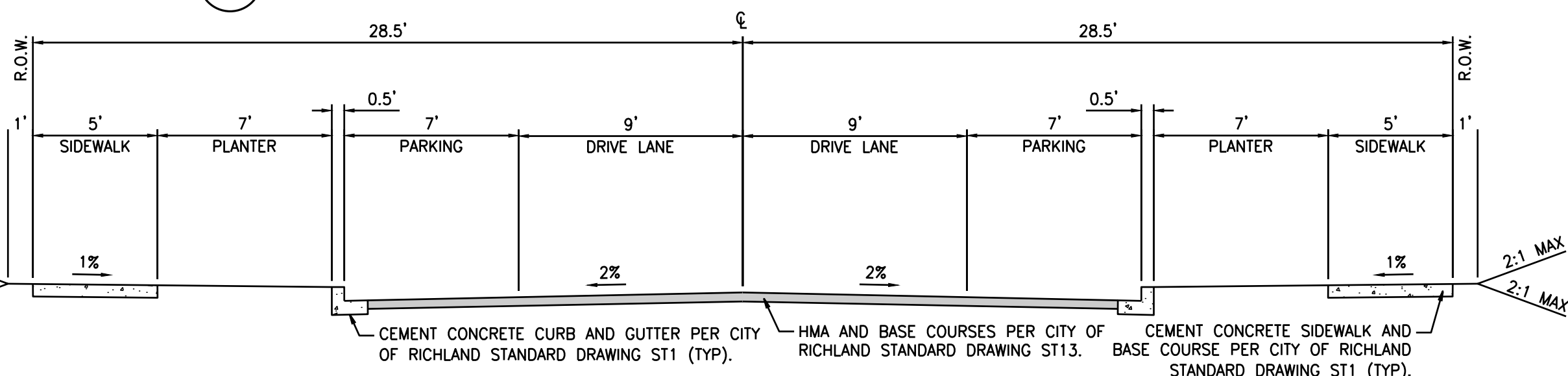
11 LOCAL ACCESS EDGE TYPE B

3 SCALE: NOT TO SCALE (ROAD E)



12 ALLEY SECTION

3 SCALE: NOT TO SCALE



10 LOCAL ACCESS EDGE TYPE A

3 SCALE: NOT TO SCALE (ROAD B, C, D, F, G, H, I, J, K, L, M, O, ALLISON WAY)

CALL BEFORE YOU DIG:  
1-800-424-5555 OR "811"

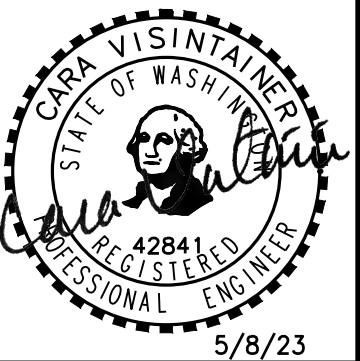
## UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-5555 AND THEN POTHOLES ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Revision	No.	Date	By	Chd.	Appr.

Title: ROAD SECTIONS FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT

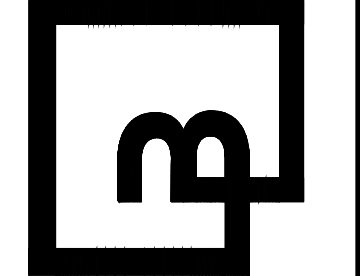
For: BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:	Horizontal	Vertical
	N/A	N/A

Designed	KDM
Drawn	KDM
Checked	CW
Approved	CW
Date	5/8/23

Barghausen Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



Job Number	22467.6
Sheet	3 of 18

EXISTING PARCEL LEGAL DESCRIPTIONS

**PARCEL 104-882-0000-03000**  
THAT PORTION OF SECTION 4, TOWNSHIP 8 NORTH, RANGE 28 EAST WILLAMETTE MERIDIAN, CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS:  
COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 4; THENCE SOUTH 0°27'45" WEST 68.76 FEET TO THE SOUTHWEST CORNER OF THAT PARCEL DESCRIBED AS PARCEL C IN DEED RECORDED UNDER AUDITOR'S FILE NUMBER 2009-012090, RECORDS OF BENTON COUNTY AND THE POINT OF BEGINNING; THENCE NORTH 89°44'48" EAST 80.06 FEET ALONG THE SOUTH LINE OF SAID PARCEL C TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 470.50 FEET (THE LONG CHORD OF SAID CURVE BEARS SOUTH 6°41'05" WEST 101.99 FEET); THENCE LEAVING THE SOUTH LINE OF SAID PARCEL C SOUTHWESTERLY 102.19 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 12°26'41"; THENCE SOUTH 0°27'45" WEST 2002.26 FEET PARALLEL WITH AND 60.00 FEET EASTERLY OF THE WEST LINE OF SAID SECTION 4 TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHEASTERLY 39.27 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°59'57"; THENCE SOUTH 89°32'12" EAST 156.17 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 820.50 FEET; THENCE NORTHEASTERLY 713.20 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°48'10"; THENCE NORTH 40°39'38" EAST 102.85 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 404.50 FEET; THENCE NORTHEASTERLY 213.10 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 30°11'06" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHEASTERLY 28.45 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 65°11'48"; THENCE SOUTH 84°21'03" EAST 85.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 454.50 FEET (THE LONG CHORD OF SAID CURVE BEARS SOUTH 17°47'35" EAST 361.62 FEET); THENCE SOUTHEASTERLY 371.91 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 46°53'03"; THENCE SOUTH 41°14'06" EAST 100.48 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 511.50 FEET; THENCE SOUTHEASTERLY 37.11 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 4°09'27"; THENCE SOUTH 37°04'40" EAST 366.99 FEET; THENCE NORTH 49°26'25" EAST 1264.93 FEET; THENCE NORTH 69°37'16" EAST 318.90 FEET; THENCE NORTH 89°48'08" EAST 618.96 FEET; THENCE SOUTH 29°04'39" EAST 79.80 FEET TO THE NORTHERLY MOST CORNER OF LOT 7 OF THE PLAT OF REATA RIDGE-PHASE 1A OF BADGER MOUNTAIN GOLF AND COUNTRY CLUB ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 389, RECORDS OF BENTON COUNTY; THENCE SOUTH 40°22'10" WEST 81.35 FEET ALONG THE WESTERLY BOUNDARY OF SAID PLAT; THENCE SOUTH 11°52'29" EAST 144.08 FEET ALONG THE WESTERLY BOUNDARY OF SAID PLAT; THENCE SOUTH 46°43'03" WEST 299.01 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 121.50 FEET; THENCE SOUTHWESTERLY 100.55 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°25'07" (THE LONG CHORD OF SAID CURVE BEARS NORTH 66°29'19" WEST 97.71 FEET) THENCE SOUTH 89°48'08" WEST 50.80 FEET TO THE NORTHEAST CORNER OF THAT PARCEL DESCRIBED IN DEED RECORDED UNDER AUDITOR'S FILE NUMBER 2010-005611, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE SOUTH 89°48'22" WEST 192.13 FEET ALONG THE NORTH BOUNDARY OF SAID PARCEL TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 125.00 FEET; THENCE NORTHWESTERLY 37.82 FEET ALONG THE ARC OF SAID CURVE AND ALONG THE NORTH LINE OF SAID PARCEL THROUGH A CENTRAL ANGLE OF 17°20'02"; THENCE NORTH 72°51'37" WEST 52.28 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 289.00 FEET; THENCE SOUTHWESTERLY 87.07 FEET ALONG THE ARC OF SAID CURVE AND ALONG THE NORTHWESTERLY BOUNDARY OF SAID PARCEL THROUGH A CENTRAL ANGLE OF 17°15'47" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 40°48'46" WEST 86.75 FEET) THENCE SOUTH 49°26'39" WEST 117.27 FEET ALONG THE NORTHWESTERLY BOUNDARY OF SAID PARCEL; THENCE SOUTH 40°33'21" EAST 26.81 FEET ALONG THE SOUTHWESTERLY BOUNDARY OF SAID PARCEL; THENCE SOUTH 49°26'25" WEST 59.95 FEET; THENCE NORTH 40°33'35" WEST 132.19 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 120.50 FEET; THENCE NORTHWESTERLY 104.64 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°45'21" TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 40.06 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 91°49'06" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE WEST HAVING A RADIUS OF 545.50 FEET; THENCE SOUTHERLY 121.27 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 12°44'15"; THENCE NORTH 79°23'48" WEST 85.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE WEST HAVING A RADIUS OF 460.50 FEET; THENCE NORTHERLY 78.62 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 09°46'55" (THE LONG CHORD OF SAID CURVE BEARS NORTH 05°42'45" EAST 78.52 FEET) TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHWESTERLY 42.99 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 98°31'02"; THENCE SOUTH 82°18'16" WEST 67.89 FEET;  
TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 34.87 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 79°55'10" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE WEST HAVING A RADIUS OF 343.50 FEET; THENCE SOUTHERLY 21.25 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 03°32'42"; THENCE NORTH 84°04'12" WEST 57.00 FEET; TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHWESTERLY 42.06 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 96°23'52" (THE LONG CHORD OF SAID CURVE BEARS NORTH 42°16'08" WEST 37.27 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 339.50 FEET; THENCE NORTHWESTERLY 82.33 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°53'38"; THENCE SOUTH 18°45'13" WEST 100.84 FEET; TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 440.00 FEET; THENCE NORTHWESTERLY 127.50 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 16°36'10" (THE LONG CHORD OF SAID CURVE BEARS NORTH 67°03'12" WEST 127.05 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 310.00 FEET; THENCE NORTHWESTERLY 166.56 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 30°47'05"; THENCE NORTH 89°32'12" WEST 370.39 FEET; THENCE SOUTH 00°27'48" WEST 560.00 FEET; THENCE NORTH 89°32'12" WEST 5.00 FEET; THENCE SOUTH 00°27'48" WEST 111.50 FEET; THENCE SOUTH 89°31'54" EAST 2.64 FEET; THENCE SOUTH 00°27'54" WEST 178.50 FEET;  
THENCE NORTH 89°32'12" WEST 315.00 FEET; THENCE SOUTH 55°44'11" WEST 84.41 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 345.50 FEET; THENCE SOUTHEASTERLY 6.76 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 01°07'15" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 75°11'26" EAST 6.76 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 404.50 FEET; THENCE SOUTHEASTERLY 105.37 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°55'33"; THENCE SOUTH 60°49'31" EAST 37.04 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 293.19 FEET; THENCE SOUTHEASTERLY 94.18 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°24'15" TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 410.50 FEET; THENCE SOUTHEASTERLY 99.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°56'36" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHEASTERLY 33.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 77°41'59" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 328.50 FEET; THENCE NORTHEASTERLY 13.01 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°16'08"; THENCE SOUTH 13°54'32" EAST 57.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 39.43 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°22'18" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 30°54'19" WEST 35.47 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 410.50 FEET; THENCE SOUTHWESTERLY 100.92 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°05'12"; THENCE SOUTH 00°11'38" EAST 70.13 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY MARGIN OF REATA ROAD; THENCE NORTH 89°29'23" WEST 187.22 FEET ALONG SAID NORTHERLY RIGHT OF WAY MARGIN TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 1080.00 FEET; THENCE SOUTHWESTERLY 317.85 FEET ALONG THE ARC OF SAID CURVE AND ALONG SAID NORTHERLY RIGHT OF WAY MARGIN THROUGH A CENTRAL ANGLE OF 16°51'45" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 81°21'52" WEST 316.70 FEET) THENCE SOUTH 73°10'53" WEST 121.42 FEET ALONG SAID NORTHERLY RIGHT OF WAY MARGIN TO THE EASTERLY BOUNDARY OF LOT 1 OF THE RIDGE AT REATA WEST PHASE 1, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 452, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE NORTH 21°44'10" WEST 83.86 FEET ALONG THE EASTERLY BOUNDARY OF SAID LOT 1; THENCE NORTH 00°27'45" EAST 4057.12 FEET ALONG THE EASTERLY BOUNDARY OF SAID LOT 1 TO THE POINT OF BEGINNING.

CONTAINS 72.34 ACRES, MORE OR LESS

**PARCEL 104-882-0000-04000**  
THAT PORTION OF SECTION 4, TOWNSHIP 8 NORTH, RANGE 28 EAST WILLAMETTE MERIDIAN, CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS:  
COMMENCING AT THE WESTERLY MOST CORNER OF THAT PARCEL DESCRIBED IN DEED RECORDED UNDER AUDITOR'S FILE NUMBER 2010-005611, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE SOUTH 40°33'21" EAST 26.81 FEET ALONG THE SOUTHWESTERLY BOUNDARY OF SAID PARCEL TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 40°33'21" EAST 99.03 FEET ALONG SAID SOUTHWESTERLY BOUNDARY TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 462.50 FEET; THENCE SOUTHEASTERLY 162.63 FEET ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHWESTERLY BOUNDARY THROUGH A CENTRAL ANGLE OF 20°08'47"; THENCE SOUTH 29°25'41" WEST 60.36 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 36.82 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 84°23'14" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 77°14'04" WEST 33.58 FEET) THENCE SOUTH 35°02'27" WEST 59.00 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 39.17 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°45'40"; THENCE SOUTH 35°16'47" WEST 57.02 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE WESTERLY 38.93 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°12'59" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 79°38'57" WEST 35.11 FEET) THENCE SOUTH 35°02'27" WEST 49.41 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 646.50 FEET; THENCE SOUTHWESTERLY 358.28 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 31°45'09" TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 40.79 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 93°28'57"; THENCE SOUTH 00°11'38" EAST 57.00 FEET; THENCE SOUTH 89°48'22" WEST 1.15 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 39.27 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00"; THENCE SOUTH 00°11'38" EAST 57.00 FEET; THENCE SOUTH 89°48'22" WEST 29.50 FEET; THENCE SOUTH 00°11'54" EAST 195.62 FEET TO THE NORTHERLY RIGHT OF WAY MARGIN OF REATA ROAD; THENCE SOUTH 89°48'18" WEST 138.58 FEET ALONG SAID NORTHERLY RIGHT OF WAY MARGIN; THENCE NORTH 86°46'14" WEST 500.91 FEET ALONG SAID NORTHERLY RIGHT OF WAY MARGIN; THENCE NORTH 89°29'23" WEST 614.62 FEET ALONG SAID NORTHERLY RIGHT OF WAY MARGIN; THENCE NORTH 00°11'38" WEST 70.13 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 410.50 FEET; THENCE NORTHWESTERLY 100.92 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°05'12" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHEASTERLY 39.43 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°22'18"; THENCE NORTH 13°54'32" WEST 57.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 328.50 FEET; THENCE SOUTHWESTERLY 13.01 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°16'08" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 74°57'24" WEST 13.01 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHWESTERLY 33.90 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°24'15"; THENCE NORTH 60°49'31" WEST 37.04 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 404.50 FEET; THENCE NORTHWESTERLY 105.37 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°55'33" TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 345.50 FEET; THENCE NORTHWESTERLY 82.33 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°53'38" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 83°31'15" EAST 82.12 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHEASTERLY 42.06 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 96°23'52"; THENCE SOUTH 84°04'12" EAST 57.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE WEST HAVING A RADIUS OF 343.50 FEET; THENCE NORTHERLY 21.25 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 03°32'42" (THE LONG CHORD OF SAID CURVE BEARS NORTH 04°09'27" EAST 21.25 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHEASTERLY 34.87 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 79°55'10"; THENCE NORTH 82°18'16" EAST 67.89 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHEASTERLY 42.99 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 98°31'02" TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 460.50 FEET; THENCE SOUTHERLY 78.62 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 09°46'55"; THENCE SOUTH 79°23'48" EAST 85.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE WEST HAVING A RADIUS OF 545.50 FEET; THENCE NORTHERLY 121.27 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 12°44'15" (THE LONG CHORD OF SAID CURVE BEARS NORTH 04°14'05" EAST 121.02 FEET) TO THE BEGINNING OF A REVERSE CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE NORTHEASTERLY 40.06 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 91°49'06" TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 120.50 FEET; THENCE SOUTHEASTERLY 104.64 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°45'21"; THENCE SOUTH 40°33'35" EAST 132.19 FEET; THENCE NORTH 49°26'25" EAST 59.95 FEET TO THE POINT OF BEGINNING.


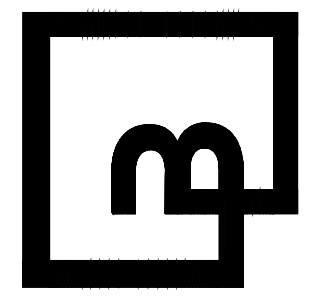
CONTAINS 40.89 ACRES, MORE OR LESS

**PARCEL 104-882-0000-05000**  
THAT PORTION OF SECTION 4, TOWNSHIP 8 NORTH, RANGE 28 EAST WILLAMETTE MERIDIAN, CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS:  
COMMENCING AT THE WESTERLY MOST CORNER OF THAT PARCEL DESCRIBED IN DEED RECORDED UNDER AUDITOR'S FILE NUMBER 2010-005611, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE SOUTH 40°33'21" EAST 125.84 FEET ALONG THE SOUTHWESTERLY BOUNDARY OF SAID PARCEL TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 462.50 FEET; THENCE SOUTHEASTERLY 162.63 FEET ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHWESTERLY BOUNDARY THROUGH A CENTRAL ANGLE OF 20°08'47" TO THE POINT OF BEGINNING; THENCE SOUTH 29°25'41" WEST 60.36 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 36.82 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 84°23'14" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 77°14'04" WEST 33.58 FEET) THENCE SOUTH 35°02'27" WEST 59.00 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 39.17 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°45'40"; THENCE SOUTH 35°16'47" WEST 57.02 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE WESTERLY 38.93 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°12'59" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 79°38'57" WEST 35.11 FEET) THENCE SOUTH 35°02'27" WEST 49.41 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 646.50 FEET; THENCE SOUTHWESTERLY 358.28 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 31°45'09" TO THE BEGINNING OF A COMPOUND CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 40.79 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 93°28'57"; THENCE SOUTH 00°11'38" EAST 57.00 FEET; THENCE SOUTH 89°48'22" WEST 1.15 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET; THENCE SOUTHWESTERLY 39.27 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00"; THENCE SOUTH 00°11'38" EAST 57.00 FEET; THENCE SOUTH 89°48'22" WEST 29.50 FEET; THENCE SOUTH 00°11'54" EAST 195.62 FEET TO THE NORTHERLY RIGHT OF WAY MARGIN OF REATA ROAD; THENCE NORTH 89°48'18" EST 1349.99 FEET ALONG SAID NORTHERLY RIGHT OF WAY; THENCE NORTH 0°11'38" WEST 195.60 FEET; THENCE NORTH 89°48'22" EAST 13.68 FEET; THENCE NORTH 0°11'38" WEST 296.58 FEET; THENCE SOUTH 89°48'22" WEST 25.00 FEET; THENCE NORTH 0°11'38" WEST 353.55 FEET; THENCE SOUTH 89°48'22" WEST 15.00 FEET; THENCE NORTH 0°11'38" WEST 178.33 FEET; THENCE SOUTH 88°07'05" EAST 11.07 FEET; THENCE NORTH 1°46'15" EAST 61.58 FEET TO THE SOUTHEAST CORNER OF THAT PARCEL DESCRIBED IN DEED RECORDED UNDER SAID AUDITOR'S FILE NUMBER 2010-005611; THENCE SOUTH 89°48'25" WEST 799.34 FEET ALONG THE SOUTHERLY BOUNDARY OF SAID PARCEL TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 462.50 FEET; THENCE NORTHWESTERLY 238.05 FEET ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHERLY BOUNDARY THROUGH A CENTRAL ANGLE OF 29°29'27" TO THE POINT OF BEGINNING.

CONTAINS 32.38 ACRES, MORE OR LESS

**PARCEL 104-882-0000-06000**  
THAT PORTION OF SECTION 4, TOWNSHIP 8 NORTH, RANGE 28 EAST WILLAMETTE MERIDIAN, CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS:  
BEGINNING AT THE SOUTHEAST CORNER OF THAT PARCEL DESCRIBED IN DEED RECORDED UNDER AUDITOR'S FILE NUMBER 2010-005611, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE NORTH 00°11'38" WEST 1065.50 FEET ALONG THE EASTERLY BOUNDARY OF SAID PARCEL; THENCE NORTH 89°48'08" EAST 50.80 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 121.50 FEET; THENCE SOUTHEASTERLY 100.55 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°25'07"; THENCE NORTH 46°43'03" EAST 299.01 FEET TO A POINT ON THE WESTERLY BOUNDARY OF THE PLAT OF REATA RIDGE PHASE 1A OF THE BADGER MOUNTAIN GOLF & COUNTRY CLUB, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 389, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE THE FOLLOWING 26 COURSES ALONG THE WESTERLY BOUNDARY OF SAID PLAT: THENCE SOUTH 11°52'29" EAST 195.19 FEET; THENCE SOUTH 11°50'59" EAST 60.17 FEET; THENCE SOUTH 11°52'13" EAST 410.41 FEET; THENCE SOUTH 02°05'01" EAST 29.09 FEET; THENCE SOUTH 02°06'25" EAST 115.72 FEET; THENCE SOUTH 02°13'29" EAST 124.96 FEET; THENCE SOUTH 01°59'32" EAST 112.74 FEET; THENCE SOUTH 45°21'47" EAST 18.17 FEET; THENCE SOUTH 45°26'02" EAST 213.10 FEET; THENCE SOUTH 35°57'02" EAST 33.87 FEET; THENCE SOUTH 35°57'43" EAST 424.08 FEET; THENCE SOUTH 36°00'59" EAST 116.35 FEET; THENCE NORTH 69°52'33" EAST 155.89 FEET; THENCE SOUTH 09°17'26" EAST 25.86 FEET; TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 20.00 FEET; THENCE SOUTHWESTERLY 29.86 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 85°32'52" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 33°30'13" WEST 27.16 FEET) TO THE BEGINNING OF A NON-TANGENT REVERSE CURVE, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 630.00 FEET; THENCE SOUTHWESTERLY 184.72 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 16°47'59" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 67°53'46" WEST 184.06 FEET) THENCE SOUTH 59°29'40" WEST 100.06 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 20.00 FEET; THENCE NORTHWESTERLY 30.24 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 86°38'43" (THE LONG CHORD OF SAID CURVE BEARS NORTH 77°10'07" WEST 27.44 FEET); THENCE SOUTH 61°19'45" WEST 80.12 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 20.00 FEET; THENCE SOUTHERLY 32.81 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 93°59'55" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 12°28'48" WEST 29.25 FEET) THENCE SOUTH 59°29'40" WEST 130.71 FEET; THENCE SOUTH 30°30'20" EAST 59.99 FEET; THENCE SOUTH 22°08'48" EAST 222.82 FEET; THENCE NORTH 65°53'43" EAST 113.01 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 560.00 FEET; THENCE SOUTHEASTERLY 8.89 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°54'34" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 00°37'29" EAST 8.89 FEET) THENCE SOUTH 00°11'54" EAST 170.35 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 20.00 FEET; THENCE SOUTHWESTERLY 31.41 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°59'23" (THE LONG CHORD OF SAID CURVE BEARS SOUTH 44°48'06" WEST 28.28 FEET) TO THE NORTHERLY RIGHT OF WAY MARGIN OF REATA ROAD; THENCE SOUTH 89°48'18" WEST 851.93 FEET ALONG SAID NORTHERLY RIGHT OF WAY MARGIN; THENCE NORTH 00°11'38" WEST 195.60 FEET; THENCE NORTH 89°48'22" EAST 13.68 FEET; THENCE NORTH 00°11'38" WEST 296.58 FEET; THENCE SOUTH 89°48'22" WEST 25.00 FEET; THENCE NORTH 00°11'38" WEST 353.55 FEET; THENCE SOUTH 89°48'22" WEST 15.00 FEET; THENCE NORTH 00°11'38" WEST 178.33 FEET; THENCE SOUTH 88°07'05" EAST 11.07 FEET; THENCE NORTH 01°46'15" EAST 61.58 FEET TO THE POINT OF BEGINNING.

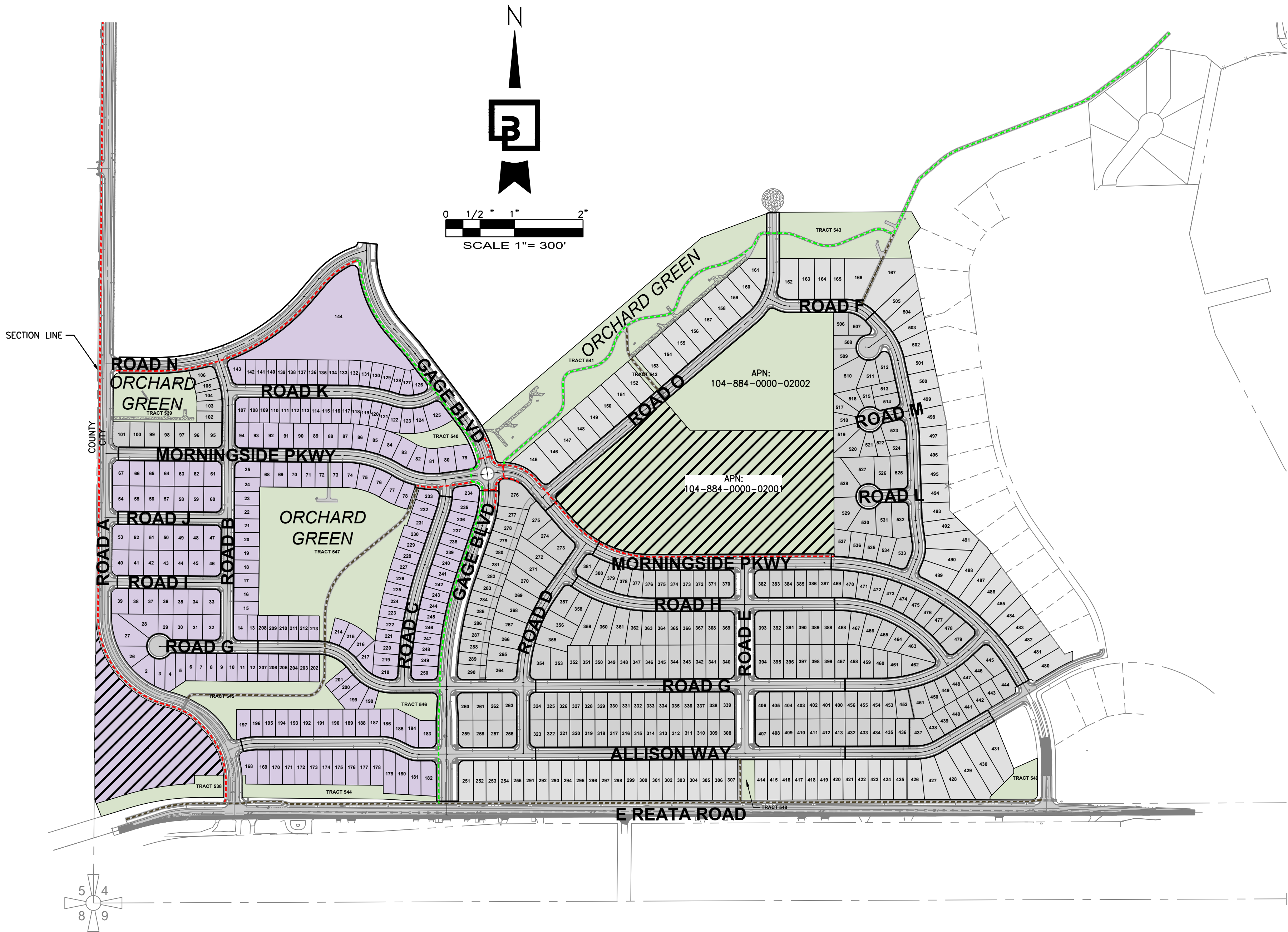
CONTAINS 33.05 ACRES, MORE OR LESS

Job Number <b>22467.6</b>		Revision	
Sheet <b>4 of 18</b>		Title: <b>LEGAL DESCRIPTIONS FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT</b>	
For: <b>BARGHAUSEN COMMUNITIES, LLC P.O. BOX 1307 GIG HARBOR, WA 98335</b>		Scale: Horizontal N/A Vertical N/A	
		KDM Designed Drawn Checked Approved Date 5/8/23	
 <b>Barghausen Consulting Engineers, Inc.</b> 18215 72nd Avenue South Kent, WA 98032 425.251.6222 <b>barghausen.com</b>		KMAP:DAO 5/15/2023 7:26 AM	



BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



LUDR DISTRICT LEGEND

DISTRICT		LUDR SECTION	
BMS-NC	NEIGHBORHOOD COLLECTOR	3.C	
BMS-NG	NEIGHBORHOOD GENERAL	3.D	
BMS-NE	NEIGHBORHOOD EDGE	3.E	
BMS-CIVIC		3.F	
OVERLAY	SPECIAL DESIGNATION "P" OVERLAY DISTRICT		

TRAIL LEGEND

CLASSIFICATION	
CITY PRIMARY	
PRIMARY	
SECONDARY	

SOUTH ORCHARD OPEN SPACE

ORCHARD GREEN		
SOUTH ORCHARD AREA	858,373 S.F.	19.71 ACRES

TRAIL FACTORS	
EQUIVALENT TRAIL LENGTHS SHALL BE APPLIED TO THE ACTUAL LENGTH OR TRAIL CONSTRUCTED MULTIPLIED BY THE APPROPRIATE TRAIL FACTOR BELOW:	
CITY PRIMARY TRAIL	1.0
PRIMARY TRAIL	1.0
SECONDARY TRAIL	0.6
EQUESTRIAN TRAIL	0.8 (WHERE SHOWN ON LUDR TRAIL PLAN)
URBAN TRAIL	1.0

TRAIL LOCATIONS								
TRAIL	TRACTS	TYPE	ACTUAL LENGTH	FACTOR	EQ LENGTH	L.F. / RU	RU	
REATA ROAD TRAIL	ROW	SECONDARY	3,945 L.F.	0.6	2,367.0 L.F.	16	147.9	
GREEN BELT TRAIL	548, 542	SECONDARY	825 L.F.	0.6	495.0 L.F.	16	30.9	
ORCHARD GREEN TRAIL	545, 547	SECONDARY	1,573 L.F.	0.6	943.8 L.F.	16	59.0	
ROAD N TRAIL	ROW	PRIMARY	1,610 L.F.	1.0	1,610.0 L.F.	16	100.6	
MORNINGSIDE PARKWAY TRAIL	ROW	PRIMARY	1,840 L.F.	1.0	1,840.0 L.F.	16	115.0	
ROAD A TRAIL	ROW	PRIMARY	4,380 L.F.	1.0	4,380.0 L.F.	16	273.8	
ORCHARD GREEN TRAIL	541, 543	CITY PRIMARY	3,720 L.F.	1.0	3,720.0 L.F.	16	232.5	
GAGE BOULEVARD TRAIL	ROW	CITY PRIMARY	2,580 L.F.	1.0	2,580.0 L.F.	16	161.3	
TOTAL			20,473 L.F.		17,935.8 L.F.		1,121.0	

PARKS				
CITY PARK (PARCEL 104-884-0000-02002)	286,505 S.F.	6.58 ACRES	S.F. / RU	RU
TOTAL	286,505 S.F.	6.58 ACRES	650	440.8

TOTAL ALLOWABLE RESIDENTIAL UNITS (RU)		
TRAILS		1,121.0 RU
PARKS		440.8 RU
TOTAL		1,561.8 RU

MISCELLANEOUS OPEN SPACE

TRACT	USE	AREA S.F.	ACRES
538	GREEN BELT	38,149	0.88
542	LANDSCAPE / TRAIL	7,180	0.16
544	GREEN BELT	43,306	0.99
545	LANDSCAPE / TRAIL	97,032	2.23
546	LANDSCAPE	24,850	0.57
548	LANDSCAPE / TRAIL	13,292	0.31
549	GREEN BELT	22,552	0.52
TOTAL		246,361	5.66

CALL BEFORE YOU DIG:  
1-800-424-5555 OR "811"

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-5555 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Title:  
BMS DISTRICTS AND GREEN SPACE CALCS  
FOR  
BADGER MOUNTAIN SOUTH  
SOUTH ORCHARD MAJOR AMENDMENT

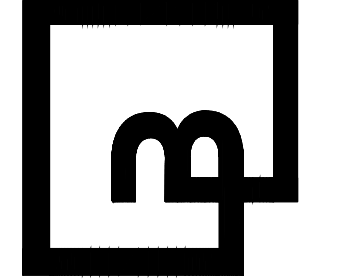
For:  
BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:  
Horizontal  
1" = 300'  
Vertical  
N/A

KDM	KDM	CW	CW	Date
Designed	Drawn	Checked	Approved	5/8/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



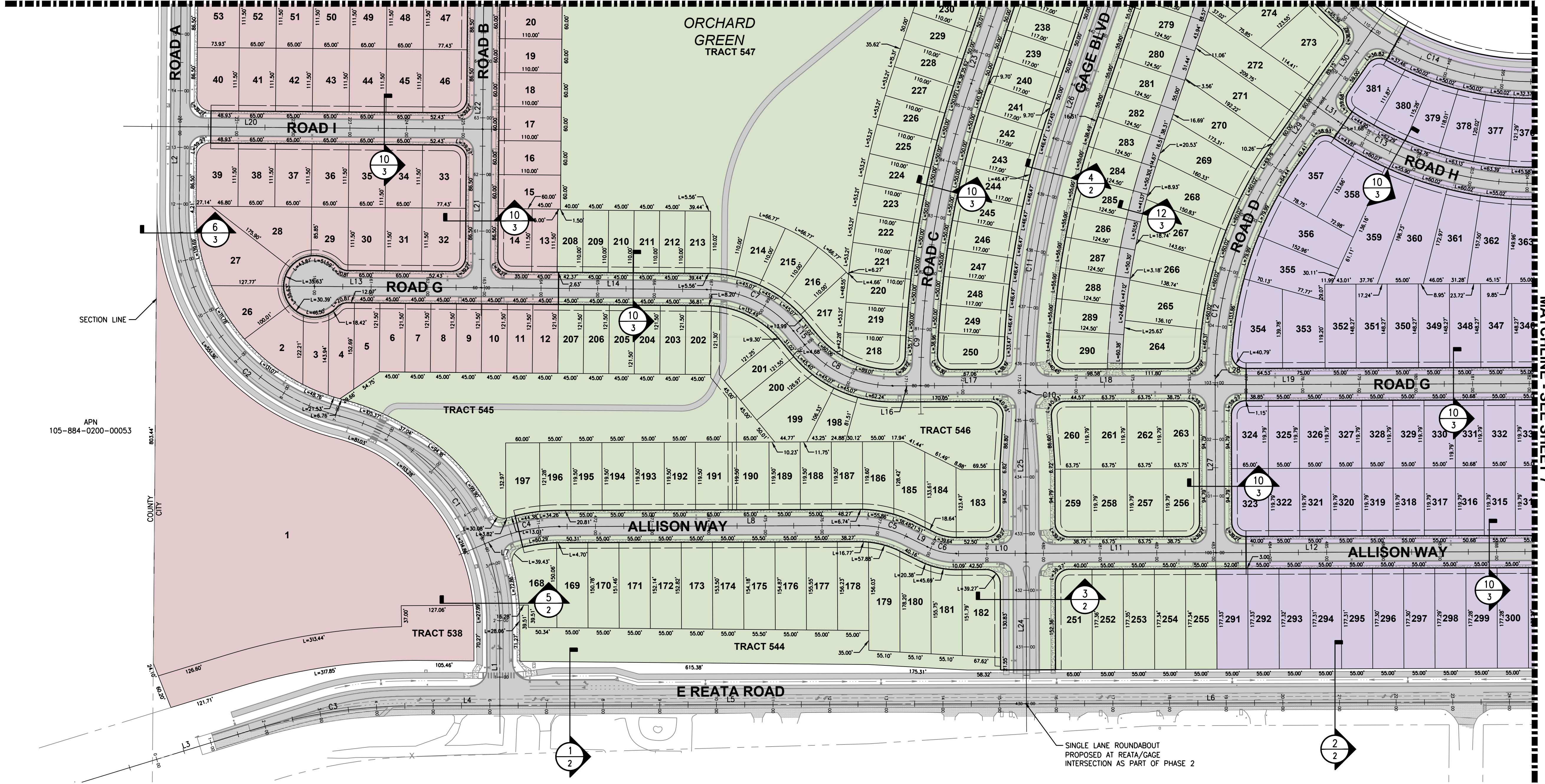
Job Number  
22467.6  
Sheet  
5 of 18



# BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

MATCHLINE - SEE SHEET 8 AND 9



## PHASING LEGEND

PHASE	LOTS	UNITS	TRACTS
1	167	325	6
2	123	123	4
3	130	130	1
4	117	117	1

\*DOES NOT INCLUDE PARCELS 104-884-0000-02001 AND 104-884-0000-02002

## ALIGNMENT LINE TABLE

LINE #	DISTANCE	BEARING	START STATION	END STATION
L1	148.95	N0° 11' 38.32"W	0+50.00	1+98.95
L2	144.21	N0° 27' 47.75"E	1+92.29	13+36.50
L3	365.47	N72° 56' 16.87"E	-1+92.97	1+72.50
L4	150.94	N89° 47' 58.87"E	4+66.81	6+17.75
L5	929.65	N89° 47' 58.87"E	6+17.75	15+47.40
L6	2621.37	N89° 47' 58.87"E	15+47.40	41+68.78
L7	14.63	N66° 36' 58.39"E	470+00.00	470+14.63
L8	529.07	N89° 48' 21.68"E	471+36.05	476+65.12
L9	40.16	S63° 37' 44.14"E	477+52.98	477+93.14
L10	123.09	N89° 48' 21.68"E	478+46.00	479+69.08
L11	335.00	N89° 48' 21.68"E	479+69.08	483+04.08
L12	968.68	N89° 48' 21.68"E	483+04.08	492+72.76
L13	294.74	S89° 32' 12.25"E	160+00.00	162+94.74
L14	397.94	S89° 32' 12.25"E	162+94.74	166+92.68
L15	31.02	S39° 25' 37.21"E	168+67.60	168+98.61
L16	49.78	N89° 48' 21.68"E	170+75.82	171+25.60

## ALIGNMENT LINE TABLE

LINE #	DISTANCE	BEARING	START STATION	END STATION
L17	185.01	N89° 48' 21.68"E	171+25.60	173+10.61
L18	334.93	N89° 48' 21.68"E	173+10.61	176+45.54
L19	968.68	N89° 48' 21.68"E	176+45.54	186+14.22
L20	534.37	S89° 32' 12.25"E	220+00.00	225+34.37
L21	280.00	N0° 27' 47.75"E	60+00.00	62+80.00
L22	280.00	N0° 27' 47.75"E	62+80.00	65+60.00
L23	240.61	N18° 45' 13.10"E	85+43.25	87+83.86
L24	265.37	N0° 11' 38.32"W	430+00.00	432+65.37
L25	282.60	N0° 11' 38.32"W	432+65.37	435+47.97
L26	240.61	N18° 45' 13.10"E	440+44.02	442+84.63
L27	296.58	N0° 11' 38.32"W	100+00.00	102+96.58
L28	15.75	N0° 11' 38.32"W	102+96.58	103+12.33
L29	102.90	N35° 02' 27.40"E	107+27.43	108+30.33
L30	164.39	N35° 02' 27.40"E	108+30.33	109+94.72
L31	43.81	S54° 53' 13.12"E	200+00.00	200+43.81
L32	403.12	N89° 48' 21.68"E	204+13.54	208+16.67

## ALIGNMENT CURVE TABLE

CURVE #	RADIUS	CHORD LENGTH	CHORD BEARING	START STATION	END STATION
C1	375.00	459.46	N37° 58' 21.16"W	1+98.95	6+93.47
C2	375.00	462.85	N37° 38' 38.13"W	6+93.47	11+92.29
C3	1000.00	293.25	N81° 22' 06.37"E	1+72.50	4+66.81
C4	300.00	120.59	N78° 12' 40.04"E	470+14.63	471+36.05
C5	189.50	87.08	S76° 54' 41.23"E	476+65.12	477+52.98
C6	114.00	52.38	S76° 54' 41.23"E	477+93.14	478+46.00
C7	200.00	169.39	S64° 28' 54.73"E	166+92.68	168+67.60
C8	200.00	171.47	S64° 48' 37.76"E	168+98.61	170+75.82
C9	1685.00	540.90	N9° 31' 03.00"E	80+00.00	85+43.25
C10	1500.00	13.98	N0° 04' 22.82"E	435+47.97	435+61.95
C11	1500.00	480.00	N9° 32' 48.53"E	435+61.95	440+44.02
C12	675.00	408.59	N17° 25' 24.54"E	103+12.33	107+27.43
C13	600.00	363.91	S72° 32' 25.72"E	200+43.81	204+13.54
C14	492.50	298.15	S72° 34' 41.61"E	392+50.38	395+53.28

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1-800-424-5555 OR "811"

## UTILITY CONFLICT NOTE:

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Revision  
No. Date By Cld. Appr.  
Title:  
LOT LAYOUT  
FOR  
BADGER MOUNTAIN SOUTH  
SOUTH ORCHARD MAJOR AMENDMENT

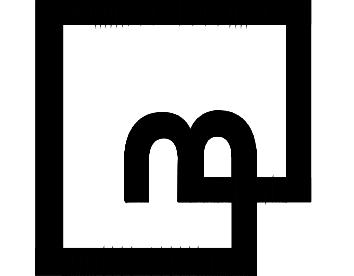
For:  
BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:  
Horizontal  
1" = 100'  
Vertical  
N/A

KDM  
Designed  
KDM  
Drawn  
CWM  
Checked  
CWM  
Approved  
Date 5/8/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

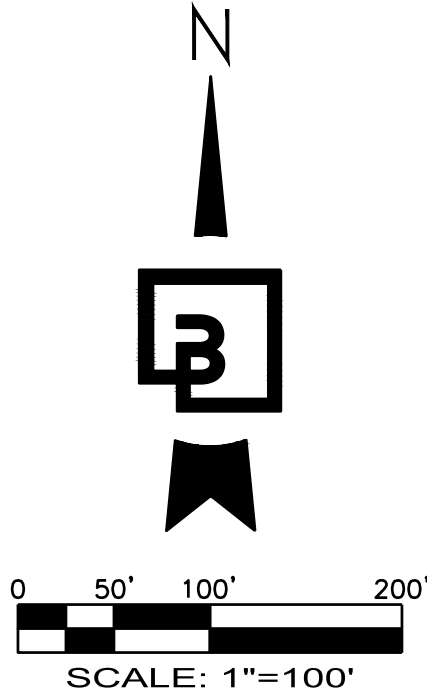


Job Number  
22467.6  
Sheet  
6 of 18



BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



PHASING LEGEND

PHASE	LOTS	UNITS	TRACTS
1	167	325	6
2	123	123	4
3	130	130	1
4	117	117	1

\*DOES NOT INCLUDE PARCELS 104-884-0000-02001 AND 104-884-0000-02002

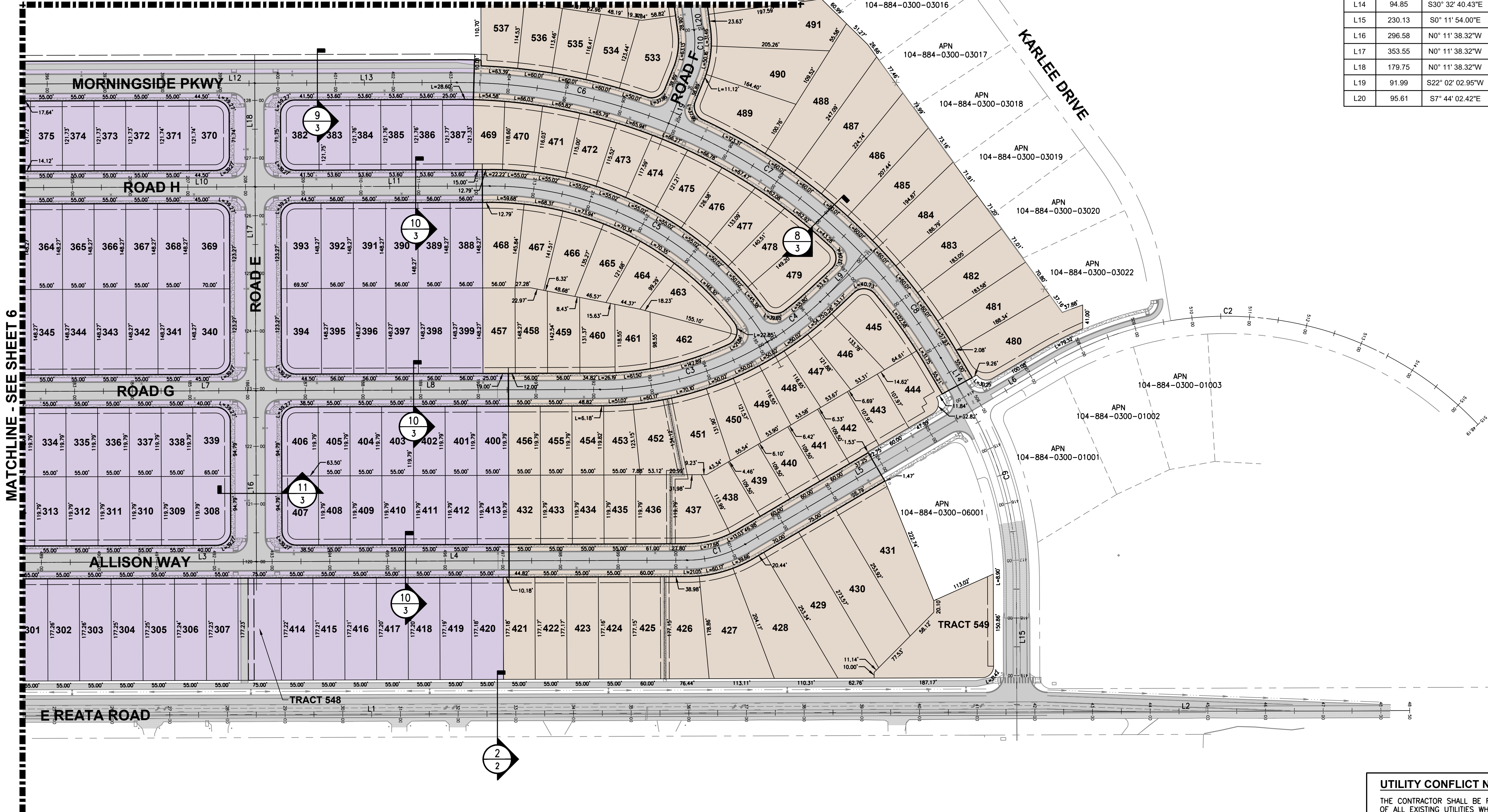
ALIGNMENT CURVE TABLE

CURVE #	RADIUS	CHORD LENGTH	CHORD BEARING	START STATION	END STATION
C1	200.00	104.63	N74° 38' 31.80"E	500+19.56	501+25.42
C2	600.00	748.09	S81° 39' 23.28"E	507+40.48	515+48.19
C3	560.00	301.58	N74° 11' 07.82"E	192+11.04	195+16.39
C4	560.00	115.32	N52° 39' 18.38"E	195+16.39	196+31.91
C5	560.00	552.29	S60° 38' 54.15"E	212+23.45	218+01.00
C6	970.00	374.02	S79° 04' 53.92"E	403+10.32	406+86.69
C7	970.00	415.12	S55° 36' 37.12"E	406+86.69	411+05.04
C8	970.00	214.74	S36° 53' 58.59"E	411+05.04	413+20.22
C9	600.00	314.08	S15° 22' 17.21"E	414+15.07	417+32.86
C10	150.00	77.06	S7° 09' 00.27"W	155+01.24	155+79.17

ALIGNMENT LINE TABLE

LINE #	DISTANCE	BEARING	START STATION	END STATION
L1	2621.37	N89° 47' 58.87"E	15+47.40	41+68.78
L2	681.22	N89° 47' 58.87"E	41+68.78	48+50.00
L3	968.68	N89° 48' 21.68"E	483+04.08	492+72.76
L4	746.80	N89° 48' 21.68"E	492+72.76	500+19.56
L5	456.21	N59° 28' 41.93"E	501+25.42	505+81.63
L6	158.85	N59° 28' 41.93"E	505+81.63	507+40.48
L7	968.68	N89° 48' 21.68"E	176+45.54	186+14.22
L8	596.82	N89° 48' 21.68"E	186+14.22	192+11.04
L9	109.49	N46° 44' 42.80"E	196+31.91	197+41.40
L10	403.12	N89° 48' 21.68"E	204+13.54	208+16.67
L11	406.79	N89° 48' 21.68"E	208+16.67	212+23.45
L12	406.64	N89° 48' 09.22"E	395+53.28	399+59.92
L13	350.40	N89° 48' 09.22"E	399+59.92	403+10.32
L14	94.85	S30° 32' 40.43"E	413+20.22	414+15.07
L15	230.13	S0° 11' 54.00"E	417+32.86	419+62.99
L16	296.58	N0° 11' 38.32"W	120+00.00	122+96.58
L17	353.55	N0° 11' 38.32"W	122+96.58	126+50.13
L18	179.75	N0° 11' 38.32"W	126+50.13	128+29.87
L19	91.99	S22° 02' 02.95"W	155+79.17	156+71.16
L20	95.61	S7° 44' 02.42"E	154+05.63	155+01.24

MATCHLINE - SEE SHEET 8



CALL BEFORE YOU DIG:  
1-800-424-5555 OR "811"

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Revision  
No. Date By Ctd. Appr.  
Title:  
LOT LAYOUT  
FOR  
BADGER MOUNTAIN SOUTH  
SOUTH ORCHARD MAJOR AMENDMENT

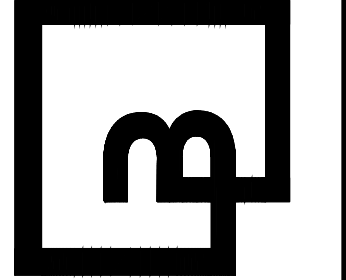
For:  
BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:  
Horizontal  
1" = 100'  
Vertical  
N/A

Designed	KDM
Drawn	KDM
Checked	CW
Approved	CW
Date	5/8/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



Job Number  
22467.6  
Sheet  
7 of 18

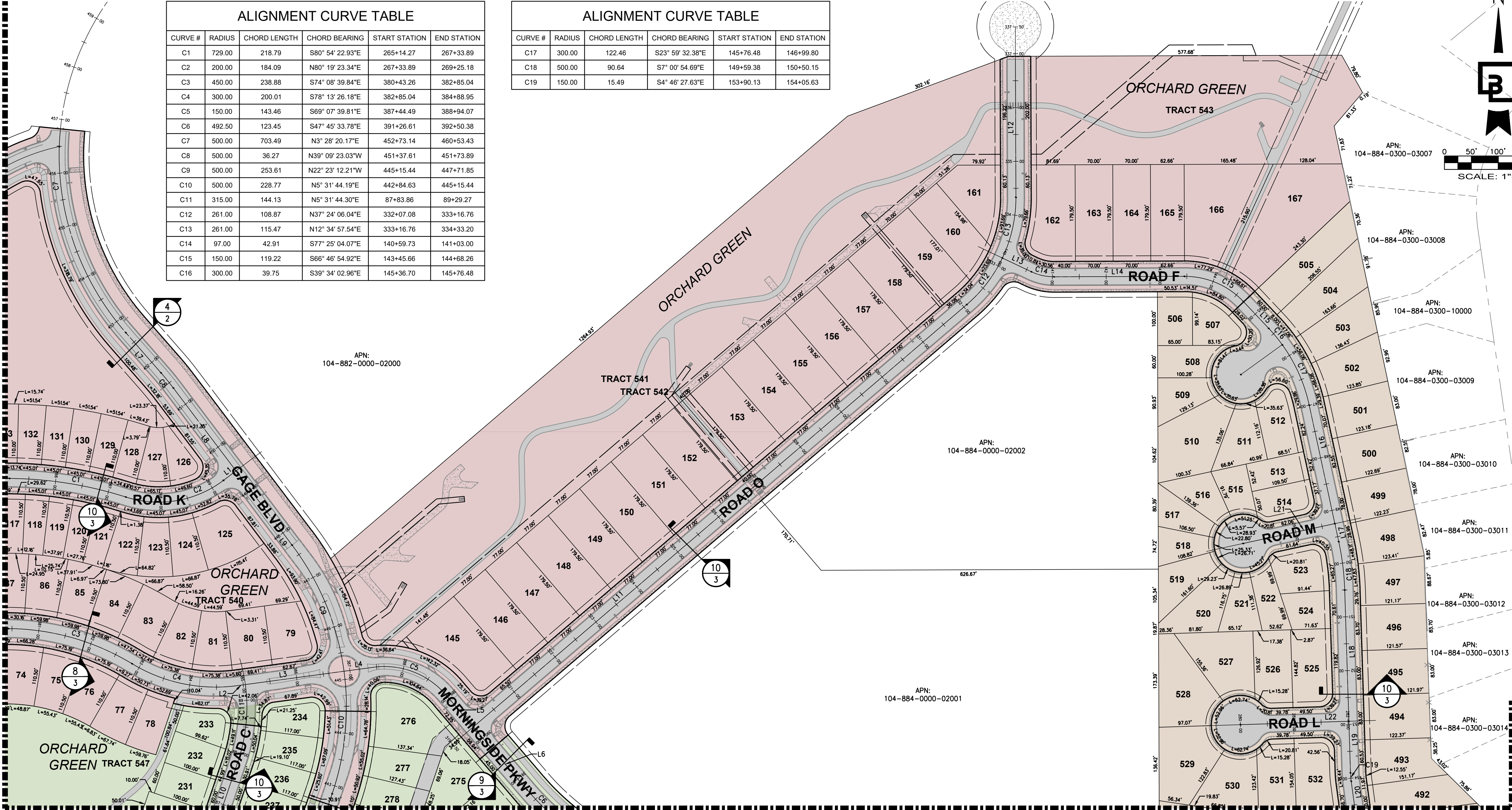


BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

ALIGNMENT CURVE TABLE					
CURVE #	RADIUS	CHORD LENGTH	CHORD BEARING	START STATION	END STATION
C1	729.00	218.79	S80° 54' 22.93"E	265+14.27	267+33.89
C2	200.00	184.09	N80° 19' 23.34"E	267+33.89	269+25.18
C3	450.00	238.88	S74° 08' 39.84"E	380+43.26	382+85.04
C4	300.00	200.01	S78° 13' 26.18"E	382+85.04	384+88.95
C5	150.00	143.46	S69° 07' 39.81"E	387+44.49	388+94.07
C6	492.50	123.45	S47° 45' 33.78"E	391+26.61	392+50.38
C7	500.00	703.49	N3° 28' 20.17"E	452+73.14	460+53.43
C8	500.00	36.27	N39° 09' 23.03"W	451+37.61	451+73.89
C9	500.00	253.61	N22° 23' 12.21"W	445+15.44	447+71.85
C10	500.00	228.77	N5° 31' 44.19"E	442+84.63	445+15.44
C11	315.00	144.13	N5° 31' 44.30"E	87+83.86	89+29.27
C12	261.00	108.87	N37° 24' 06.04"E	332+07.08	333+16.76
C13	261.00	115.47	N12° 34' 57.54"E	333+16.76	334+33.20
C14	97.00	42.91	S77° 25' 04.07"E	140+59.73	141+03.00
C15	150.00	119.22	S66° 46' 54.92"E	143+45.66	144+68.26
C16	300.00	39.75	S39° 34' 02.96"E	145+36.70	145+76.48

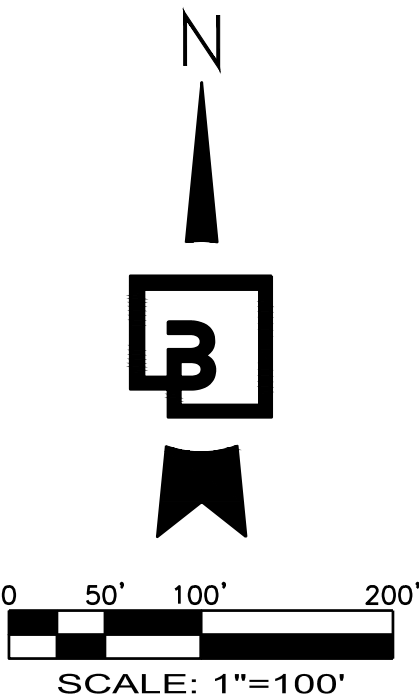
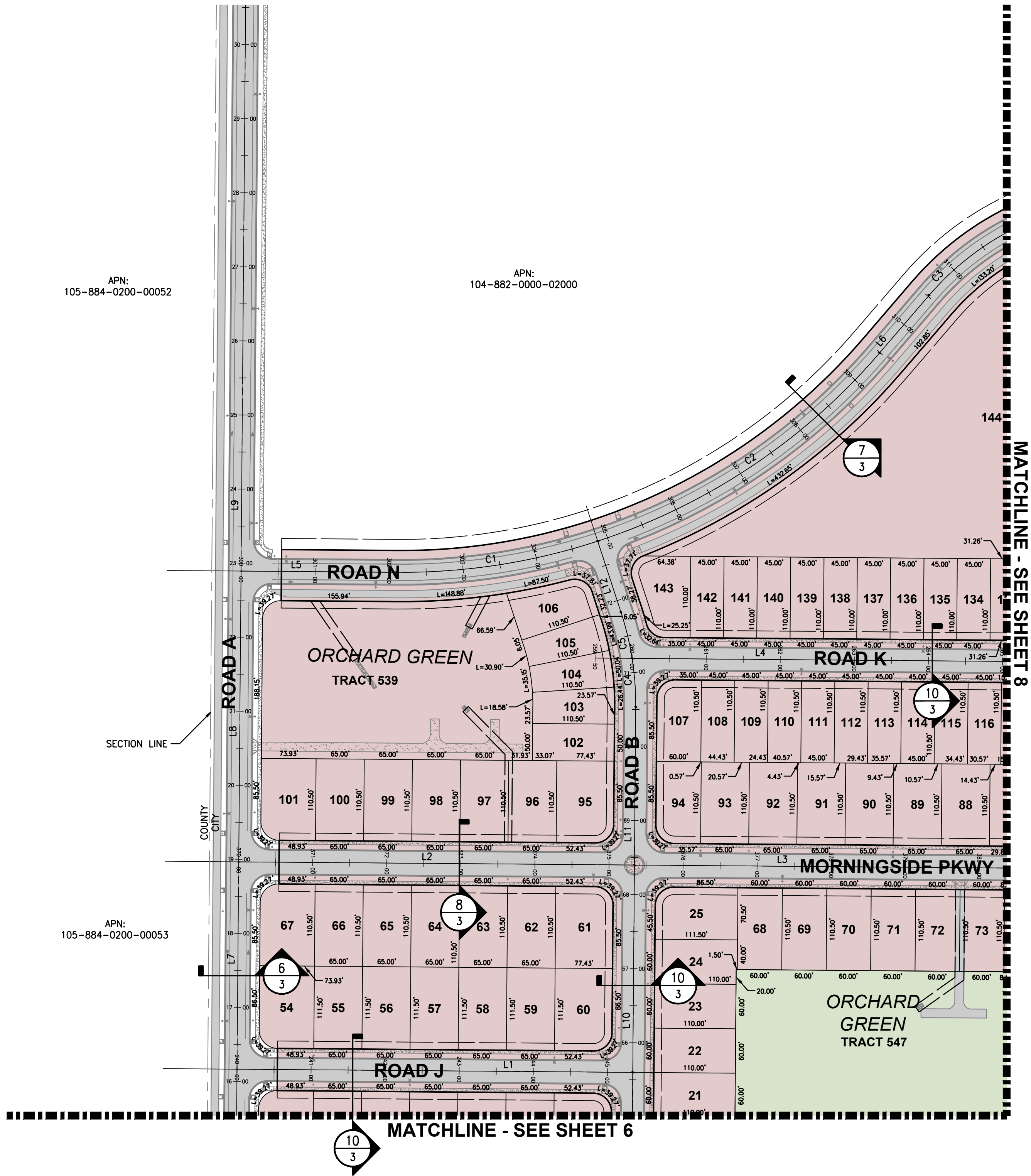
ALIGNMENT CURVE TABLE					
CURVE #	RADIUS	CHORD LENGTH	CHORD BEARING	START STATION	END STATION
C17	300.00	122.46	S23° 59' 32.38"E	145+76.48	146+99.80
C18	500.00	90.64	S7° 00' 54.69"E	149+59.38	150+50.15
C19	150.00	15.49	S4° 46' 27.63"E	153+90.13	154+05.63





BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



PHASING LEGEND				
PHASE	LOTS	UNITS	TRACTS	
1	167	325	6	
2	123	123	4	
3	130	130	1	
4	117	117	1	

\*DOES NOT INCLUDE PARCELS 104-884-0000-02001 AND 104-884-0000-02002

ALIGNMENT LINE TABLE				
LINE #	DISTANCE	BEARING	START STATION	END STATION
L1	534.37	S89° 32' 12.25"E	240+00.00	245+34.37
L2	534.37	S89° 32' 12.25"E	370+00.00	375+34.37
L3	508.89	S89° 32' 12.25"E	375+34.37	380+43.26
L4	514.27	S89° 32' 12.25"E	260+00.00	265+14.27
L5	210.44	S89° 32' 12.25"E	300+00.00	302+10.44
L6	102.85	N40° 39' 38.22"E	309+49.28	310+52.13
L7	280.00	N0° 27' 47.75"E	16+16.50	18+96.50
L8	392.65	N0° 27' 47.75"E	18+96.50	22+89.15
L9	854.06	N0° 27' 47.75"E	22+89.15	31+43.21
L10	280.00	N0° 27' 47.75"E	65+60.00	68+40.00
L11	213.57	N0° 27' 47.75"E	68+40.00	70+53.57
L12	101.21	N18° 07' 00.44"W	71+83.28	72+84.49

ALIGNMENT CURVE TABLE					
CURVE #	RADIUS	CHORD LENGTH	CHORD BEARING	START STATION	END STATION
C1	850.00	274.43	N81° 10' 23.65"E	302+10.44	304+86.08
C2	850.00	457.49	N56° 16' 18.89"E	304+86.08	309+49.28
C3	375.00	239.18	N59° 15' 28.03"E	310+52.13	312+95.56
C4	400.00	65.65	N4° 14' 38.55"W	70+53.57	71+19.30
C5	400.00	63.92	N13° 32' 02.65"W	71+19.30	71+83.28

Revision

No.

Date

By

Chd.

Appr.

Title:

LOT LAYOUT  
FOR  
BADGER MOUNTAIN SOUTH  
SOUTH ORCHARD MAJOR AMENDMENT

For:

BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335

Scale:  
Horizontal  
1" = 100'  
Vertical  
N/A

Designed  
KDM

Drawn  
KDM

Checked  
CWM

Approved  
CWM

Date  
5/8/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

Job Number  
22467.6

Sheet  
9 of 18

CALL BEFORE YOU DIG:  
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BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

LOT TABLE

LOT	AREA (SF)
1	209,820
2	8,261
3	5,868
4	7,108
5	6,169
6	5,468
7	5,468
8	5,468
9	5,468
10	5,468
11	5,468
12	5,468
13	5,017
14	6,556
15	6,600
16	6,600
17	6,600
18	6,600
19	6,600
20	6,600
21	6,600
22	6,600
23	6,600
24	6,660
25	7,727
26	7,929
27	14,412
28	10,916
29	6,214
30	7,247
31	7,247
32	8,500
33	8,500
34	7,248
35	7,248
36	7,248
37	7,248
38	7,248
39	8,110
40	8,110
41	7,247
42	7,247
43	7,247
44	7,247
45	7,247
46	8,500
47	8,500
48	7,248
49	7,248
50	7,248
51	7,248
52	7,248
53	8,110
54	8,110
55	7,247
56	7,247
57	7,247
58	7,247
59	7,247
60	8,500

LOT	AREA (SF)
61	8,422
62	7,183
63	7,183
64	7,183
65	7,183
66	7,183
67	8,036
68	6,630
69	6,630
70	6,630
71	6,630
72	6,630
73	6,630
74	7,344
75	7,217
76	7,217
77	7,436
78	6,213
79	8,897
80	8,162
81	6,628
82	6,628
83	8,276
84	7,391
85	7,391
86	7,391
87	7,012
88	7,183
89	7,182
90	7,182
91	7,182
92	7,182
93	7,182
94	6,558
95	8,422
96	7,182
97	7,182
98	7,182
99	7,182
100	7,182
101	8,036
102	5,525
103	5,092
104	4,707
105	4,806
106	6,532
107	6,496
108	4,973
109	4,973
110	4,973
111	4,973
112	4,973
113	4,972
114	4,973
115	4,972
116	4,973
117	4,715
118	4,581
119	4,581
120	4,581

LOT	AREA (SF)
121	4,581
122	6,136
123	6,185
124	6,185
125	10,386
126	5,265
127	4,869
128	4,853
129	5,310
130	5,310
131	5,310
132	5,310
133	5,060
134	4,950
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138	4,950
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145	18,174
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150	13,822
151	13,821
152	13,822
153	13,822
154	13,821
155	13,821
156	13,821
157	13,822
158	13,821
159	12,537
160	11,763
161	10,872
162	15,021
163	12,565
164	12,565
165	11,247
166	22,723
167	29,627
168	9,689
169	8,274
170	8,312
171	8,349
172	8,386
173	8,424
174	8,461
175	8,576
176	8,536
177	8,574
178	8,606
179	10,280
180	9,129

LOT	AREA (SF)
181	8,365
182	10,248
183	9,143
184	7,215
185	7,314
186	6,754
187	6,573
188	6,572
189	6,572
190	7,767
191	7,767
192	6,572
193	6,572
194	6,572
195	6,572
196	6,593
197	7,579
198	5,022
199	8,886
200	5,558
201	5,467
202	5,467
203	5,468
204	5,468
205	5,468
206	5,468
207	5,468
208	4,957
209	4,950
210	4,950
211	4,950
212	4,950
213	4,950
214	6,151
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216	6,151
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219	5,677
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221	5,677
222	5,677
223	5,677
224	5,677
225	5,677
226	5,677
227	5,677
228	5,551
229	5,500
230	5,501
231	6,000
232	6,080
233	5,714
234	7,344
235	6,852
236	6,231
237	5,850
238	5,850
239	5,850
240	5,850

LOT	AREA (SF)
241	5,684
242	5,644
243	5,644
244	5,644
245	5,644
246	5,644
247	5,644
248	5,644
249	5,644
250	6,893
251	11,394
252	9,754
253	9,754
254	9,754
255	9,753
256	7,503
257	7,637
258	7,637
259	7,503
260	7,906
261	7,637
262	7,637
263	7,503
264	10,468
265	9,040
266	9,311
267	9,748
268	10,356
269	11,163
270	12,113
271	12,059
272	13,111
273	11,389
274	9,539
275	11,698
276	15,985
277	8,128
278	7,635
279	6,848
280	6,847
281	6,847
282	6,848
283	6,643
284	6,555
285	6,555
286	6,555
287	6,555
288	6,555
289	6,555
290	7,969
291	9,753
292	9,753
293	9,752
294	9,752
295	9,752
296	9,751
297	9,751
298	9,751
299	9,750
300	9,750

LOT	AREA (SF)
301	9,750
302	9,749
303	9,749
304	9,749
305	9,748
306	9,748
307	9,748
308	7,652
309	6,588
310	6,588
311	6,588
312	6,588
313	6,588
314	6,588
315	6,588
316	6,071
317	6,588
318	6,588
319	6,588
320	6,588
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325	6,588
326	6,588
327	6,588
328	6,588
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349	8,155
350	8,155
351	8,155
352	8,155
353	9,712
354	12,277
355	10,478
356	10,789
357	10,107
358	8,932
359	13,801
360	12,672

LOT	AREA (SF)
361	11,173
362	9,458
363	8,910
364	8,155
365	8,155
366	8,155
367	8,155
368	8,155
369	10,245
370	8,193
371	6,696
372	6,695
373	6,695
374	6,695
375	6,695
376	6,670
377	6,845
378	6,735
379	6,577
380	6,374
381	6,890
382	7,828
383	6,526
384	6,526
385	6,526
386	6,527
387	6,523
388	8,303
389	8,303
390	8,303
391	8,303
392	8,303
393	10,171
394	10,171
395	8,303
396	8,303
397	8,303
398	8,303
399	8,303
400	6,588
401	6,588
402	6,588
403	6,588
404	6,588
405	6,588
406	7,473
407	7,473
408	6,588
409	6,588
410	6,588
411	6,588
412	6,588
413	6,588
414	9,747
415	9,747
416	9,746
417	9,746
418	9,746
419	9,745
420	9,745

LOT	AREA (SF)
421	9,745
422	9,744
423	9,744
424	9,744
425	10,629
426	12,099
427	16,066
428	18,087
429	18,963
430	19,781
431	19,821
432	6,588
433	6,588
434	6,588
435	6,588
436	7,307
437	9,340
438	6,133
439	6,570
440	6,570
441	6,570
442	6,535
443	6,478
444	8,271
445	10,227
446	7,756
447	6,544
448	6,384
449	6,531
450	6,994
451	10,802
452	8,539
453	6,886
454	6,589
455	6,588
456	6,588
457	8,303
458	8,221
459	7,670
460	7,637
461	6,698
462	8,684
463	9,415
464	7,007
465	7,980
466	8,936
467	8,454
468	9,476
469	6,276
470	7,089
471	6,971
472	6,954
473	7,040
474	7,228
475	7,519
476	7,916
477	7,631
478	8,130
479	10,834
480	15,033

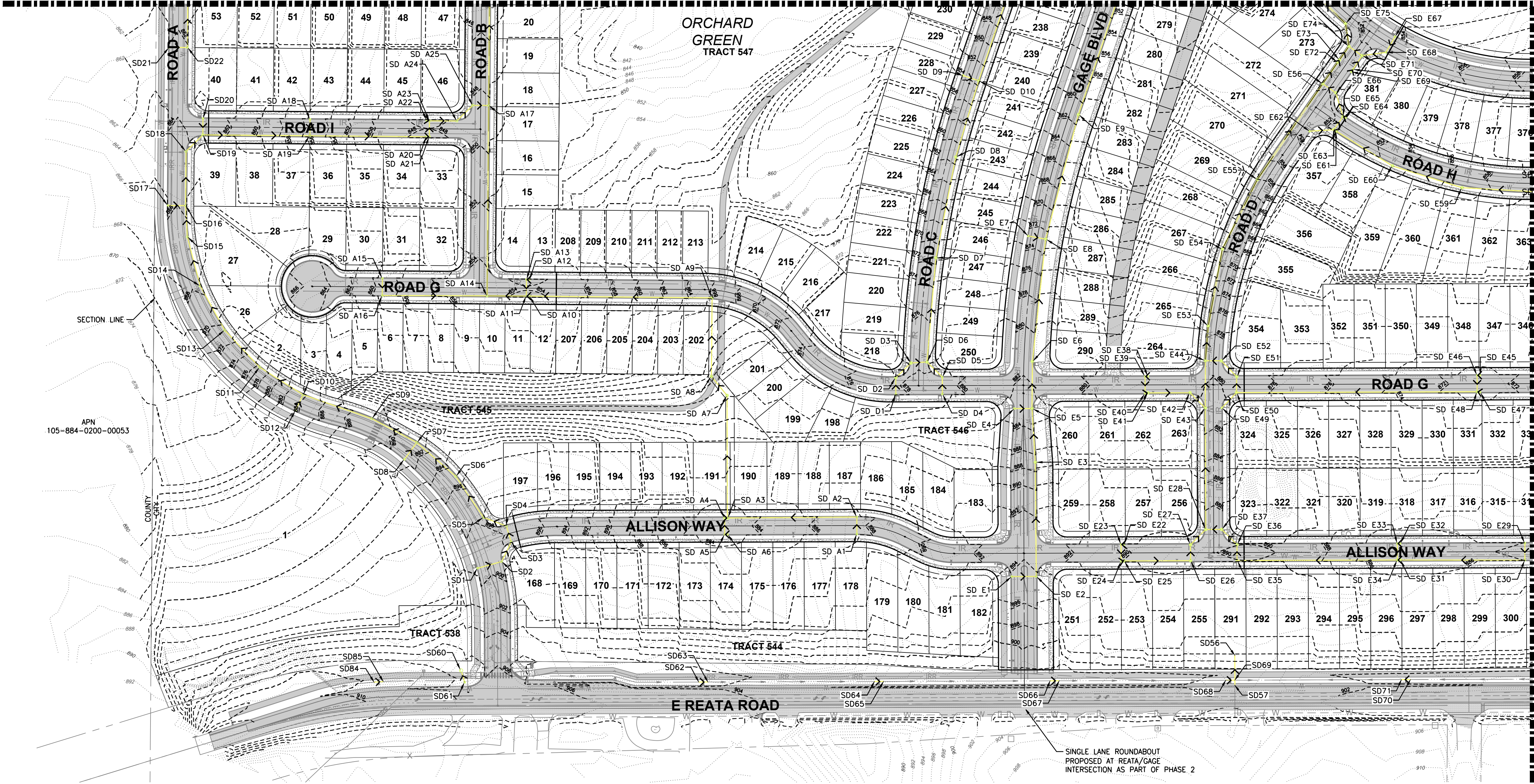
LOT	AREA (SF)
481	12,124
482	11,984
483	12,098
484	12,518
485	13,259
486	14,340
487	15,797
488	17,447
489	13,056
490	13,771
491	16,190
492	10,463
493	10,145
494	10,140
495	10,107
496	10,158
497	10,098
498	10,128
499	9,552
500	10,148
501	10,025
502	10,158
503	10,223
504	12,528
505	13,496
506	6,496
507	7,496
508	6,636
509	6,749
510	15,116
511	8,024
512	8,582
513	5,740
514	6,586
515	5,249
516	6,389
517	5,719
518	5,202
519	7,579
520	9,753
521	5,995
522	5,830
523	8,243
524	5,631
525	10,655
526	9,933
527	12,837
528	14,150
529	13,455
530	10,638
531	10,133
532	11,781
533	10,305
534	7,605
535	7,271
536	7,208
537	8,151



# BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

MATCHLINE - SEE SHEET 13 AND 14



## GRADING NOTES

ROUGH FINISHED GRADE CONTOURS SHOWN FOR PRELIMINARY PLATTING PURPOSES ONLY. GRADING AND DRAINAGE OF PHASED ENGINEERING PLANS MAY DIFFER FROM THOSE SHOWN.

CALL BEFORE YOU DIG:  
1-800-424-5555 OR "811"

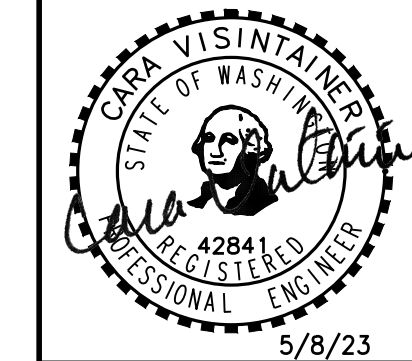
## UTILITY CONFLICT NOTE:

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Revision	No.	Date	By	Chd.	Appr.

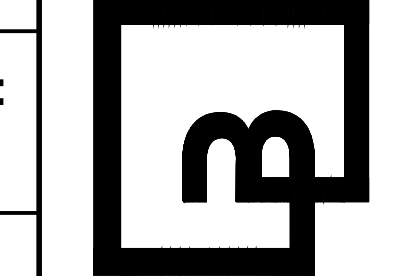
Title: GRADING AND DRAINAGE PLAN  
FOR  
BADGER MOUNTAIN SOUTH  
SOUTH ORCHARD MAJOR AMENDMENT

For: BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:	Horizontal 1" = 100'	Vertical N/A
Designed	KDM	Date
Drawn	KDM	5/8/23
Checked	CW	
Approved	CW	

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



Job Number	22467.6
Sheet	11 of 18

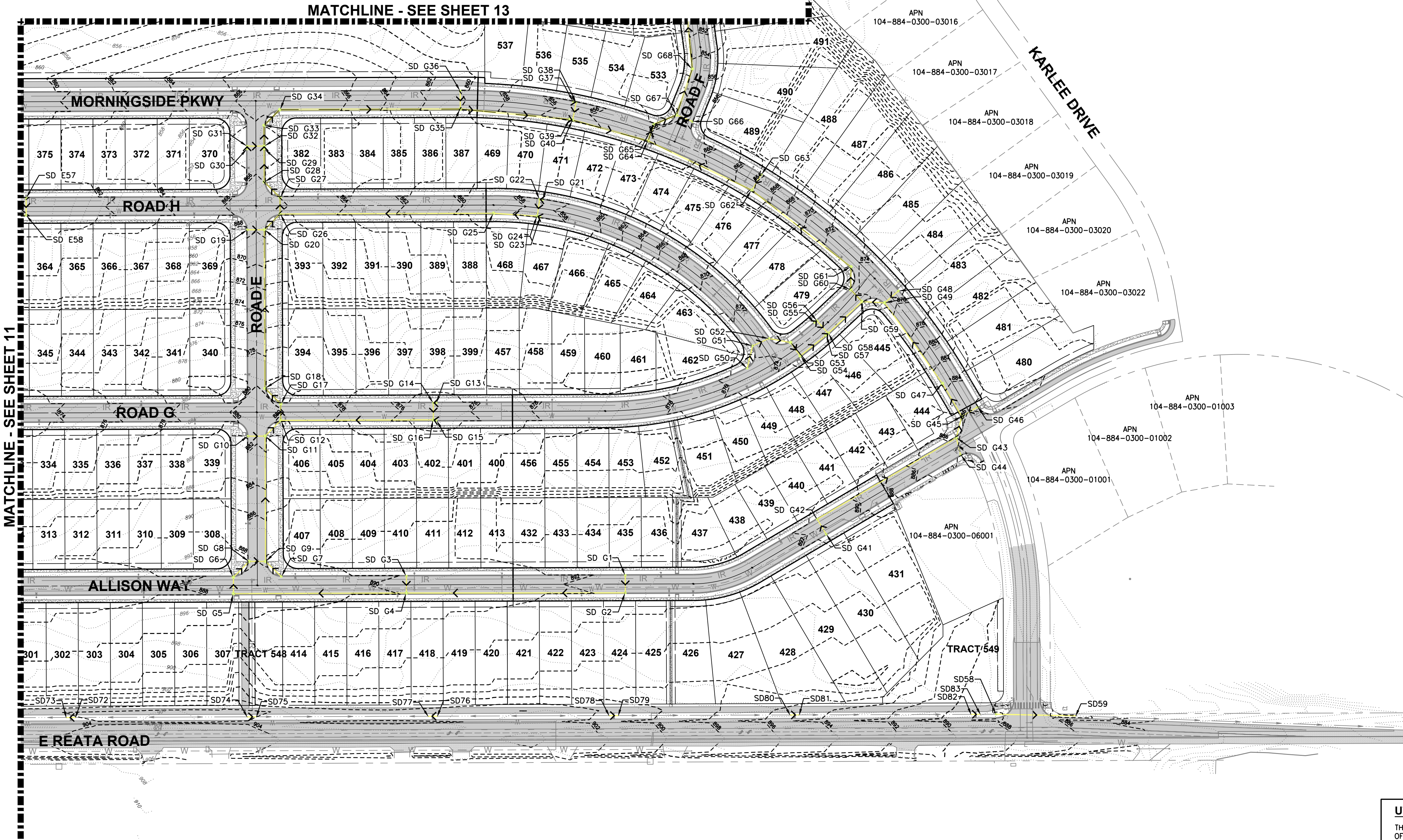
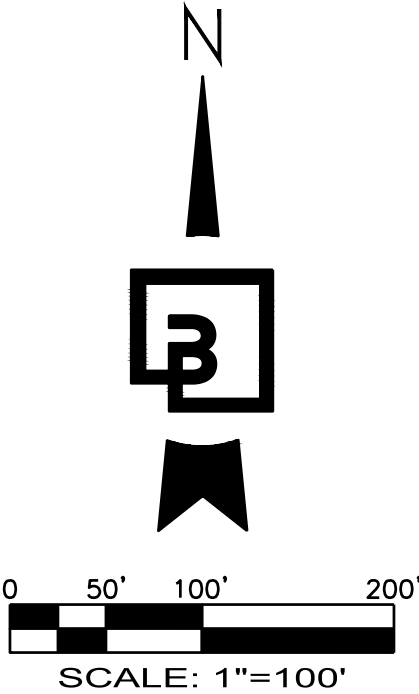


BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

GRADING NOTES

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CALL BEFORE YOU DIG:  
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No.	Date	By	Chd.	Appr.	Revision
Title: GRADING AND DRAINAGE PLAN FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT					

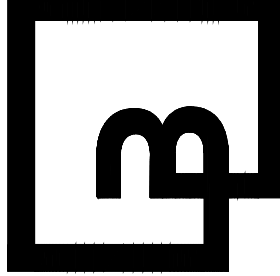
For: BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale: Horizontal 1" = 100' Vertical N/A

KDM	KDM	CW	CW	Date
Designed	Drawn	Checked	Approved	5/8/23

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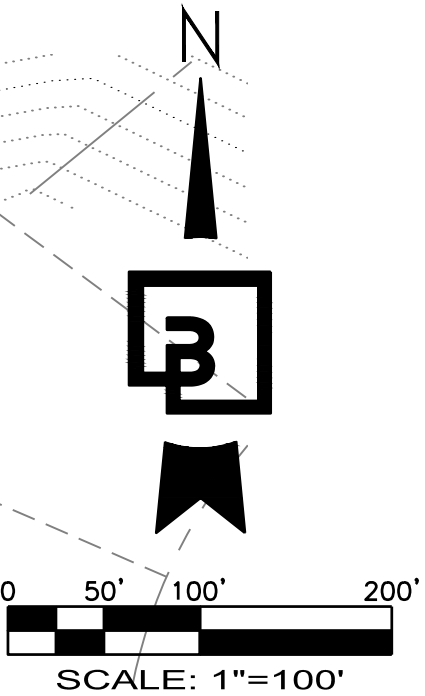
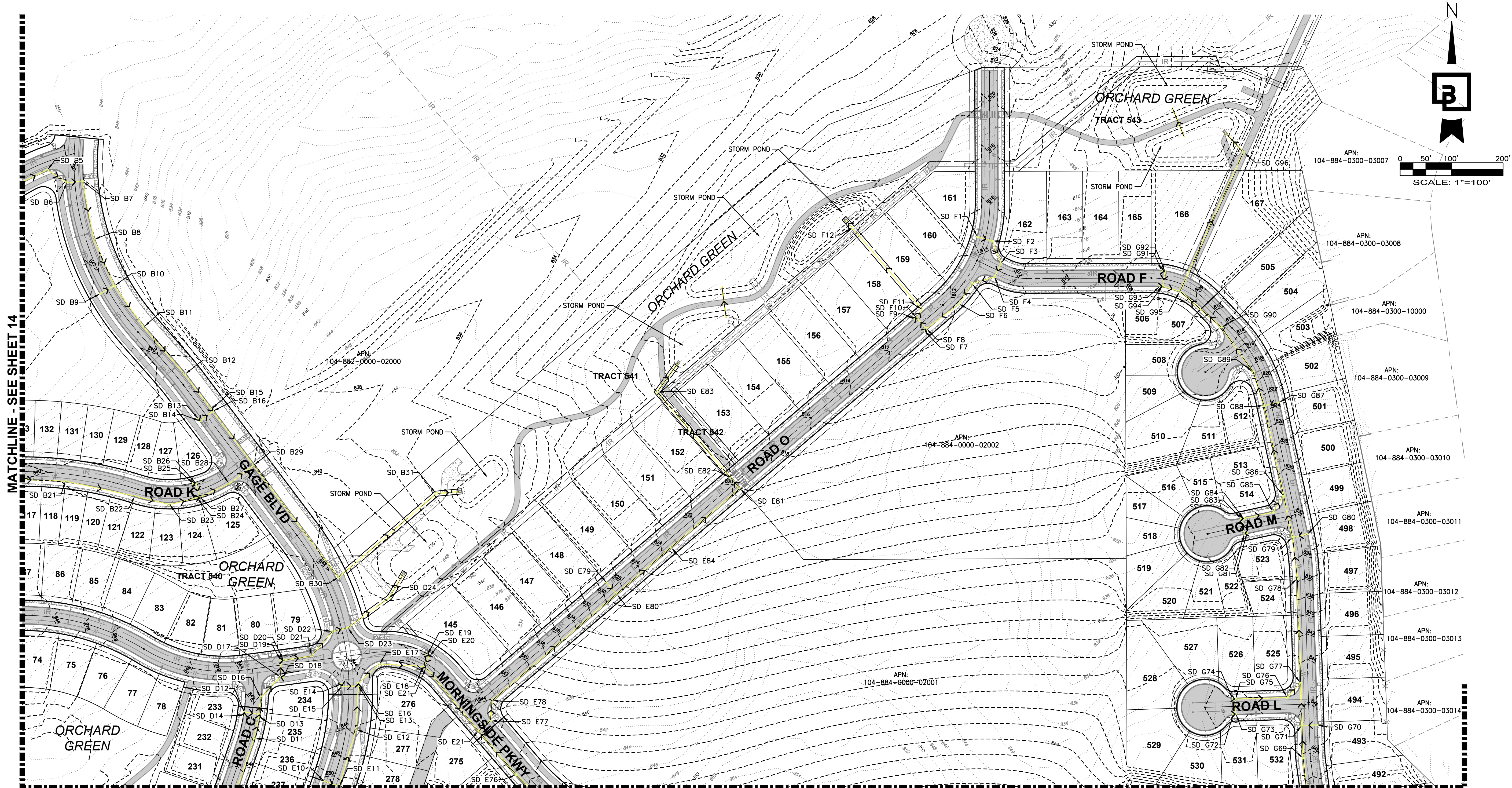


Job Number 22467.6	Sheet 12 of 18
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BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



GRADING NOTES

ROUGH FINISHED GRADE CONTOURS SHOWN FOR PRELIMINARY PLATTING PURPOSES ONLY. GRADING AND DRAINAGE OF PHASED ENGINEERING PLANS MAY DIFFER FROM THOSE SHOWN.

MATCHLINE - SEE SHEET 11 AND 12

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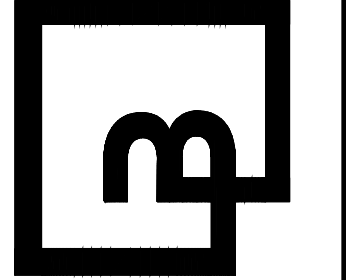
For: BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale: Horizontal 1" = 100' Vertical N/A

KDM	KDM	KDM	KDM	Date
Designed	Drawn	Checked	Approved	5/8/23

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Kent, WA 98032  
425.251.6222  
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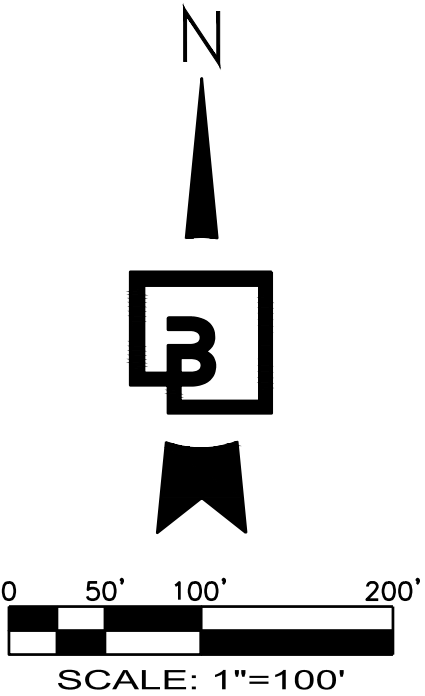
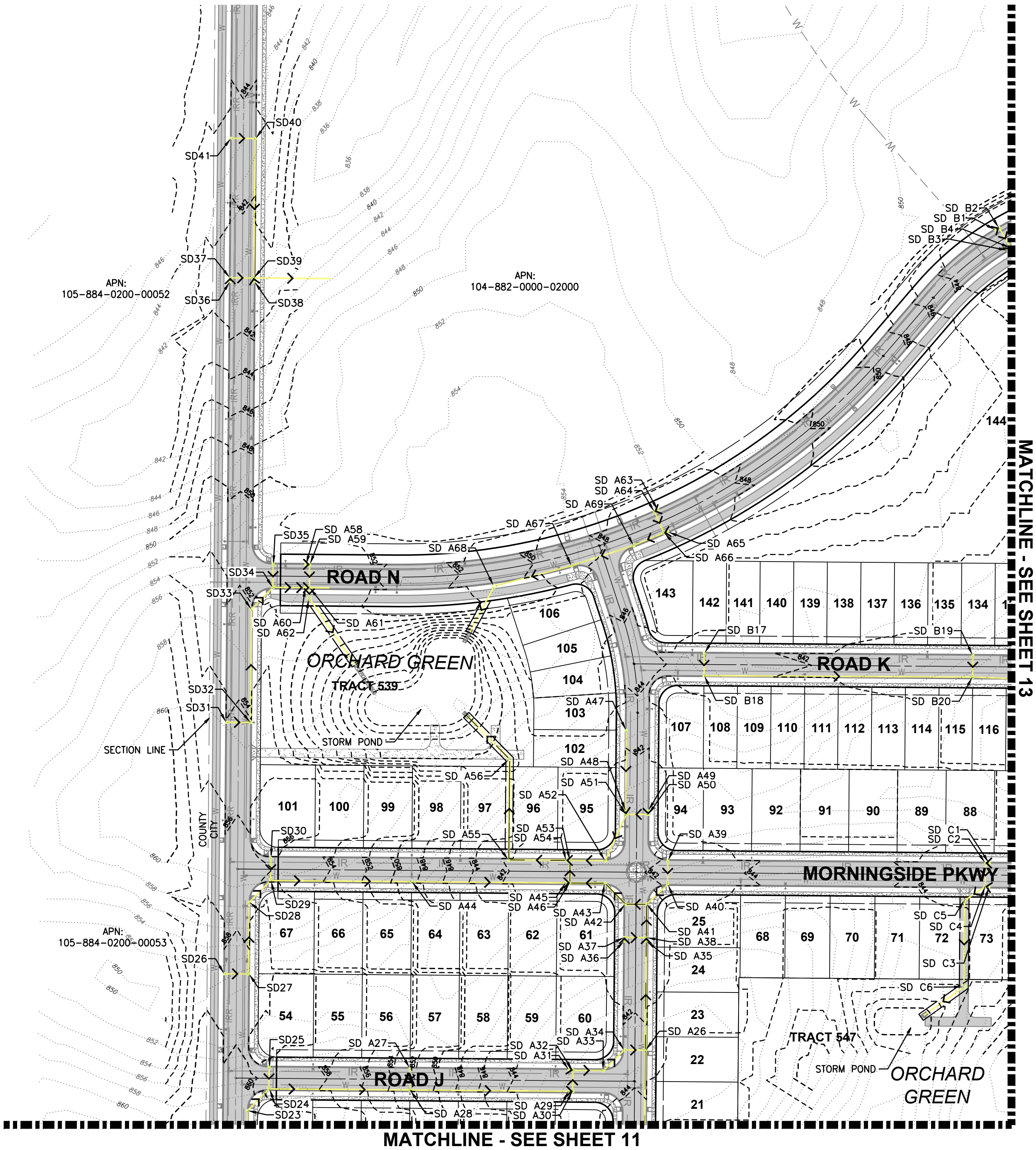


Job Number 22467.6	Sheet 13 of 18
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BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



GRADING NOTES

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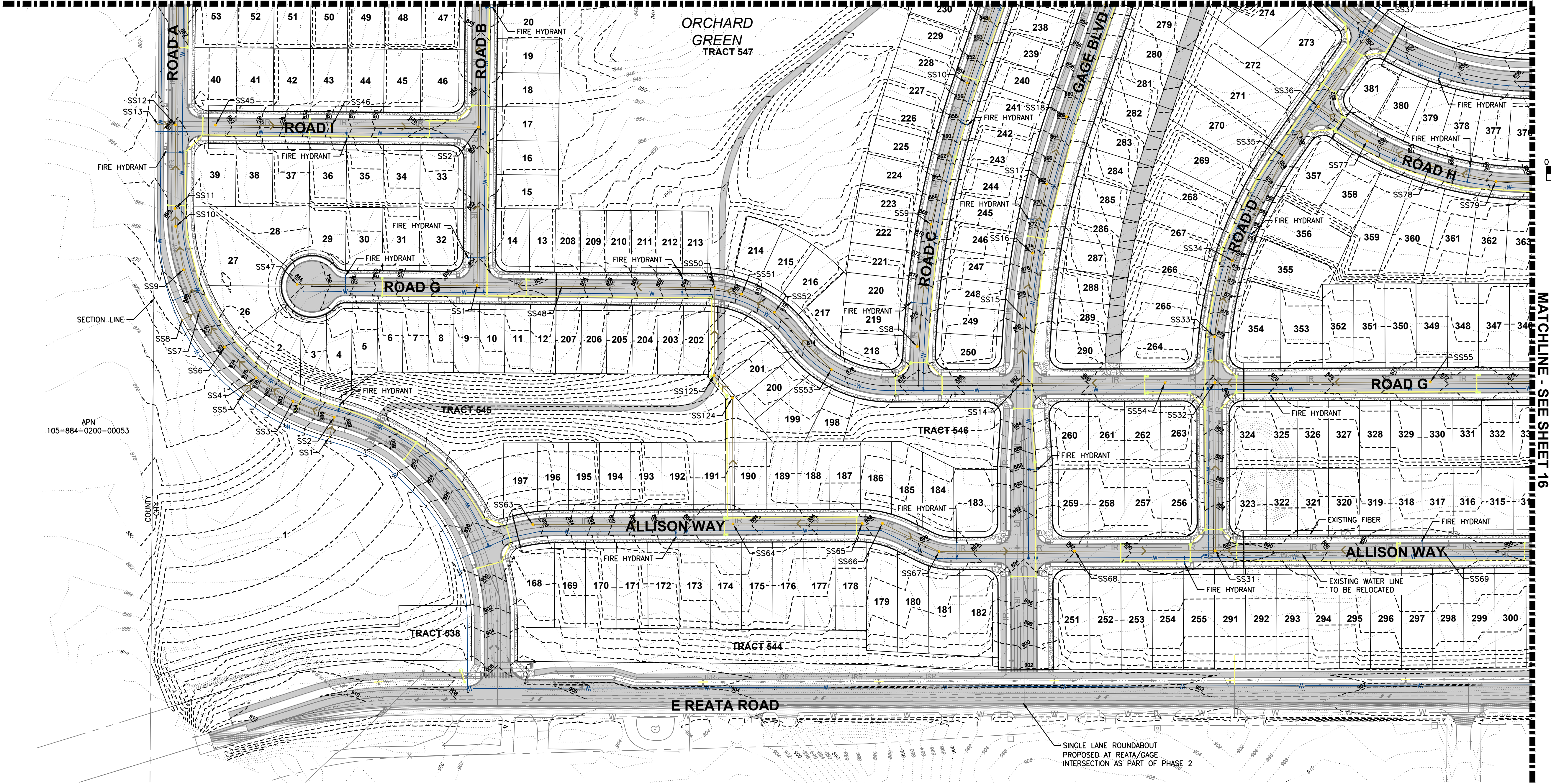
Revision No. Date By Ckd. Appr.	
Title: GRADING AND DRAINAGE PLAN FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT	
For: BADGER COMMUNITIES, LLC P.O. BOX 1307 GIG HARBOR, WA 98335	
Scale: Horizontal: 1" = 100' Vertical: N/A	
KDM Designed Drawn Checked Approved Date	5/8/23 5/8/23 5/8/23 5/8/23 5/8/23
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com	
Job Number 22467.6	Sheet 14 of 18



BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA

MATCHLINE - SEE SHEET 17 AND 18



UTILITY LEGEND			
PROPOSED		EXISTING	
	WATER MAIN		WATER MAIN
	IRRIGATION MAIN		IRRIGATION MAIN
	SANITARY SEWER MAIN		SANITARY SEWER MAIN
	STORM MAIN		STORM MAIN

CALL BEFORE YOU DIG:  
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Kent, WA 98032  
425.251.6222 [barghausen.com](http://barghausen.com)



For: **BADGER COMMUNITIES, LLC**  
P.O. BOX 1307  
GIG HARBOR, WA 98335

Title: **UTILITY PLAN**  
FOR  
**BADGER MOUNTAIN SOUTH**  
**SOUTH ORCHARD MAJOR AMENDMENT**

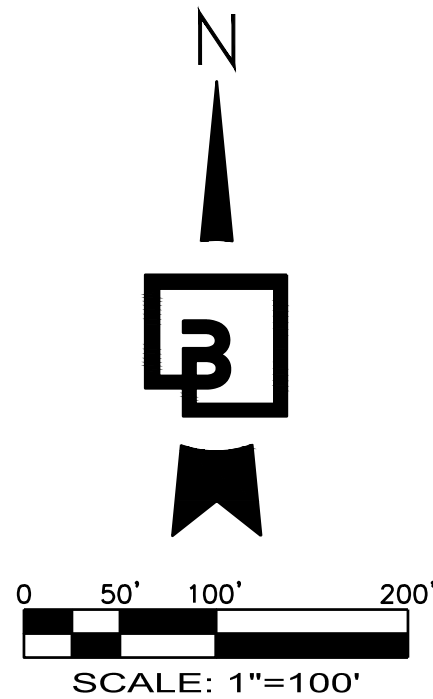
Revision	No.	Date	By	Chd.	Appr.

Job Number  
**22467.6**  
Sheet  
**15** of **18**

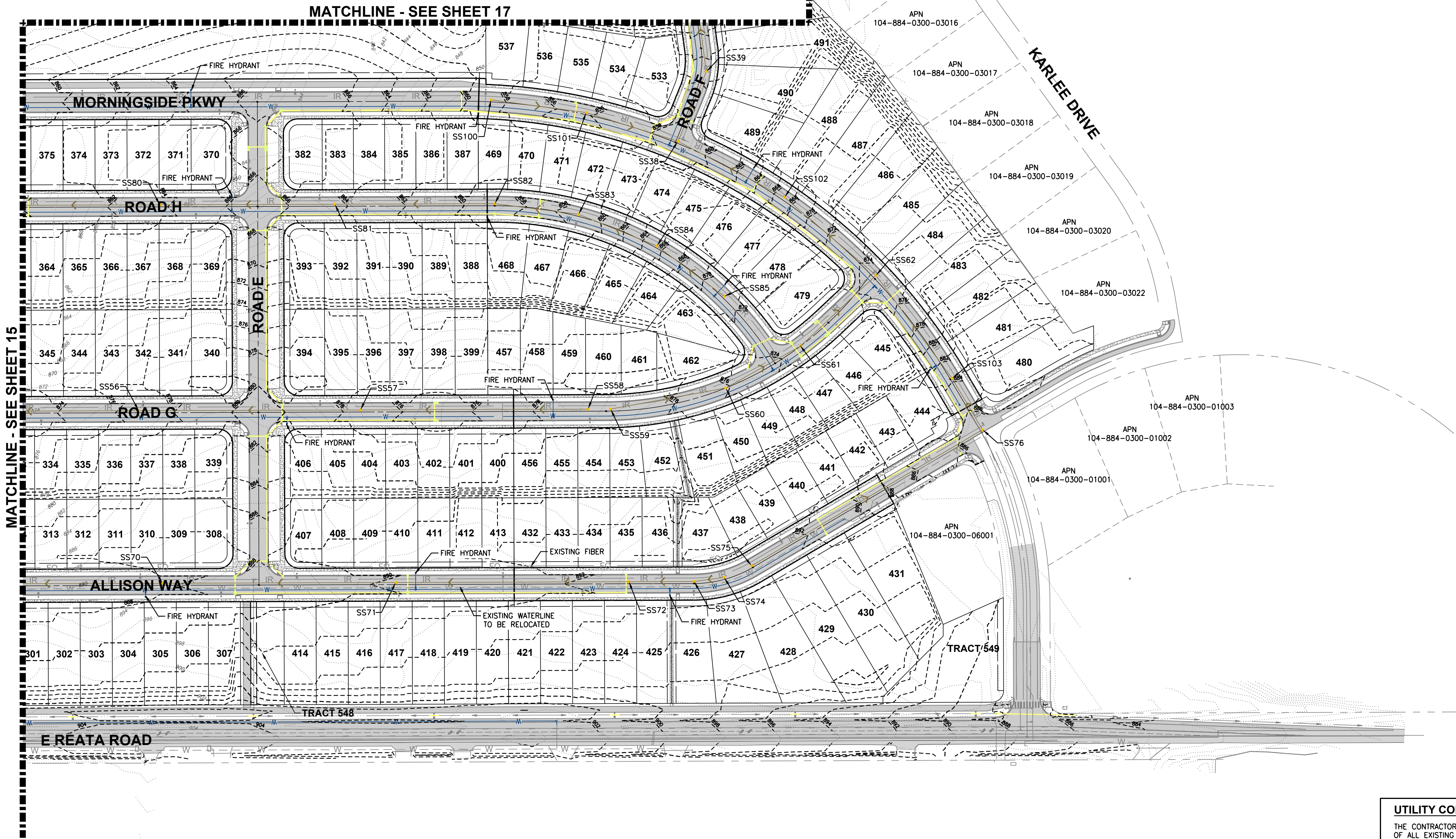


BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



UTILITY LEGEND	
PROPOSED	EXISTING
W- WATER MAIN	-W- WATER MAIN
IR- IRRIGATION MAIN	-IR- IRRIGATION MAIN
SANITARY SEWER MAIN	SANITARY SEWER MAIN
STORM MAIN	STORM MAIN



CALL BEFORE YOU DIG:  
1-800-424-5555 OR "811"

**UTILITY CONFLICT NOTE:**  
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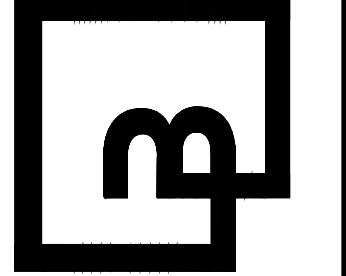
No.	Date	By	Chd.	Appr.	Revision
Title:					
UTILITY PLAN FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT					

For:  
BADGER COMMUNITIES, LLC  
P.O. BOX 1307  
GIG HARBOR, WA 98335



Scale:	Horizontal 1" = 100'	Vertical N/A
KDM Designed	KDM Drawn	CW Checked
		CW Approved
		Date 5/8/23

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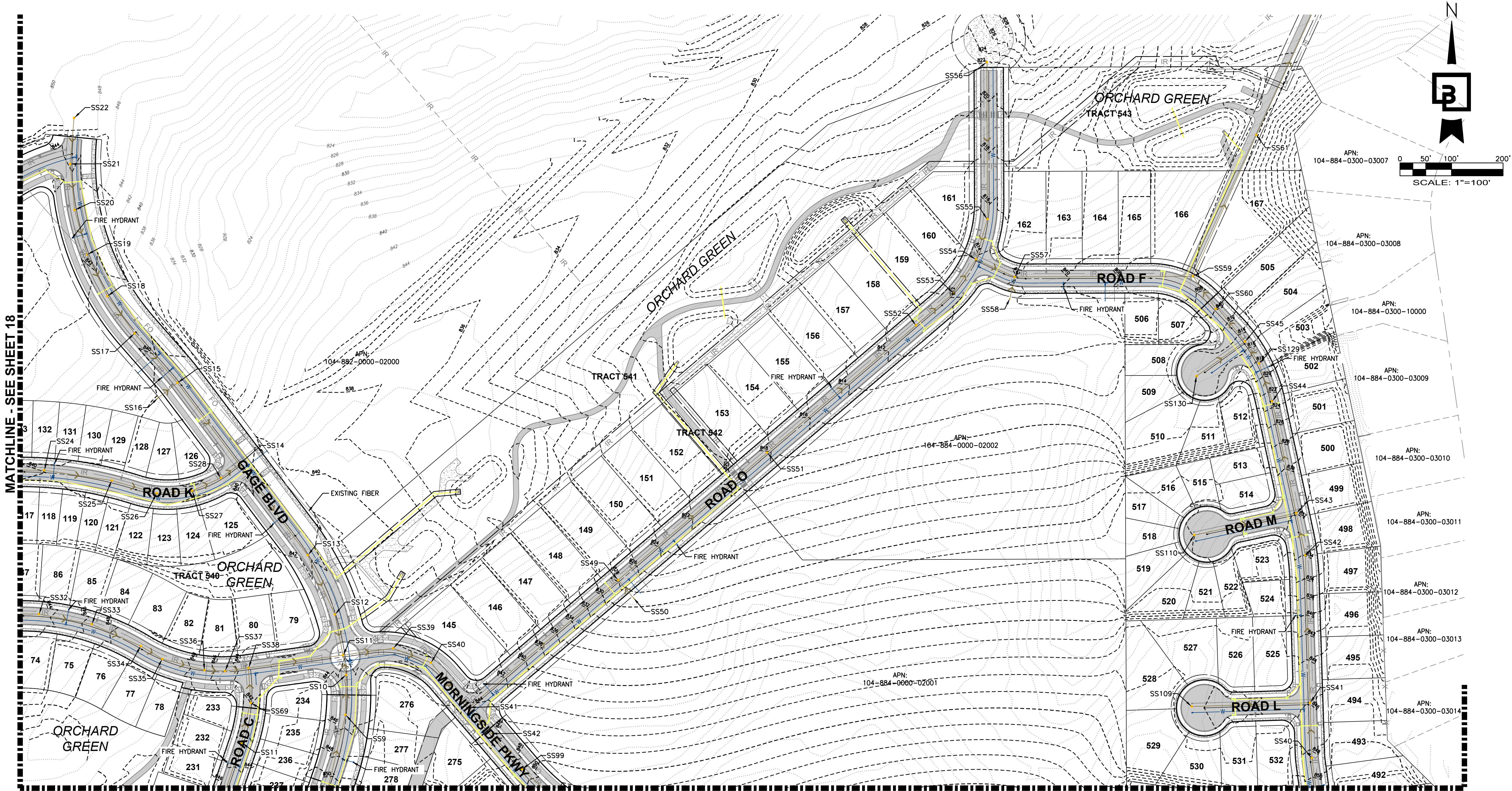


Job Number 22467.6	Sheet 16 of 18
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BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



MATCHLINE - SEE SHEET 18

MATCHLINE - SEE SHEET 15 AND 16

UTILITY LEGEND			
PROPOSED		EXISTING	
	WATER MAIN		WATER MAIN
	IRRIGATION MAIN		IRRIGATION MAIN
	SANITARY SEWER MAIN		SANITARY SEWER MAIN
	STORM MAIN		STORM MAIN

CALL BEFORE YOU DIG:  
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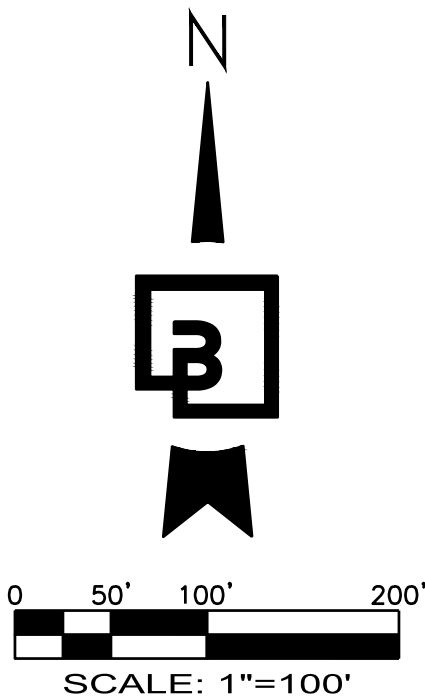
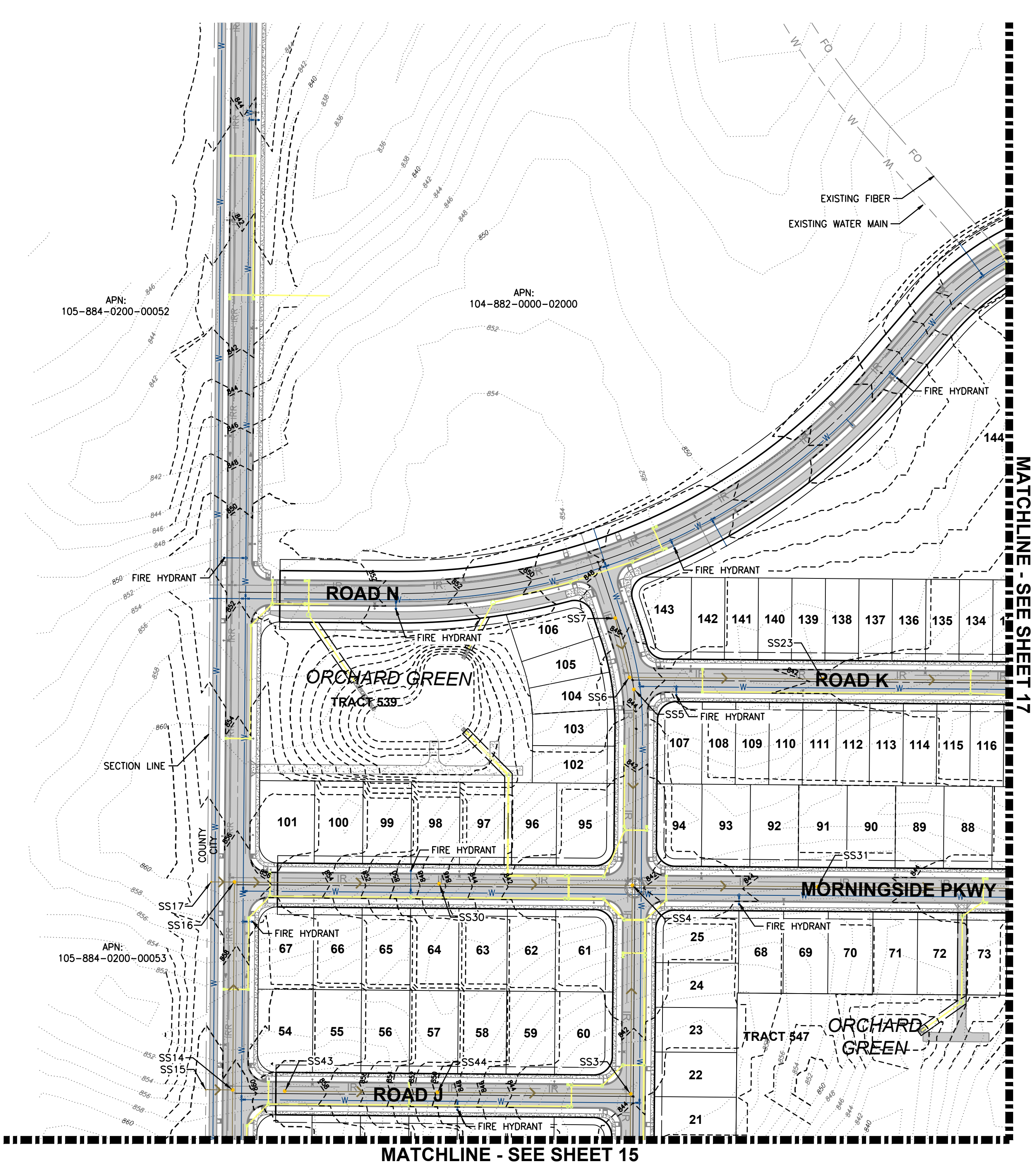
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Job Number 22467.6		Sheet 17 of 18	
<b>Barghausen Consulting Engineers, Inc.</b> 18215 72nd Avenue South Kent, WA 98032 425.251.6222 <a href="http://barghausen.com">barghausen.com</a>			
Scale: Horizontal 1" = 100' Vertical N/A			
KDM Designed KDM Drawn CWM Checked CWM Approved Date 5/8/23			
For: <b>BADGER COMMUNITIES, LLC</b> P.O. BOX 1307 GIG HARBOR, WA 98335			
Title: <b>UTILITY PLAN FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT</b>			
Revision No. Date By Cld. Appr.			



BMS SOUTH ORCHARD - MAJOR AMENDMENT

A PORTION OF SEC. 4, T 8 N, R 28 E, W.M., CITY OF RICHLAND, WA



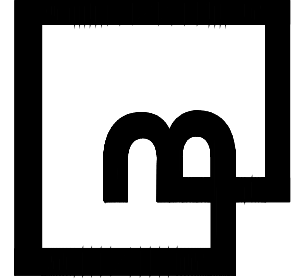
UTILITY LEGEND			
PROPOSED		EXISTING	
	WATER MAIN		WATER MAIN
	IRRIGATION MAIN		IRRIGATION MAIN
	SANITARY SEWER MAIN		SANITARY SEWER MAIN
	STORM MAIN		STORM MAIN

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Title: UTILITY PLAN FOR BADGER MOUNTAIN SOUTH SOUTH ORCHARD MAJOR AMENDMENT							
For: BADGER COMMUNITIES, LLC P.O. BOX 1307 GIG HARBOR, WA 98335							
Scale: Horizontal 1" = 100' Vertical N/A							
KDM		KDM		CWM		CWM	
Designed		Drawn		Checked		Approved	
Date		Date		Date		Date	
5/8/23		5/8/23		5/8/23		5/8/23	
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com							
Job Number 22467.6		Sheet 18 of 18					







May 8, 2023

Mike Stevens  
Planning Manager  
City of Richland  
625 Swift Blvd  
Richland, WA 99354

RE: MACR Update for South Orchard Plat for Major Amendment application dated 5-3-2023

Dear Mr. Stevens,

This letter serves as an update to the MACR Supplement to the Preliminary Plat for South Orchard.

Badger Communities, LLC is requesting a major amendment to the plat conditions for South Orchard. As part of this request, Badger Communities, LLC approached me as the Associate Master Plan Administrator to update the MACR for review.

I have reviewed the City of Richland's plat conditions and the original MACR. From the documents I received from Badger Developers, LLC, it appears the applicant is only requesting to add 64 additional residential lots dispersed in Phases 2-4. As such, I support the proposal to add additional lots to the project after considering the following:

1. The additional lots do not significantly impact the layout of the roads and utilities as previously submitted.
2. There will be no impact to the first phase of the project which is currently permitted and under construction.
3. I was initially concerned about exceeding the density targets (LUDR 7.C) for South Orchard, but upon further review, the approved preliminary plat of South Orchard included land that was shown as East Market (LUDR 7.D) on the original neighborhood map. The maps in the LUDR are considered as illustrative (LUDR 7.D heading) so adjusting the boundaries for the preliminary plat was completely within the allowances in the LUDR. The increase in the overall density target for South Orchard will be taken into account for East Market in the future. The following is a breakdown of the proposed total residential lot increase per phase:
  - a. Phase 1: approved-325; proposed-0
  - b. Phase 2: approved-101; proposed-123 (22 residential lot increase)
  - c. Phase 3: approved-101; proposed-130 (29 residential lot increase)
  - d. Phase 4: approved-104; proposed-117 (13 residential lot increase)
4. The City of Richland City Council has asked staff to work with developers to try to find ways to make housing more attainable. By increasing the total lot count by reducing larger lot sizes, the costs associated with development will be spread over more lots and will reduce the price of lots in South Orchard. This will help reduce the overall cost of housing and make it more attainable.

5. The applicant is still exceeding the trail and green space requirements from the LUDR. The original MACR review showed 1,534 allowed RU based on the amount of trail and green space that is being provided in South Orchard. This is obviously well above the required amount for the 695 RU being proposed by this amendment.

I want to make sure that this proposal does not change or remove any of the recommendations/requirements from the original MACR. Additionally, I don't support any request to change or remove any of the original plat conditions from the City of Richland with the exception of adding additional lots and tracts as requested. If any requests to change the original MACR or the original City of Richland plat conditions are made, we reserve the right to review those changes and make a MACR determination.

Thank you,

*Darrin Sweeney*

Darrin Sweeney  
Badger Mountain South  
Associate Master Plan Administrator



## Exhibit 2

# S2021-104 Master Agreement Consistency Recommendation [MACR]

## **Badger Mountain South**

### **Master Agreement Consistency Recommendation (MACR) Supplement to the Preliminary Plat Application for South Orchard**

#### **Executive Summary**

The successful development of the Badger Mountain South Master Plan Community requires close attention to the detailed planning and standards created in the adopted Master Agreement, specifically to the Land Use and Development Regulations as found in Exhibit C of the Master Agreement, commonly identified as the LUDR (Land Use and Development Regulations). The LUDR standards are designed to go beyond the more typical City requirements or standards because they are seen by the Master Developer as building blocks to creating a walkable and sustainable community.

The LUDR establishes a process for the review of development applications that is intended to integrate into the existing City application processes, and yet provide the close attention to LUDR standards without adding significant review time by City staff. This is accomplished by requiring each development application to meet all City code submittal requirements and, at the same time, undergo a review for consistency with the standards of the LUDR. This latter review is completed by the Badger Mountain South Master Plan Administrator who makes a written recommendation of consistency to the City's Development Services Manager. A final "Master Agreement Consistency Determination" is issued by the City after the Manager's review.

The document that follows is the Master Plan Administrator's recommendation for a determination of consistency for this application. It includes a review of all relevant standards found in the LUDR related to a preliminary plat application. The standards are cited and the specific responses are provided for this application. The document concludes with references to other relevant Master Agreement provisions that are met with this application.

The applicant has stated that this plat will be finalized in one phase. The conditions of the approved Preliminary Plat, the Master Agreement, and specifically, the LUDR must be met before it will be finalized.

## **Badger Mountain South**

### **Master Agreement Consistency Recommendation (MACR) Supplement to the Preliminary Plat Application for South Orchard**

Date: October 21, 2021

The purpose of completing the MACR is to ensure that the applicant has met the special requirements for Badger Mountain South, as found in the Land Use and Development Regulations (LUDR). It also allows City staff to be assured that the Master Developer is meeting the terms and obligations of the approved Master Agreement, as it applies to each development activity in Badger Mountain South.

The MACR will be completed by the Master Plan Administrator in conjunction with the Applicant and submitted with other Preliminary Plat materials, as required in Richland Municipal Code (RMC) Chapter 24.12.

**1. Applicant name, address and contact information:**

South Richland Communities  
PO Box 1307  
Gig Harbor, WA 98335  
Contact: Geoff Clark  
253-677-3402

**2. Project name:**

*South Orchard*

**3. Project description including site size in acres:**

*A subdivision of 194.54 acres total area; 475 total lots including 471 Residential Lots, 29 Tracts, 2 Civic Lots, and 2 Multi-Family Lots created all within Badger Mountain South, lying adjacent to and North of Reata Road.*

**4. Is phasing proposed? Please explain:**

*The project will be designed and permitted in one effort. Phasing for final plat approval will be done per the phase lines on the plans.*

**5. Regulating Plan District(s) (see LUDR p. 2-2):**

*See Sheet C005 for BMS Districts within South Orchard*

- *BMS-NC (Neighborhood Collector-LUDR Section 3.C)*
- *BMS-NG (Neighborhood General-LUDR Section 3.D)*
- *BMS-NE (Neighborhood Edge-LUDR Section 3.E)*
- *BMS-Civic*
- *Special Designation "P" Overlay District (See land use table 2.C for "P" designation)*

**6. What is the name of the neighborhood? (See LUDR pp. 7-1 through 7-3).**

*Neighborhoods: South Orchard (LUDR Illustrative Plan 7.D on page 7-3)*

**7. What is proposed use? See Allowable Use Table (see LUDR p. 2-3).**

- *BMS-NC- Single Family Residential and Multi Family as allowed in LUDR table 2.C note 2 & 3*
- *BMS-NG- Single Family Residential with the potential of Multi Family as allowed in LUDR table*

2.c note 3

- BMS-NE- Single Family Residential
- BMS-Civic- Orchard Green open space, City of Richland Park, Kennewick School Site, Trail System as shown on plat

**8. What building types are likely to be developed here? (See LUDR p. 2-4):**

*Single Family Residences, Multi-Family (including Stacked unit buildings in BMS-NC) and Duplex/Row Houses in BMS-NC and BMS-NG per LUDR Table 2.D.*

*Kennewick School District in BMS-Civic (Tract 477)*

*Misc Park Structures for City of Richland Park (Tract 476)*

**LUDR COMPLIANCE**

***LUDR Section 1***

This is the introduction and administration section of the LUDAR and thus it is not applicable to this review.

***LUDR Section 2***

This section identifies the Regulating Plan Districts and permitted land uses.

**Please define the District for this application:**

*District Type:*

- BMS-NC (Neighborhood Collector-LUDR Section 3.C)
- BMS-NG (Neighborhood General-LUDR Section 3.D)
- BMS-NE (Neighborhood Edge-LUDR Section 3.E)
- BMS-Civic
- Special Designation "P" Overlay District (See land use table 2.C for "P" designation)

*Does the requested use meet the requirements outlined in 2.C Land Use?*

**Yes**

*Does the requested use meet the Building Type requirements outlined in 2.D Building Type?*

**Yes**

***LUDR Section 3***

This section identifies the district development standards for five of the districts in Badger Mountain South. For this review, the District Intent will be reviewed. The specific building placement, profile, height, frontage type, and parking requirements will be reviewed as part of the MACR 2.

*Does the requested use meet the District Intent as outlined in Section 3?*

- BMS-NC (Neighborhood Collector-LUDR Section 3.C)- **Yes see LUDR 3-4, 3-5**
- BMS-NG (Neighborhood General-LUDR Section 3.D)- **Yes see LUDR 3-6**
- BMS-NE (Neighborhood Edge-LUDR Section 3.E)- **Yes see LUDR 3-7**
- BMS-Civic- **Yes see LUDR 3-8**
- Special Designation "P" Overlay District (See land use table 2.C for "P" designation)- **Yes see table 2.C for special overlay designation**

***LUDR Section 4***

This section identifies the special district development standards. There are no special district development areas proposed in South Orchard so it is not applicable to this review.

## **LUDR Section 5**

This section identifies the open space, trails, and community facilities that will be constructed in Badger Mountain South.

### *Badger Mountain South - MA Section 25.3*

*"As part of the Master Plan Consistency Determination described in Paragraph 23, the City, shall consult with the Master Agreement Administrator, and the applicant in determining the appropriate share of infrastructure and mitigation costs that shall be borne by the proposed development and how that development's share of infrastructure and mitigation relates to the overall infrastructure and mitigation that is required for buildout of Badger Mountain South."*

Does the number of residential lots trigger additional MA Exhibit D, Green Infrastructure Improvements?

**Yes X      No**

Please explain:

**Green Infrastructure Improvements are required and as found in the Master Agreement Exhibit D, are linked to the numbers of residential units (RU) developed.**

**In the case of The South Orchard Preliminary Plat, there are a total of 631 RU. With the improvements identified below, this Preliminary Plat meets the requirements of the Master Agreement, Exhibit D.**

**For planning purposes, it is assumed that the Green Infrastructure requirements of a minimum of 631 RU will be provided in the following manner:**

## **TRAILS/PARK/GREEN SPACE REQUIREMENT**

### **SEE SHEET C004**

Trail Type and Park Calculation Factor (Trail lengths and Park SF shall be applied to the length of trail constructed and SF of Parks constructed and multiplied by the following trail factor):

- Primary Trail                      1 RU per foot
- City Primary Trail                1 RU per foot
- Secondary Trail                   .6 RU per Foot
- Urban Trail                        1 RU per Foot
- Park                                 1 RU per 650 SF

Total Trail to be constructed- 20,052 feet; **Total credit based on trail type- 17,497.2 or 1,093.6 RU Credit**

Total SF of Park to be constructed is 286,505; **Total credit based on park SF- 440.8 RU Credit**

**TOTAL ALLOWED RU IN SOUTH ORCHARD FOR TRAIL AND PARK IS 1,534.4 RU (exceeds requirement)**

This calculation does not factor in the Kennewick School District Parks and Open Space on Tract 477 as allowed in 5.F of the LUDR. This space will be calculated as the Kennewick school design progresses.

### Other Comments:

There is an active comprehensive traffic impact study currently under final review with the City of Richland. After reviewing the initial remand from the Hearing Examiner and working with the City of Richland Public Works staff and TENW (the traffic engineer for the updated TIA), the applicant has provided a letter of explanation along with a letter from TENW that outlines the importance of the new TIA to the entire Badger Mountain Subarea and the traffic mitigations outlined in the new TIA and the codified City of Richland Traffic Impact Fee Program. These mitigations are supported by the City of Richland Public Works department even as the final details of the expanded TIA are being reviewed.

### **LUDR Section 6**

This section identifies the street layout for the arterial collectors, the proposed layout for the internal collector streets, and the right-of-way standards for each street type in the Badger Mountain South Development.

Is a public street to be constructed?

Yes ☒ No ☐

Provide separate sheet with street type and edge type(s) indicated.

See the proposed preliminary plat pages COO2 and C003 for street type and edge type

### **LUDR Section 7**

This section establishes the framework for creating the pedestrian-scaled, walkable community of Badger Mountain South by outlining the process for using Block Standards to subdivide land.

LUDR 7.B.2 identifies the Block Size and Configuration should meet the following Block Dimension Standards: Block length= 1000' max., except in VMU District= 400' max. Identify the following for the smallest and largest blocks:

Block length: Smallest: 290 ft.; Largest: 985 ft

Road O between intersections of Road F and Morningside Parkway has a length of 1,220 feet between roadways; however, several locations along its length have been given way for trail access to Orchard Green open space as well as a mid-block crossing between the proposed school and City of Richland Park parcel. Considering the trail access to green space, school site, and park site, the MPA recommends the block length is acceptable.

The original MACR for South Orchard had the following condition:

***“Alison Way between tract 497 (trail access) and Morningside Parkway is 1,250 feet between roadways and a mid-block crossing. The MPA will require a mid-block crossing between lots 374 and 375 to comply with the requirements of this section.”***

As part of this submittal, the mid-block crossing has been added to the preliminary plat

LUDR 7.B.4 addresses alleys and front facing blocks. Please answer the following: Does the proposal include only blocks to be constructed with alleys?

Yes ☐ No ☒

If yes, skip to LUDAR 7.B.5.a below; otherwise please select response:

Do those blocks with direct street access lots (i.e., without alleys) meet the following criteria:



1. Non-alley load lots do not front onto a Collector Street, except in single-loaded, perimeter location; or, are located in the NE District; or, where located in an area where two districts abut (NG to NE District).

Yes      No X

**The City of Richland has classified Morningside Parkway as a “minor collector” which is provisioned for front loading driveway access**

2. Non-alley load lots are not across from a Civic District space.

Yes      No X

**The NE District lots along Road O are positioned across from a future park and school parcel**

Per the LUDR 3.E.1, in the NE District houses are typically accessed by streets. Per LUDR 7.B.4.d(1), direct street access lots are permitted onto a Collector Street when they are (i) located in the BMS-NG District; (ii) when they are in the BMS-NG District and are located along the perimeter of the BMS project boundary; or (iii) when they are located in the BMS-NG District where that district abuts the BMS-NE District.

Does this preliminary plat include any areas where the NE and NG districts abut?

Yes X      No

LUDR 7.B.5.a Other Block Requirements -In the Village Mixed Use (VMU), Neighborhood Collector (NC), and Neighborhood General (NG) Districts, two (2) building types required on each block; see Section 2.D. for Building Type Table. Identify Building Types proposed if known or enter N/A:

N/A

LUDR 7.B.4 Dead-end alleys greater than 150' ft. are not permitted; are dead end alleys greater than 150' proposed?

Yes      No X

#### **LUDR Section 8**

This section identifies the design standards for each of the Building Types allowed within the Districts.

LUDR 8.B - 8.P Lot Size by District and Proposed Building Type. In LUDAR 7.B.5.a (above), proposed Building Types were identified for this project. Do the proposed lot size(s) meet the proposed Building Types lot standards?

Yes X      No

Please describe:

**Lot dimensions vary, but all can meet one or more Building Type Requirements and related standards**

#### **Recommendation of Consistency:**

**It is my opinion as the Master Plan Administrator that the application as submitted is consistent with the intent and the purpose of the Master Agreement relative to this plat dated 04/01/2021 and the approved LUDAR.**

Signature: 

Date:      October 21, 2021



## Exhibit 3

# S2021-104 Hearing Examiner Decision [Packet]



## **NOTICE OF DECISION**

**PURSUANT TO RICHLAND MUNICIPAL CODE SECTION 19.60.080, NOTICE IS HEREBY GIVEN THAT ON DECEMBER 16, 2021 THE CITY OF RICHLAND HEARING EXAMINER ISSUED A DECISION APPROVING THE PRELIMINARY PLAT OF SOUTH ORCHARD (CITY FILE NO. S2021-104):**

**DESCRIPTION  
OF ACTION:**

The preliminary plat of "South Orchard" proposing to subdivide 194.5-acres into 475 lots and twenty-nine (29) tracts for residential, commercial, civic and open-space development, has been approved.

**SEPA REVIEW:**

The probable significant adverse environmental impacts of the proposed project have been adequately addressed in the Planned Action Ordinance [RMC 19.50.030 (B)].

**APPROVED:**

The subdivision application has been approved.

**PROJECT LOCATION:**

The project site is located along the north side of Reata Road, west of Morningside Parkway in the Badger Mountain South master planned community (APN 1-04882000001000)

Shane O'Neill,  
Senior Planner

December 17, 2021  
Date

A full text of the Hearing Examiner's recommendation report can be viewed at:  
<https://www.ci.richland.wa.us/departments/development-services/planning/land-use>

An appeal of the Hearing Examiner's decision regarding this preliminary plat application shall be final, subject to judicial appeal in the time and manner as provided in RMC 19.70.060 and Ch. 36.70C RCW.



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**BEFORE THE HEARING EXAMINER  
FOR THE  
CITY OF RICHLAND**

**FINDINGS, CONCLUSIONS AND  
DECISION APPROVING  
“SOUTH ORCHARD” PRELIMINARY PLAT**

**FILE NUMBER:** S2021-104

**APPLICANT/OWNER:** NOR AM INVESTMENTS, LLC

**APPLICATION:** TO SUBDIVIDE 194.5 ACRES INTO 475 LOTS, ALLOWING FOR RESIDENTIAL, COMMERCIAL, CIVIC, AND OPEN-SPACE DEVELOPMENT

**LOCATION:** PART OF THE BADGER MOUNTAIN SOUTH SUB-AREA, IN THE BADGER MOUNTAIN MASTER PLANNED COMMUNITY, ON THE WEST END OF THE SOUTHERNMOST PART OF THE BMS COMMUNITY, NORTH OF REATA ROAD

**PARCEL NUMBERS:** 1-0488-200-0001-000 (PARENT PARCEL)

**REVIEW PROCESS:** TYPE III, PRELIMINARY PLAT,  
HEARING EXAMINER DECISION

**SUMMARY OF DECISION:** *APPROVAL*, SUBJECT TO CONDITIONS

**DATE OF DECISION:** DECEMBER 16, 2021

## **I. CONTENTS OF RECORD.**

Copies of all materials in the record and a digital audio recording of the open-record hearing conducted for this application are maintained by the City and may be requested by using the City's Public Records online portal or other methods for requesting records as described in the City's Public Records Disclosure Policy No. 0260.

**Exhibits:**     *Final Staff Report.* City of Richland Development Services Division Staff Report and recommendation of approval to the Hearing Examiner regarding the "South Orchard" Preliminary Plat, File No. S2021-104, transmitted to the Examiner on Nov. 12<sup>th</sup>, dated November 17, 2021, issued following Remand, with 11 attached exhibits, as identified and numbered on page 34 of such report (*80 pages in .pdf file of materials, with report on pages 1-34*);

*Remand Order.* Issued by the Hearing Examiner in September of 2021, based on issues that prevented approval at such time (six pages);

*Initial Staff Report.* City of Richland Development Services Division Staff Report to the Hearing Examiner detailing numerous issues regarding the "South Orchard" Preliminary Plat and recommending Remand of such application for revisions, File No. S2021-104, dated July 12, 2021, with 9 Exhibits as identified and numbered on page 33 of such report (*91 pages in .pdf file of materials*);

*Applicant's Response to Initial Staff Report.* Email correspondence from Applicant Representative, Mr. Sweeney, to City Staff, dated July 9, 2021, with multiple attachments, all transmitted to the Examiner from Staff on July 12, 2021;

*Amended Staff Report, for initial public hearing in July.* Staff memo amending Initial Staff Report, dated July 8, 2021, with several exhibits attached thereto, including an additional *Exhibit 7A*, an email comment from the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Protection Program (CRPP) dated July 7, 2021, which reads as follows:

“[CTUIR] has reviewed the materials regarding the BMS South Orchard project. The project area is in close proximity to three historic properties of religious and cultural significance, Piyuušmaamí uštáy ('hills of the snakes'), usipamá ('for horses'), and Wišpúšya ('Beaver') to the CTUIR. Given that the project area is in close proximity to these traditional use areas and that the project will reach native soils, the likelihood of encountering cultural resources is high. Therefore, we recommend a cultural resource survey with subsurface testing.”

*Primary Exhibits Relied upon in issuing this Decision – all provided with the Final Staff Report, with updated drawings, comments, and recommendations, based on revisions made to the proposal in response to the Remand Order:*

1. Application, REVISED, dated October 21, 2021 (.pdf pages 35-36);
2. Preliminary Plat Maps, Road Sections, Grading and Drainage Plans, Utility and other plan sheets, including 10 pages of REVISED plan sheets dated 10.21.2021 (begins on .pdf page 37);
3. Applicant's Response to the Remand Order, undated (begins on .pdf page 55);
4. TENW memo dated October 18, 2021, re: ongoing review of BMS Traffic Impact Analysis (TIA) (begins on .pdf page 57);
5. Master Agreement Consistency Recommendation (MACR), revised, dated October 21, 2021 (.pdf page 58);
6. Master Agreement Consistency Determination (MACD), revised, dated Nov. 3, 2021 (.pdf page 64);
7. Planned Action Consistency Determination (PACD), revised, dated November 3, 2021 (.pdf page 65);
8. BMS Master Agreement, page D-6 (.pdf page 67);
9. Site Photos (.pdf page 68);
10. Public Notices and affidavits confirming same (.pdf page 72);
11. Written Comments received after Remand, before final hearing, including two items, one a letter dated Nov. 8, 2021 from the City of West Richland, and another dated Nov. 10, 2021 from WSDOT (these comments are marked as Exhibit 12 in .pdf file of materials, beginning on .pdf page 78).
12. (Added into the Record during the final night of hearing) Public Works Department memo dated November 9, 2021, detailing specific transportation improvement projects funded by Traffic Impact Fees collected in Traffic Impact Zone 3, where the proposed plat and other parts of the BMS community are located. Previously included as Exhibit 16 in the Goose Ridge II Decision. Submitted and discussed during Mr. O'Neill's testimony.
13. Applicant Response to Final Staff Report, undated, forwarded to the Examiner on November 18<sup>th</sup>.

14. Post-hearing Supplement to Final Staff Report, including additional conditions of approval, mistakenly omitted from the Staff Report, with attached emails by/between staff and applicant representatives, indicating acceptance with such proposed conditions.
15. Richland City Council packet item for its Nov. 16<sup>th</sup> meeting, with coversheet, proposed Interlocal Agreement, drawing, and other materials, updated to include signed copy of Richland City Council Resolution No. 139-21, adopted on November 16, 2021, authorizing an agreement with Benton County to revise the City of Richland's corporate boundary to include the Reata Road right-of-way where it runs below the BMS/South Orchard development project, discussed during the public hearing, as a way to resolve questions regarding frontage improvements and the like that will be required along such right-of-way if it is in the County or the City. *(signed copy transmitted to the Examiner on November 19<sup>th</sup>).*
16. BMS Master Agreement, from October 2015, complete copy added to the record by the Examiner for reference by interested parties.
17. Master Declaration of Covenants, Conditions, and Restrictions for Badger Mountain South, added to the record by the Examiner for reference by interested parties. *(Benton County Auditor's Office, Recording No. 2012-027520 COV, recorded on 09/07/2012 (30 pages)).*

**Testimony/Comments:** The following persons were sworn and provided testimony under oath during the open-record hearing on November 17<sup>th</sup> for the revised application:

1. Shane O'Neill, Senior Planner, for the City of Richland;
2. Pete Rogalski, P.E., Public Works Director for the City of Richland, explained his professional judgement and opinions that support wider streets than some shown in application materials, that traffic safety and general drivability would be reduced if narrower streets are used in some instances, and that the City's transportation impact fees collected for each building permit in the proposed plat will be sufficient to proportionally fund transportation system improvements needed to mitigate impacts of this project, and that the pending TIA will be used to refresh the list of transportation improvements needed for the BMS community, which is all located in a specific impact fee area, known as "zone 3";
3. Darren Sweeney, Applicant's representative, summarized written comments included in the record as Ex. 13, which included concurrence with a possible condition of approval to withhold final plat approval until the TIA is accepted ("We are working with City staff to make sure the new TIA is accepted and approved before the final plat of the first phase of South Orchard is approved. We would be

amenable to a preliminary plat condition to make that a requirement of the final plat”), spoke to the merits of the revised South Orchard preliminary plat application;

4. Kaleb Mapstead, P.E., with AHBL Inc., Engineer of record for the project applicant, summarized portions of plan sheets that he believes to show compliance with various requirements and standards for the proposal merits of application and responded to questions; clarified that final plat design would not include narrower (32 foot) road widths on streets that are considered “Major” collectors, noting Major collectors would be at least 34 feet;

For this application, the Examiner takes official notice of sworn testimony provided by Mr. Rogalski and Carlo D’Alessandro, PE, Transportation and Development Manager for the City of Richland Public Works Department, during the public hearing held on November 8, 2021 before the Hearing Examiner for the Goose Ridge II preliminary plat application (File No. S2021-107), which is also located in the BMS community and included comments from the City of West Richland similar to those found in Ex. 11 for this South Orchard project. During their testimony, Mr. Rogalski and Mr. D’Alessandro offered credible and un rebutted evidence that trip counts used to determine if transportation improvements are “triggered” so construction should move forward are based upon building permits issued, not lots approved in final subdivisions, so the 1,000 unit threshold and others referenced in some comments have not been or will not be met until such time as 1,000 building permits are issued for new homes in the BMS community.

## **II. APPLICABLE LAW.**

Under applicable provisions of the Richland Municipal Code (RMC), a preliminary plat application is first subject to review and approval by city staff with respect to the engineering elements of said plat, then the Hearing Examiner is responsible for conducting an open record public hearing followed by a final written Decision. A preliminary plat application is a Type III procedure. RMC 19.20.010(C)(1).

As explained in RMC 24.12.050(A), the hearing examiner shall consider any preliminary plat application and shall conduct an open record public hearing in accordance with Chapter 19.60 RMC. After the public hearing and review of materials in the record, the hearing examiner shall determine whether the preliminary plat is in accordance with the comprehensive plan and other applicable code requirements and shall either make a decision of approval or disapproval. The same provision of the city’s code (RMC 24.12.050(A)) provides that any approval of the preliminary plat shall not be given by the hearing examiner without the prior review and approval of the city manager or their designee with respect to the engineering elements of said plat including the following:



1. Adequacy of proposed street, alley, right-of-way, easement, lighting, fire protection, drainage, and utility provisions;
2. Adequacy and accuracy of land survey data;
3. The submittal by the applicant of a plan for the construction of a system of street lights within the area proposed for platting, including a timetable for installation; provided, that in no event shall such a plan be approved that provides for the dedication of such a system of lighting to the city later than the occupancy of any of the dwellings within the subdivision.

The City's decision criteria for preliminary plat approval are substantially similar to state subdivision mandates found in RCW 58.17.110(2)<sup>1</sup> and reads as follows:

***Richland Municipal Code 24.12.053 Preliminary plat – Required findings.***

*The hearing examiner shall not approve any preliminary plat application, unless the approval is accompanied by written findings that:*

*A. The preliminary plat conforms to the requirements of this title;*

*B. Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;*

*C. The public use and interest will be served by the platting of such subdivision and dedication; and*

*D. The application is consistent with the requirements of RMC 19.60.095 (addresses transportation concurrency considerations).*

And, RMC 19.60.095 mandates the following additional findings:

***19.60.095 Required findings.***

*No development application for a Type II or Type III permit shall be approved by the city of Richland unless the decision to approve the permit application is supported by the following findings and conclusions:*

*A. The development application is consistent with the adopted comprehensive plan and meets the requirements and intent of the Richland Municipal Code.*

*B. Impacts of the development have been appropriately identified and mitigated under Chapter 22.09 RMC.*

*C. The development application is beneficial to the public health, safety and welfare and is in the public interest.*

*D. The development does not lower the level of service of transportation facilities below the level of service D, as identified in the comprehensive plan; provided, that if a development application is projected to decrease the level of service lower than level of service D, the development may still be approved if improvements or strategies to raise the level of service above the minimum level of service are made concurrent with development. For the purposes of this*

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<sup>1</sup> "A proposed subdivision and dedication shall not be approved unless the city, town, or county legislative body makes written findings that: (a) Appropriate provisions are made for the public health, safety, and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school; and (b) the public use and interest will be served by the platting of such subdivision and dedication. If it finds that the proposed subdivision and dedication make such appropriate provisions and that the public use and interest will be served, then the legislative body shall approve the proposed subdivision and dedication. []" RCW 58.17.110(2).

*section, “concurrent with development” means that required improvements or strategies are in place at the time of occupancy of the project, or a financial commitment is in place to complete the required improvements within six years of approval of the development. (emphasis added).*

*E. Any conditions attached to a project approval are as a direct result of the impacts of the development proposal and are reasonably needed to mitigate the impacts of the development proposal.*

The burden of proof rests with the applicant, and any decision to approve or deny a preliminary plat must be supported by a preponderance of evidence. *RMC 19.60.060 and Hearing Examiner Rules of Procedure, Sec. 3.08.* The application must be supported by proof that it conforms to the applicable elements of the city’s development regulations, comprehensive plan and that any significant adverse environmental impacts have been adequately addressed. RMC 19.60.060.

The hearing examiner’s decision regarding this preliminary plat application shall be final, subject to judicial appeal in the time and manner as provided in RMC 19.70.060 and Ch. 36.70C RCW *(The city’s final decision on land use application may be appealed by a party of record with standing to file a land use petition in Benton County Superior Court. Such petition must be filed within 21 days of issuance of the decision).* See RMC 24.12.050(B).

### **III. ISSUE PRESENTED.**

Whether a preponderance of evidence demonstrates that the applicant has satisfied their burden of proof to satisfy the criteria for preliminary plat approval?

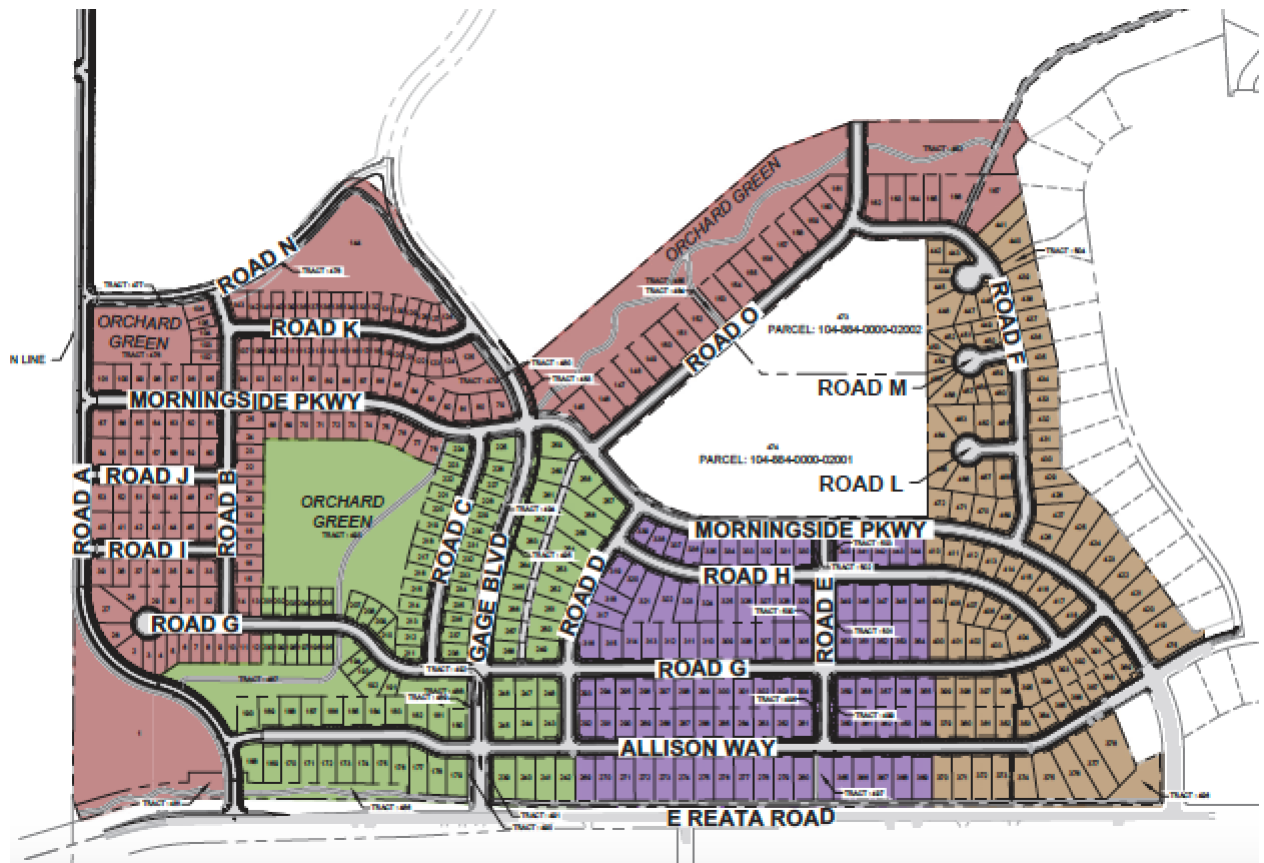
Short Answer: Yes, but only if the proposed plat is developed in compliance with specific conditions.

### **IV. FINDINGS OF FACT.**

1. Upon consideration of the Staff Report, exhibits, public hearing testimony, follow-up research and review of applicable codes, plans, policies, controlling legal instruments, including without limitation the Badger Mountain South LUDR provisions, this Decision is now in order. Based on all the evidence, testimony, codes, policies, regulations, and other information contained in the Record, the Examiner issues the following findings, conclusions and Decision to approve the preliminary plat as set forth below.
2. Any statements in previous or following sections of this document that are deemed findings are hereby adopted as such. Captions should not be construed to modify the language of any finding, as they are only provided to identify some of the key topics at issue in this application.
3. Nor Am Investment, LLC, is the applicant and owner of the parcel(s) of property addressed in this revised preliminary plat application. *(Final Staff Report, pages 1-2; Exhibit 1, revised application; Ex. 2, revised plat drawings).*

4. The project site is part of the larger Badger Mountain South master planned community and is subject to review and compliance with applicable provisions of city development regulations as well as the Land Use and Development Regulations (LUDR) for the Badger Mountain South master planned community.
5. The Badger Mountain South master planned community is intended to be a “walkable and sustainable community” with a range of housing types, mixed-use neighborhoods, up to 5,000 dwelling units, businesses and other commercial activities, all subject to specially adopted Land Use and Development Regulations (LUDR) for the area. (*LUDR, 1.A, Intent, and 1.B, Purpose*). The property addressed in this application is located in the “South Orchard” portion of of the BMS community. (*LUDR, Sec. 1.E*).
6. Earlier this year, the city received a new application for a Preliminary Plat known as South Orchard, assigned File No. S2021-104. Testimony at the initial public hearing for this matter, on July 12<sup>th</sup>, explained that a previously approved preliminary subdivision for the same area expired at some point this year and is of no legal effect in this new application.
7. Based upon the record established at the initial public hearing, the Hearing Examiner found that the proposal could not be approved because it failed to meet applicable city requirements and LUDR provisions and remanded the application for additional information and revisions needed to satisfy relevant standards and approval criteria. (*Remand Order, dated September 29, 2021*).
8. On or about October 21, 2021, the Applicant submitted revised plat application materials, included as *Exhibits 1-4* in the Final Staff Report. Following review of the revised application materials, city staff deemed the materials complete for purposes of further review and acceptance on or about the same date it mailed, posted, and published Notices of the revised Application and Public Hearing for the matter on November 3 and 5, 2021. (*Final Staff Report, page 11; Ex. 10, copies of notices and confirmation materials*). All written comments received prior to the final public hearing from members of the public or interested agencies are included in the record as part of *Exhibit 11*. Copies of public comments received before the initial public hearing were also reviewed and considered in issuing this Decision. The applicant and City staff adequately addressed most of those comments and major concerns in revisions made to the application, and/or in new information included in the record following the Remand Order. The same is true for most all of the sworn testimony from the initial public hearing, which was considered in reaching this Decision, but was not of special relevance given that the application has been revised and additional evidence has been included in the record to clarify various issues.
9. This revised South Orchard preliminary plat application would divide 194.54 acres into a development site with 475 total lots, including 471 residential lots, 2 multi-family lots, 2 civic/open space lots, and 29 tracts. (*Final Staff Report, page 2; Ex. 2, Revised Preliminary Plat illustrations, dated October 21, 2021, Sheet C001, Land Use Table*).

10. For the reader's convenience, a screen shot of the revised Preliminary Plat of South Orchard illustration is provided below:



*(Portion of revised plat drawing, included as part of Ex. 2, 'Revised Preliminary Plat' illustration, dated October 21, 2021, Sheet C001).*

11. The application seeks approval to develop the proposed plat in 4 (four) phases, as depicted using different colors for each phase as shown above and on the more detailed plan sheets included in *Exhibit 2*.
12. The LUDR specifies various “districts” that are applied to properties in the BMS community. For this plat, most of the land area is located in the BMS-NG (Neighborhood General) District, with large portions in the BMS-NE (Neighborhood Edge) District, the BMS-NC (Neighborhood Connector) District, the BMS-NC District with an overlay, and the BMS-Civic District (*See Staff Report, discussion on pages 5 and 6; Ex. 2, revised preliminary plat plan sheet C005, labeled “BMS Districts”*).
13. Block standards are mandated in the LUDR at Section 7.B, including without limitation: a restriction on block lengths to no more than 1,000 feet (*see LUDR Sec. 7.B(2), which is satisfied by this application through use of trail connections, a midblock crossing, and the like to interrupt otherwise lengthy road-segments along blocks as explained on page 9 of the*

*Staff Report, subject to a correction that the longest, uninterrupted block length for this revised plat appears to be 985 feet instead of 1,045-feet as stated in the Final Staff Report<sup>2</sup>, see further discussion of the topic in Ex. 5, the updated MACR for this revised application, on .pdf page 62); and requirements for a minimum number of at least 2 (two) Building Types per block in portions of this proposed plat that are in the BMS-NC and BMS-NG districts (see Sec. 7.B(5)(a).*

14. Section 2.D of the LUDR specifies all of the Building Types that are allowed in each District.
15. Conditions of approval must be enforced that require the applicant to identify all Building Types that will be allowed on each lot included in this plat, to ensure compliance with the Building Type, the minimum number of Building Types per block mandates, density, and other requirements. *(See discussion in Staff Report; Comments in Ex. 13, Applicant's response to Final Staff Report, providing additional information showing how proposal satisfies LUDR density requirements, and need to revise either LUDR or Master Agreement to be consistent with one another).*
16. Consistent with LUDR Sec. 1.G(5) and 7.B(5)(a)(2 and 3), the face of the final plat documents must identify the building type(s) that will be allowed on each lot, and demonstrate that there will be two building types per block for all blocks of the proposed plat that are within the BMS-NC and BMS-ND Districts. *(See proposed Condition of Approval No. 78, on page 34 of Final Staff Report).*
17. The Regulating Plan and purpose section for the various districts in the BMS community is found in the LUDR at Sec. 1.F.1(c), which reads in part as follows: *"No house in the BMS-NG District is intended to be farther than three blocks from any park, mini park or other type of open space."* *(LUDR, page 1-3, Sec. 1.F.1(c)).* While this LUDR provision did not come up during public testimony for this application, it has been a significant issue in other preliminary plats considered in the BMS community, especially the recent Goose Ridge II matter. While a cursory review of the revised plat design shown in Ex. 2 for this South Orchard subdivision appears to include genuine park, mini park, and open spaces, so that no house in the NG District areas will be further than three blocks from such amenities, all final plat reviews for each phase of this plat must ensure that Sec. 1.F.1(c) and all other LUDR provisions are satisfied. (NOTE: The "3-block" proximity rule in Sec. 1.F.1 of the LUDR should probably be included in future reviews and recommendation forms used by the Master Plan Administrator and City staff).
18. If not already, as determined by the Planning Manager and the City Attorney, Conditions addressing ownership and maintenance of privately held open space/park, and other common

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<sup>2</sup> The higher figure showing the largest block size to be greater than 1,000 feet appears to be a typographical error, as a possible "carry-over" number first used in the initial staff report, because the revised and initial Master Agreement Consistency Recommendation both indicate that the longest block length (without interruptions) is just 985 feet. In any event, the MACR clearly evidences concurrence that the LUDR mandates a 1,000 foot limit on block-lengths, and the Examiner finds and concludes that the block-interruption strategies used in this revised plat are appropriate means to accomplish such objective.

areas should be included in specific covenants, conditions, and restrictions for the subdivision, sometimes called CC&Rs or CCRs.

19. The Examiner takes official notice of a recorded legal instrument that applies to properties located in the BMS master planned community<sup>3</sup>, specifically The Master Declaration of CC&R's for Badger Mountain South, which includes a section that reads as follows:

8.1 Applicability. The following use standards, conditions and restrictions shall apply to all residential lots within BMS. The CCRs for any Phase may contain more restrictive but not less restrictive standards, conditions and restrictions. In the event any architectural, design, construction, use, or maintenance standard, condition or restriction for a Phase is more restrictive than provided in this Article 8, the more restrictive standard, condition or restriction shall control.

20. Based upon the record, the Examiner finds and concludes that it is necessary to include requirements for additional CCRs that clarify spaces that are required for Park/Open Space purposes in this proposed plat, how such space is to be landscaped, the amenities required in such space, the function any Park or Open Space is intended to provide, and the like, as well as language recognizing that the City is not responsible for enforcing provisions in any CCR, but that it rests with the specific HOA for a particular subdivision.

### ***Transportation Concurrency.***

21. RMC 19.60.095(D) mandates that a projects like this preliminary plat proposal may not “*lower the level of service of transportation facilities below the level of service D, as identified in the comprehensive plan; provided, that if a development application is projected to decrease the level of service lower than level of service D, the development may still be approved if improvements or strategies to raise the level of service above the minimum level of service are made concurrent with development. For the purposes of this section, “concurrent with development” means that required improvements or strategies are in place at the time of occupancy of the project, or a financial commitment is in place to complete the required improvements within six years of approval of the development. (emphasis added).*”
22. One of the primary reasons for the Remand Order was based upon testimony and evidence showing that transportation concurrency requirements could not be satisfied until a final, updated Transportation study for the BMS community was approved by the City of Richland. Before the remand, there was no clarity on precisely what “yardstick” the City was using to

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<sup>3</sup> This document was not included in the application materials or the Staff Report but was provided to the Examiner during post-hearing research to obtain access to relevant legal instruments addressing many of the topics raised by BMS residents in connection with other BMS project applications before the Examiner. Given the substance of comments that were not adequately addressed in testimony or written materials already in the record, the Examiner found good cause to reopen and supplement the record at the end of last week, to include a copy of the CC&Rs and a copy of the entire BMS Master Agreement, which includes provisions that resolve some unanswered questions at the time of the Remand Order. The record is now closed, and this Decision is in order. (See H.Ex. Rule 1.14(d) re: official notice of records; and Rule 1.17, reopening to supplement record; new Exhibits 16 and 17).

determine if and when various road improvements will be required. Following the Remand, the City's Public Works Director and Transportation Engineer offered credible, un rebutted evidence and sworn testimony as part of the Goose Ridge II hearing process, establishing that "Building Permits issued" instead of "approved lots" are used as the yardstick to determine if and when various transportation improvement requirements are triggered for projects in the BMS community.

23. Having reviewed and considered the entire record, including the entire BMS Master Agreement that has been added to the record by the Examiner as *Exhibit 16*, and prior sworn testimony from City Public Works staff responsible for transportation system improvement issues, the Examiner finds and concludes that the "yardstick" used by the City to count units for purposes of triggering various transportation improvements is actual building permits issued by the City in the BMS community, and not the number of lots approved in final plats issued for properties that are located in the BMS community. (*Testimony of Mr. Rogalsky during this hearing as well as during the Goose Ridge II hearing; Testimony of Mr. D'Alessandro during the Goose Ridge II hearing; Ex. 12, Public Works Department memo detailing specific transportation improvement projects funded by Traffic Impact Fees collected in Traffic Impact Zone 3, where the proposed plat is located*).
24. Mr. Rogalsky provided credible and reassuring testimony, within the scope of his professional expertise, and provided written materials explaining that this proposal will be required to pay transportation impact fees that are used to fund a long list of specific transportation improvements needed to mitigate impacts associated with this proposed plat. (*Ex. 12; Testimony of Mr. Rogalsky*).
25. Based upon the testimony of Mr. Rogalsky, *Exhibit 12*, and the mitigation measures included in the Planned Action Consistency Determination issued on November 3, 2021 (*Ex. 7*), the Examiner expressly finds and concludes that a specific list of required transportation system improvements or strategies are or will be in place at the time of occupancy of this project, or the impact fee revenues to be collected for each building permit issued for homes in the new plat will serve as an adequate financial commitment to complete the required improvements within six years of final plat approval for this plat. However, if at the time of final plat approval for any phase of this plat, City officials determine that impact fees and other resources (including additional contributions from or work performed by private developers) have been or will be inadequate to complete transportation projects required as conditions to mitigate the impacts of this plat, then the final plat could be denied. (*See RMC 19.60.095(D), concurrency requirements for preliminary plats; RMC 24.12.110, Final Plat approval requirements*).
26. In response to public comments from local residents in the BMS community in other preliminary plat hearings, or from surrounding jurisdictions like the City of West Richland, expressing concerns that the timing of some transportation projects may have been changed from dates given in the Master Agreement, the Examiner directs attention to Section 19.4 of the BMS Master Agreement, which reads as follows: "The timing for the construction of

Transportation Improvements is set forth in Exhibit B<sup>4</sup>. The City and Nor Am may agree to change the timing of construction of road improvements if deemed to be in the public interest.” Mr. Rogalsky and Mr. D’Alessandro have offered credible testimony in public hearings summarizing some of the projects where timing has been changed, as they deemed to be in the public interest. Moving forward, periodic written reports or updates from the Public Works Director on the City’s website pages summarizing BMS community information may be helpful to keep the public and neighboring jurisdictions (like West Richland) better informed, and to maintain public confidence that transportation system requirements are appropriately monitored and enforced, all as the Public Works Director might deem to be in the public interest. An additional condition of approval has been included as part of this Decision, specifying that changes in the timing of road improvements required as part of this project shall be considered “Minor Revisions” to the approved preliminary plat, subject to a Type I approval process that includes public notice of such decisions and possible appeals to the Examiner, noting that any review of such revision requests will require substantial deference to any determination made by the Public Works Director. (See RMC 19.20.010 and .030; See Condition of Approval, General **Condition J**).

27. While the issue may have already been resolved through discussions between state and city officials, the applicant and City staff should be fully advised that no phase of final plat approval should move forward until concerns expressed by WSDOT are adequately addressed. See *Ex. 11*, the WSDOT Comment letter dated November 10, 2021, from Region Planning Engineer, Paul Gonseth, P.E., found on page 80 in the .pdf file for the Final Staff Report materials, which reads in relevant part as follows:

“The subject property is in the vicinity of Interstate 82 (I-82) and the Dallas Road (Exit 104) interchange and within the Badger Mountain South (BMS) subarea. I-82, including the interchanges, is a fully controlled limited access facility, Highway of Statewide Significance (HSS), and part of the National Highway System (NHS). We are not opposed to this proposal, or any previous proposals within the BMS subarea; however, we are concerned with the cumulative impact development of the subarea is having on I-82, specifically the Exit 104 interchange. Exit 104 currently operates within acceptable safety and operational thresholds and it is to the benefit of the city, county and state to preserve this interchange’s safety and efficiency. The additional vehicle trips generated by this project will cause the total subarea trip level to exceed all mitigation triggers described in exhibit B of the BMS master agreement. To date, no effort to mitigate subarea impacts to I-82 and Exit 104 has been made. The latest analysis, the draft BMS Traffic Impact Analysis (TIA) dated May 14, 2021, states the eastbound and westbound ramp terminals at Exit 104 are projected to fail in 2025. The TIA also recommends the developer only contribute towards a portion of the cost to mitigate these impacts and doesn’t clearly identify a complete funding strategy. It is our position that the BMS subarea is the sole driver creating the need for improvements to Exit 104, and the developer and city are responsible for ensuring these impacts are mitigated prior to the year 2025.

Therefore, as a condition of plat approval, the city and developer must amend the BMS master agreement to include fully funded mitigation strategies and updated timelines to preserve the safety and efficiency of the I-82 Exit 104 interchange. [...]”. (*Ex. 11, Comment Letter dated November 10, 2021, from WSDOT Region Planning Engineer, Paul Gonseth, P.E., included as part of documents erroneously marked Exhibit 12, provided with the Final Staff Report package, found on page 80 of 80 in the .pdf file*).

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<sup>4</sup> Included as *Ex. 16* in this record for the South Orchard application.



### ***SEPA Compliance.***

28. The City of Richland’s Planned Action Ordinance adopted in or about 2010 for the Badger Mountain master planned community covers development within the Badger Mountain South Subarea. The Supplemental Final Environmental Impact Statement issued in 2010 for the Planned Action Ordinance covers the site of this proposed plat. (*Final Staff Report, page 11*). Accordingly, standard SEPA review is not required, so long as the project is consistent with the master plan and mitigation measures adopted and identified in applicable SEPA documentation for the master planned area. (*Final Staff Report discussion on page 11; and Ex. 7, Planned Action Consistency Determination*). With such documentation, and so long as the project is developed in a manner that meets the conditions of approval imposed as part of this Decision, which mandates compliance with the LUDR provisions applicable to the BMS master planned community, the pending application satisfies(ies) applicable SEPA review requirements.
29. The applicant objected to Staff’s proposed Condition in the Initial Staff Report that would have mandated a professional archaeological survey of the site prior to ground disturbing activities, based on a letter from the Department of Archaeology and Historic Preservation. (*See .pdf page 74 of Initial Staff Report file materials, where a DAHP official explains that: “Our statewide predictive model indicates that there is a moderate probability of encountering cultural resources within the proposed project area.”; Initial Staff Report; Testimony of applicant representatives at the July hearing*).
30. There is no evidence in this record to show that DAHP’s predictive model mapping was ever included as part of the record reviewed or considered at the time the original environmental review occurred for the BMS community in the late 2000s or whenever it occurred.
31. Similarly, there is no evidence in the record showing that information included in a written comment submitted by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) was ever included as part of the environmental information reviewed or considered when the BMS environmental reviews took place in the late 2000s. (*See Exhibit 7A, a written comment from the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Protection Program (CRPP) dated July 7, 2021, which reads in part as follows:*

“[CTUIR] has reviewed the materials regarding the BMS South Orchard project. The project area is in close proximity to three historic properties of religious and cultural significance, Piyyuśmaamí uštáy (‘hills of the snakes’), usipamá (‘for horses’), and Wišpúuśya (‘Beaver’) to the CTUIR. Given that the project area is in close proximity to these traditional use areas and that the project will reach native soils, the likelihood of encountering cultural resources is high. Therefore, we recommend a cultural resource survey with subsurface testing.”
32. The Final Staff Report modifies the initial recommendation for a full cultural resource survey, omitting a recommended condition to this effect, and makes reference to RCW

43.21C.440.3(b), regarding no requirement for additional environmental review if a proposal is consistent with the development described in the planned action ordinance. (*Final Staff Report, page 20, item 28*).

33. In any event, the Examiner finds and concludes that there is a clear preponderance of un rebutted evidence establishing that cultural resource concerns must be taken into account as this project moves forward. Accordingly, the applicant must confer with DAHP and CTUIR officials, to generate an Inadvertent Discovery Plan, to be onsite throughout ground disturbance work on the site, independent of substantive SEPA authority, but to be consistent with other state statutes addressing cultural resource protections, including without limitation RCW 68.50.645, RCW 27.44.055, and RCW 68.60.055.

### ***Public Hearing.***

34. The open-record public hearing for this revised application occurred on November 17, 2021, wherein the undersigned Examiner presided, and all persons wishing to provide comments were heard, providing testimony under oath. Brief summaries of key topics raised during public testimony is provided in other parts of this Decision. The hearing was conducted using the Zoom online hearing platform, coordinated by City Staff, all in accord with proclamations and public health measures in effect at this time. The Examiner has visited the site of the proposed project on multiple occasions, and public roads leading to and from the vicinity of the proposed plat, and is familiar with the larger Badger Mountain South area from previous visits in connection with other applications over the last few years.
35. The Final Staff Report and recommendation of approval includes a number of specific findings and conditions that partially establish how the underlying plat application, as conditioned, can satisfy provisions of applicable law, be consistent with the city's Comprehensive Plan, and designed or conditioned to comply with applicable development standards and guidelines. It points out some requirements found in the LUDR that must be satisfied before any phase can be granted final plat approval.
36. Additional conditions of approval have been added by the Examiner to ensure that all staff and future developer representatives fully understand and appreciate that the burden is on the applicant to show compliance with applicable provisions of the LUDR and the Richland Municipal Code at every stage of development, whether or not such provisions are enumerated or referenced in the approved preliminary plat plans, in the staff report, or in this Decision.

### ***Compliance with city development regulations achieves consistency with the Comprehensive Plan***

37. RMC 24.04.020 explains that the purpose of the City's platting and subdivision codes is "*in furtherance of the comprehensive plan of the city*" and that such regulations contained in the city's platting and subdivision codes "*are necessary for the protection and preservation of the public health, safety, morals and the general welfare, and are designed, among other*

*things, to encourage the most appropriate use of land throughout the municipality; to lessen traffic congestion and accidents; to secure safety from fire; to provide adequate light and air; to prevent overcrowding of land; to avoid undue concentration of population; to promote the coordinated development of unbuilt areas; to secure an appropriate allotment of land area in new developments for all the requirements of community life; to conserve and restore natural beauty and other natural resources; and to facilitate the adequate provision of transportation, water, sewerage and other public uses and requirements.”* The effect of this provision boils down to this: compliance with the City’s Comprehensive Plan can be established, or at least partially established, through compliance with the city’s platting and subdivision regulations found in Title 24 of the Richland Municipal Code. In this matter, a preponderance of evidence in the record establishes compliance by the proposed plat (as conditioned herein) with the city’s land platting regulations that are applicable to this project, including without limitation those reflected in the LUDR for Badger Mountain South, thus implementing and complying with the City’s Comprehensive Plan. *(See Staff Report, all Findings)*. Obviously, if the proposed plat is not designed and/or conditioned to demonstrate compliance with all applicable LUDR provisions, then the application would NOT be compliant with the city’s comprehensive plan.

***As Conditioned, and if developed in compliance with requirements in applicable LUDR provisions, the proposed plat will provide public benefits***

38. The applicant’s submittals established that some aspects of the new subdivision will provide a public benefit, including without limitation, new housing inventory and options fulfilling the city’s goals and policies set forth in the Comprehensive Plan, construction of new roads, sidewalks, an attractive street system to serve the new plat, and other features that will serve to promote health benefits of a walkable, pedestrian-friendly community.

***A preponderance of evidence in the record demonstrates the proposed project, as conditioned, satisfies approval criteria.***

39. The record contains a preponderance of evidence to demonstrate that, as conditioned, the proposed plat makes appropriate provisions for:
- A. The public health, safety, and general welfare: *See Final Staff Report; all Findings above; Conditions of Approval; Ex. 7, Planned Action Consistency Determination, mitigation measures; Testimony of Public Works Director re: Transportation System improvement issues.*
  - B. Open Spaces: *Findings above, Conditions of approval; Final Staff Report, including discussion on bottom of page 14.*
  - C. Drainage Ways: the project will be consistent with all applicable standards for stormwater system design, including without limitation the Department of Ecology Stormwater Management Manual for Eastern Washington. *Final Staff Report, recommended Storm Water conditions; Ex. 7, mitigation measures.*

- D. Streets or roads, alleys, other public ways: the proposed plat has been reviewed by the City for compliance with applicable street system design requirements, and has been deemed consistent with all applicable LUDR and city standards for city roads, streets, driveways, access, circulation, transportation concurrency and the like. *Final Staff Report, proposed conditions; Testimony of Public Works Director; Ex. 12, list of transportation projects funded by impact fees to be collected in connection with this project; Ex. 7, mitigation measures; Conditions of Approval, including addressing Traffic and Streets.*
- E. Transit stops: To the extent transit stops are or may be located nearby to serve residents of the proposed plat, or Richland residents generally, the subdivision design, access and internal circulation patterns, as conditioned, are appropriate to allow for pedestrians and vehicles to access arterials and other routes that could direct users to existing or future transit stops and facilities. The proposed plat is within the Ben Franklin Transit service area, though no bus service is currently provided for the neighborhood. The transit agency was given lawful notice of the proposed plat and did not provide any comments or feedback for consideration as part of the record in this matter. *Staff Report, page 15.*
- F. Potable water supplies: The new subdivision will receive its domestic water supply from the City of Richland. Staff confirms that adequate capacity is available within the city's water supply system to provide domestic water. Irrigation water will continue to be available within the plat, as provided by the Badger Mountain Irrigation District. *Staff Report, pages 10 and 25; TAC recommended Domestic Water conditions on pages 18 and 19 of the Staff Report.*
- G. Sanitary systems: The City's sewer system has capacity to serve the proposed plat, and will do so. *Staff Report, at page 12 and 15, recommended Sanitary Sewer Conditions of Approval.*
- H. Parks and recreation, playgrounds, schools: The Staff Report and site plans show that the project includes provisions for new trails, green space, some park like amenities, advancing the Badger Mountain South vision with homes in close proximity to recreational venues throughout the master planned community. The Staff Report explains that the park mitigation fees will be paid for each dwelling unit constructed within the plat. School needs for future residents are adequately addressed in the LUDR for the Badger Mountain South master planned community. *Staff Report, page 15. Conditions of approval require compliance with LUDR provisions, including the 3-block proximity to parks/open space standard for homes in the NG districts, LUDR 1.F.1(c).*
- I. Planning features to assure safe walking conditions for students: The proposed plat includes walking paths and sidewalks that will adequately provide safe walking routes and conditions for school children. *Ex. 2, revised preliminary plat plans showing sidewalks and trails in the new plat.*

40. Except as modified in this Decision, all Findings, and statements of fact contained in the Final Staff Report are incorporated herein by reference as Findings of the undersigned hearing examiner.<sup>5</sup>

41. Based on all evidence, exhibits and testimony in the record, the undersigned Examiner specifically finds that the proposed plat, as conditioned below, makes appropriate provisions for the considerations detailed in applicable law, including without limitation RMC 24.12.050, .053, 19.60.095, and the LUDR provisions applicable to the Badger Mountain South area, and that the public use and interest will be served by the proposed plat and associated dedications and improvements.

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<sup>5</sup> For purposes of brevity, only certain Findings from the Department's Recommendation are highlighted for discussion in this Decision, and others are summarized, but any mention or omission of particular findings should not be viewed to diminish their full meaning and effect, except as modified herein.

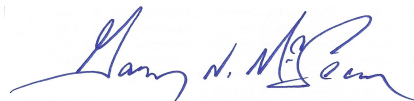
## **V. CONCLUSIONS OF LAW.**

1. Based on the Findings as summarized above, the undersigned examiner concludes that the proposed plat, as conditioned below, conforms to all applicable zoning and land use requirements and appropriately mitigates adverse environmental impacts. Upon reaching such findings and conclusions as noted above, the preliminary plat meets the standards necessary to obtain approval by the City.
2. The proposed conditions of approval as set forth in the Staff Report and as modified by the Examiner in this Decision, are reasonable, supported by the evidence, and capable of accomplishment. Additional conditions have been added to ensure that provisions of the LUDR are followed as the project moves forward.
3. Any Finding or other statements in previous or following sections of this document that are deemed Conclusions are hereby adopted as such.

## **VI. DECISION.**

Based upon the preceding Findings of Fact and Conclusions of Law, evidence presented through the course of the open record hearing, all materials contained in the contents of the record, and the Examiner's site visits through the BMS community, **the undersigned Examiner APPROVES the "South Orchard" Preliminary Plat** application, subject to the Conditions of Approval set forth below and adopted herein as part of this Decision.

Decision issued: December 16, 2021.



Gary N. McLean  
Hearing Examiner for the City of Richland

**CONDITIONS OF APPROVAL  
FOR THE  
PRELIMINARY PLAT OF SOUTH ORCHARD  
FILE NO. S2021-104**

***In accord with authority granted in the Richland Municipal Code, the hearing examiner grants the above-referenced preliminary plat application subject to conditions, modifications and restrictions set forth below, all found necessary to make the application compatible with the environment, and carry out applicable state laws and regulations, and the regulations, policies, objectives and goals of the city's comprehensive plan, zoning code, subdivision code, and other ordinances, policies and objectives of the city.***

***General Conditions:***

- A. Development of the plat shall be substantially consistent with drawings provided in the Preliminary Plat maps included as part of the revised application materials (*Ex. 2*), subject to modifications necessary to comply with these conditions of approval.
- B. Preliminary Plat approval shall be null and void if any condition enumerated herein is not satisfied.
- C. No construction or site development activities related to the plat may be undertaken until required city approvals become effective, and the City and other regulatory authorities with jurisdiction issue applicable permits.
- D. The applicant shall comply with all professional report conclusions and recommendations submitted in connection with the preliminary plat and engineering reviews, as approved and/or amended by the City.
- E. Applicant shall be responsible for consulting with state and federal agencies, and tribal entities with jurisdiction (if any) for applicable permit or other regulatory requirements. Approval of a preliminary plat does not limit the applicant's responsibility to obtain any required permit, license or approval from a state, federal, or other regulatory body. Any conditions of regulatory agency permits, licenses, or approvals shall be considered conditions for this project.
- F. The final engineering plans and submittals necessary to obtain final approvals for each phase of the plat shall conform to all applicable provisions of the Richland Municipal Code and the Conditions of Approval herein.
- G. The preliminary plat shall comply with all applicable provisions of the Richland Municipal Code, and LUDR provisions for the Badger Mountain South community where this plat is located, whether or not such provisions are enumerated or referenced in the approved preliminary plat plans, in the staff report or in this Decision; provided adjustments to road widths, sidewalk and trail dimensions shall be in accord with final reviews and determinations by the City's Public Works Director, who is authorized to exercise sound engineering judgment in such matters, and that some adjustments may constitute Minor or Major Revisions to the Preliminary Plat, as explained in Condition J, below. The burden is on the applicant to show compliance with these conditions and applicable provisions of the City's code and LUDR provisions at every stage of development, including without limitation the 1,000 foot limit on uninterrupted block lengths, and the "3-Block" proximity to a park, mini park, or other type of open space standard for houses in the BMS-NG District. (*LUDR Sec. 7.B.2 and Sec. 1.F.1(c)*).

- H. The preliminary plat can be developed in 4 (four) phases, as identified in the application materials and depicted on revised plan sheets included in Ex. 2, subject to compliance with all final conditions herein.
- I. Final Covenants, Conditions and Restrictions (CCRs) for each phase of this plat shall be submitted with the final plat application for each phase, and shall be recorded prior to the final plat. The CCRs are subject to review and approval of the Planning Manager and City Attorney to ascertain if the documents are sufficient to assure compliance with these Conditions of Approval, SEPA Mitigation measures, and LUDR provisions. At a minimum, the CCRs shall include provisions for repair, maintenance and performance guarantee of any tracts, private parks or open space, landscaping, facilities, utilities or amenities which are private and commonly owned by the homeowners of the plat, and clearly explaining that the City of Richland is not responsible for enforcement of private CCRs. Language shall also be included in the CCRs that require notification to the City of Richland Planning Manager of any amendments to the CCRs, and that the City shall have the authority to object to any modification that is inconsistent with any condition lawfully placed upon the subdivision by the City of Richland.
- J. ***Process for Review of Potential Minor or Major Revisions to this Preliminary Plat.*** Revisions to an approved preliminary plat are reviewed under RMC 19.20.010, with minor revisions reviewed as a Type I application (see RMC 19.20.010(A)(5)), which requires approval by the Director; and major revisions reviewed as a Type III application requiring approval by the Hearing Examiner (See RMC 19.20.010(C)(1)).

As provided in RMC 19.20.030, a Type I application does not require public notice, but public notice must be issued regarding any decision to approve a Type I application, which is then subject to appeal before the Hearing Examiner; and all Type III applications require full public notice of such application, an open record hearing, and a decision by the Hearing Examiner.

Because this application and others in the BMS community have generated significant public comments generally expressing concerns that some requirements, conditions, or expectations for prior BMS developments were modified or abandoned, or the timing of some requirements has been changed, it is in the public interest for this preliminary plat approval and future BMS projects to provide a clear condition explaining the sorts of revisions that will require a Type I or Type III review and approval, subject to application fees and filing requirements as determined by the Director or his/her designee.

For this preliminary plat, “Major Revisions” shall include proposed changes in primary access points or increase in the number of peak hour vehicle trips, expansion of site area, increase in the number of lots, elimination of or substantial change to a required transportation system improvement, substantial expansions of environmental impacts, or substantive changes to any finding of fact or condition of approval in the Decision approving the preliminary plat.

“Minor Revision” shall include proposed changes that the Director determines to be minor but still within the scope of the original preliminary plat approval. Minor revisions can include, without limitation: changes to the boundaries and lots within phases of the preliminary plat; changes in the timing of construction of road improvements mandated in the BMS Master Agreement, the LUDR, or these Conditions of Approval, if deemed to be in the public interest by the Public Works Director; technical engineering items and details, unless the proposed detail modifies or eliminates features specifically required as an element of approval; minor changes in lot or tract lines or dimensions, with no change in density; minor changes to street alignment or utility design; minor changes to street, sidewalk, or trail dimensions, based on site conditions, sound engineering judgement, or public safety considerations; reduction in the number of lots approved, as long as the modification meets any minimum density requirement; minor changes to clarify notations on the face of the plat; a change to a condition of approval that does not modify the intent of the original condition; and reconfiguration of



any designated park, trail, open space, or recreation areas, provided, that no reduction in overall area occurs.

- K. ***Right of Way Permit for Construction Traffic.*** Based on compelling testimony and evidence contained in the record for projects in the BMS master planned community that demonstrated a need for specific conditions to reduce the impacts of construction-related traffic that will move through surrounding neighborhood streets as the new plat is developed and homes are constructed therein, and under authority granted in development regulations found in the Richland Municipal Code, including without limitation RMC Chapter 12.08 (Right of Way Permits) and the purpose and intent of erosion, dust, traffic, pedestrian-safety and water-pollution control regulations set forth in other provisions of the RMC, the following Condition shall be satisfied prior to issuance of any clearing and grading, building, demolition, or other construction permit associated with development of or within the new plat that the Public Works Director determines is likely to have a material impact on any segment(s) of the city's existing public street network that will be used to obtain access to and from the plat-development site(s):

The applicant is required to apply for a Right of Way Permit before the issuance of any grading, building, demolition, or other construction permit associated with development of or within the new plat that the Public Works Director determines is likely to have a material impact on any segment(s) of the city's existing public street network that will be used to obtain access to and from the plat-development site(s). In some cases, more than one Right of Way Permit may be required, such as one for hauling and one for construction work within the right of way. A Right of Way Permit issued under this Condition is intended to regulate activity within the city right of way, and is required of any person who performs construction-related work within existing or proposed city rights-of-way, easements, or on city-owned infrastructure, including without limitation the following:

- a) Designated truck hauling routes.
- b) Truck loading and unloading activities.
- c) Hours of construction and hauling.
- d) Continuity of pedestrian facilities.
- e) Temporary traffic control and pedestrian detour routing for construction activities.
- f) Street sweeping and maintenance during excavation and construction.
- g) Location of construction fences.
- h) Parking for construction workers.
- i) Construction vehicles, equipment, and materials in the right of way.
- j) All other construction activities as they affect the public street system.

In addition, the applicant shall submit for review and approval by the Public Works Director a plan for providing pedestrian access on existing public streets that are impacted during construction of this project (if any). Access on such existing public streets shall be provided at all times during the construction process, except when specific construction activities such as shoring, foundation work, and construction of frontage improvements prevents access. General materials storage and contractor convenience are not reasons for preventing access along streets, sidewalks or other portions of the city street system surrounding the new plat.

- L. ***Inadvertent Discovery Plan Required.*** Based on unrebutted comment letters from DAHP and the Confederated Tribes of the Umatilla Indian Reservation, before commencement of any ground disturbing activities in connection with development of this proposed plat, the applicant shall submit a proposed Inadvertent Discovery Plan (IDP) for review and approval by the Planning Manager, which

shall be consistent with state codes and regulations regarding cultural resources. The proposed IDP should be developed in consultation with DAHP and tribal officials who provided comments in the record for this matter. A copy of an approved IDP, subject to updates and additional provisions or mandatory contacts that may be imposed by the City's Planning Manager, including current names and contact numbers, must be provided to all contractors and be available on-site for reference throughout all phases of the development process that might involve ground disturbance work. If ground-disturbing activities uncover or reveal objects that might appear to be protected resources during the course of construction, then all activity will cease that could cause further disturbance to such items, until notifications are made to appropriate parties, as detailed in the approved IDP and as may be mandated by the City's Planning Manager. This Condition may be satisfied with an IDP that is consistent with DAHP guidance on the topic, but must include current names and contact numbers. For instance, in an effort to standardize language and to be consistent with state law, the Department of Archaeology and Historic Preservation offers the following text relating to the inadvertent discovery of human skeletal remains to be used in the development of inadvertent discovery protocols<sup>6</sup>:

**Inadvertent Discovery of Human Skeletal Remains on  
Non-Federal and Non-Tribal Land in the State of Washington  
(See RCW 68.50.645, RCW 27.44.055, and RCW 68.60.055)**

*"If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the State provides notice to proceed. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains."*

M. Whether restated or discussed elsewhere in these Conditions of Approval or this Decision, each and every of the mitigation conditions provided in Ex. 7, the Planned Action Consistency Determination issued for this revised application on November 3, 2021, are incorporated herein by reference as individual Conditions of Approval adopted by the Hearing Examiner for this preliminary plat.

***Conditions Derived from the Final Staff Report:***

1. Street names are not reviewed or vested until construction plans are submitted for review. The street names included on the pre-plat may not be approved or available during the construction plan review process.

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<sup>6</sup> Available on the DAHP website, at: <https://dahp.wa.gov/archaeology/human-remains/recommended-inadvertent-human-remains-discovery-language>

2. If any of the small tracts have the potential to one day become building lots, utility stubs should be provided to them to avoid the need to cut new streets.
3. Any future storm drainage tracts will be dedicated to the city for ownership. The “Tract Note” on sheet C001 of the pre-plat should be amended to include this.
4. All final, approved plans for public improvements shall be submitted prior to pre-con on a 24” x 36” hardcopy format and also electronically in .dwg format compatible with the City’s standard CAD software. Addendums are not allowed; all information shall be supplied in full size (and electronic) format. Electronic copies of the construction plans are required prior to the pre-con meeting along with the multiple sets of paper drawings. When construction of the public infrastructure has been substantially completed, the applicant shall provide paper and electronic record drawings in accordance with the City’s “Record Drawing Requirements”. The electronic record drawings shall be submitted in an AutoCAD format compatible with the City’s standard CAD software. The final record drawings shall be submitted and approved by the City before the final punchlist inspection will be performed. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
5. A copy of the construction drawings shall be submitted for review to the appropriate jurisdictions by the developer and his engineer. All required comments/conditions from all appropriate reviewing jurisdictions (e.g.: Benton County, any appropriate irrigation districts, other utilities, etc.) shall be incorporated into one comprehensive set of drawings and resubmitted (if necessary) for final permit review and issuance. All necessary permits that may be required by jurisdictional entities outside of the City of Richland shall be the responsibility of the developer to obtain.
6. Any work within the public right-of-way or easements or involving public infrastructure will require the applicant to obtain a right-of-way construction permit prior to beginning work, per RMC Chapter 12.08. The applicant shall pay a plan review fee based on a cost-per-sheet of engineering infrastructure plans. This public infrastructure plan review fee shall apply each time a project is submitted for review. This fee will be different for commercial projects versus subdivision projects. Please visit the Public Works Private Development page on the City’s webpage to find the current per-sheet fee. A permit fee in the amount equal to 3% of the construction costs of the work within the right-of-way or easement will be collected at the time the construction permit is issued. A stamped, itemized Engineers estimate (Opinion of probable cost) and a copy of the material submittals shall be submitted along with the approved plan submittal.
7. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of the final plat. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of plat acceptance. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for final plat acceptance.
8. A pre-construction conference will be required prior to the start of any work within the public right-of-way or easement. Contact the Public Works Engineering Division at 942-7500 to schedule a pre-construction conference.
9. All plan sheets involving construction of public infrastructure shall have the stamp of a current Washington State licensed professional engineer.

10. A copy of the preliminary plat shall be supplied to the Post Office and all locations of future mailbox clusters approved prior to final platting.

***Design Standards:***

11. Public improvement design shall follow the following general format:

- a) All materials and workmanship shall be in conformance with the latest revision of the City of Richland Standard Specifications and Details, Public Infrastructure Design Guidelines and the current edition of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction. Please confirm that you have the latest set of standard specs and details by visiting the City's web page.
- b) Fire hydrant location shall be reviewed and approved by the City Fire Marshal.
- c) All utilities shall be extended to the adjacent property (properties) at the time of construction.
- d) For public utilities not located within public street rights-of-way the applicant shall provide maintenance access acceptable to the City and the applicant shall provide an exclusive 10-foot-wide public utility easement (minimum) to be conveyed to the City of Richland.
- e) Final design of the public improvements shall be approved at the time of the City's issuance of a Right-of-way Construction Permit for the proposed construction.
- f) All public improvements shall comply with the State of Washington and City of Richland requirements, standards and codes.
- g) All public streets shall meet design requirements for sight distance (horizontal, vertical and intersectional).
- h) The final engineered construction plans shall identify locations for irrigation system, street lighting, gas service, power lines, telephone lines, cable television lines, street trees and mailboxes. All electrical appurtenances such as transformers, vaults, conduit routes, and streetlights (including their circuit) need to be shown in the plan view.
- i) The contractor shall be responsible for all public infrastructure construction deficiencies for a period of one year from the date of the letter of acceptance by the City of Richland.
- j) If the project will be built in phases the applicant shall submit a master plan for the sanitary sewer, domestic water, storm drainage, electrical, street lighting and irrigation system for the entire project prior to submitting plans for the first phase to assure constructability of the entire project. This includes the location and size of any storm retention ponds that may be required to handle runoff.

12. If the City Fire Marshal requires a secondary emergency vehicle access, it shall be included in the construction plan set and be designed to the following standards:

- 2-inches compacted gravel, minimum (temp. SEVA only).
- 2% cross-slope, maximum.
- 5% slope, maximum. Any access road steeper than 5% shall be paved or be approved by the Fire Marshal.
- Be 20-feet in width.
- Have radii that are accommodating with those needed for City Fire apparatus.

13. Secondary emergency vehicles accesses (SEVA's) shall be 20-feet wide, as noted. Longer secondary accesses can be built to 12-feet wide with the approval of the City of Richland Fire Marshal; however, turn-outs are required at a spacing acceptable to the Fire Dept. Temporary SEVA's shall be constructed with 2-inches of compacted gravel, at a minimum. Permanent SEVA's shall be paved with 2-inches of asphalt over 4-inches of gravel, at a minimum.

### ***Survey Monument Destruction:***

14. All permanent survey monuments existing on the project site shall be protected. If any monuments are destroyed by the proposed construction, the applicant shall retain a professional land surveyor to replace the monuments and file a copy of the record survey with the City.
- a. No survey monument shall be removed or destroyed (the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible) before a permit is obtained from the Department of Natural Resources (DNR). WAC 332-120-030(2) states “It shall be the responsibility of the governmental agency or others performing construction work or other activity (including road or street resurfacing projects) to adequately search the records and the physical area of the proposed construction work or other activity for the purpose of locating and referencing any known or existing survey monuments.” (RCW 58.09.130).
  - b. Any person, corporation, association, department, or subdivision of the state, county or municipality responsible for an activity that may cause a survey monument to be removed or destroyed shall be responsible for ensuring that the original survey point is perpetuated. (WAC 332-120- 030(2)).
  - c. Survey monuments are those monuments marking local control points, geodetic control points, and land boundary survey corners. (WAC 332-120-030(3)).
  - d. When a monument must be removed during an activity that might disturb or destroy it, a licensed Engineer or Land Surveyor must complete, sign, seal, and file a permit with the DNR.
  - e. It shall be the responsibility of the designing Engineer to identify the affected monuments on the project plans and include a construction note directing them to the DNR permit.

### ***Traffic & Streets:***

15. The South Orchard preliminary plat is subject to the City’s traffic impact fee program (RMC 12.03), subject to payment of all such impact fees in an amount as established by the City of Richland at the time of each building permit application. The program includes street and intersection improvements sufficient to mitigate the off-site impacts of this project. The developer of this proposed project may receive credit for construction of the improvements listed in RMC 12.03.
16. Projects either completed and occupied or approved for future development within Badger Mountain South have resulted in traffic generation that requires an update to the Badger Mountain South Traffic Impact Analysis as identified in Exhibit B, Section 5.3 of the Master Development Agreement. **Final plat approval will not be granted for ANY phase of this project until the Badger Mountain South Traffic Impact Analysis is updated and accepted by the Public Works Director and other necessary approvals are accomplished to effectuate, amend, or mandate compliance with the approved TIA, as determined by the City Attorney (i.e., possible amendment to portions of the BMS Master Agreement, the LUDR, or other legal instruments).**
17. This project will create impacts to three intersections that **shall be mitigated** with intersection improvements.
- a. The Gage/Reata intersection improvements shall include the construction of a roundabout designed for the 2040 anticipated full build-out traffic volumes. This intersection should be completed with the phase of construction that connects Gage Boulevard to Reata Road.

- b. The Gage/Morningside intersection improvements shall include a roundabout or mini roundabout to account for both on-site and planned off-site future peak traffic volumes related to development traffic from the west. These intersection improvements shall be completed along with the phase that constructs the Gage/Morningside intersection.
  - c. The Road A/Reata Road intersection improvements shall include a westbound right turn lane from Reata onto Road A, and a southbound right turn lane from Road A onto Reata. These intersection improvements shall be completed along with the phase that constructs the Road A/Reata Road intersection.
- 18. The Gage Blvd./Road N intersection is anticipated as needing a roundabout when future development continues the extension of Gage Blvd. to the north. Adequate right-of-way shall be provided at this intersection for the anticipated roundabout.
  - 19. The developer shall conduct a preliminary design of Gage Blvd. and Road A (horizontal and vertical alignment) to a point at least 500-feet offsite to the north, or to its next northerly intersection, whichever is further, to confirm the most appropriate alignment. These designs shall be completed concurrent with phase 1.
  - 20. Gage Blvd., Road A and Road N will be classified as “Major Collectors”.
  - 21. On-street parking and driveway accesses for single family lots will not be permitted onto Major Collector streets.
  - 22. Morningside Parkway as designed on this proposed pre-plat will be classified as a Minor Collector.
  - 23. The curves at the south end of Road A need to be designed with a centerline radius compliant with a major collector, per AASHTO design guidelines. The applicable street section for Road A shall include a separated pathway for the full length of Road A, as detailed in the LUDR for a 2-lane arterial collector.
  - 24. Sheet C002 identifies a road section with a median, however it is not clearly identified where that road section is intended to be within the pre-plat. Medians shall not interfere with left-turning movements at intersections. The developer shall obtain approval from the City’s Traffic Engineer for all median designs.
  - 25. Lots fronting on Gage Blvd. shall take access from a rear alley easement. Single family residential driveway access to Gage Blvd. will not be permitted.
  - 26. The City anticipates an update to the LUDR in the near future that will revise the standard street cross sections throughout Badger Mountain South. The developer is requested to consult with Public Works regarding the anticipated cross section changes and to utilize them in anticipation of the LUDR update being completed. Alternatively, this project shall utilize street cross section designs in the LUDR as it exists at the time of infrastructure permitting.
  - 27. Road “A” shall be constructed full-width at the time that the phase which constructs the lots adjacent to Road A is developed. The full road section (curb, gutter, sidewalk, and pathway) shall be constructed on both sides at that time.
  - 28. Reata Road is currently a Benton County road in this area. Staff at the City and Benton County have begun a process to transfer this right of way to City jurisdiction. If this process is not completed all intersections with Reata Road must be reviewed and approved by Benton County. If the process is

completed as proposed by City and County staff, the intersection designs will be reviewed and approved by the City.

29. A note will be included on the face of the final plat stating that no driveways will be allowed directly onto Reata Road with the exception of Lot 1. Proposed driveways from Lot 1 onto Reata Road will need to be approved by the City of Richland Traffic Engineer and Benton County Public Works.
30. A ten-foot public utility easement adjacent to the Reata Road frontage shall be provided on the face of the final plat.
31. Sidewalks shall be installed along all public right-of-way frontages that building lots do not front on during construction of those phases (e.g., storm drainage ponds, parks, HOA tracts, etc.).
32. The developer and his engineer shall demonstrate on the construction plans that all future driveways, sidewalks and pedestrian ramps will meet City and ADA requirements, and also provide at least 5-foot of separation between driveway and/or pedestrian ramp transitions.
33. Pedestrian ramps shall be designed to current City standard details and A.D.A. standards. Adequate right-of-way shall be provided at corners to allow for at least 1-foot of ROW behind the ped. ramp landing. Crosswalks between pedestrian ramps shall be designed to City standards. Crosswalks at stop-controlled intersections shall have cross-slopes less than 2%. Crosswalks crossing thru-streets shall have cross-slopes less than 5%. The road profile shall be designed to accommodate this.
34. The vision-clearance triangle shall be shown on all corner lots (including access easements that serve multiple homes) on both the construction plans and the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in or within 500-feet of a curve, it will have to be evaluated per AASHTO guidelines. The assumed speeds for sight triangle evaluation are 35 mph for Major Collectors, 30 mph for Minor Collectors and 25 mph for local streets. This information shall be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
35. All private roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements.
36. The proposed 18-foot “rear alley” easements shall be private access ways which are for the use and benefit of the homeowners that abut said roads and are to be maintained by the adjacent property owners and/or the HOA. The City of Richland accepts no maintenance responsibility for these rear alley easements.
37. All intersections of private shared driveways and alleys with City streets shall be standard commercial driveway drops constructed to City standards.
38. Street signs indicating any restricted parking areas shall be installed prior to final platting at the developer’s expense. The restricted parking areas shall be indicated on the construction plans and the final plat. All signage will be installed by the developer prior to final platting.
39. All roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements. Homes whose sole access is the proposed “rear alley easement” road section may have to place their garbage cans at locations acceptable to City solid waste collection vehicles.

40. If the project is to be constructed in phases, all dead-end streets longer than 150-feet that will be continued later need to have temporary turnarounds built at the end of them. If the temporary turnaround is not located within the final plat an easement with a 50-foot radius will be required.

***Domestic Water:***

41. Any grading operations that take place near or over the top of the existing domestic water main shall ensure that adequate cover remains over the water main to protect it from breakage or freezing. It shall be the responsibility of the developer to re-install any water mains that have too little (or too much) cover over them as a result of grading operations, or that will result in this water main being in a building lot. This water main needs to be within the roadway whenever possible. The existing main shall be exposed and surveyed at multiple locations as part of the grading permit application.

42. In accordance with municipal code, domestic water mains shall be extended to the adjoining properties adjacent to the preliminary plat, provided they are in the correct pressure zone.
43. If the homes within this preliminary plat are required to install residential fire sprinkler systems, the sprinkler systems shall be the flow-through type in compliance with the City's cross connection control program.
44. The developer will be required to demonstrate that all phases are capable of delivering adequate fire flows prior to construction plans being accepted for review. This may require looping of the watermain from off-site locations or oversizing of the main where needed.
45. The fire hydrant layout shall be approved by the City Fire Marshal.
46. Domestic water mains shall be extended to adjoining properties adjacent to the preliminary plat, where appropriate.
47. In accordance with Richland Municipal Code Chapter 18.16.080, an irrigation source and distribution system, entirely separate from the City's domestic water system, shall be provided for this development. Construction plans will not be accepted for review until adequate and viable proof of an irrigation source is made available by the developer. The designing Engineer shall submit plans for the proposed irrigation system to the Irrigation District with jurisdiction over the property at the same time that they are submitted to the City for construction review. Plans shall be reviewed and accepted by said irrigation district prior to issuance of a Right- of-Way permit by the City. Easements shall be provided on the final plat for this system where needed.

***Sanitary Sewer:***

48. It shall be the responsibility of the developer to extend a sewer main to this property to serve sanitary sewer at the time of plat construction.
49. This preliminary plat may receive City sanitary sewer service only after completion of a new sewer pump station and required improvements to the existing Dallas Road sewer pump station are completed. The developer shall update the Badger South subarea sewer service plan to reflect current planning assumptions for the development and complete the sewer system design and construction required to



serve this project. If the developer constructs capacity beyond the needs of this project it will be eligible for a latecomer agreement per Richland Municipal Code.

50. A 10-foot-wide exclusive sanitary sewer easement shall be provided for any sewer main that is outside of the public Right-of-Way. Wider easements are required for mains that are buried deeper than 10-feet. If any manholes are located outside of the public Right-of-Way, maintenance truck access to said structure may be required.
51. Sanitary sewer shall be extended to the adjoining properties adjacent to the preliminary plat, where appropriate and where grade allows.

***Storm Water:***

52. All construction projects that don't meet the exemption requirements outlined in Richland Municipal Code Section 16.06 shall comply with the requirements of the Washington State Department of Ecology issued Eastern Washington NPDES Phase II Municipal Stormwater Permit. The Developer shall be responsible for compliance with the permit conditions. All construction activities subject to this title shall be required to comply with the standards and requirements set forth in the Stormwater Management Manual for Eastern Washington (SWMMEW) and prepare a Stormwater Site Plan. In addition, a Stormwater Pollution Prevention Plan (SWPPP) or submission of a completed erosivity waiver certification is required at the time of plan submittal. The City has adopted revised standards affecting the construction of new stormwater facilities to comply with conditions of its NPDES General Stormwater Permit program. This project, and each phase thereof, shall comply with the requirements of the City's stormwater program in place at the time each phase is engineered. The project will require detailed erosion control plans.
53. All public storm drainage systems shall have their flow rate and storage capacity designed by a professional engineer following the core elements defined in the latest editions of the Stormwater Management Manual for Eastern Washington, the current Richland municipal codes, the Phase II Municipal Stormwater Permit, and the City's "Public Infrastructure Construction Plan Requirements and Design Guidelines". The storm water calculations shall be stamped by a professional engineer and shall include a profile of the storm system showing the hydraulic grade line. The calculations should include an accurate delineation of the contributing drainage area to accurately size the stormwater facilities. Passing the storm water downhill to an existing storm system will require an analysis of the downstream storm system to determine its capability of accepting the storm water without being overwhelmed. The applicant's design shall provide runoff protection to downstream property owners.
54. If any existing storm drainage or ground water seepage drains onto the proposed site, said storm drainage shall be considered an existing condition, and it shall be the responsibility of the property developer to design a system to contain or treat and release the off-site storm drainage.
55. If there are any natural drainage ways across the proposed pre-plat, the engineered construction plans shall address it in accordance with Richland Municipal code 24.16.170 ("Easements-watercourses").
56. Any proposed storm drainage retention facilities within the boundary of the proposed preliminary plat shall not adversely affect neighboring properties.
57. Prior to or concurrent with the submittal of the first phase the developer shall provide a Geotechnical report including the percolation rate of the soils in the area of any storm retention ponds. If the project constructs a storm retention pond then the engineer will need to demonstrate that the pond will drain

itself within 72 hours after the end of a storm event, and not have standing water in it longer than that. Engineering solutions are available for retention ponds that do not percolate within 72 hours.

58. As per RMC chapter 24.20.070 and the City of Richland's Comprehensive Stormwater Management Plan, the storm drainage system installed as part of this plat may need to be oversized to handle the additional flow from future developments in the vicinity. The storm drainage system for this development, both its conveyance and retention / infiltration components, shall be designed to effectively manage runoff from upstream properties that can be anticipated to convey stormwater onto this property because of a pre-development runoff condition, or as a result of flows discharged that are in excess of the design storm from the upstream property. Additionally, as this property is upslope of developed properties the stormwater system shall include provisions for possible discharge of runoff onto downslope properties from storms in excess of the design storm as described above. Those provisions may be required to include off-site downslope conveyance facilities and/or flowage easements allowing for the conveyance of stormwater to and across downslope properties.
59. The amount of post-development storm runoff from the proposed site shall comply with RMC Chapter 16.06.
60. Stormwater collection pipes shall be extended to the adjoining properties adjacent to the plat, where appropriate and where grade allows.
61. The parcel occupied by the stormwater basin shall be identified as a separate parcel or tract on the final plat and shall be dedicated to the City stormwater utility. The design of the basin shall include access features meeting the city's needs for maintenance.
62. The developer shall consider the long-term appearance of the storm basin, particularly if it will occupy a prominent location in the development. The City's typical storm pond maintenance practices consist of semi-annual vegetation trimming and silt and debris removal. If the pond location is deemed by City staff as being in a prominent location the developer shall design and install fencing and/or landscaping to mitigate the pond's visible character for the surrounding properties. If the City requires this type of treatment to the pond site, the developer may propose landscaping treatments consistent with the development and establish maintenance responsibilities to remain with the development. These maintenance responsibilities shall be noted on the final plat. Basins designed as detention and evaporative basins need to include plantings that will tolerate or thrive in standing water. Planting designs for areas not routinely exposed to water shall include plants that will thrive without irrigation unless the developer intends to maintain an irrigated pond site. At a minimum the landscaping plan should be consistent with the City's intended maintenance standard as described above.
63. The developer shall be responsible for landscaping the storm pond and for its maintenance and the plantings through the one-year infrastructure warranty period. At 11 months after the final acceptance date the developer shall clean the storm system and basin of all accumulated oil, sediment, and debris. After this maintenance is completed and inspected the City will begin routine maintenance of the system and basin. The developer shall replace any plantings that have failed to survive the warranty period. The developer shall also perform trimmings required to control weeds in excess of 18-inches in height for the 12-months following the date of final plat acceptance.

***Final Platting / Project Acceptance Requirements:***

64. When the construction is substantially complete a paper set of "record drawings" shall be prepared by a licensed surveyor and include all changes and deviations. Please reference the Public Works document "RECORD DRAWING REQUIREMENTS & PROCEDURES" for a complete description of the

record drawing process. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.

65. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of a certificate of occupancy. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final acceptance. Off-site (“third party”) easements or rights-of-way for City infrastructure are the responsibility of the developer to obtain. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to final platting.
66. Any off-site easements or permits necessary for this project shall be obtained and secured by the applicant and supplied to the City at the time of plat construction and prior to final plat acceptance by the City.
67. Ten-foot-wide public utility easements will be required on the final plat along both sides of all Right-of-Ways within the proposed plat.
68. The vision-clearance triangle needs to be shown on all corner lots on the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
69. The final plat shall include notes identifying all common areas including the private streets and tracts and acknowledging the ownership and maintenance responsibility by the homeowner’s association. A note shall be added to the face of the final plat that states: “The proposed rear alley easements shall be private roadways which are for the use and benefit of the homeowners that abut said roads and are to be maintained by the adjacent property owners or the HOA. The City of Richland accepts no maintenance responsibility for rear alley easements”.
70. A note shall be added to the face of the plat that states: “The private rear alley easements within this plat are fire lanes and parking is restricted. The required no-parking signs shall be installed by the developer where applicable.”
71. All landscaped areas within the plat that are in the public Right of Way shall be the responsibility of the property owners to maintain.
72. A one foot “No access / screening easement” will be required along the Reata Road, Gage Blvd., and “Road A” Right of Ways.
73. The intended use and ownership of all tracts within the plat shall be noted on the final plat.
74. Property with an unpaid L.I.D. assessment towards it must be paid in full or segregated per Richland Municipal Code 3.12.095.
75. Any restricted parking areas shall be indicated on the final plats.
76. Future construction shall meet the sustainability standards contained in Section 12 of the LUDR and with the design requirements established within Sections 3 and 8 of the LUDR.

77. Note #3, as shown on sheet C001 of Exhibit 2, is not valid and shall not appear on any subsequent final plat(s). All lots shall be designed to meet setback requirements of the applicable BMS zoning district(s).
78. *Building Types.* Consistent with LUDR Sec. 1.G(5), and Sec. 7.B(5)(a)(2 and 3), the face of the final plat documents for all phases of the project must identify the building type(s) that will be allowed on each lot, and demonstrate that there will be two building types per block for all blocks of the proposed plat that are within the BMS-NC and BMS-NG Districts.
79. This project shall utilize street cross-section designs as proposed in the LUDR amendments (CA2021-108) by NorAm and their engineer in a separate code amendment application, so long as such amendments are recommended by the Planning Manager and the Public Works Director.
80. Street names will be reviewed when construction drawings are submitted to the Public Works Department. When construction drawings are submitted, please include two (2) street name options for each of the new street segments and the City will review to determine acceptable street names.
81. Final plats shall include addressing [brackets] placed on all lots and tracts adjacent to all public road frontages.
82. Pursuant to LUDR Section 1.G(5), final plats shall identify housing types allowed on each lot.
83. All rights-of-way shall include public pedestrian facilities and edge-type features as shown in Section 6 of the LUDR.

**NOTE – In the event of a need for clarification regarding the application or interpretation of any term or condition of approval set forth above, either the applicant or the city can invoke the jurisdiction of the Hearing Examiner to issue a written clarification of a particular term or condition, through a written request detailing the matter, and the basis for such request. Such request shall be made as a Request for Reconsideration, submitted within seven (7) calendar days of the date this Decision is issued.**

## **Notice of Rights to Request Reconsideration or Appeal This Decision**

### ***Reconsideration –***

Sec. 2.22(a) of the Richland Hearing Examiner Rules of Procedure reads as follows:

(a) The Hearing Examiner may reconsider a decision or recommendation on an application, if it is filed in writing within 7 calendar days of the date of issuance. Only parties of record have standing to seek reconsideration. Any request for reconsideration shall be served on all parties of record and to any party's designated representative or legal counsel on the same day as the request is delivered to the Hearing Examiner. The Examiner will seek to accept or reject any request for reconsideration within 3 business days of receipt. If the Examiner decides to reconsider a decision, the appeal period will be tolled (placed on hold) until the reconsideration process is complete and a new decision is issued. If the Examiner decides to reconsider a recommendation made to the City Council, the transmittal to the City Council shall be withheld until the reconsideration process is complete and a new recommendation is issued. If the Examiner decides to reconsider a decision or recommendation, all parties of record shall be notified. The Examiner shall set a schedule for other parties to respond in writing to the reconsideration request and shall issue a decision no later than 10 business days following the submittal of written responses. A new appeal period shall run from the date of the Hearing Examiner's Order on Reconsideration.

### ***Appeal –***

The hearing examiner's decision regarding this preliminary plat application shall be final, subject to judicial appeal in the time and manner as provided in RMC 19.70.060 and Ch. 36.70C RCW (*The city's final decision on land use application may be appealed by a party of record with standing to file a land use petition in Benton County Superior Court. Such petition must be filed within 21 days of issuance of the decision*). See RMC 24.12.050(B).

**NOTE:** The Notice provided on this page is only a short summary, and is not a complete explanation of fees, deadlines, and other filing requirements applicable reconsideration or appeals. Individuals should confer with advisors of their choosing and review all relevant codes, including without limitation the city code provisions referenced above and the Land Use Petition Act (Chapter 36.70C RCW) for additional information and details that may apply.



## Exhibit 4

# Master Agreement Consistency Determination [MACD]



May 30, 2023

## **MASTER AGREEMENT CONSISTENCY DETERMINATION**

**For:** Preliminary Plat Major Amendment Application for South Orchard, a Badger Mountain South Development (SA2023-102)

**Applicant:** Darrin Sweeney on behalf of Badger Communities, LLC

**Project Description:** Request to amend prior preliminary plat to now place 535, single-family residential lots, 2 multi-family lots, and 12 public amenity tracts on 174.37 acres.

**Consistency Determination Type:** Level 1

**Master Agreement Consistency Recommendation:** The Richland Planning Department received a revised master agreement consistency recommendation (MACR) from the Badger Mountain South Master Program Administrator [MPA] on May 8<sup>th</sup>, 2023.

After completing a review of the preliminary plat major amendment application of South Orchard, evaluating it against the standards contained in the adopted Land Use and Development Regulations (LUDR) for the Badger Mountain South Community and the Master Agreement between the City of Richland and Nor Am Investments, LLC, and, after reviewing the recommendation of the Badger Mountain South Master Program Administrator, I find that the application is consistent with the Master Agreement and the LUDR and hereby issue this Master Agreement Consistency Determination.

Sincerely,

Matthew Howie  
Senior Planner



## Exhibit 5

# Planned Action Consistency Determination [PACD]





May 30, 2023

## **PLANNED ACTION CONSISTENCY DETERMINATION**

**For:** Preliminary Plat Major Amendment Application for South Orchard, a Badger Mountain South Development (SA2023-102)

**Applicant:** Darrin Sweeney on behalf of Badger Communities, LLC

**Project Description:** Request to amend prior preliminary plat to now place 535, single-family residential lots, 2 multi-family lots, and 12 public amenity tracts on 174.37 acres.

**Master Agreement Consistency Determination:** Issued May 30, 2023.

After completing the review of the preliminary plat application of South Orchard and evaluating it considering the mitigating conditions established in the Final Supplemental Environmental Impact Statement prepared for the Badger Mountain South Subarea Plan and as delineated as Exhibit B in the Master Agreement between the City of Richland and Nor Am Investments, LLC, the City finds the following:

1. Following the major amendment, the South Orchard preliminary plat meets the description for a planned action as defined in City code and that as conditioned, the project will implement applicable conditions or mitigation measures identified in RMC 19.50 (Consistency with Development Regulations and SEPA); and
2. The South Orchard preliminary plat is consistent with the City of Richland Comprehensive Plan and the Badger Mountain Subarea Plan; and
3. The South Orchard preliminary plat is consistent with the Master Agreement between the City and Nor Am Development, LLC regarding development of Badger Mountain South, as evidenced by the Master Agreement Consistency Determination issued by the City on May 30, 2023; and
4. The probable significant adverse environmental impacts of the proposed project have been adequately addressed in the Planned Action Ordinance [RMC 19.50.030 (B)] and as described in the Badger Mountain South Planned Action Consistency Determination for South Orchard preliminary plat; and
5. The South Orchard preliminary plat is not an essential public facility, as defined in RCW 36.70A.200; and
6. Based on the foregoing, a SEPA threshold determination or EIS is not required; and
7. The following environmental mitigation conditions shall apply to the South Orchard preliminary plat:

- a. Erosion control measures as required by City of Richland shall be implemented; vegetative cover on exposed soils shall be provided as soon as practicable following clearing and grading activities; water of exposed soils shall be performed in accordance with Benton Clean Air Authority requirements; soils shall be compacted at densities appropriate for planned uses.
- b. The applicant shall submit a dust control plan to the Benton County Clean Air Authority for their review and approval. All construction work shall be performed in accordance with the provisions of the approved dust control plan.
- c. The applicant shall submit an erosion control plan to the City of Richland Public Works Department for their review and approval based on the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington. All construction work shall be performed in accordance with the provisions of the approved erosion control plan which shall be consistent with City standards.
- d. The applicants shall conform to City noise standards.
- e. Transportation mitigation measures shall be applied pursuant to the most recent traffic impact analysis prior to recording any phase of South Orchard.
- f. Potable water systems shall be designed and constructed in accordance with City standards.
- g. Sewer systems shall be designed and constructed in accordance with City standards.
- h. All residential dwelling units shall be constructed with a residential fire sprinkler system.
- i. Energy conservation measures and sustainability standards as established in the LUDR shall apply to new construction within the proposed project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Mike Stevens', is written over a horizontal line.

Mike Stevens, Planning Manager



## Exhibit 6

# Traffic Impact Analysis Letter



5/26/2023

Darrin Sweeney  
NorAm

**RE: Acceptance of Badger Mountain South Updated Traffic Impact Analysis dated February 16, 2022 with City Amendments**

In accordance with Exhibit B to Master Agreement Environmental Conditions subsection 5.3, once the 1000 trips threshold has been reached, a Traffic Impact Analysis (TIA) shall be provided by the developer at every point the when the 500 p.m. peak hour trips are generated from Badger Mountain South. The scope of this study was very large as the City had identified substantial deficiencies in the study used to set the project's environmental mitigation conditions. Pursuant to the City's direction regarding the scope of the study the Developer and their traffic consultant TENW produced a draft traffic study dated May 14, 2021, which was subsequently returned with comments from the City. The developer and their traffic consultant TENW produced a second draft of traffic study dated February 16, 2022, which was subsequently supplemented by TENW with replacement pages to correct identified errors. On May 23, 2022, the City of Richland Public Works Department sent a review comment letter in response to the February 16, 2022 draft. The TIA and replacement pages are attached as Appendix B. The purpose of the City's review was to develop a plan for the City's concurrency with the findings for the proposed mitigation within the TIA and provide guidance to the developer to updated the TIA to a product the City could approve. The Developer and TENW have not subsequently provided an updated study document.. This letter serves as the City's proposed acceptance of the TIA and conditions under which the City will consider Nor Am to have fulfilled the requirements of Exhibit B to Master Agreement Environmental Conditions subsection 5.3.

**Funding and Coordination with Outside Agencies**

For projects within the footprint of Badger Mountain South (onsite) and within the City's Traffic Impact Fee (TIF) zone boundary, we suggest our recommended improvement scope to that proposed by the TIA even if it exceeds the overall LOS D or better requirement. Designing the internal system to operate well for all approaches is in all our best interests and the City will incorporate these changes into the TIF program to raise funds and reimburse the developer (NorAm) for building the recommended improvements.

For projects outside of the footprint of Badger Mountain South (offsite) and inside the City limits, three situations arose from our review. (1) The TIA analysis satisfies an overall average LOS of D or better at the intersection and we agree with the proposed mitigation; (2) The TIA analysis satisfies an overall average LOS of D or better at the intersection, but intersection approaches fail and the City provides recommended changes to lane configurations to ensure the intersection will operate without exorbitantly long delays and queues; and (3) The City disagrees with pro-rata share or proposed mitigation.

For projects outside of both the Badger Mountain South and the City limits, we reviewed the TIA analysis to ensure it satisfies the overall average LOS of D or better. Offsite intersections not within City of Richland limits were subject to consultation with The City of West Richland and Benton County. The City developed interlocal agreements with those agencies and incorporated the improvement projects into the City's TIF to reimburse those agencies for improvements they make to their transportation system.

The collection of TIF also applies to the I-82/Dallas Road ramp terminal intersections operated by the Washington Department of Transportation. The responsibilities for planning the improvements to the ramps rest with the developer in coordination with WSDOT who manages the relevant right-of-way. Early consultation with WSDOT is encouraged due to the potential for state requirements for additional study of intersection type and design.

### **Amendment to TIA Recommendations**

The following tables represents the City's acceptable amendments to the TIA. These recommendations shall function as the basis for future traffic conditions for Badger Mountain South. Appendix A provides figures with the recommended intersection configurations.

#### ***Onsite Intersections***

In general, the City concurs with trip distribution, as well as present and future intersection level of service computations. Below is the City's recommendation based on the analysis provided.

<b>Study Intersection Number</b>	<b>Study Intersection</b>	<b>TIA Proposed Mitigation</b>	<b>City Recommended Mitigation</b>	<b>Reason for Difference</b>
A	Bella Coola Lane / Trowbridge Boulevard	Roundabout or signal	Roundabout	Already installed to needed configuration.

<b>Study Intersection Number</b>	<b>Study Intersection</b>	<b>TIA Proposed Mitigation</b>	<b>City Recommended Mitigation</b>	<b>Reason for Difference</b>
B	Ava Way / Trowbridge Boulevard	Roundabout or signal	Roundabout	Already installed to needed configuration.
C	Sol Duc Avenue / Trowbridge Boulevard	Two-way stop control - Sol Duc Approaches	Two-way stop control - Sol Duc Approaches with left-turn lane on Trowbridge	Left-turns needed at Sol Duc due to thru and LT volumes on Trowbridge.
D	Unnamed N/S Road / Trowbridge Boulevard	Roundabout or signal	Single lane roundabout with additional EBRT and NBLT lanes.	Address queuing on approaches and better LOS.
E	Gage Boulevard / Corvina Street	Two-way stop control - Corvina Approaches	Add turn lanes on all Gage approaches.	Meet need for volumes on Gage.
F	Gage Boulevard / Trowbridge Boulevard	Roundabout or signal	Single lane roundabout	Roundabout is preference.
G	Gage Boulevard / Bella Coola Lane	Two-way stop control - Bella Coola Approach	Add turn lanes on all Gage approaches.	Meet need for volumes on Gage.
H	Gage Boulevard / Unnamed E/W Road	Two-way stop control - Unnamed E/W Approach	Add turn lanes on all Gage approaches.	Meet need for volumes on Gage.
I	Gage Boulevard / Morningside Parkway	Two-way stop control - Morningside Parkway Approach	Single lane mini-roundabout	Per South Orchard plat conditions.
J	Unnamed N/S Road (aka Southgate) /	Two-way stop control - Unnamed	Agree	Future consideration for school reserved.

Study Intersection Number	Study Intersection	TIA Proposed Mitigation	City Recommended Mitigation	Reason for Difference
	Unnamed E/W Road	E/W Approach		
K	Unnamed N/S Road (aka Southgate)/ Bella Coola Lane	Roundabout or all-way stop	Single lane roundabout	Roundabout is preference.
L	Clark Ridge Drive / Bella Coola Lane	Two-way stop control - Clark Ridge Approach	Agree	Future consideration for school reserved.

#### ***Offsite Intersections (in City)***

In general, the City concurs with trip distribution, as well as present and future intersection level of service computations. Below is the City's recommendation based on the analysis provided.

#	Study Intersection	TIA Proposed Mitigation	City Recommended Mitigation	Reason for Difference
3	Dallas Road / Trowbridge Road	Roundabout	Roundabout with additional NB lane (configuration is NB thru/left, NB thru/right, NB right slip lane and EB lane (configuration is EB thru/left and EB right)).	Continuation of Dallas 4-5 lane section.
4	Dallas Road / Ava Way	Roundabout or signal	Roundabout with additional NB lane (configuration is NB thru/left and NB thru/right).	Continuation of Dallas 4-5 lane section.
10	Duportail Street / Keene Road	None - Meets LOS standard	Agree	N/A
11	Duportail Street / Kennedy Road	None - Meets LOS standard	Agree	N/A

#	Study Intersection	TIA Proposed Mitigation	City Recommended Mitigation	Reason for Difference
12	Duportail Street / Queensgate Drive	Monitor	Additional SB left turn lane. Doing so effectively means that the WB ramp terminal on Queensgate would need modifications. Additional SB right turn. 10% Pro-rata share. 2030 Improvement year.	Intersection fails and requires mitigation. Identify pro-rata share and improvement year.
13	Queensgate Drive / I-182 WB Ramps	None - Meets LOS standard	Agree	N/A
14	Queensgate Drive / I-182 EB Ramps	None - Meets LOS standard	Agree	N/A
15	Keene Road / Queensgate Drive	None - Meets LOS standard	Agree	N/A
16	Gage Boulevard / Queensgate Drive / Bermuda Road	Roundabout	Roundabout with additional SB right turn lane.	Resolves approach failure.
17	Keene Road / Gage Boulevard	None - Meets LOS standard	Agree	N/A
18	Leslie Road / Gage Boulevard	Monitor	WB+EB right-turn, add SB thru, and NB dual left turn. 6% Pro-rata share. 2030 Improvement year.	Intersection fails and requires mitigation. Identify pro-rata share and improvement year.
19	Leslie Road / Reata Road	Roundabout or signal	Roundabout with additional right-turn lane on EB Reata and elimination of SB Leslie right slip lane in favor of a second SB lane (configuration is SB thru-right)	This solution addresses AM Reata approach failure and eliminates slip lane to thus being more cost effective while providing adequate LOS.



#	Study Intersection	TIA Proposed Mitigation	City Recommended Mitigation	Reason for Difference
20	Badger Road / Clearwater Avenue / Leslie Road	Monitor	SB Approach - Additional SB right-turn lane and WB receiving lane to extend west over RR tracks. WB Approach - Reconfigure to allow two thru movements (configuration is WB thru-left and thru-right). EB Approach - additional right turn lane and modification to south island for dual EB lefts (configuration is EB left-turn lane, left-turn/thru/right-turn lane, and right-turn lane. 20% Pro-rata share. 2030 Improvement year.	Intersection fails and requires mitigation. Identify pro-rata share. SB approach - necessary to address PM approach failure. WB approach - necessary to address AM approach failure. EB approach - necessary to address AM failure and queuing over 500 ft. Address if this recommendation is part of recent RR required study.
24	Morningside Parkway / Reata Road	TIP/Frontage	Stop control on Morningside approach and TWLTL and right-turn lane onto Morningside.	3-lane design per design standard for this road and EB right-turn lane per WSDOT guidance.
25	Gage Boulevard / Reata Road	TIP/Frontage	Roundabout - single lane	Per South Orchard plat conditions, meets need for roundabout.
26	Unnamed N/S (aka Southgate) / Reata Road	TIP/Frontage	Stop control on Unnamed N/S (Road A) approach and TWLTL and right-turn lane on Reata.	Per South Orchard plat conditions.

#### ***Offsite Intersections (outside of City limits)***

In general, the City concurs with trip distribution, as well as present and future intersection level of service computations. As mentioned above, through consultation with the City of West Richland and Benton County, the City developed interlocal agreements with those agencies and incorporated the improvement projects into the

City's TIF to reimburse those agencies for improvements they make to their transportation system. The following table is for information purposes:

#	Study Intersection	Responsible Party	TIA Proposed Mitigation	Recommended Mitigation	Reason for Difference
1	Dallas Road / I-82 EB Ramps	Developer in coordination with Benton County / WSDOT	Roundabout or Signal	Roundabout, but may change upon consultation with WSDOT.	Access Revision Report and Intersection Control Evaluation required by WSDOT
2	Dallas Road / I-82 WB Ramps	Developer in coordination with Benton County / WSDOT	Roundabout or Signal	Roundabout, but may change upon consultation with WSDOT.	Access Revision Report and Intersection Control Evaluation required by WSDOT
5	Dallas Road / Arena Road	West Richland	Cul-de-sac	Partial closure eliminating EB movement at intersection and WB right-out only.	Maintains some access and accomplishes reduction in cut-through.
6	Bombing Range Road / Kennedy Road	West Richland	Roundabout or signal	Signal and NB right turn lane. 41% Pro-rata share.	Disagree with pro-rata share due to change in traffic volumes with partial closure of Arena. Additional lane needed to resolve approach failure.
7	Bombing Range Road	West Richland	None - Meets LOS standard	Remove roundabout, install traffic	Project already started by West Richland, but

#	Study Intersection	Responsible Party	TIA Proposed Mitigation	Recommended Mitigation	Reason for Difference
	/ Keene Road			signal and reconfigure lanes. 8% Pro-rata share.	accounting for BMS additional traffic.
8	Kennedy Road / Arena Road	West Richland	Cul-de-sac	Partial closure at Dallas Rd eliminating EB movement at intersection and WB right-out only.	Maintains full access at Kennedy and accomplishes reduction in cut-through.
9	Kennedy Road / Keene Road	West Richland	NB+SB right-turn overlap phases	Phase 1 – upgrade signal to add NB/SB right turn arrows. Phase 2 - Add exclusive left turn lanes for Kennedy Road and improve signal operations. 11% Pro-rata share.	Phase 1 – resolves immediate need as per TIA. Phase 2 - resolves approach failures for left turn phases at final build out of BMS.
21	Badger Road / I-82 WB Ramps	Benton County / WSDOT	None - Meets LOS standard	Agree	N/A
22	Badger Road / I-82 EB Ramps	Benton County / WSDOT	None - Meets LOS standard	Agree	N/A
23	Bermuda Road / Reata Road	Benton County	Roundabout or signal	Roundabout - single lane.	Roundabout preferred due to impracticality of signal.

### Master Agreement Mitigation Measures, Updates to Improvement Timeline and Progress of Development

The BMS Master Agreement, Section 19 and Exhibit B requires that after the Phase 1 threshold has been reached (1000 trips), and the Phase 1 improvements constructed, a Traffic Impact Analysis (TIA) will be provided to the city by the master developer at

every point when 500 p.m. peak trips are generated. The improvements intended for Phase 1 traffic mitigation measures are not complete at the time of this letter. It is the intent of the City of Richland to utilize the TIA, its amendments, and its subsequent updates as a basis for recommending that the triggers identified in the Phase 1 traffic mitigation measures be replaced with the amended TIA as the basis for future traffic mitigation triggers. The City takes this position because the TIA has satisfactorily documented that the development has not resulted in traffic impacts as anticipated by the original analysis and master agreement and that the TIA satisfactorily identifies and programs all necessary traffic mitigation projects for the development.

The key weakness of the TIA is that it does not identify thresholds or triggers for needed traffic mitigations based on p.m. peak hour trips generated. However, the TIA establishes the recommendations based on an anticipated development timeline and years that the mitigation is proposed based on that timeline. To compensate for this weakness, the City will require, as provided for in the master agreement that at every 500 p.m. peak hour trips beyond 1000 trips generated the developer shall update its traffic impact analysis. These updates shall, at a minimum, include:

- Trips generated since development began,
- Future development timeline,
- Road network constructed,
- Land use and roadway assumptions planned with future phases, and
- Any new/changed recommendations for mitigation type and timeline.

In addition, a sensitivity analysis of select intersections may be required to determine the phase of development in which improvements are needed if phases are constructed at a different timeline than assumed in the TIA.

The City tracks p.m. peak hour trips generated by the BMS site by tracking approved building permits. The City will identify when the trip threshold is reached and communicate such to the developer.

The City also tracks the mitigations conditioned upon developments, mitigations completed by the developer, and identifies the developer's obligations to agencies outside of the City. The City will condition developments with traffic mitigation measures identified in the amended TIA based on the year identified in the TIA, but also development progression, trip generation, roadway network constructed, and any sensitivity analysis completed.

As stated above this letter provides the City's proposed acceptance of Nor Am's updated TIA, completed to comply with Exhibit B to Master Agreement Environmental Conditions subsection 5.3. If Nor Am wishes to contest the City's proposal I ask that Nor Am provide a written response to this letter within the next thirty days stating your objections to the City's proposal and the technical basis of your objection. If Nor Am

5/26/2023

Page 10

does not contest the City's proposal the City will proceed to administer the development on the basis of this proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Pete Rogalsky', with a large, stylized flourish extending from the end of the signature.

Pete Rogalsky, PE  
Public Works Director

Enclosure: Appendix A: City Recommended Intersection Layouts  
Appendix B: February 16, 2022 Badger Mountain South Traffic Impact  
Analysis as amended by replacement pages



## Exhibit 7

# Traffic Impact Analysis Report

# Badger Mountain South

Richland, WA

Updated Transportation Impact Analysis  
February 16, 2022

Prepared for:

*Nor Am Investment, LLC*  
4405 71<sup>st</sup> Avenue Court NW  
Gig Harbor, WA 98335

Prepared by:



Transportation Engineering NorthWest

11400 SE 8<sup>th</sup> Street, Suite 200  
Bellevue, WA 98004  
(425) 889-6747

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# INTRODUCTION

This updated transportation impact analysis (TIA) has been prepared for the Badger Mountain South development located on the north side of I-82 and east of Dallas Road in Richland, WA. This study has been updated based on comments received from the City of Richland dated August 26, 2021, in response to review of the initial TIA dated May 14, 2021.

## Project Description

Badger Mountain South (BMS) is a large mixed-use, multi-phased development on approximately 1,500 acres located in the Badger Mountain Subarea of Richland, WA. The BMS site is located north of I-82 and east of Dallas Road and is generally divided into six neighborhoods (BMS Station, West Village, West Vineyard, East Garden, East Market and South Orchard) as shown in the **Figure 1** vicinity map. As of November 2020, Phase 1 (approximately 700 dwelling units and 22,000 square feet of commercial use) had been constructed. Full project buildout is expected by 2040 and is anticipated to include a total of approximately 4,600 residential dwelling units (both single family and multifamily) and approximately 1,017,000 square feet of commercial development.

Vehicular access to/from the BMS site is currently provided via Dallas Road only. With full buildout of the development by 2040, vehicular access to the BMS site will be provided from Dallas Road, Reata Road, and via the future planned extension of Gage Blvd to/from the east. A preliminary site plan illustrating the anticipated buildout of the BMS site over the next 20 years is shown in **Figure 2**.

## History and Purpose

Transportation impacts associated with the development of BMS were evaluated in the 2010 Badger Mountain South Final Supplemental EIS (FSEIS). The subsequent Badger Mountain South Subarea Plan and approved Master Agreement (2015) were based on the FSEIS analysis. Exhibit B of the 2015 Master Agreement (conditions of approval) outlines several traffic mitigation measures to be completed with the first 1,000 PM peak hour trips generated by Badger Mountain South (referred to as Phase 1). Exhibit B of the Master Agreement also documents the need for a TIA to be provided to the City for every 500 trips generated after the BMS Phase 1 threshold has been reached in order to identify potential off-site improvements beyond Phase 1 of BMS.

This Transportation Impact Analysis (TIA) was prepared to meet the requirement of the Master Agreement condition of approval for evaluation of traffic impacts beyond the development of BMS Phase 1. The analysis included in this TIA is intended to evaluate traffic impacts of an additional 500 PM peak hour project trips as well as full buildout of the BMS development; and to develop a mitigation strategy to address future roadway and intersection deficiencies as a result of buildout of BMS and growth in background traffic to the year 2040.

## Project Approach and Study Scope

The detailed scope of work for this TIA was established through correspondence with the City of Richland, and their subsequent coordination with other local jurisdictions. A total of 26 off-site study intersections and 12 on-site study intersections were identified for evaluation during both the AM and PM peak hours. Additionally, the City required evaluation of four future development years (2025, 2030, 2035 and 2040) in order to assist with identifying the future development phases of BMS for which transportation mitigation will be needed.

The scope of work for this TIA is significantly different and more extensive than the traffic analysis included in 2010 FSEIS which analyzed a total of 11 off-site study intersections and 4 on-site study intersections for the PM peak hour only.

To analyze the transportation impacts from buildout of the Badger Mountain South development, the following tasks were undertaken:

- Assessed existing conditions through field reconnaissance and reviewed existing planning documents.
- Described existing roads, pedestrian facilities, and transit facilities in the project vicinity.
- Documented existing (2021) traffic volumes and intersection level of service (LOS) at 22 off-site study intersections during the weekday AM and PM peak hours.
- Documented planned roadway improvements in the project vicinity.
- Developed weekday daily, AM peak hour, and PM peak hour trip generation estimates for four future development years (2025, 2030, 2035, and 2040).
- Summarized traffic modeling information obtained from BFCG to determine the project trip distribution.
- Documented trip distribution and assignment of AM and PM peak hour project trips.
- Documented AM and PM peak hour traffic forecasts and assumptions for year 2040 conditions with full buildout of Badger Mountain South.
- Analyzed weekday AM and PM peak hour LOS for future year 2040 conditions with full project buildout at 26 off-site study intersections.
- Analyzed weekday AM and PM peak hour LOS for future year 2040 full buildout conditions at 12 on-site intersections and identified preliminary traffic control and channelization.
- Documented preliminary roadway functional classifications for internal roadways within BMS.
- Evaluated and documented potential mitigation measures at off-site intersections forecast to operate at LOS E or LOS F in 2040; note LOS D is acceptable per City of Richland.

## Primary Data and Information Sources

- Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10<sup>th</sup> edition, 2017.
- Peak Hour traffic counts by IDAX, November 2020.
- Peak Hour traffic counts by City of Richland, 2019 and 2021.
- *Highway Capacity Manual (HCM)*, 6<sup>th</sup> Edition, TRB.
- City of Richland *2022-2027 Six Year Transportation Improvement Program (TIP)*.
- City of West Richland *2022-2027 Six Year Transportation Improvement Program (TIP)*.
- Benton Franklin Council of Governments *2021-2024 Transportation Improvement Program (TIP)*.
- WSDOT *2022-2025 Statewide Transportation Improvement Program (STIP)*.

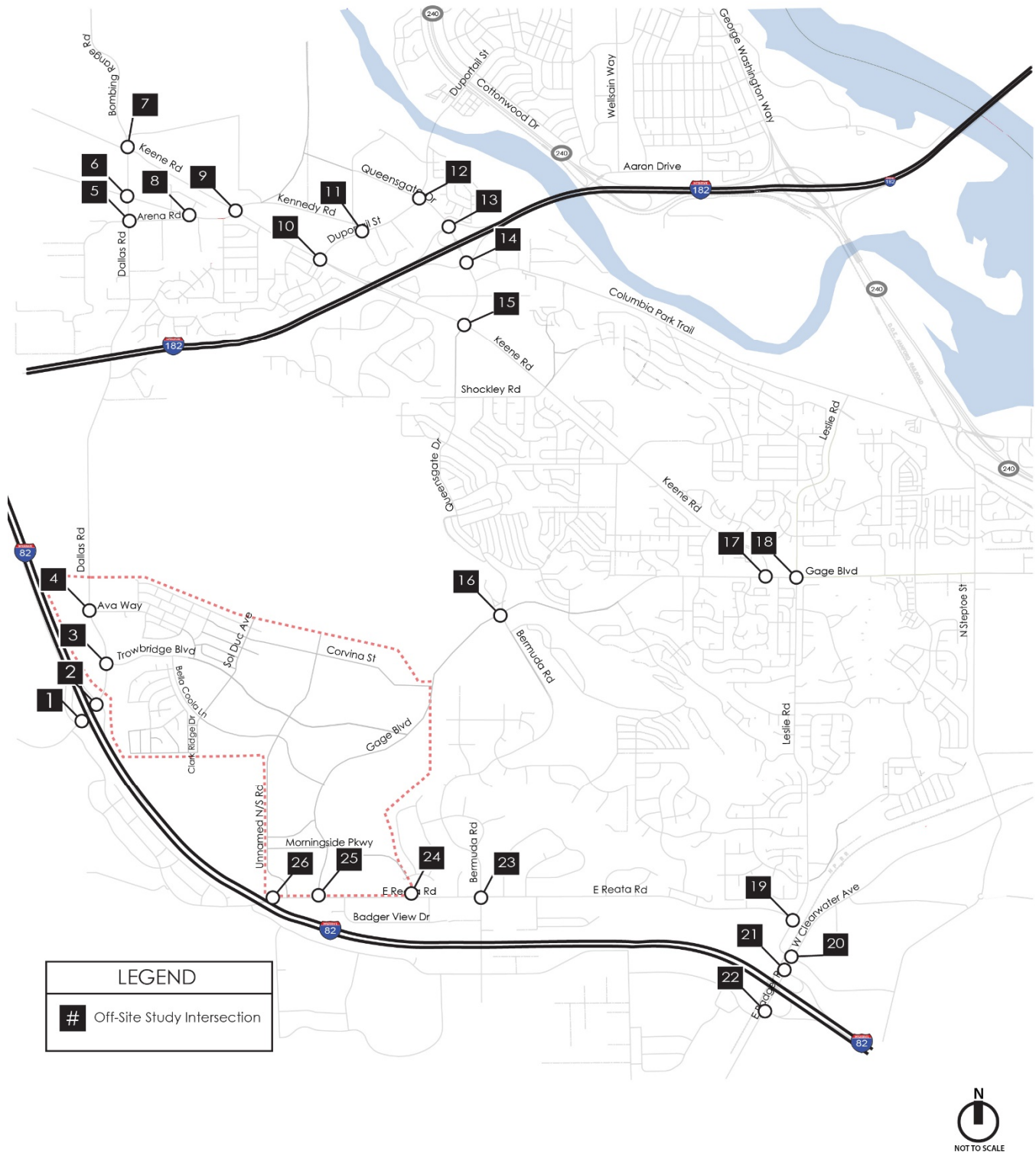
- City of Richland *Comprehensive Plan*, 2017.
- Badger Mountain South Sub Area Plan, 2010.
- Badger Mountain South Final Supplemental EIS, 2010.
- Benton Franklin Council of Governments traffic modeling.
- Ben Franklin Transit webpage, [www.bft.org](http://www.bft.org), February 2022.

## Report Organization

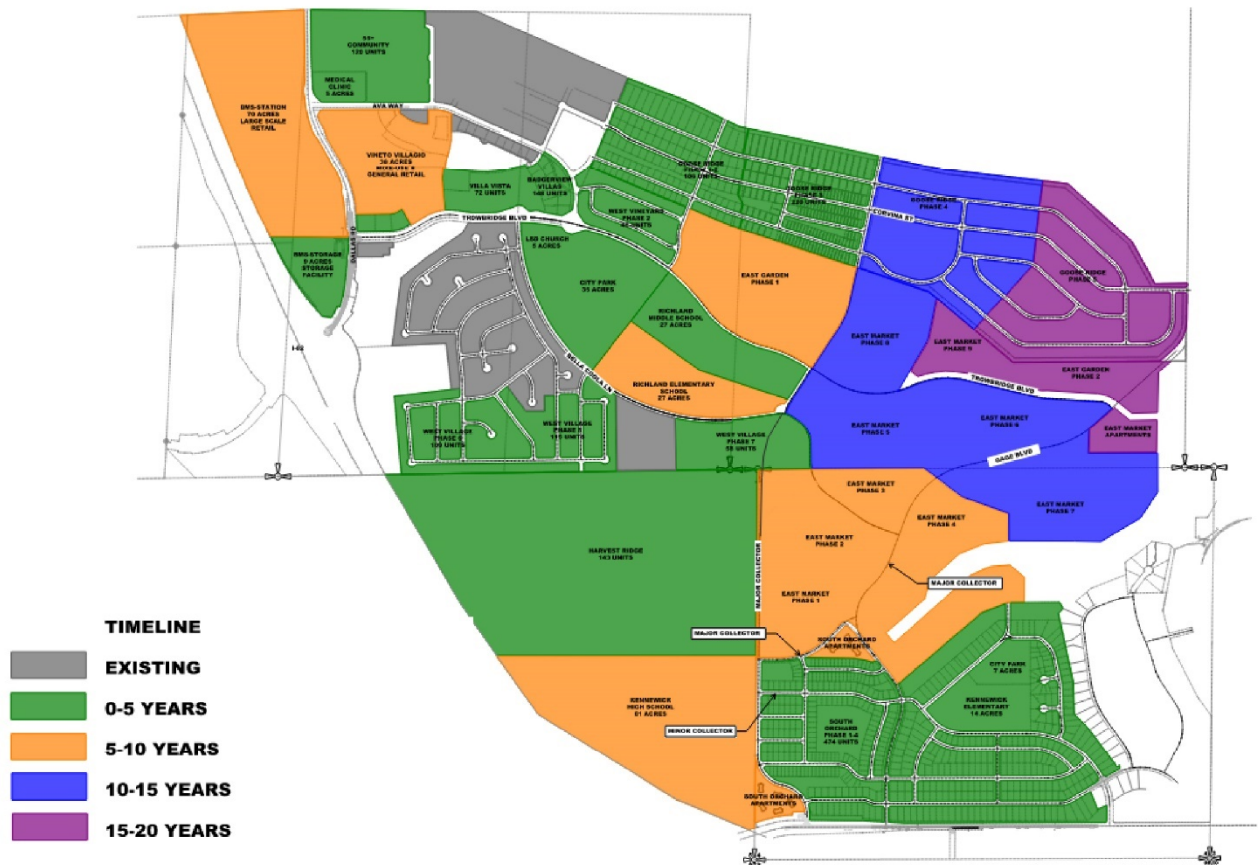
This TIA report is organized to first describe Existing Conditions in the study area of the BMS development, which includes AM and PM peak hour traffic volumes and intersection operations. Then future year conditions are described in year 2040 to reflect full buildout of the BMS development and anticipated growth in background traffic.

Evaluation of existing and future conditions applies intersection level of service (LOS) to identify locations where future transportation improvements are necessary to maintain acceptable LOS operations by 2040.

Finally, a Mitigation section provides a description of transportation roadway and intersection improvements needed to accommodate buildout of BMS while also accounting for growth in background traffic. The Mitigation section is intended to provide a list of improvements to be used to monitor and identify road and intersection improvements as buildout of BMS occurs over the next 18 years.



**Figure 1:** Project Site Vicinity and Off-Site Study Intersections



**Figure 2:** Preliminary Site Plan for Full Buildout of BMS



# EXISTING CONDITIONS

## Study Area

The existing transportation study area and roadway network providing access to the Badger Mountain South site is shown on **Figure 1**. The off-site study intersections evaluated in this transportation analysis were identified and agreed upon by the City of Richland. The 26 off-site study intersections and their corresponding jurisdiction are as follows (see also **Figure 1**):

1. Dallas Road / I-82 Eastbound Ramps (WSDOT/Richland)
2. Dallas Road / I-82 Westbound Ramps (WSDOT/Richland)
3. Dallas Road / Trowbridge Blvd (Richland)
4. Dallas Road / Ava Way (Richland)
5. Dallas Road / Arena Road (West Richland)
6. Bombing Range Road / Kennedy Road (West Richland)
7. Bombing Range Road / Keene Road (West Richland)
8. Arena Road / Kennedy Road (West Richland)
9. Kennedy Road / Keene Road (West Richland)
10. Duportail Street / Keene Road (Richland)
11. Duportail Street / Kennedy Road (Richland)
12. Duportail Street / Queensgate Drive (Richland)
13. Queensgate Drive / I-182 Westbound Ramps (WSDOT)
14. Queensgate Drive / I-182 Eastbound Ramps (WSDOT)
15. Queensgate Drive / Keene Road (Richland)
16. Gage Blvd / Queensgate Drive / Bermuda Road (Richland) – *Future Intersection*
17. Keene Road / Gage Blvd (Richland)
18. Leslie Road / Gage Blvd (Richland)
19. Leslie Road / Reata Road (Richland)
20. Leslie Road / Badger Road / Clearwater Avenue (Richland)
21. Badger Road / I-82 Westbound Ramps (WSDOT/Richland)
22. Badger Road / I-82 Eastbound Ramps (WSDOT/Richland)
23. Bermuda Road / Reata Road (Benton County/Richland)
24. Morningside Parkway / Reata Road (Benton County/Richland)
25. Gage Blvd / Reata Road (Benton County/Richland) – *Future Intersection*
26. Unnamed Road / Reata Road (Benton County/Richland) – *Future Intersection*

In addition to the 26 off-site study intersections, a total of 12 on-site (internal) study intersections were identified by the City of Richland as shown in **Figure 3**:

- A. Bella Coola Lane / Trowbridge Blvd
- B. Ava Way / Trowbridge Blvd
- C. Sol Duc Ave / Trowbridge Blvd
- D. Unnamed N/S Road / Trowbridge Blvd
- E. Gage Blvd / Trowbridge Blvd
- F. Gage Blvd / Corvina Street
- G. Gage Blvd / Bella Coola Lane
- H. Gage Blvd / Unnamed E/W Road
- I. Gage Blvd / Morningside Parkway
- J. Unnamed N/S Road / Unnamed E/W Road
- K. Unnamed N/S Road / Bella Coola Lane
- L. Clark Ridge Dr / Bella Coola Lane





## Roadway Network

**Table 1** describes the existing characteristics of the streets used as primary routes to and from the BMS site. Roadway characteristics are described in terms of directional orientation, arterial classification, number of lanes, posted speed limits, parking, pedestrian facilities, and bicycle facilities. The relationship of these roadways to the project site is shown in **Figure 1**. An aerial view of the transportation network in the site vicinity is shown on the next page.

**Table 1**  
**Existing Study Area Roadway Network**

Roadway	Orientation	Existing Functional Classification	# of Travel Lanes	Posted Speed Limit (mph)	Parking	Sidewalks	Bicycle Facilities
Interstate 82 (I-82)	EW	Interstate	4	70	No	No	None
Interstate 182 (I-182)	E/W	Interstate	4	70	No	No	None
Dallas Rd	N/S	Minor Arterial	2	35/50	No	No	None
Trowbridge Blvd	E/W	Minor Arterial	2-4	30	No	Intermittent	None
Ava Way	E/W	Major Collector	2	25	No	Intermittent	None
Bombing Range Rd	N/S	Minor Arterial	2+	35	No	Both Sides	None
Kennedy Rd	E/W	Major Collector	2	40	No	Intermittent	None
Keene Rd	NW/SE	Principal Arterial	4+	30/45	No	Intermittent	Bike Lanes on Both Sides and Shared Use Path on North Side
Duportail St	N/S	Principal Arterial	4+	30	No	Both Sides	Bike Lanes on Both Sides
Queensgate Dr	N/S	Principal Arterial	4+	35	No	Both Sides	Bike Lanes on Both Sides and Shared Use Path on East Side from Keene to I-182
Gage Blvd	E/W	Minor Arterial	2-5	30-40	No	Intermittent	Bike Lanes on Both Sides east of Leslie
Leslie Rd	N/S	Minor Arterial	2+	35	No	Intermittent	Bike Lanes on Both Sides
Reata Rd	E/W	Major Collector	2	40	No	No	None

+ includes center two-way left-turn lane (TWLTL)

The following describes the primary roads providing access to the BMS area in more detail.

**Interstate 82 (I-82)** is an east-west limited access freeway that connects I-90 in central Washington to I-84 in Oregon. In the project vicinity, I-82 consists of two travel lanes in each direction with a posted speed limit of 70 mph (60 mph for trucks). Paved shoulders exist on both sides of the highway.

In the vicinity of Badger Mountain there is an interchange with I-82 at E Badger Road (Exit 109), an interchange with I-82 at Dallas Road (Exit 104) and an interchange with I-82 at I-182 (Exit 102). The I-82 interchange at Dallas Road provides primary access to the project site.

**Interstate 182 (I-182) / US 12** is an east-west interstate freeway that connects the Tri Cities area between I-82 and the City of Walla Walla. In the project vicinity, I-182 consists of two travel lanes in each direction with a posted speed limit of 70 mph (60 mph for trucks). Paved shoulders exist on both sides of the highway. In the vicinity of the project site, there is an interchange with I-182 at I-82 (Exit 102) and an interchange with I-182 at Queensgate Drive (Exit 3). The I-182 interchange at Queensgate Drive provides primary access to West Richland to the northwest and the City of Kennewick to the southeast.

**Dallas Road** is a north-south major collector consisting of two lanes (one in each direction) and posted speed limits ranging from 35 to 50 mph. Dallas Road provides access to the BMS project site from its interchange with I-82. Paved shoulders exist on both sides of the roadway.

**Gage Blvd** is an east-west minor arterial consisting of two lanes in each direction with a center two way left turn lane. Gage Blvd connects the commercial area of Kennewick to residential Richland. The posted speed is 30 mph and sidewalks exist on both sides of the roadway east of Keene Road. A future planned road extension will connect Gage Blvd to Reata Road through the BMS site.

**Reata Road** is an east-west major collector consisting of two lanes (one in each direction) and a posted speed limit of 40 mph. Gravel shoulders exist on both sides of the roadway. Reata Road provides a connection between Dallas Road and Leslie Road along the southern boundary of the BMS site.

## Nonmotorized Transportation Facilities

Pedestrian facilities in the immediate project vicinity include intermittent sidewalks on the north side of Ava Way, a paved pedestrian path on the southern side of Ava Way, and a paved pedestrian path on the south side of Trowbridge Blvd. The Badger Mountain Trailhead Park Loop, Canyon Trail, Langdon Trail, Sagebrush Trail and Skyline Trail are located directly north of the project site and are protected trails for pedestrians and bicycles. Other pedestrian facilities include curb ramps and crosswalks at the majority of the study intersections. There are no designated bicycle lanes in the immediate vicinity of the site.

## Transit Service

Transit service to and from the project vicinity is provided by Ben Franklin Transit (BFT). There is no existing transit service in the vicinity of the BMS project site.

## Existing Traffic Volumes

Year 2021 existing weekday AM and PM peak hour traffic volumes at the off-site study intersections were based on counts conducted in 2019, 2020, and 2021. The AM peak hour represents the highest one-hour time period between 7:00 and 9:00 AM and the PM peak hour represents the highest one-hour time period between 4:00 and 6:00 PM (standard ITE-defined peak period).

To calculate the impact of COVID-19 on existing peak hour traffic volumes collected in 2020 and 2021, the peak hour traffic volumes were compared to available historical peak hour traffic volumes provided by the City of Richland, the Benton Franklin Council of Governments (BFCG), and other

traffic studies in the project vicinity. An estimated 1.2 percent growth rate was applied to the 2017 and 2019 historical volumes to estimate existing 2021 “normal” conditions. The 1.2% annual growth rate was calculated based on a comparison of link traffic volumes at the off-site study intersections from the future year 2025 and year 2040 baseline (without BMS project traffic) traffic modeling provided by BFCG.

Based on the results of this volume comparison, to estimate “normal” 2020 existing traffic volumes for non-COVID conditions, the traffic counts collected in November 2020 were increased by 25 percent during the AM peak hour and 15 percent during the PM peak hour. All counts used in this updated TIA were conducted in November 2020 with exception to the following:

- **#7 Bombing Range Road / Keene Road** – December 2021 counts were used at this intersection for the AM peak hour; April 2019 counts were used at this intersection for the PM peak hour
- **#10 Duportail Street / Keene Road** – March 2021 counts were used at this intersection for the AM and PM peak hours
- **#11 Duportail Street / Kennedy Road** – August 2021 counts were used at this intersection for the AM peak hour; March 2021 counts were used at this intersection for the PM peak hour
- **#12 Duportail Street / Queensgate Drive** – March 2021 counts were used at this intersection for the AM and PM peak hours
- **#15 Keene Road / Queensgate Drive** – March 2021 counts were used at this intersection for the AM and PM peak hours
- **#24 Morning Side Parkway / Reata Road** – December 2021 counts were used at this intersection for the AM and PM peak hours

Traffic counts collected in March and August 2021 were increased by 15 percent during the AM peak hour and 5 percent during the PM peak hour to estimate “normal” 2021 existing traffic volumes. A COVID adjustment was not applied to counts conducted in December 2021 because the volume comparison showed that the December 2021 counts were higher than historical peak hour traffic volumes with an estimated growth rate of 1.2 percent applied, indicating that the December 2021 volumes reflect existing “normal” conditions.

*It should be noted that the counts used in the previous BMS TIA at the intersection of Bombing Range Road / Keene Road (#7) were not used in this updated TIA due to concerns regarding the intersection’s proximity to several schools and schools being conducted remotely at the time counts were collected in November 2020. Therefore, this updated TIA uses counts with schools operating normally (December 2021 counts during the AM peak hour and April 2019 counts with an applied growth rate during the PM peak hour). Additionally, minor adjustments were made to the volumes at the Kennedy Road / Keene Road intersection (#9) to balance with the traffic volumes at Bombing Range Road / Keene Road.*

The 2021 “normal” weekday AM and PM peak hour traffic volumes at the 23 off-site study intersections are illustrated in Error! Reference source not found. and Error! Reference source not found., respectively. It should be noted that three of the 26 off-site study intersections are not existing intersections but will be future intersections with the development of BMS and analyzed under future 2040 conditions). Detailed traffic count data sheets are included in **Appendix A**.

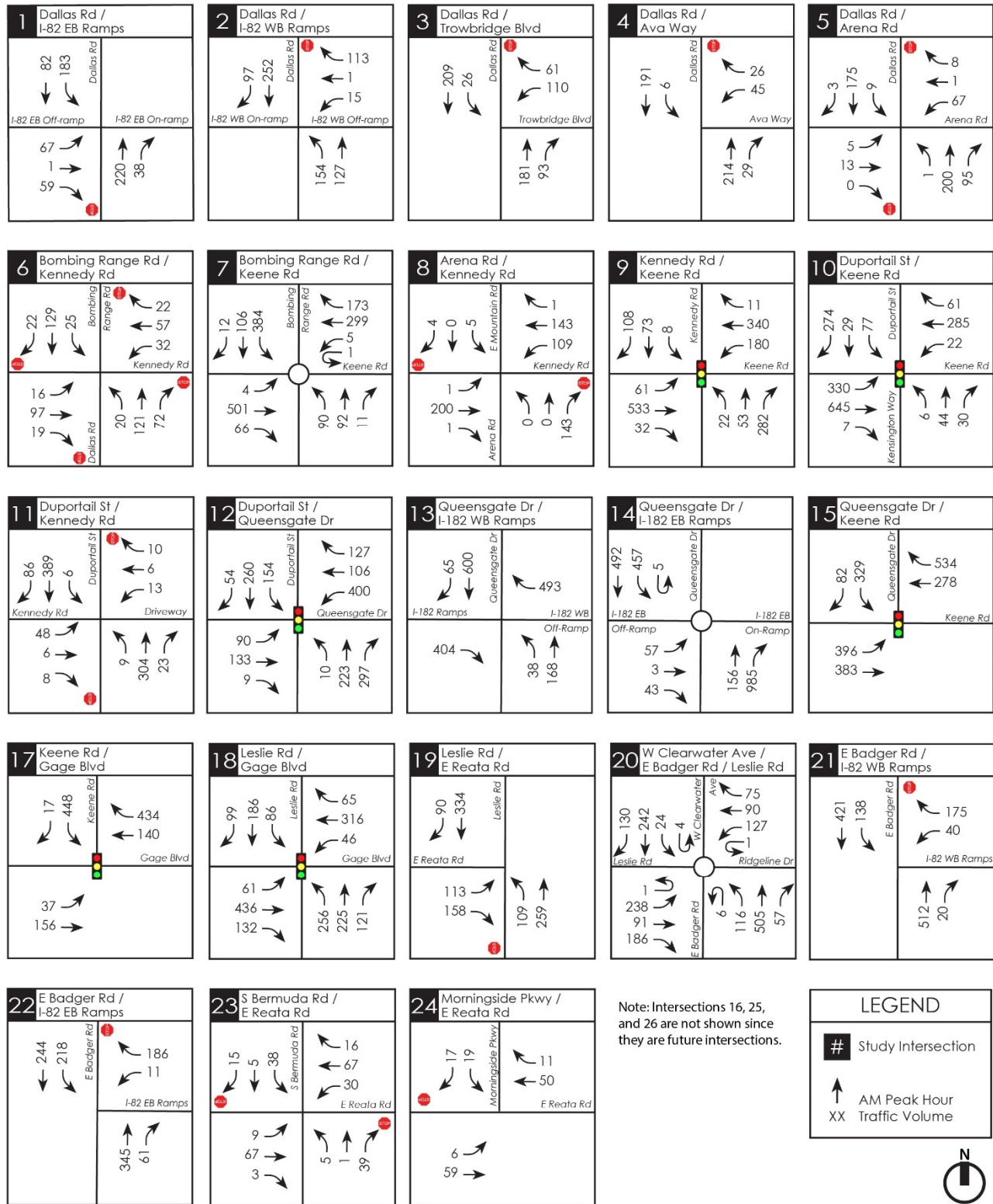


Figure 4: 2021 Existing Weekday AM Peak Hour Traffic Volumes



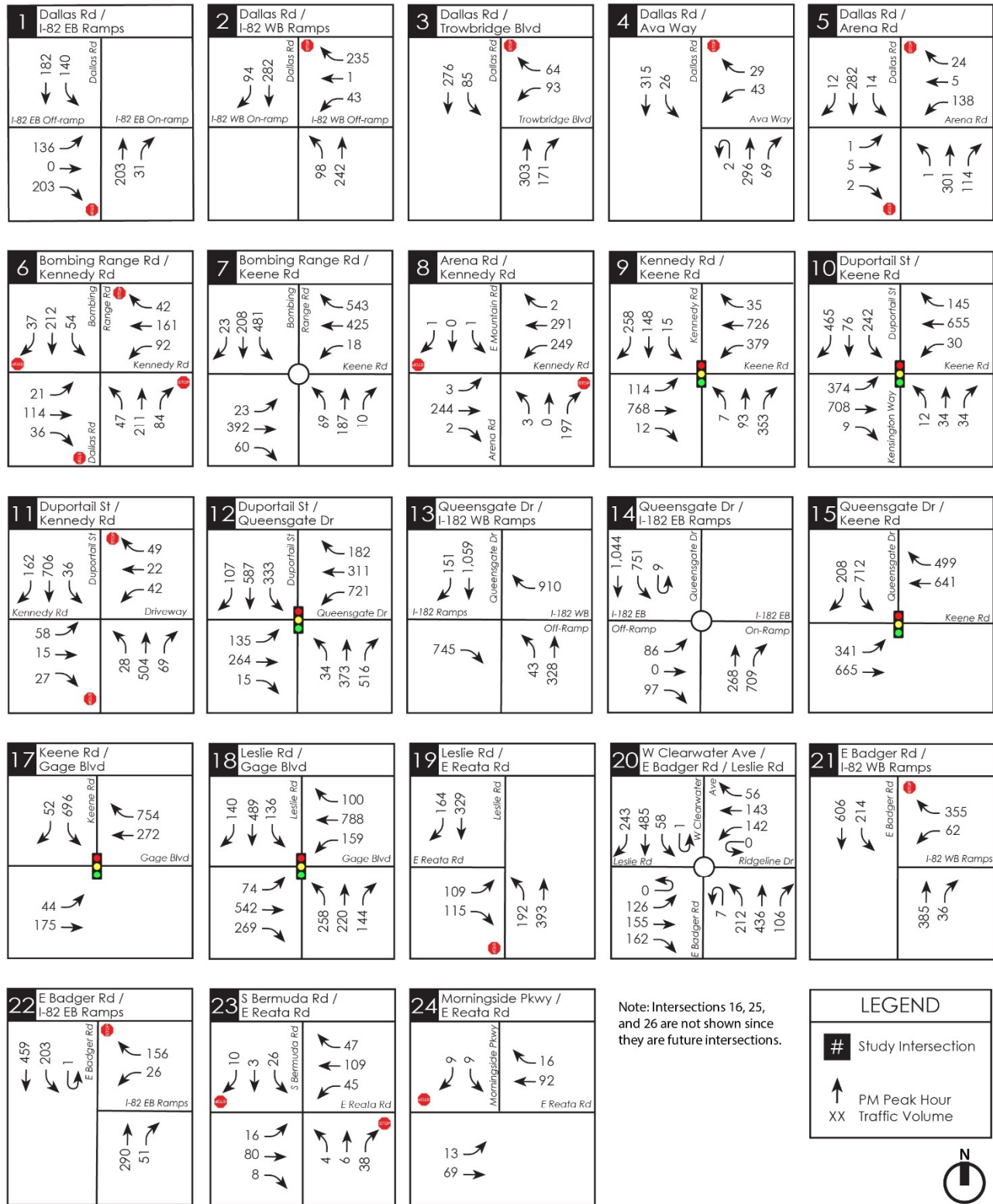


Figure 5: 2021 Existing Weekday PM Peak Hour Traffic Volumes

## Existing Level of Service

Based on extensive scoping discussions with the City of Richland, existing weekday AM and PM peak hour level of service (LOS) analyses were conducted at 23 existing off-site study intersections (note that 3 of the 26 identified off-site study intersections are not existing intersections but will be future intersections with the development of BMS).

LOS generally refers to the degree of congestion on a roadway or intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS. At signalized intersections, LOS A represents free-flow conditions (motorists experience little or no delays), and LOS F represents forced-flow conditions where motorists experience an average delay in excess of 80 seconds per vehicle.

The LOS reported for signalized intersections represents the average control delay (sec/veh) and can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only).

The LOS reported at stop-controlled intersections is based on the average control delay and can be reported for each controlled minor approach, controlled minor lane group, and controlled major-street movement (and for the overall intersection at all-way stop controlled intersections. Additional v/c ratio criteria apply to lane group or movement LOS only).

**Table 2** outlines the current HCM 6<sup>th</sup> Edition LOS criteria for signalized and stop-controlled intersections based on these methodologies.

**Table 2**  
**LOS Criteria for Signalized and Stop Controlled Intersections**

SIGNALIZED INTERSECTIONS			UNSIGNALIZED INTERSECTIONS		
Control Delay (sec/veh)	LOS by Volume-to Capacity (V/C) Ratio <sup>1</sup>		Control Delay (sec/veh)	LOS by Volume-to Capacity (V/C) Ratio <sup>2</sup>	
	≤ 1.0	> 1.0		≤ 1.0	> 1.0
≤ 10	A	F	≤ 10	A	F
> 10 to ≤ 20	B	F	> 10 to ≤ 15	B	F
> 20 to ≤ 35	C	F	> 15 to ≤ 25	C	F
> 35 to ≤ 55	D	F	> 25 to ≤ 35	D	F
> 55 to ≤ 80	E	F	> 35 to ≤ 50	E	F
> 80	F	F	> 50	F	F

Source: Highway Capacity Manual, Transportation Research Board, 6<sup>th</sup> Edition, 2016.

<sup>1</sup> For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.

<sup>2</sup> For two-way stop-controlled intersections, the LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop-controlled intersections. For approach-based and intersection-wide assessments at all-way stop controlled intersections and roundabouts, LOS is solely defined by control delay.

LOS calculations were based on methodology and procedures outlined in the 6<sup>th</sup> Edition of the *Highway Capacity Manual* using *Synchro 10* and *SIDRA 9* traffic analysis software. Existing signal timing at the signalized study intersections was provided by the City of Richland.

The 2021 existing AM and PM peak hour LOS analysis results at the existing off-site study intersections are summarized in **Table 3** (for signals and roundabouts) and **Table 4** (for stop-controlled). The LOS worksheets are included in **Appendix B**. It should be noted that study intersection #13 (Queensgate

Dr / I-182 WB Ramps) is not included in Table 3 or Table 4 because all movements at the intersection are uncontrolled and thus do not have any vehicular delay associated with them.

**Table 3**  
**2021 Existing Peak Hour LOS Summary at Off-Site Study Intersections (signals and roundabouts)**

Study Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
<u>Signalized Intersections</u>				
9. Kennedy Road / Keene Road	C	22.5	C	27.3
10. Duportail Street / Keene Road	C	27.3	C	26.3
12. Duportail Street / Queensgate Drive	B	17.9	C	27.3
15. Queensgate Drive / Keene Road	B	18.8	C	24.4
17. Keene Road / Gage Blvd	B	14	B	14.1
18. Leslie Road / Gage Blvd	C	28.4	D	53.4
<u>Roundabout Intersections</u>				
7. Bombing Range Road / Keene Road	D	27.3	C	24.6
14. Queensgate Drive / I-182 EB Ramps	A	5.9	A	6.4
20. Badger Road / Clearwater Ave / Leslie Road	A	8.2	A	9.5

**Table 4**  
**2021 Existing Peak Hour LOS Summary at Off-Site Study Intersections (stop-controlled)**

Study Intersection / Movement	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
<u>All-Way Stop Controlled Intersection</u>				
6. Bombing Range Road / Kennedy Road	A	9.7	C	15.9
<u>Two-Way Stop Controlled Intersections</u>				
1. Dallas Road / I-82 EB Ramps				
Eastbound Approach	C	21.5	E	41.1
Southbound Left-Turn	A	8.5	A	8.1
2. Dallas Road / I-82 WB Ramps				
Westbound Approach	B	11.2	C	16.9
Northbound Left-Turn	A	8.8	A	8.7
3. Dallas Road / Trowbridge Blvd				
Westbound Approach	B	14.3	C	22.2
Southbound Left-Turn	A	8.1	A	8.8
4. Dallas Road / Ava Way				
Westbound Approach	B	11.7	C	15.8
Southbound Left-Turn	A	8.0	A	8.2



**Table 4 continued**  
**2021 Existing Peak Hour LOS Summary at Off-Site Study Intersections (stop-controlled)**

Study Intersection / Movement	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
5. Dallas Road / Arena Road				
Eastbound Approach	B	13.7	C	15.7
Westbound Approach	C	15.7	E	41.8
Northbound Left-Turn	A	7.6	A	7.9
Southbound Left-Turn	A	7.9	A	8.3
8. Arena Road / Kennedy Road				
Eastbound Left-Turn	A	7.5	A	7.8
Westbound Left-Turn	A	8.0	A	8.4
Northbound Approach	B	10.7	B	11.7
Southbound Approach	C	15.4	D	25.5
11. Duportail Street / Kennedy Road				
Eastbound Left-Turn	B	13.8	D	25.8
Eastbound Thru-Right	B	11.5	C	15.8
Westbound Left-Turn	B	11.3	C	17.3
Westbound Thru-Right	B	10.8	B	14.5
Northbound Left-Turn	A	8.5	B	10.1
Southbound Left-Turn	A	7.6	A	8.1
19. Leslie Road / Reata Road				
Eastbound Left-Turn	C	17.5	C	24.7
Eastbound Right-Turn	B	12.1	B	11.3
Northbound Left-Turn	A	8.8	A	9.3
21. Badger Road / I-82 WB Ramps				
Westbound Shared Left-Right	D	27.1	F	58.0
Southbound Left-Turn	A	9.7	A	9.0
22. Badger Road / I-82 EB Ramps				
Westbound Approach	C	16.5	C	15.1
Southbound Left-Turn	A	9.3	A	8.7
23. Bermuda Road / Reata Road				
Eastbound Left-Turn	A	7.5	A	7.6
Westbound Left-Turn	A	7.5	A	7.5
Northbound Approach	A	9.2	A	9.9
Southbound Approach	B	10.7	B	12.0
24. Morningside Parkway / Reata Road				
Eastbound Left-Turn	A	7.4	A	7.5
Westbound Right-Turn	A	0	A	0
Southbound Left-Turn	A	9.4	A	9.7
Southbound Right-Turn	A	8.7	A	8.8

AM Peak Hour

As shown in LOS **Table 3**, all signalized and roundabout study intersections are currently operating at LOS D or better during the AM peak hour.

As shown in LOS **Table 4**, the all-way stop controlled study intersection and all individual lane groups at the stop-controlled study intersections are currently operating at LOS D or better during the AM peak hour.

PM Peak Hour

As shown in **Table 3**, all signalized and roundabout study intersections are currently operating at LOS D or better during the PM peak hour.

As shown in **Table 4**, the all-way stop controlled study intersection and all individual lane groups at the stop-controlled study intersections are currently operating at LOS D or better during the PM peak hour with exception to the following:

- #1 Dallas Road/I-82 EB Ramps – the eastbound approach is currently operating at LOS E
- #5 Dallas Road/Arena Road – the westbound approach is currently operating at LOS E
- #21 Badger Road/I-82 WB Ramps – the westbound approach is currently operating at LOS F

## FUTURE TRAFFIC ANALYSIS

This section provides information related to future planned roadway improvements, weekday AM and PM peak hour traffic volumes, and peak hour LOS at study intersections in year 2040. The 2040 traffic conditions account for buildout of the BMS development and growth in background traffic. Level of service (LOS) evaluation during weekday AM and PM peak hours is used to identify locations where future improvements will be necessary to maintain acceptable LOS operations by 2040. Locations where improvements are needed to provide acceptable LOS are then addressed later in the Mitigation Measures section of the report.

### Planned Transportation Improvements

This section describes the planned transportation improvements located within the project study area. The following planning documents were reviewed to document planned capacity-related transportation improvements located within the project study area. It should be noted that planned improvements are noted for the next 6-year period; road and intersection improvements beyond 2027 are not identified.

- Benton-Franklin Council of Governments (BFCG) 2021-2024 Transportation Improvement Program (TIP)
- City of Richland 2022-2027 Six-Year Transportation Improvement Program (TIP)
- City of West Richland 2022-2027 Six-Year Transportation Improvement Program (TIP)
- Benton County 2022-2027 Six-Year Transportation Improvement Program (TIP)
- WSDOT 2022-2025 Statewide Transportation Improvement Program (STIP)

#### **BFCG 2021-2024 TIP**

No capacity related projects were identified within the project vicinity in the BFCG's 2021-2024 TIP.

#### **City of Richland 2022 – 2027 TIP**

**Gage Blvd Improvements** (Priority #8). Improvements of Gage Blvd from Penny Royal Ave to Morency Drive. The project involves the addition of curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Construction is anticipated to start in 2024. *The funding for this project is not secured.*

**Queensgate Drive Extension Phase I** (Priority #13). Extension of Queensgate Drive from Shockley Road to Keene Road. The new roadway will have three lanes with curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Construction is anticipated to start in 2025. *This project is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). The funding for this project is not secured and is anticipated to be constructed with development activity. Therefore, the schedule for this project is dependent on privately initiated development.*

**Duportail / Kennedy Intersection Improvements** (Priority #15). Reconstruct intersection of Duportail Street/Kennedy Road. Construction is anticipated to start in 2024.

**Duportail / Driveway Intersection Improvements** (Priority #16). Reconstruct intersection of Duportail Street/Driveway (north of Kennedy Road). Construction is anticipated to start in 2025. *This project is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03).*

**Dallas Road / Trowbridge Blvd Intersection Improvements** (Priority #18). Improvements of the Dallas Road and Trowbridge Blvd intersection includes the reconstruction of the intersection to provide for added capacity. Construction is anticipated to start in 2025. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). Thus, this project is anticipated to be constructed with development activity.*

**Dallas Road / Ava Way Intersection Improvements** (Priority #20). Improvements of the Dallas Road and Ava Way intersection includes the reconstruction of the intersection to provide for added capacity. Construction is anticipated to start in 2024. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). Thus, this project is anticipated to be constructed with development activity.*

**Dallas Road / I-82 WB Ramps Intersection Improvements** (Priority #21). Improvements of the Dallas Rd and I-82 WB ramps intersection includes reconstruction of the ramp and intersection to provide for added capacity. Construction is anticipated to start in 2025. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). Thus, this project is anticipated to be constructed with development activity.*

**Dallas Road / I-82 EB Ramps Intersection Improvements** (Priority #22). Improvements of the Dallas Rd and I-82 EB ramps intersection includes reconstruction of the ramp and intersection to provide for added capacity. Construction is anticipated to start in 2025. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). Thus, this project is anticipated to be constructed with development activity.*

**Dallas Road Widening** (Priority #23). Widening of Dallas Road from city limits to I-82 to have four lanes with curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Construction is anticipated to start in 2026. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). This project is anticipated to be constructed with a combination of development activity impact fees and City grant funds.*

**Gage Blvd Extension** (Priority #24). Extension of Gage Blvd from Morency Drive to Queensgate Blvd to include three lanes with curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Based on information provided by the City, construction is anticipated to occur between 2030 and 2035. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). This project is anticipated to be constructed with a combination of development activity impact fees and City grant funds.*

**Shockley Road Extension** (Priority #25). Extension of Shockley Road from Keene Rd to south of Badger Valley Way to have two lanes with curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Based on information provided by the City, construction is likely to occur after 2030. *This project is currently unfunded but is part of the City of Richland's Traffic Impact Fee Program (RMC 12.03). Thus, this project is anticipated to be constructed with development activity.*

**Trowbridge Blvd – Sol Duc Ave to Gage Blvd** (Priority #26). Construction of Trowbridge Blvd between Sol Duc Ave and Gage Blvd to have two lanes with curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Construction is anticipated to start in 2025. *This project is anticipated to be funded and constructed by Badger Mountain South and is eligible for impact fee credit per the City of Richland's Traffic Impact Fee Program (RMC 12.03).*

**Bella Coola Lane – Copper Mountain Apartments to Gage Blvd** (Priority #27). Construction of Bella Coola Lane from the Copper Mountain Apartments to Gage Blvd to have two lanes with curbs, gutter, sidewalks, bike lanes, streetlights, and storm drainage. Construction is anticipated to start in 2025. *This project is anticipated to be funded and constructed by Badger Mountain South and is eligible for impact fee credit per the City of Richland's Traffic Impact Fee Program (RMC 12.03).*

**Gage Blvd / Trowbridge Blvd Intersection Improvements** (Priority #28). Construction of the Gage Blvd/Trowbridge Blvd intersection. Construction is anticipated to start in 2026. *This project is anticipated to be funded and constructed by Badger Mountain South and is eligible for impact fee credit per the City of Richland's Traffic Impact Fee Program (RMC 12.03).*

**Gage Blvd - Badger Mountain South Improvements** (Priority #29). Construction of Gage Blvd from Road B-C to Queensgate Drive to include two lanes with curb, gutter, sidewalk, bike lanes, streetlights, and storm drainage. Construction is anticipated to start in 2026. *This project is anticipated to be funded and constructed by Badger Mountain South and is eligible for impact fee credit per the City of Richland's Traffic Impact Fee Program (RMC 12.03).*

#### **City of West Richland 2022-2027 TIP**

**Bombing Range Road / Keene Road Intersection Modifications** (Priority #2). This project would signalize the intersection and construct associated lane improvements. Construction is anticipated to occur in 2025.

**Bombing Range Road / Kennedy Road Intersection Modifications** (Priority #16). This project would construct intersection modifications which may include signalization.

#### **Benton County 2022-2027 TIP**

**Badger Road – I-82 Roundabouts and Pathway** (Priority #5). This project would construct four roundabouts along Badger Road, three at the interchange with I-82 and one at Cottonwood Drive. A non-motorized pathway would also be constructed along the north side of the road to remove pedestrians and other non-motorized traffic from the roadway. Construction is anticipated to start in 2026. *This project is anticipated to be constructed by a combination of federal and state funding.*

**Reata Road Widening and Pathway** (Priority #17). This project would add a twelve-foot pathway on the north side of Reata Road and widen the roadway to accommodate three (3) eleven foot lanes from the I-82 Overpass to Richland City Limits. Construction is anticipated to start in 2026. *This project is currently unfunded.*

**Badger Road Pathway** (Priority #19). This project would add two six-foot bike lanes along seven miles of Badger Road from the City of Kennewick to Dallas Road. Construction is anticipated to start in 2026. *This project is anticipated to be constructed by County funding.*

#### **WSDOT 2022 – 2025 STIP**

No capacity related projects were identified within the project vicinity in WSDOT's 2021-2024 STIP.

## Future Year 2040 Roadway Network

The roadway network for the future year 2040 LOS analysis at the 26 off-site study intersections was based on existing conditions except at the following intersections where identified improvements were assumed to be in place by 2040 (note that assumed improvements do not reflect known commitments to improvements):

- **#1 Dallas Road / I-82 Eastbound Ramps** – new southbound left-turn lane as identified in the BMS Master Agreement for Phase 1.
- **#2 Dallas Road / I-82 Westbound Ramps** – new westbound right-turn lane, a northbound left-turn lane, and a southbound right-turn lane as identified in the BMS Master Agreement for Phase 1.
- **#3 Dallas Road / Trowbridge Blvd** – widen Dallas Road to 4 lanes south of Trowbridge Blvd as identified in the BMS Master Agreement for Phase 1; also assumed to be a 4-leg roundabout with the west leg providing access to BMS development on the west side of Dallas Road
- **#4 Dallas Road / Ava Way** – new turn lanes on Dallas Road as identified in the BMS Master Agreement for Phase 1; also assumed to be unsignalized with Dallas Road free flow and Ava Way stop-controlled. A new west leg of the intersection was included at this intersection to account for planned BMS development on the west side of Dallas Road.
- **#7 Bombing Range Road / Keene Road** – reconstruct existing roundabout to a signalized intersection per City of West Richland TIP project. Assumed channelization includes: two eastbound through lanes with separate eastbound right and left-turn lanes; two westbound through lanes with separate westbound right and left-turn lanes; a northbound left-turn lane plus a shared through-right-turn lane; and dual southbound left-turn lanes plus a shared through-right-turn lane.
- **#11 Duportail Street / Kennedy Road** – new signalized intersection per City of Richland TIP project. Existing channelization was assumed at this intersection.
- **#15 Queensgate Drive / Keene Road** – new south leg as part of the Queensgate Drive Extension project identified in the City of Richland's Six-Year TIP. Assumed channelization improvements include the following: two eastbound through lanes with separate right and dual left-turn lanes; two westbound through lanes with separate right and left-turn lanes; dual northbound left-turn lanes plus a through lane and a shared through-right-turn lane; and dual southbound left-turn lanes with separate through and right-turn lanes.
- **#16 Gage Blvd / Queensgate Drive / Bermuda Road** – new intersection as part of the Queensgate Drive Extension Project identified in the City of Richland's Six-Year TIP; also assumed to be a roundabout per City of Richland.
- **#21 Badger Road / I-82 WB Ramps** – new roundabout per Benton County TIP project.
- **#22 Badger Road / I-82 EB Ramps** – new roundabout per Benton County TIP project.
- **#25 Gage Blvd / Reata Road** – new unsignalized intersection with Reata Road a single-lane in each direction with a center two-way left-turn lane; assumes Gage Boulevard is stop-controlled with separate southbound right and left-turn lanes.

- **#26 Unnamed N/S Road / Reata Road** – new unsignalized intersection with Reata Road a single-lane in each direction with a center two-way left-turn lane; assumes Unnamed N/S Road is stop-controlled with separate southbound right and left-turn lanes.
- **#5 Dallas Road / Arena Road** (requested by the City of Richland) – new dead-end cul-de-sac on the west end of Arena Road, east of its existing intersection with Dallas Road. As a result, the Dallas Road / Arena Road intersection would be a three-leg unsignalized intersection with the west leg of Arena Road stop-controlled, and Dallas Road free flow.

## Project Land Use Assumptions by Year

Development of the BMS project will occur in phases over the next 18 years with full buildout anticipated to be achieved by 2040. **Table 5** below summarizes the existing BMS development as of November 2020 (when existing traffic volumes were conducted) and the future land use anticipated to be developed by years 2025, 2030, 2035, and 2040. It should be noted that the future land use assumptions by development year and by BMS neighborhood have been provided by the applicant/owner and are based on the best available information from the owner/applicant. However, it should be recognized that the assumptions may be updated or changed as the Badger Mountain South project develops over the next 18 years.

**Table 5**  
**Project Land Use Summary by Development Year**

Land Use	Total Badger Mountain South Land Use				
	Existing (as of Nov 2020)	Year 2025	Year 2030	Year 2035	Year 2040 (Full Buildout)
<u><b>Residential</b></u>					
Single Family	428 DU	1,247 DU	1,617 DU	2,152 DU	2,382 DU
Multifamily	283 DU	808 DU	1,258 DU	1,598 DU	2,058 DU
Senior Adult Housing	--	150 DU	150 DU	150 DU	150 DU
<b>Subtotal Residential</b>	<b>711 DU</b>	<b>2,205 DU</b>	<b>3,025 DU</b>	<b>3,900 DU</b>	<b>4,590 DU</b>
<u><b>Commercial</b></u>					
Grocery Store	18,030 sf	18,030 sf	18,030 sf	18,030 sf	18,030 sf
Gas Station w/ Market	3,200 sf	3,200 sf	3,200 sf	3,200 sf	3,200 sf
Fast-Food w/ Drive-Thru	700 sf	700 sf	700 sf	700 sf	700 sf
Shopping Center	--	--	260,000 sf	485,000 sf	500,000 SF
Home Improvement Superstore	--	--	--	130,000 sf	130,000 sf
Sporting Goods Superstore	--	--	--	130,000 sf	130,000 sf
Medical Office	--	40,000 sf	40,000 sf	40,000 sf	40,000 sf
Mini-Warehouse	--	175,000 sf	175,000 sf	175,000 sf	175,000 sf
<u><b>Other</b></u>					
Church		20,000 sf	20,000 sf	20,000 sf	20,000 sf

In addition to the BMS land use assumptions summarized in **Table 5**, four schools and a separate single family residential plat anticipated to be constructed within the BMS subarea as follows:

- Elementary School (Kennewick School District) – 650 students (by 2025)
- Middle School (Richland School District) – 800 students (by 2025)



- Elementary School (Richland School District) – 650 students (by 2030)
- High School (Kennewick School District) – 2,000 students (by 2030)
- Harvest Ridge Single Family Residential Plat – 143 dwelling units (by 2025)

## Project Trip Generation

Trip generation estimates for development of the BMS site in future years 2025, 2030, 2035 and 2040 (full buildout) were based on methodology documented in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10<sup>th</sup> Edition (2017). *It should be noted that although trip generation estimates were prepared for four future development years (2025, 2030, 2035, and 2040), the analysis documented in subsequent sections of this TIA focuses on year 2040 conditions with full buildout of the BMS site.*

Reductions to the gross trip generation estimates were made to account for internal and pass-by trips. Internal trips are made by people making multiple stops within a development without generating new trips onto the adjacent street system. The internal trip adjustments for the peak hours were based on methodology established in the ITE *Trip Generation Handbook*, 3<sup>rd</sup> Edition, 2017 and the internal adjustments for the weekday time period were based on methodology documented in the ITE *Trip Generation Handbook*, 2<sup>nd</sup> Edition. Pass-by trips are trips that are made by vehicles that are already on the adjacent streets and make intermediate stops at the commercial uses on route to a primary destination (i.e. on the way from work to home). The pass-by trips were based on methodology and studies documented in the ITE *Trip Generation Handbook*, 3<sup>rd</sup> Edition, 2017.

The resulting net new weekday daily, AM peak hour, and PM peak hour trip generation estimates for full buildout of the BMS site in 2040 are shown in **Table 6**. Detailed trip generation calculations for year 2040 conditions with full buildout are included in **Appendix C**. The detailed peak hour trip generation for future years 2025, 2030, and 2035 are included in **Appendix D**. *It should be noted that the future year 2040 trip generation estimates summarized in **Table 6** and included in **Appendix C** include existing BMS land use that was constructed and occupied as of November 2020.*

**Table 6**  
**Project Trip Generation Summary for Project Buildout (Year 2040)**

Trip Type	Weekday New Trips Generated								
	Daily			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Gross Trips	33,041	33,042	66,083	1,266	2,311	3,577	3,359	2,724	6,083
Less Internal Trips	-4,957	-4,957	-9,914	-63	-63	-126	-539	-539	-1,078
Less Pass-by Trips	<u>-5,079</u>	<u>-5,079</u>	<u>-10,158</u>	<u>-215</u>	<u>-163</u>	<u>-378</u>	<u>-431</u>	<u>-452</u>	<u>-883</u>
<b>New Trips</b>	<b>23,005</b>	<b>23,006</b>	<b>46,011</b>	<b>988</b>	<b>2,085</b>	<b>3,073</b>	<b>2,389</b>	<b>1,733</b>	<b>4,122</b>

As shown in **Table 6**, with full buildout in 2040 the BMS site is estimated to generate a total of 46,011 new weekday daily trips, with 3,073 new trips occurring during the weekday AM peak hour (988 entering, 2,085 exiting), and 4,122 new trips occurring during the weekday PM peak hour (2,389 entering, 1,733 exiting).

A more detailed summary of the total year 2040 (full buildout) BMS project trip generation by neighborhood is also included in **Table 7** next.



**Table 7**  
**Project Trip Generation Summary for Project Buildout (Year 2040) by BMS Subarea**

BMS Neighborhood	2040 Land Use	Weekday Net New Trips Generated					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
BMS Station	130,000 sf home imp. superstore 130,000 sf sporting goods superstore 445,000 sf shopping center 175,000 sf mini-warehouse 150 DU senior housing 18,030 sf grocery store 40,000 sf medical office	346	208	554	743	683	1,426
West Vineyard	303 single family DU 220 multifamily DU	72	220	292	183	115	298
West Village	542 single family DU 301 multifamily DU 3,200 sf gas station/market 700 sf fast food with drive thru 20,000 sf church	144	386	530	349	221	570
East Garden	305 single family DU 785 multifamily DU 10,000 sf shopping center	128	394	522	329	209	538
East Market	850 single family DU 500 multifamily DU 45,000 sf shopping center	209	608	817	555	358	913
South Orchard	382 single family DU 252 multifamily DU	89	269	358	230	147	377
TOTAL		988	2,085	3,073	2,389	1,733	4,122

## Project Trip Distribution and Assignment

The distribution of BMS project trips for year 2040 (full buildout) conditions was based on select zone traffic modeling provided by the Benton Franklin Council of Governments (BFCG). The BFCG traffic model distributed BMS project trips through the off-site study intersections based on specific project land use and trip generation assumptions associated with each of the model's TAZ's within the BMS subarea. The project distribution from the traffic model also assumed future planned roadway improvements (previously outlined) were in place. The total trip generation in and out of the BMS subarea based on the BFCG modeling was then compared to the total estimated BMS trip generation summarized above in **Table 6** and deemed to be comparable for the purposes of estimating the distribution of BMS project trips. Thus, the BFCG select zone modeling was used to develop BMS project trip distribution percentages that were then applied to the trip generation projections shown in **Table 6**. Although the BFCG traffic model is a PM peak hour based model, it was assumed that the general BMS trip distribution for the AM peak hour is similar the PM peak hour. The estimated peak hour BMS project trip distribution for year 2040 conditions is illustrated in **Figure 6**.

The specific distribution and assignment of net new peak hour BMS project trips through the BMS off-site access points and internal (on-site) study intersections was based on the general off-site trip distribution from the model (**Figure 6**), and the specific development assumptions and trip generation estimates for each of the six BMS neighborhood areas (BMS Station, West Village, West Vineyard, East Garden, East Market and South Orchard, as shown in **Figure 3**). The resulting AM and PM peak hour net new project trip assignment at the 26 off-site study intersections is shown in **Figures 7 and 8**, respectively. The resulting AM and PM peak hour net new project trip assignment at the 12 on-site study intersections is shown in **Figures 9 and 10**, respectively.

Internal project trips are typically not assigned as vehicular trips since they are assumed to occur internal to a project site and do not impact the off-site transportation network. However, it was conservatively assumed that all internal project trips would be vehicular trips for the purpose of evaluating traffic impacts. The assignment of peak hour internal vehicular trips through the BMS site was based on the specific origins and destinations of the internal project trips by land use and BMS neighborhood. The resulting AM and PM peak hour internal and pass-by project trip assignment at the 12 on-site study intersections is included in **Appendix E**. The resulting total AM and PM peak hour project trip assignment (net new plus internal plus pass-by trips) at the off-site study intersections is shown in **Figures 11 and 12**. The resulting total AM and PM peak hour project trip assignment (net new plus internal plus pass-by trips) at the on-site study intersections are shown in **Figures 13 and 14**.

## Future Year 2040 Traffic Volumes

Future year 2040 AM and PM peak hour traffic volumes with full buildout of BMS were estimated by applying a 1.2 percent annual growth rate to the "normal" existing (year 2021) traffic volumes, adding in project traffic associated with full buildout of Badger Mountain South (see **Figures 13 and 14**), and adding in traffic volumes or estimated traffic volume adjustments associated with approved pipeline projects and planned roadway improvements. The 1.2% annual growth rate was calculated based on a comparison of link traffic volumes at the off-site study intersections from the future year 2025 and year 2040 baseline (without BMS project traffic) traffic modeling provided by BFCG; this approach was approved by the City of Richland in the traffic scoping process.

The pipeline projects and roadway improvement projects that were included in establishing future year 2040 traffic volumes are noted below:

Pipeline Projects

- Harvest Ridge residential plat – 143 single-family dwelling units
- Elementary School (Kennewick School District) – 650 students
- Middle School (Richland School District) – 800 students
- Elementary School (Richland School District) – 650 students
- High School (Kennewick School District) – 2,000 students
- Sienna Hills residential plat – 285 single-family dwelling units
- West Cliffe Heights residential plat – 203 single-family dwelling units
- Monson Property residential plat – 319 single family units and 57 multifamily units
- Queensgate Mixed-Use (QDMU) development

Roadway Improvement Projects

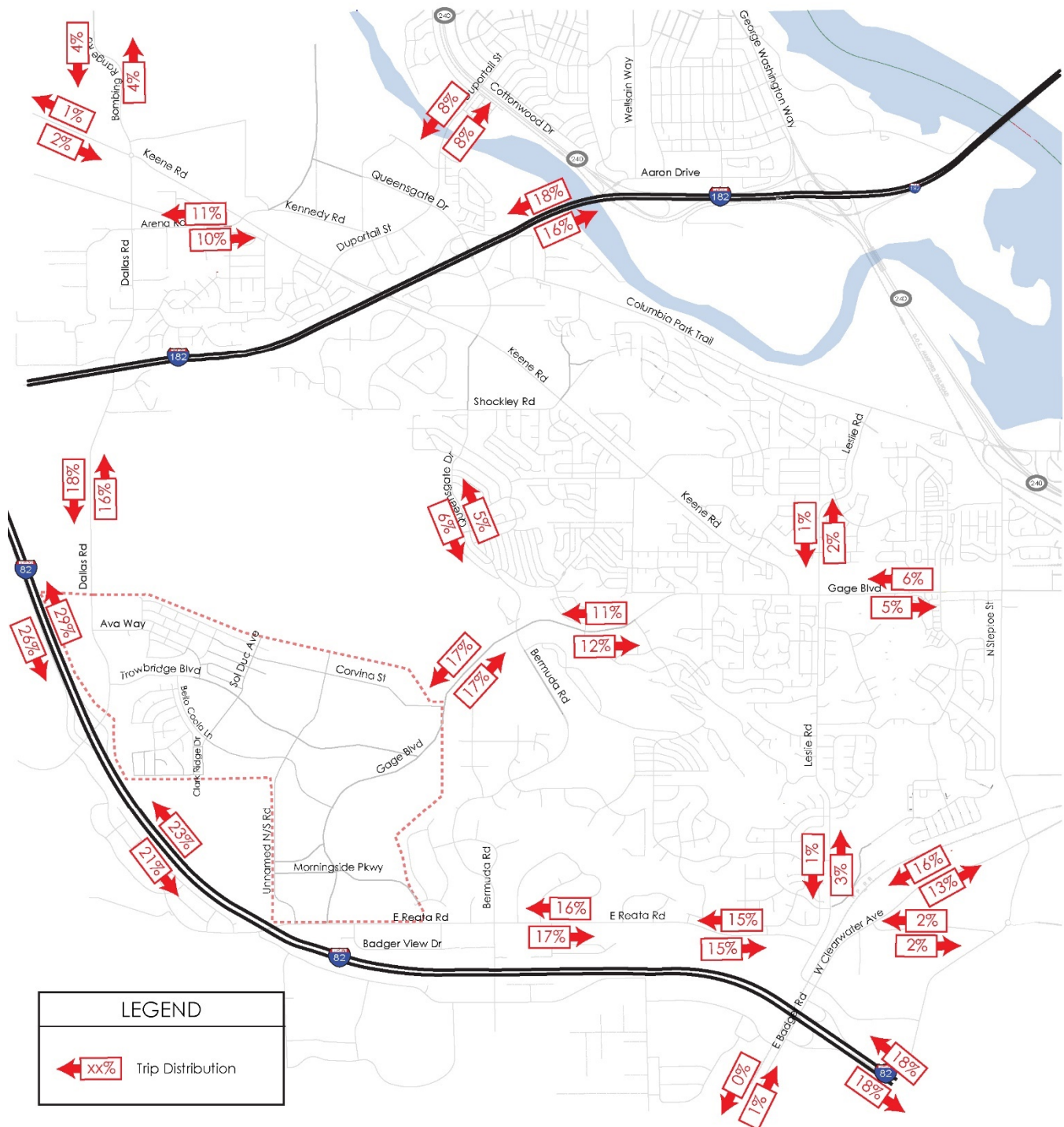
- Duportail Street bridge
- Queensgate Drive road Extension
- Gage Blvd road Extension

*It should be noted that the QDMU, Sienna Hills, West Cliffe Heights, and Monson Property pipeline projects were not included in the previous BMS TIA (May 2021), but were included in this updated TIA to respond to City comments expressing concerns that the 2040 forecast volumes at the Queensgate Dr/Keene Road and Gage Blvd/Queensgate Dr/Bermuda Road intersections were too low. These additional pipeline volumes were distributed and assigned throughout the BMS study area, with exception to the QDMU pipeline volumes which were only assigned to 2 off-site study intersections (Queensgate Dr/Keene Road and Gage Blvd/Queensgate Dr/Bermuda Road).*

At the time that the existing counts were conducted in November 2020, the Duportail Bridge was still under construction, and not open. Therefore, traffic volume adjustments at the study intersections to account for the Duportail Street bridge improvement project were estimated by comparing November 2020 counts to March 2021 counts with the bridge open. Traffic volume adjustments at the study intersections to account for the future Queensgate Drive Extension and Gage Blvd Extension roadway improvement projects were estimated based on the future year 2040 'baseline' traffic modeling (without BMS site traffic) provided by BFCG.

Additionally, the forecast 2040 traffic volumes at the intersection of Queensgate Drive/Keene Road were updated in this TIA based on review and comparison of Queensgate Drive Extension traffic volume forecasts as documented in the Queensgate Extension Study and as provided by the Queensgate Mixed-Use (QDMU) project.

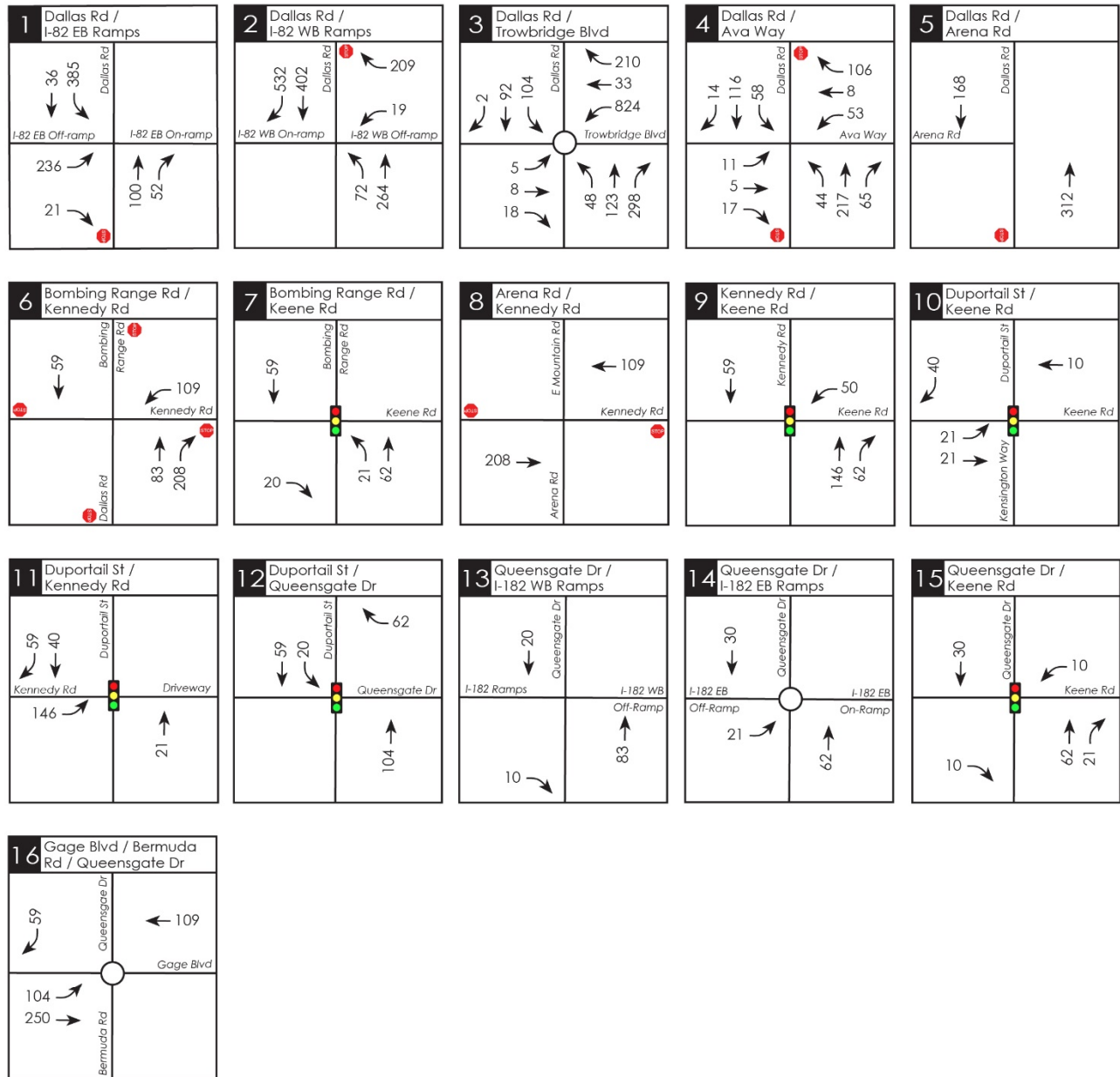
The future 2040 weekday AM and PM peak hour traffic volumes with full buildout of BMS at the 26 off-site study intersections are shown in **Figure 15 and Figure 16**, respectively. The future 2040 with Full Buildout weekday AM and PM peak hour traffic volumes at the 12 on-site study intersections are shown in **Figure 17 and Figure 18**, respectively.



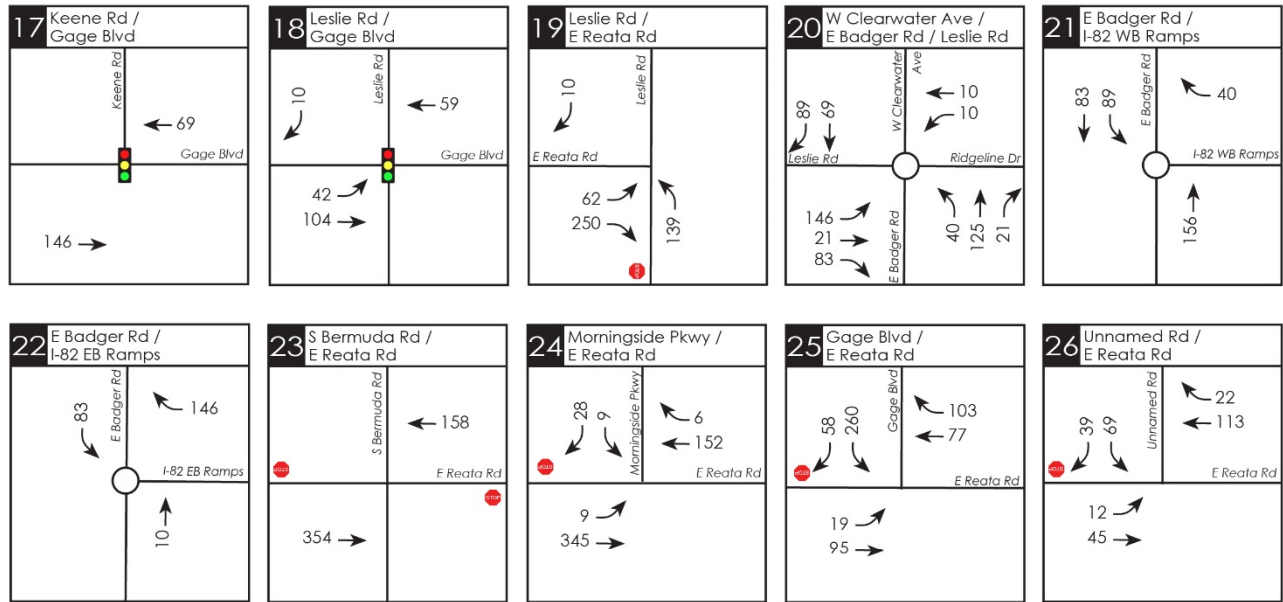
**Figure 6:** Year 2040 Peak Hour Project Trip Distribution



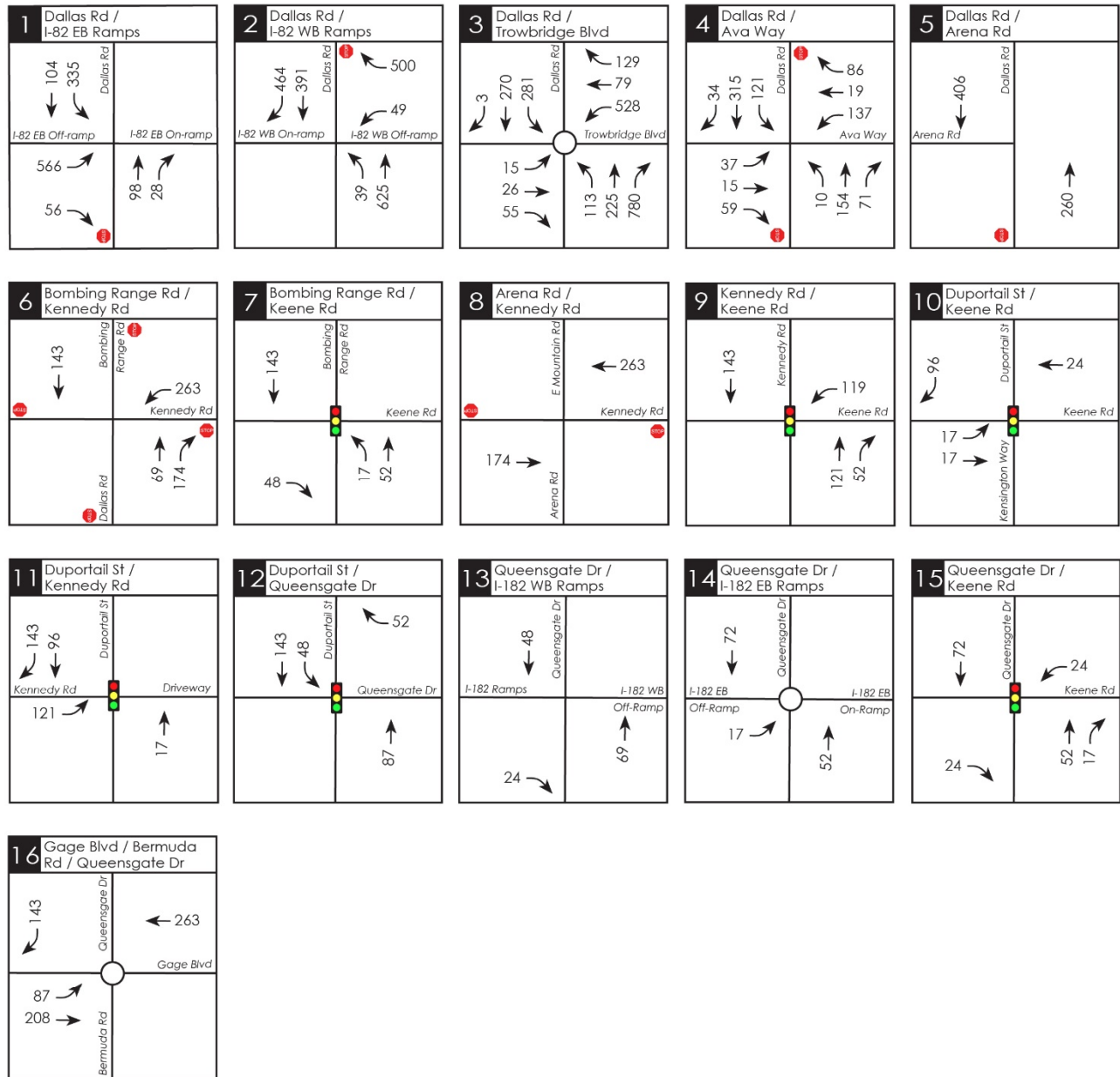




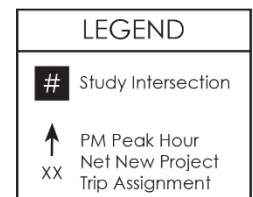
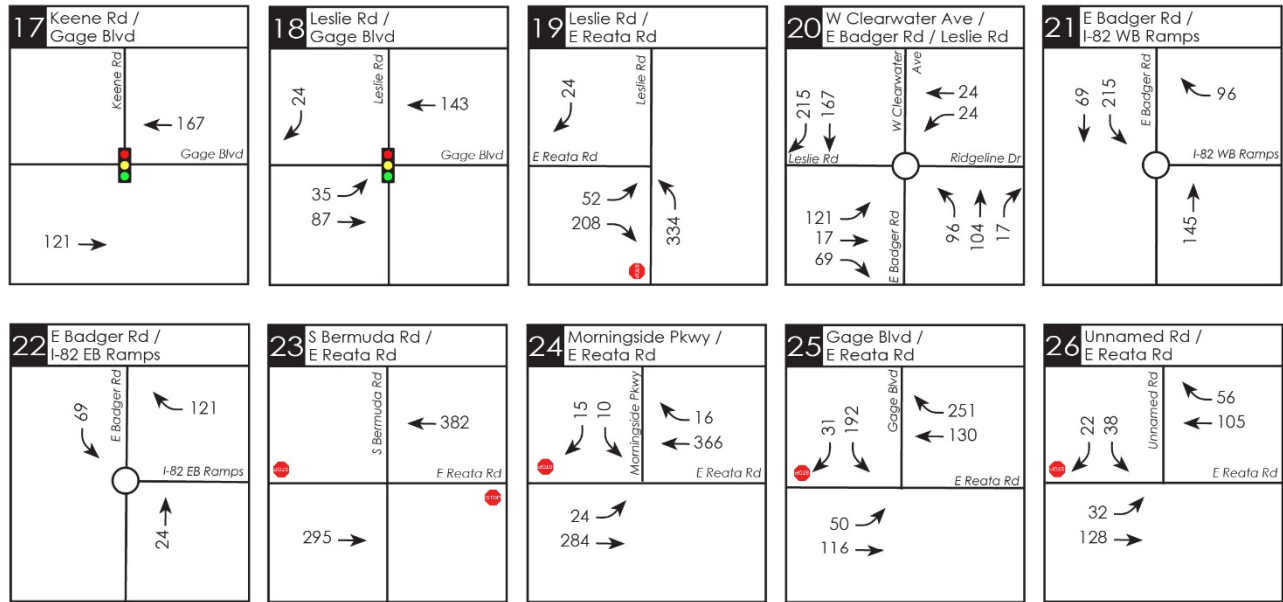
**Figure 7a:** Year 2040 AM Peak Hour Net New Project Trip Assignment (off-site)



**Figure 7b:** Year 2040 AM Peak Hour Net New Project Trip Assignment (off-site)

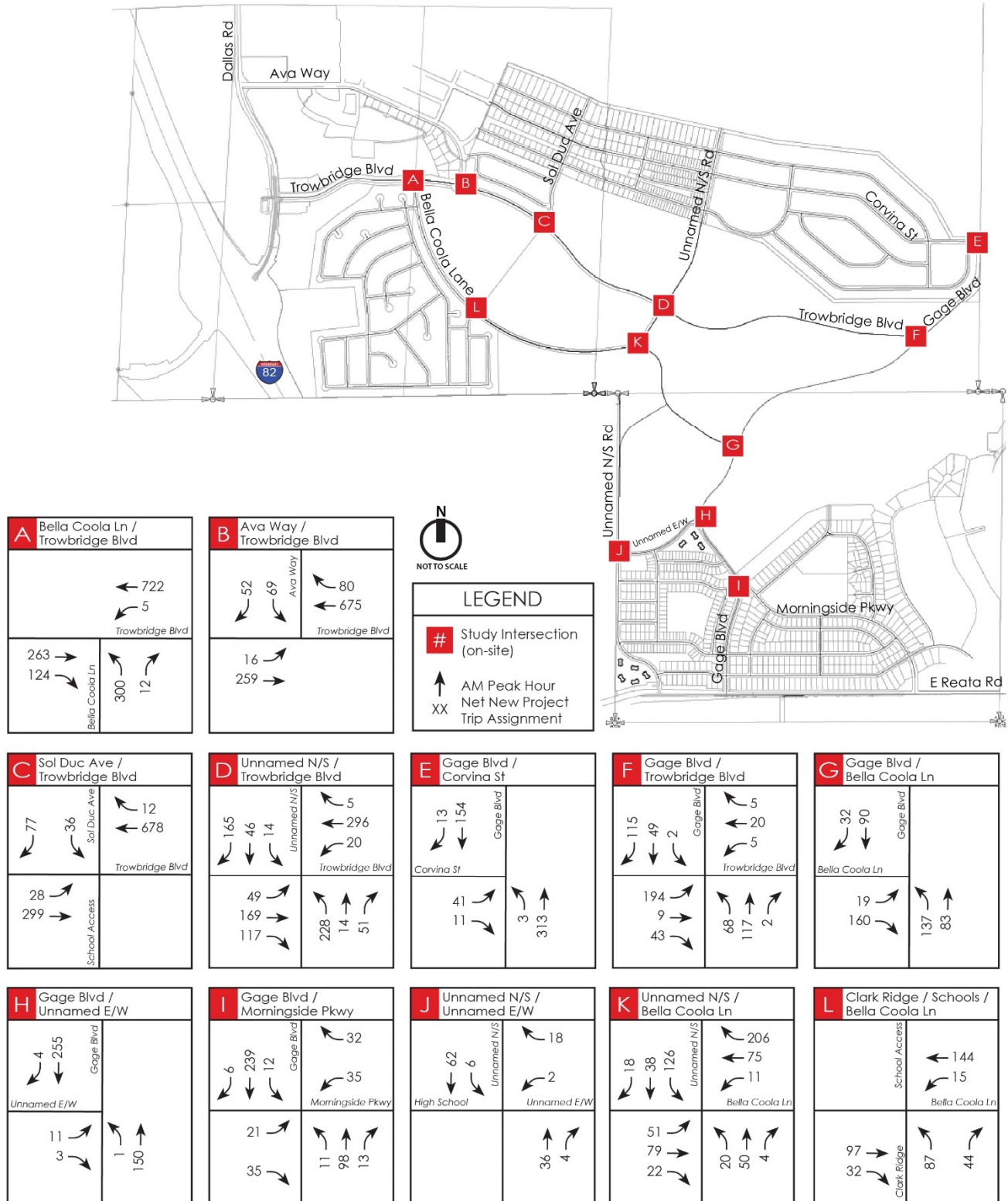


**Figure 8a:** Year 2040 PM Peak Hour Net New Project Trip Assignment (off-site)

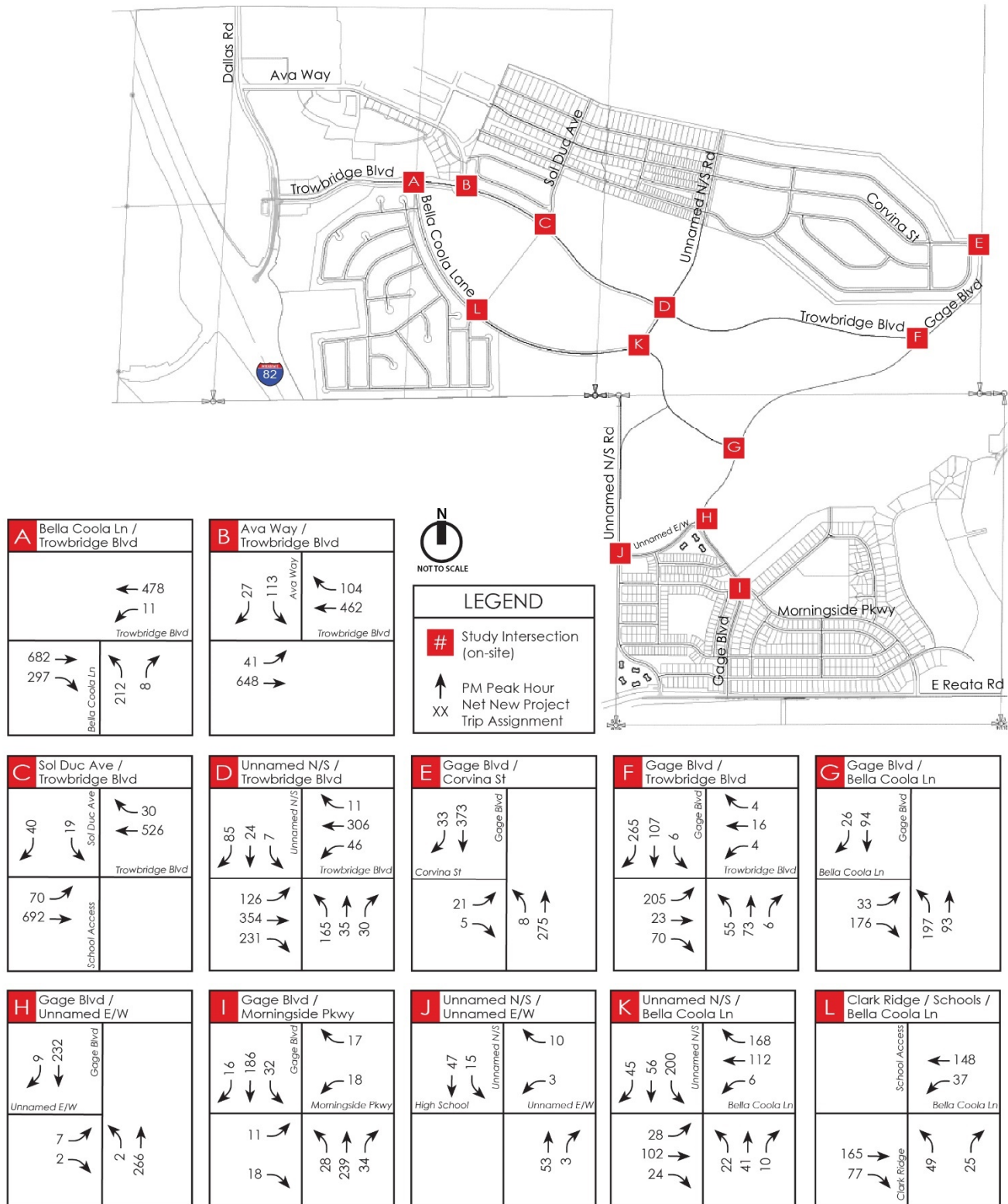


**Figure 8b:** Year 2040 PM Peak Hour Net New Project Trip Assignment (off-site)

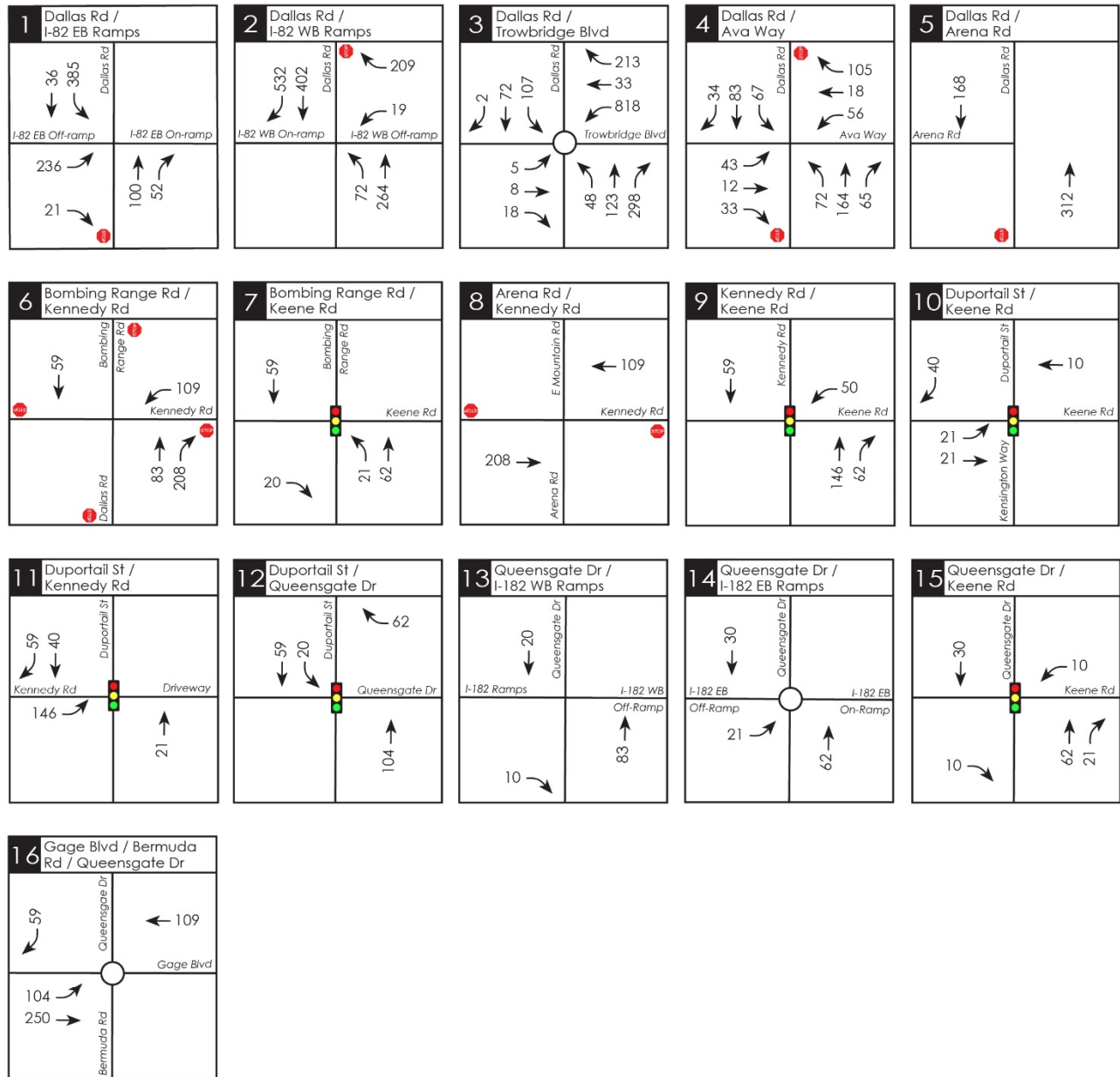




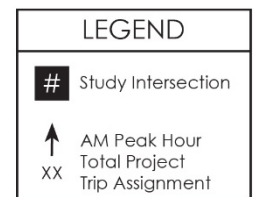
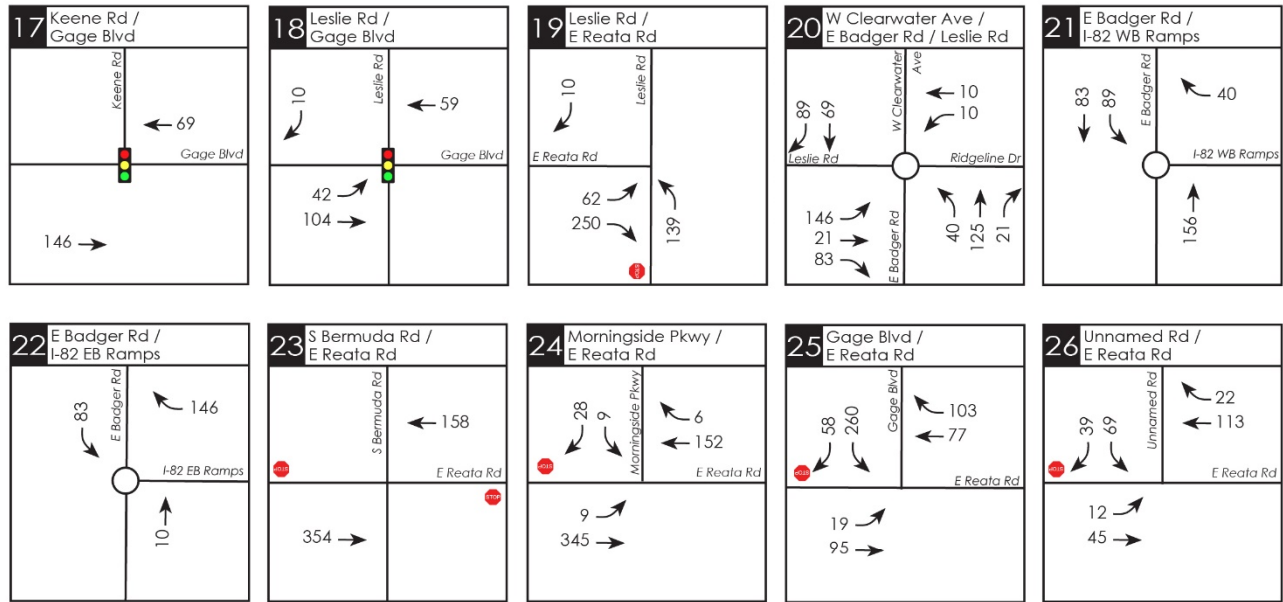
**Figure 9:** Year 2040 AM Peak Hour Net New Project Trip Assignment (on-site)



**Figure 10:** Year 2040 PM Peak Hour Net New Project Trip Assignment (on-site)

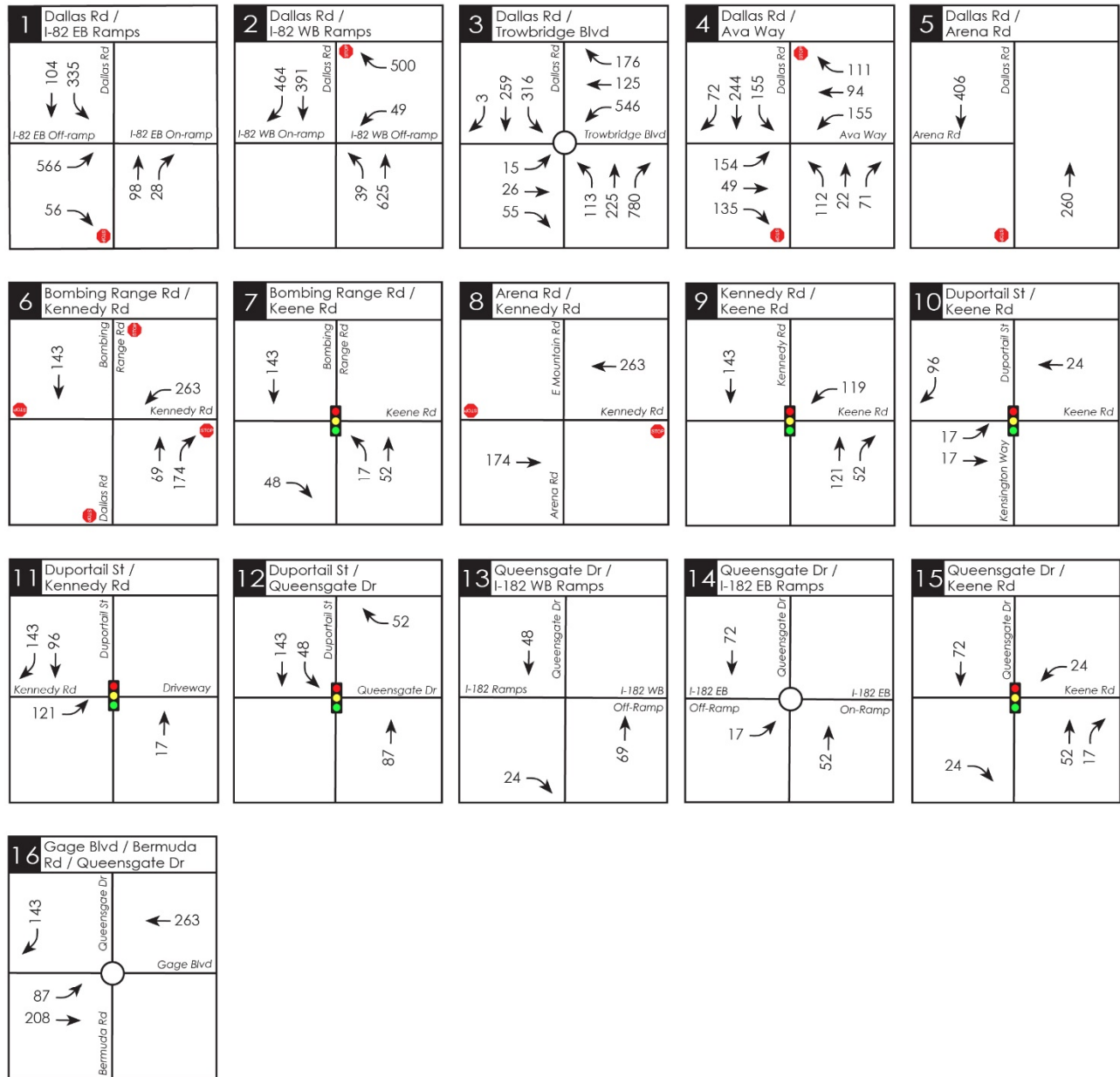


**Figure 11a:** Year 2040 AM Peak Hour Total Project Trip Assignment (off-site)

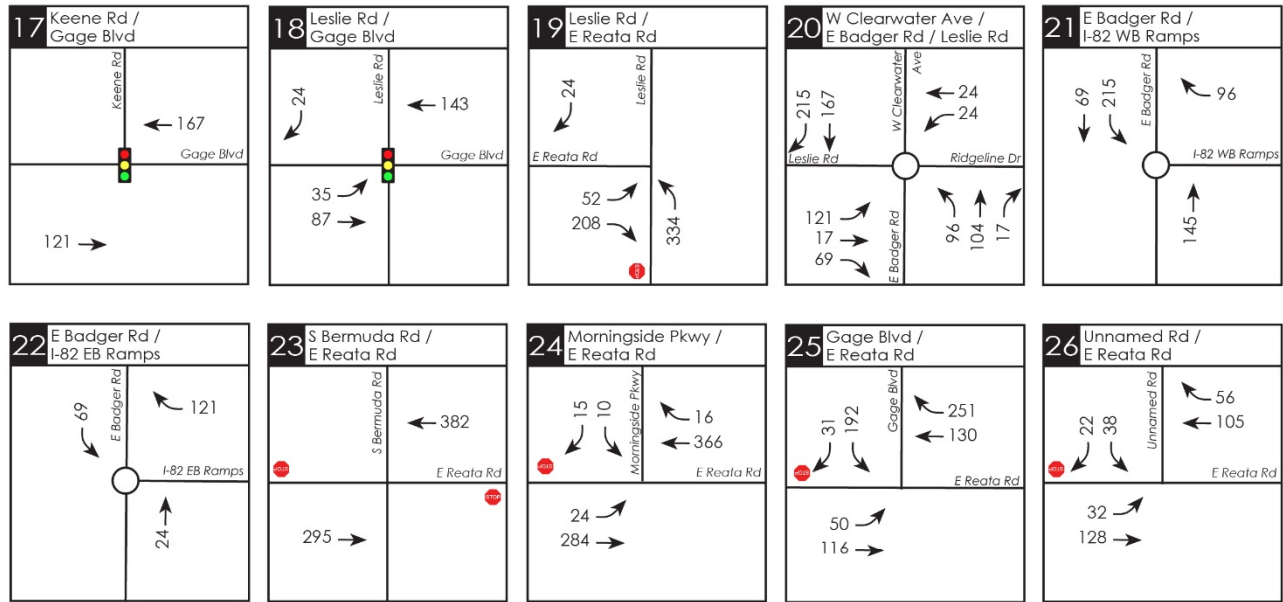


**Figure 11b:** Year 2040 AM Peak Hour Total Project Trip Assignment (off-site)

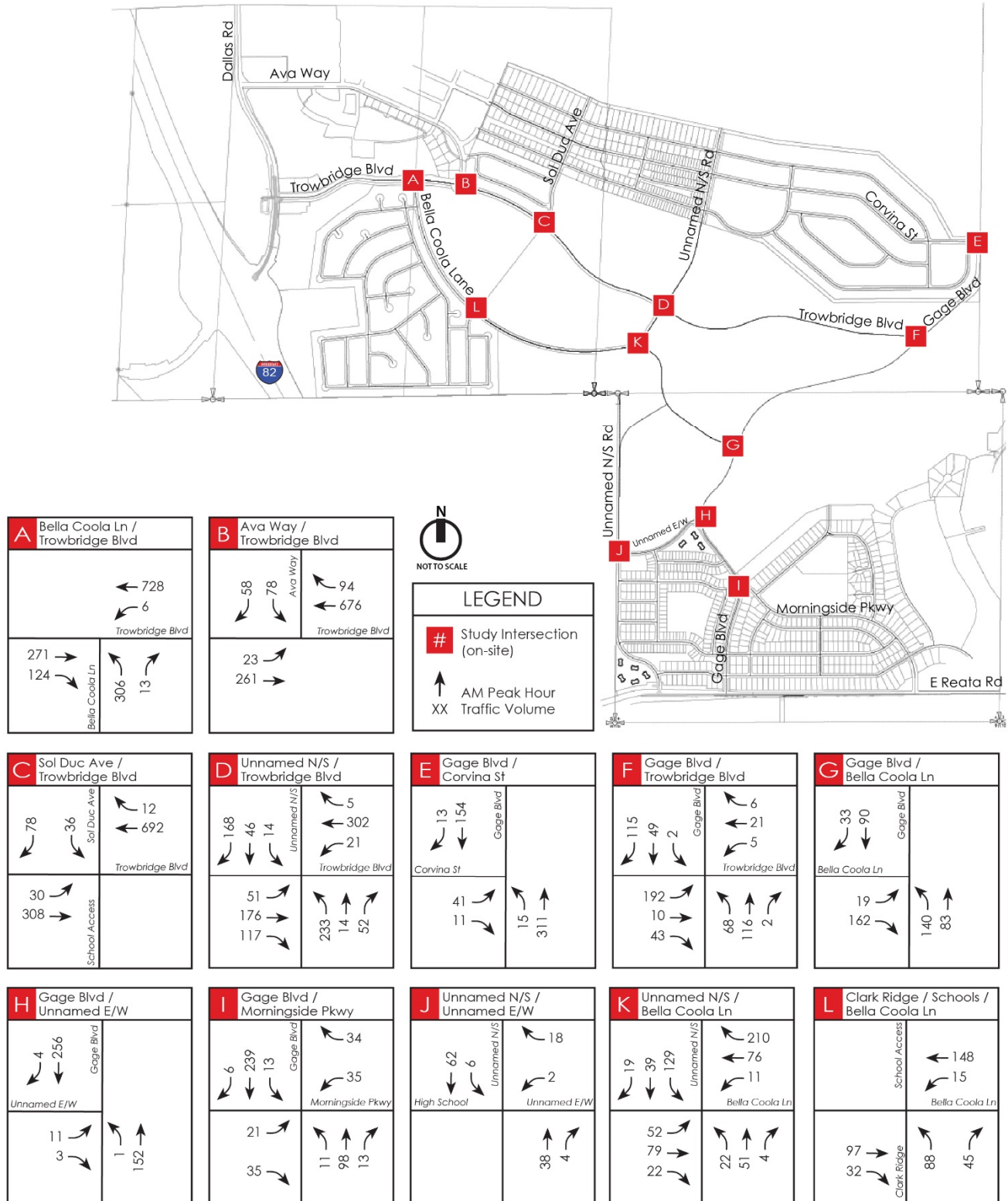




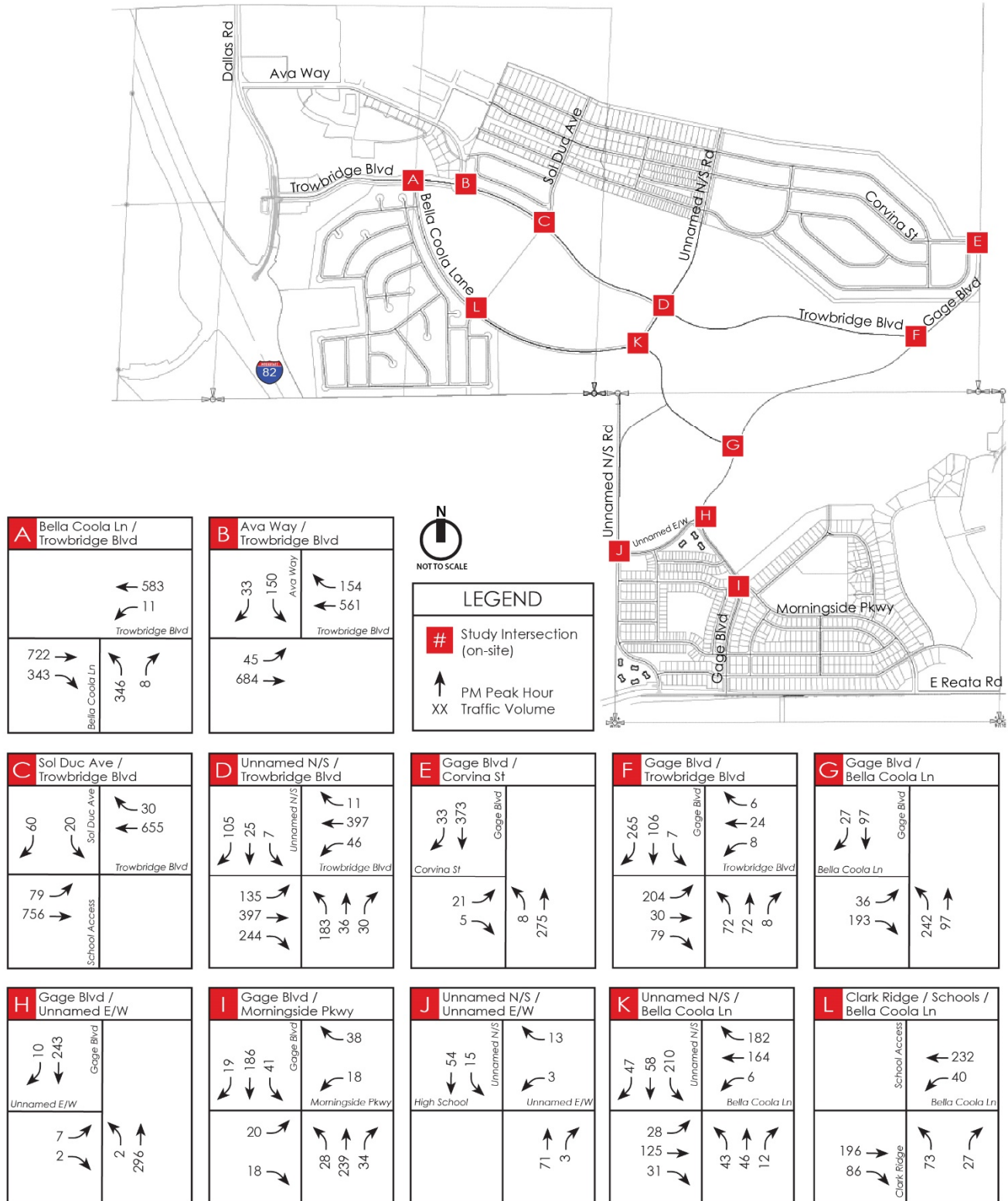
**Figure 12a:** Year 2040 PM Peak Hour Total Project Trip Assignment (off-site)



**Figure 12b:** Year 2040 PM Peak Hour Total Project Trip Assignment (off-site)

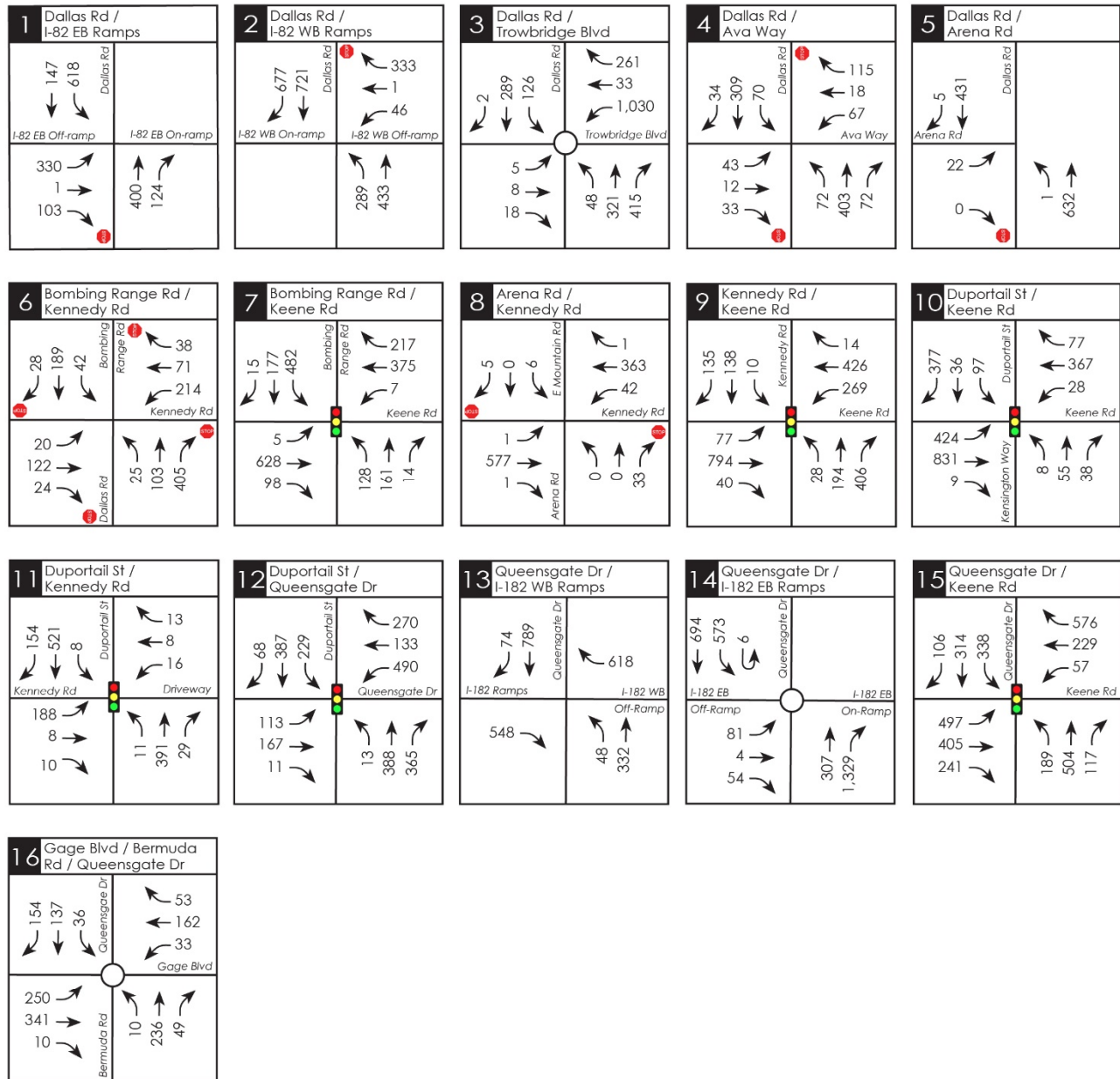


**Figure 13:** Year 2040 AM Peak Hour Total Project Trip Assignment (on-site)

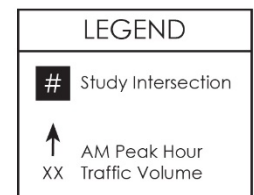
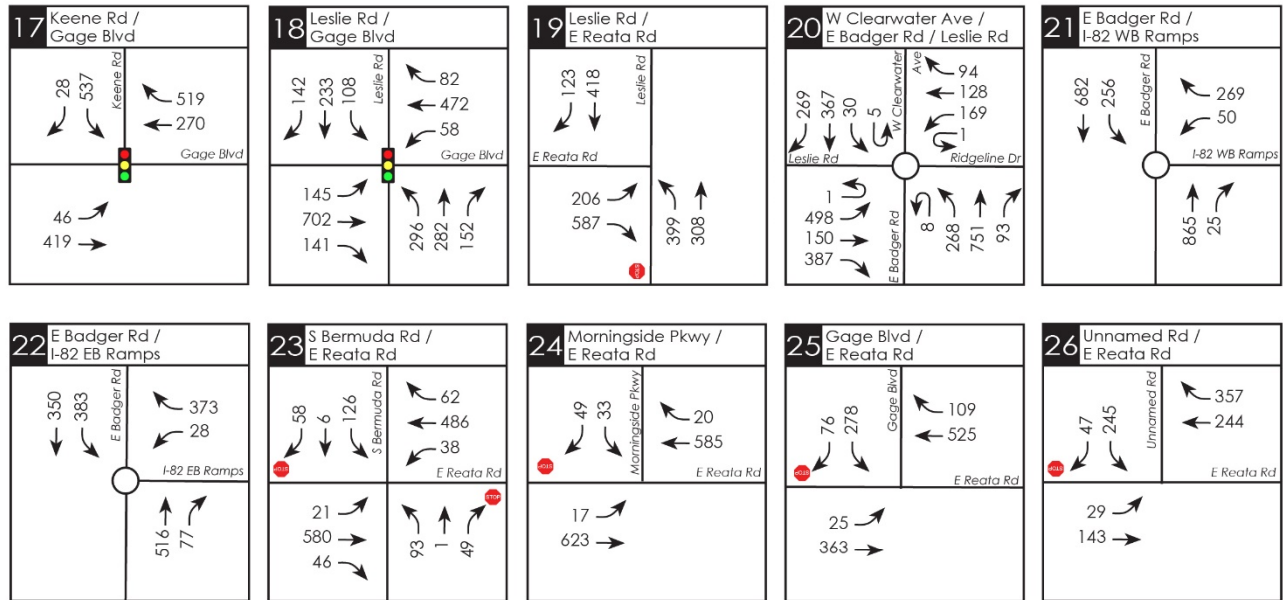


**Figure 14:** Year 2040 PM Peak Hour Total Project Trip Assignment (on-site)

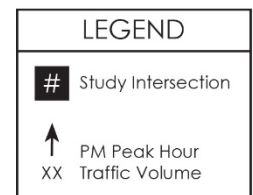
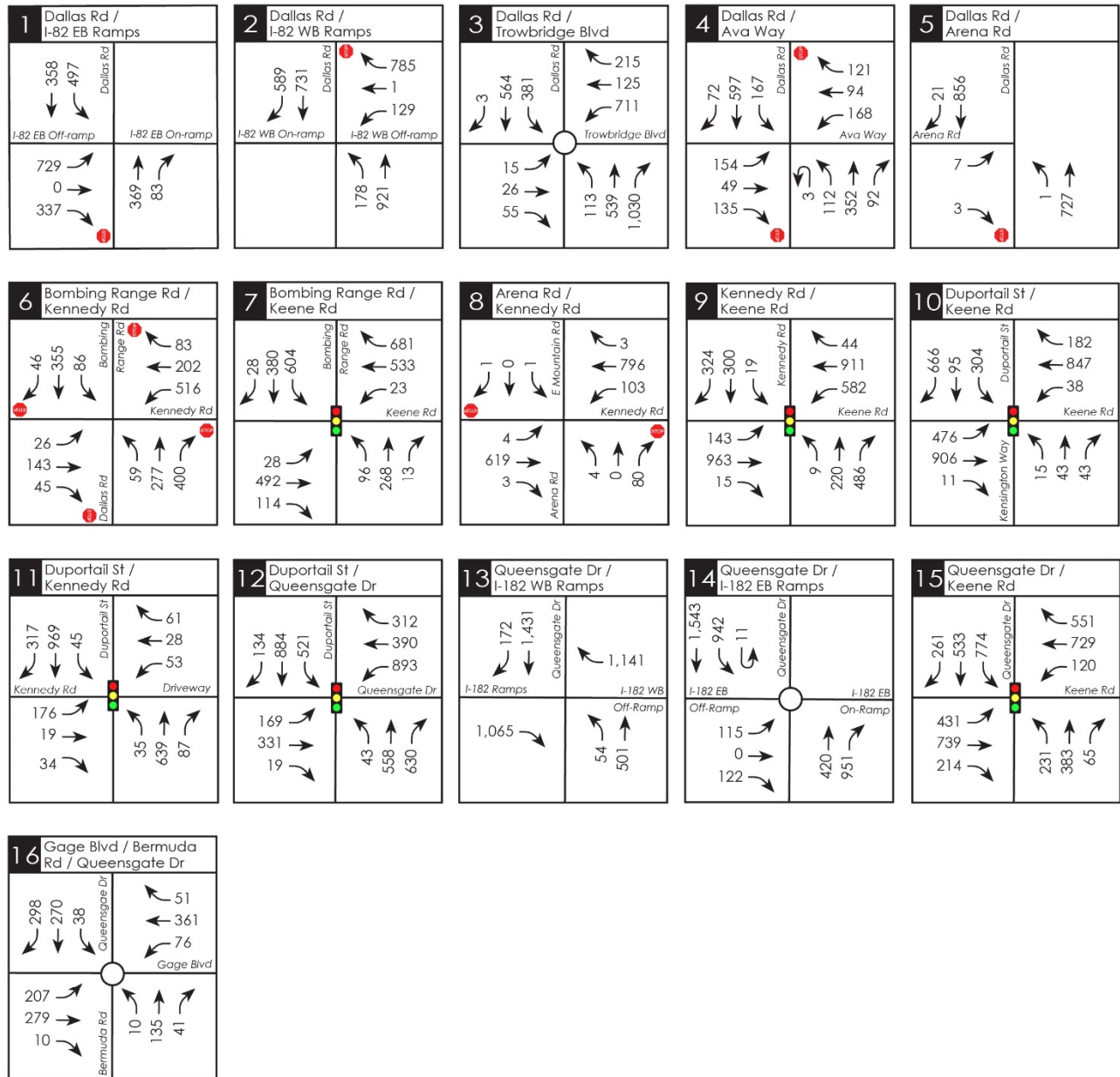




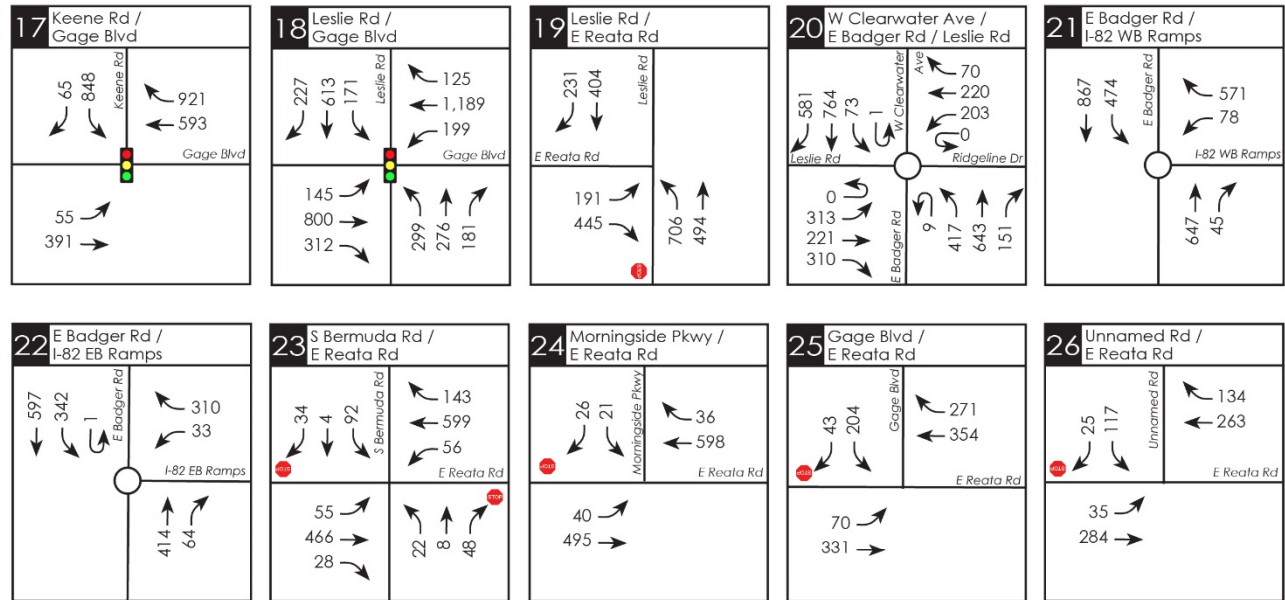
**Figure 15a:** Year 2040 (With Full BMS Buildout) AM Peak Hour Traffic Volumes (off-site)



**Figure 15b:** Year 2040 (With Full BMS Buildout) AM Peak Hour Traffic Volumes (off-site)

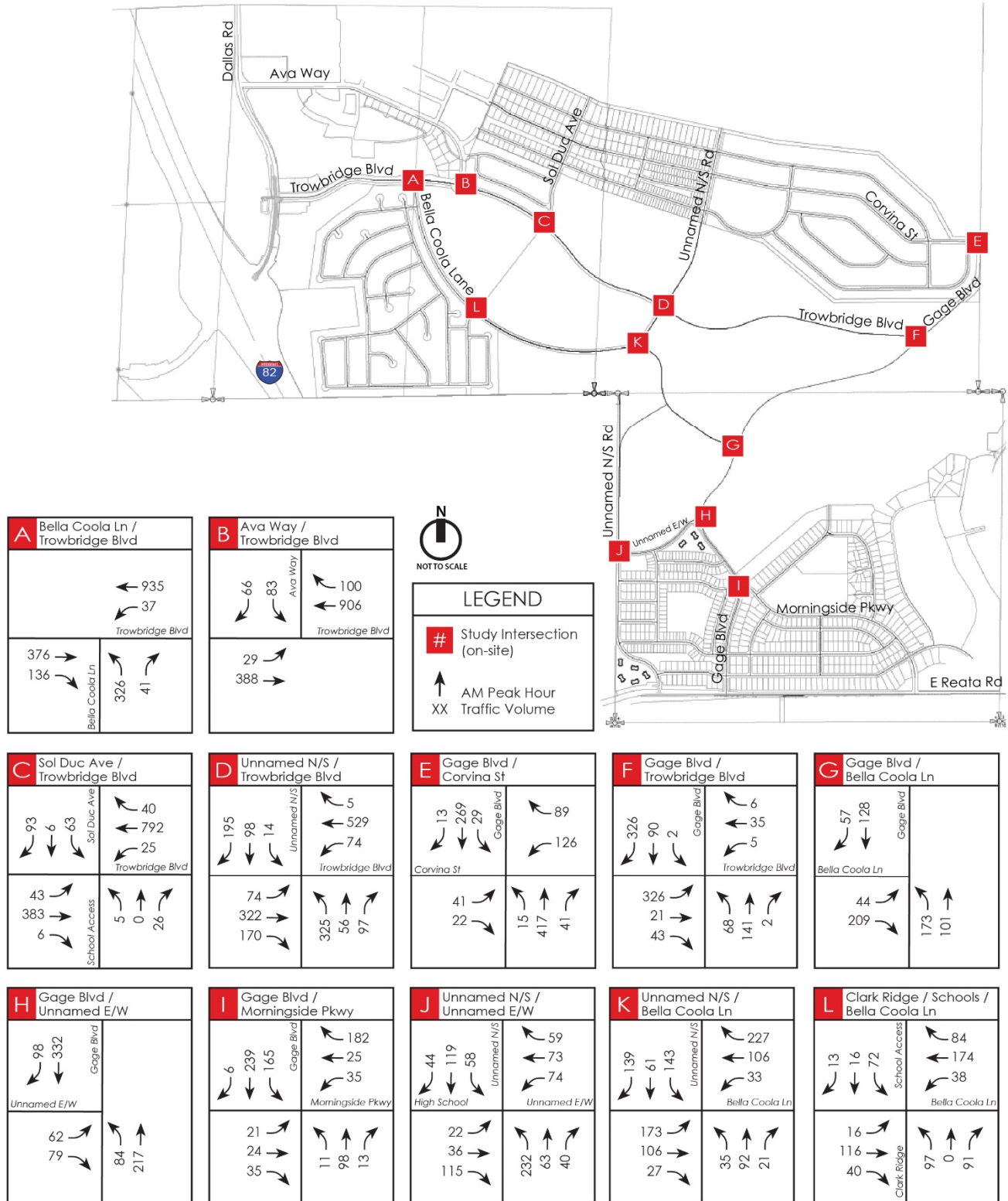


**Figure 16a:** Year 2040 (With Full BMS Buildout) PM Peak Hour Traffic Volumes (off-site)

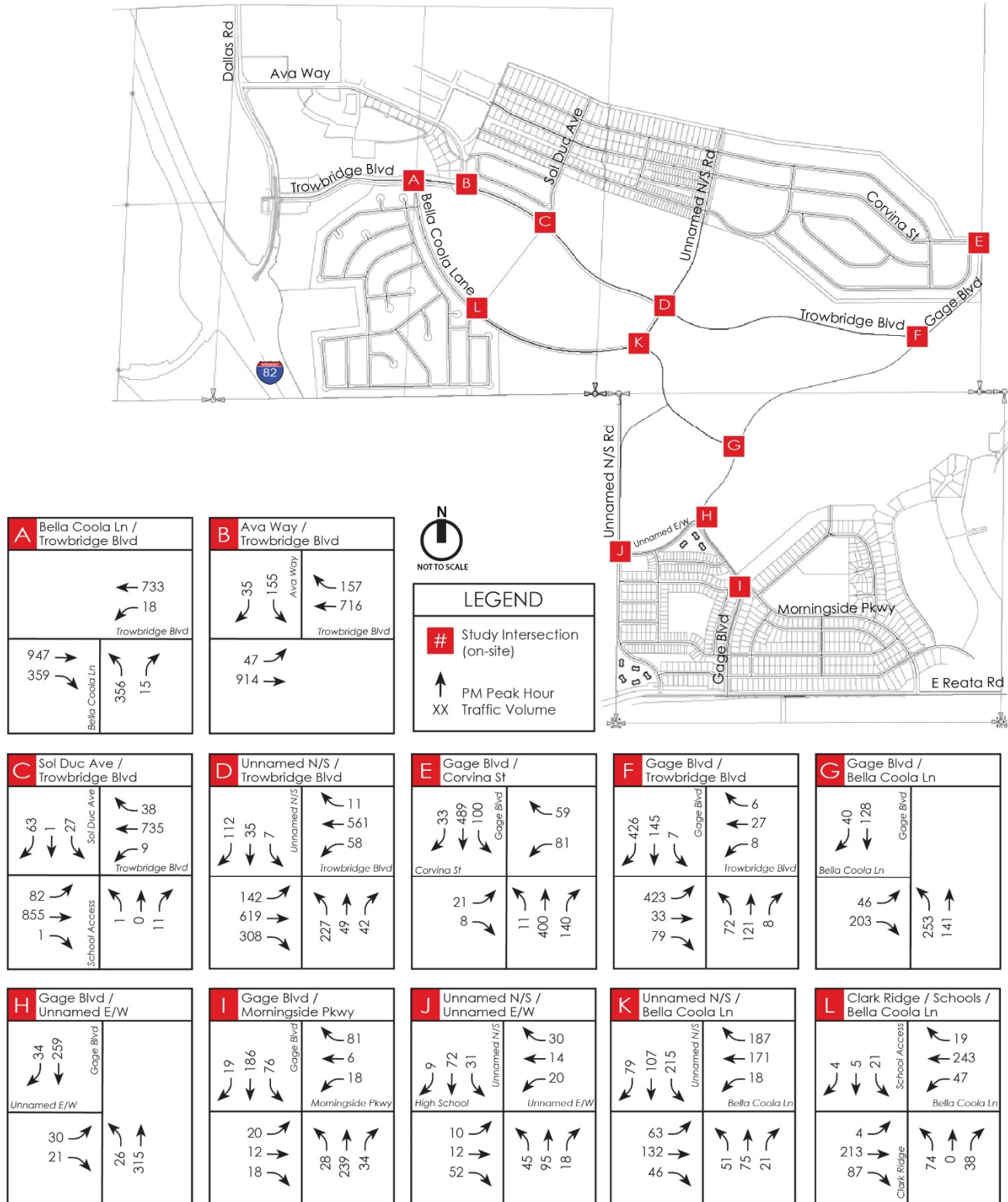


**Figure 16b:** Year 2040 (With Full BMS Buildout) PM Peak Hour Traffic Volumes (off-site)

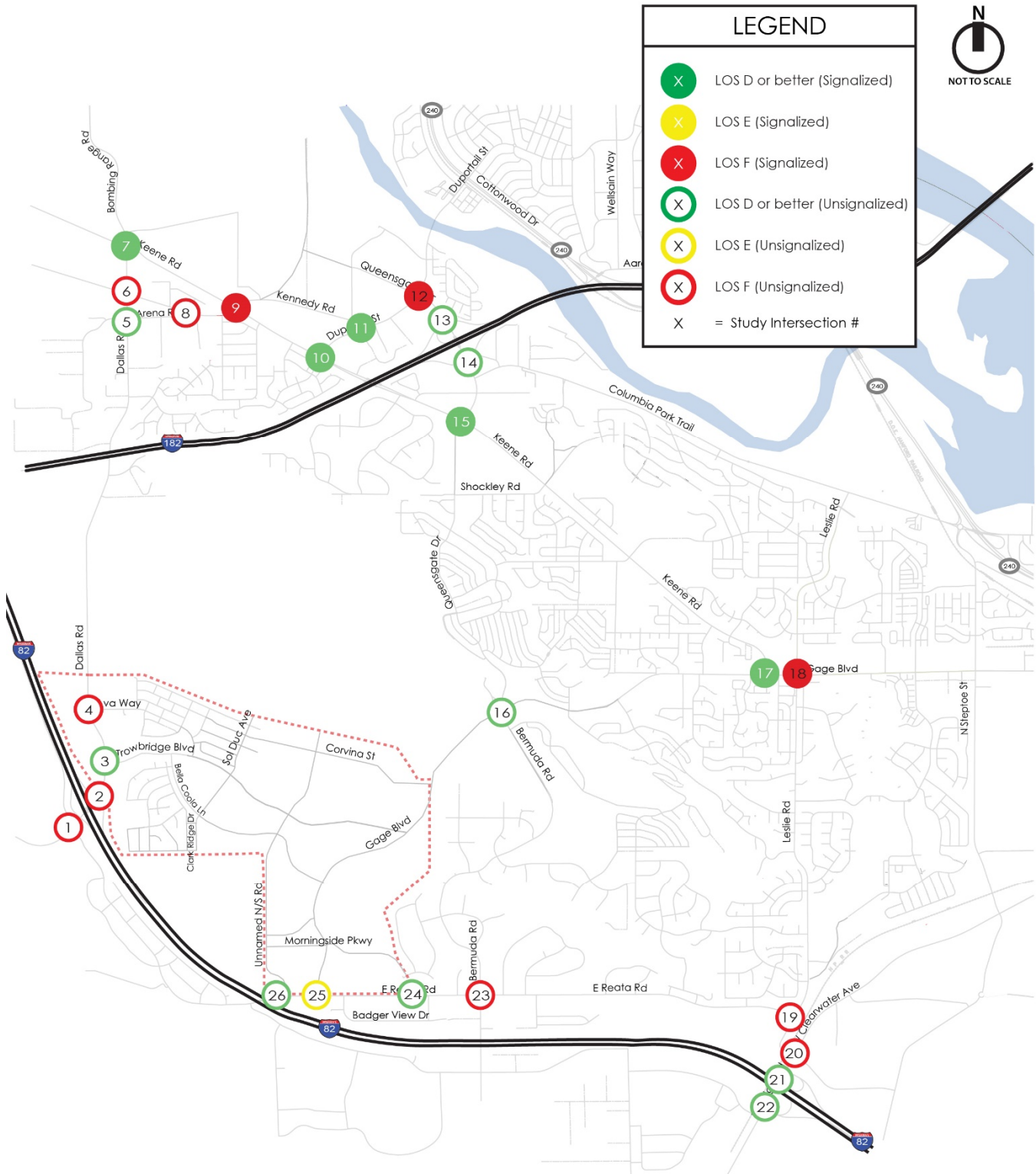




**Figure 17: Year 2040 (With Full BMS Buildout) AM Peak Hour Traffic Volumes (on-site)**



**Figure 18:** Year 2040 (With Full BMS Buildout) PM Peak Hour Traffic Volumes (on-site)



**Figure 19:** 2040 With Project (Full Build Out) LOS Summary

## Future Year 2040 Level of Service at Off-Site Study Intersections

Future year weekday AM and PM peak hour Level of Service (LOS) analyses were conducted at the 26 off-site study intersections for year 2040 with Full Buildout of Badger Mountain South and the 2040 roadway network documented above. Intersection LOS are evaluated based on the methodology and procedures outlined in the 6<sup>th</sup> Edition of the *Highway Capacity Manual* (HCM) using the *Synchro 10* and *SIDRA 9* software programs. It should be noted that LOS at on-site intersections within the BMS development are described in a later section of this report.

The weekday AM and PM peak hour LOS results at the off-site study intersections for 2040 with Full Buildout conditions are summarized in **Table 8**. The year 2040 LOS results at the off-site intersections are also illustrated in **Figure 19**. The detailed LOS worksheets are included in **Appendix B**.

**Table 8**  
**2040 With Full Buildout Peak Hour LOS Summary at Off-Site Study Intersections**

Study Intersection	2040 With Full Buildout of BMS			
	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
<u>Signalized Intersections</u>				
7. Bombing Range Road / Keene Road	D	53.0	D	35.5
9. Kennedy Road / Keene Road	C	35.0	F	84.6
10. Duportail Street / Keene Road	C	21.5	D	39.1
11. Duportail Street / Kennedy Road	B	16.3	B	16.4
12. Duportail Street / Queensgate Drive	C	20.3	F	91.9
15. Queensgate Drive / Keene Road	D	42.4	D	44.7
17. Keene Road / Gage Blvd	C	23.3	C	23.1
18. Leslie Road / Gage Blvd	C	32.8	F	84.3
<u>Roundabout Intersections</u>				
3. Dallas Road / Trowbridge Blvd	B	14.0	D	28.4
14. Queensgate Drive / I-182 EB Ramps	A	6.4	A	7.4
16. Gage Blvd / Queensgate Dr / Bermuda Road	B	10.5	C	16.5
20. Badger Road / Clearwater Ave / Leslie Road	D	35.0	F	83.3
21. Badger Road / I-82 WB Ramps	C	15.6	C	17.1
22. Badger Road / I-82 EB Ramps	B	11.7	B	11.7
<u>All-Way Stop Controlled Intersections</u>				
6. Bombing Range Road / Kennedy Road	F	53.3	F	>100
<u>Two-Way Stop Controlled Intersections</u>				
1. Dallas Road / I-82 EB Ramps				
Eastbound Approach	F	>100	F	>100
Southbound Left-Turn	B	13.4	B	10.9
2. Dallas Road / I-82 WB Ramps				
Westbound Shared Left-Thru	F	>100	F	>100
Westbound Right-Turn	C	15.9	F	>100
Northbound Left-Turn	C	22.7	C	15.5



**Table 8 continued**  
**2040 With Full Buildout Peak Hour LOS Summary at Off-Site Study Intersections**

Study Intersection / Movement	2040 With Full Buildout of BMS			
	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
4. Dallas Road / Ava Way				
Eastbound Left-Turn	F	71.5	F	>100
Eastbound Shared Thru-Right	C	16.5	F	>100
Westbound Left-Turn	F	60.8	F	>100
Westbound Shared Thru-Right	C	17.5	F	>100
Northbound Left-Turn	A	8.3	A	9.9
Southbound Left-Turn	A	8.8	A	9.1
5. Dallas Road / Arena Road				
Eastbound Approach	C	16.1	C	20.0
Northbound Left-Turn	A	8.3	B	10.0
8. Arena Road / Kennedy Road				
Eastbound Left-Turn	A	8.1	A	9.5
Westbound Left-Turn	A	9.0	A	9.4
Northbound Approach	B	13.1	C	18.5
Southbound Approach	C	20.8	F	50.0
19. Leslie Road / Reata Road				
Eastbound Left-Turn	F	>100	F	>100
Eastbound Right-Turn	F	79.5	D	27.7
Northbound Left-Turn	B	11.5	D	25.7
23. Bermuda Road / Reata Road				
Eastbound Left-Turn	A	8.8	A	9.8
Westbound Left-Turn	A	9.2	A	8.7
Northbound Approach	E	38.3	C	21.6
Southbound Approach	F	59.9	F	51.0
24. Morningside Parkway / Reata Road				
Eastbound Left-Turn	A	9.0	A	9.2
Southbound Left-Turn	C	18.8	C	17.8
Southbound Right-Turn	B	13.8	B	13.5
25. Gage Blvd / Reata Road				
Eastbound Left-Turn	A	9.2	A	9.4
Southbound Left-Turn	E	49.7	D	29.8
Southbound Right-Turn	B	14.2	B	12.3
26. Unnamed N/S / Reata Road				
Eastbound Left-Turn	A	9.0	A	8.4
Southbound Left-Turn	C	20.9	C	15.3
Southbound Right-Turn	B	11.6	B	10.5

*Signalized, Roundabout, and All-Way Stop Controlled Off-Site Study Intersections*

As shown in **Table 8**, many of the intersections are anticipated to operate at LOS D or better during the AM and PM peak hours in 2040 with full buildout of BMS. Five study intersections are anticipated to operate at LOS F and would require improvements to improve to LOS D or better by year 2040; those intersections are described next along with a description of the proportionate share of traffic generated by BMS (during weekday AM and PM peak hours).

- **#6 Bombing Range Road / Kennedy Road.** BMS is estimated to add 459 AM peak hour trips (33.2% of total entering traffic) and 649 PM peak hour trips (29.0% of total entering traffic). Potential mitigation could include a roundabout or signal.
- **#9 Kennedy Road / Keene Road.** BMS is estimated to add 435 PM peak hour trips (10.8% of total entering traffic). Potential mitigation could include adding northbound and southbound right-turn overlap phases.
- **#12 Duportail Street / Queensgate Drive.** BMS is estimated to add 330 PM peak hour trips (6.8% of total entering traffic). Recent improvements were constructed at this intersection which generally render the intersection to be built out. However, the following improvements for the City to consider are anticipated to improve LOS: dual northbound right-turn lanes, a signalized northbound right-turn slip lane, and/or dual southbound left-turn lanes. Monitoring and future analysis of this intersection is proposed after BMS project opening to assess traffic volumes and intersection operations based on future conditions to determine if intersection improvements may be necessary to maintain acceptable LOS.
- **#18 Leslie Road / Gage Boulevard.** BMS is estimated to add 289 PM peak hour trips (6.4% of total entering traffic). Recent improvements have been constructed at this intersection which generally render the intersection to be built out. However, the following improvements for the City to consider in the future are anticipated to improve LOS: dual northbound left-turn lanes, dual southbound through lanes, an eastbound right-turn lane, and/or a westbound right-turn lane. The City should also consider adding right-turn overlap phases to any existing or future right-turn lanes. Monitoring and future analysis of this intersection is proposed after BMS project opening to assess traffic volumes and intersection operations based on future conditions to determine if intersection improvements may be necessary to maintain acceptable LOS.
- **#20 Badger Road / Clearwater Ave / Leslie Road.** BMS is estimated to add 854 PM peak hour trips (21.5% of total entering traffic). Potential mitigation at this existing roundabout intersection could include adding a southbound right-turn slip lane and/or an additional eastbound lane. There is an existing railroad crossing located approximately 150 feet west of the roundabout and pedestrian paths located on the northwest and southwest corners of this intersection that would be directly impacted by the addition of a southbound right-turn slip lane and/or additional eastbound lane. Monitoring and future analysis of this intersection is proposed after BMS project opening to assess traffic volumes and intersection operations based on future conditions to determine if intersection improvements may be necessary to maintain acceptable LOS. As traffic volumes increase with future development, consideration should also be given to changing the existing roundabout to a signalized intersection.

*Two-Way Stop Controlled Off-Site Study Intersections*

As shown in **Table 8**, many individual lane groups at the two-way stop-controlled study intersections are estimated to operate at LOS D or better during the AM and PM peak hours in 2040 with full buildout of BMS. Several of the two-way stop-controlled study intersections have controlled movements that are anticipated to operate at LOS E or LOS F and would require improvements to improve to LOS D or better by year 2040; those intersections are described next along with a description of the proportionate share of traffic generated by BMS.

- **#1 Dallas Road/I-82 EB Ramps** – the stop-controlled eastbound approach (off-ramp) is anticipated to operate at LOS F during the AM and PM peak hours. BMS is estimated to add 830 AM peak hour trips (48.2% of total entering traffic) and 1,187 PM peak hour trips (50.0% of total entering traffic). Potential mitigation could include a roundabout or signal.
- **#2 Dallas Road/I-82 WB Ramps** – the stop-controlled westbound shared left-thru lane on the off-ramp is anticipated to operate at LOS F during the AM and PM peak hours and the westbound right-turn lane is anticipated to operate at LOS F during the PM peak hour. BMS is estimated to add 1,498 AM peak hour trips (59.9% of total entering traffic) and 2,068 PM peak hour trips (62.0% of total entering traffic). Potential mitigation improvements at this intersection could include a roundabout or signal.
- **#4 Dallas Road/Ava Road** – the stop-controlled eastbound and westbound left-turn lanes are anticipated to operate at LOS F during the AM peak hour and the eastbound and westbound approaches (both lanes) are anticipated to operate at LOS F during the PM peak hour. BMS is estimated to add 752 AM peak hour trips (60.3% of total entering traffic) and 1,374 PM peak hour trips (64.9% of total entering traffic). Potential mitigation improvements at this intersection could include a roundabout or signal.
- **#8 Arena Road / Kennedy Road** – the stop-controlled southbound approach is anticipated to operate at LOS F during the PM peak hour. BMS is estimated to add 437 PM peak hour trips (27.1% of total entering traffic). The anticipated LOS F operation at this intersection stems from the delay experienced by two southbound trips exiting a residential driveway. As mentioned previously, the 2040 network assumes a cul-de-sac on the west side of Arena Road, which would eliminate the existing cutthrough traffic and any future cutthrough traffic on Arena Road that would occur as a result of future development. Removing the high volume of traffic traveling from the east on Kennedy Road that would have utilized Arena Road as a cutthrough to travel southbound on Dallas Road improved side-street operations at this intersection significantly. Therefore, no additional mitigation improvements are proposed at this intersection.
- **#19 Leslie Road/Reata Road** – the stop-controlled eastbound left-turn lane is anticipated to operate at LOS F during the AM and PM peak hours and the eastbound right-turn lane is anticipated to operate at LOS F during the AM peak hour. BMS is estimated to add 461 AM peak hour trips (22.6% of total entering traffic) and 618 PM peak hour trips (25.0% of total entering traffic). Potential mitigation improvements at this intersection could include a roundabout or signal.
- **#23 Bermuda Road/Reata Road** – the stop-controlled northbound approach is anticipated to operate at LOS F during the AM peak hour and LOS E during the PM peak hour and the southbound approach is anticipated to operate at LOS F during the

AM and PM peak hours. BMS is estimated to add 512 AM peak hour trips (32.5% of total entering traffic) 677 PM peak hour trips (43.5% of total entering traffic). Potential mitigation improvements at this intersection could include a roundabout or signal.

- **#24 Gage Blvd/Reata Road** – the stop-controlled southbound approach is anticipated to operate at LOS E during the AM peak hour. BMS is estimated to add 612 AM peak hour trips (44.5% of total entering traffic). Potential mitigation improvements at this intersection could include a roundabout or signal.

*It should be noted that the PHF at the WSDOT Ramp intersections (#1, 2, 14, 21, and 22) was updated from the original BMS TIA to 1.0 to be consistent with WSDOT Synchro analysis protocol. As a result, the operations at these intersections improved when compared to the previous TIA.*

*Additionally, the future 2040 roadway network was updated to include the planned transportation projects adopted in Benton County's 2022-2027 TIP which improved 2040 with full buildout of BMS operations at the study intersections along Reata Road west of Leslie Road (#23, 24, 25, and 26) and the study intersections along Badger Road south of Clearwater Ave / Leslie Road at the I-82 ramps (#21 and 22).*

At the locations listed above where improvements are necessary to maintain LOS D or better during weekday AM and PM peak hours in 2040, preliminary mitigation or mitigation strategies have been identified. Mitigation and proportionate share contribution of BMS traffic is provided in greater detail in the *Mitigation* section of the report.



## Future Year 2040 Level of Service at On-Site Study Intersections

Future year weekday AM and PM peak hour LOS analyses were conducted at the 12 on-site study intersections for year 2040 with full buildout of Badger Mountain South and the preliminary internal roadway layout as shown previously in **Figure 2**. It should be noted that LOS at intersections outside of the BMS development (off-site study intersections) were described in the prior section.

The LOS analyses are based on the methodology and procedures outlined in the 6<sup>th</sup> Edition of the *Highway Capacity Manual* (HCM) using the *Synchro 10* and *SIDRA 9* software program.

**Table 9 and Table 10** summarize the weekday AM and PM peak hour LOS results and proposed intersection control at the 12 on-site study intersections for 2040 with Full Buildout conditions. The detailed LOS worksheets are included in **Appendix F**.

The LOS analyses at intersections within the BMS development include turn lanes, channelization, and intersection control (i.e. stop sign or roundabout) necessary to ensure the on-site intersections would operate at acceptable LOS during the AM and PM peak hours with full buildout in 2040. The majority of the on-site study intersections will operate at LOS D or better with two-way stop control (side streets stop controlled and primary street free flow); therefore, two-way stop control is proposed at these intersections. However, at intersections A, B, D, F and K, more than one proposed intersection control was identified for control of the intersection, and the LOS results for both options are presented in **Table 9 and Table 10**. The specific lane channelization assumptions for both of the proposed control options at intersections A, B, D, F and K is included in **Appendix G**.

As shown in **Tables 9 and 10**, all controlled movements at the unsignalized BMS internal (on-site) intersections and all proposed roundabout or signalized intersections are expected to operate at LOS D or better during the AM and PM peak hours with the following exception:

- **C. Sol Duc Ave/Trowbridge Blvd** – the southbound approach is anticipated to operate at LOS E during the AM peak hour. Given that Sol Duc Ave is a minor side street roadway, no improvements are proposed for this side-street approach.

**Table 9**  
**2040 With Full Buildout AM Peak Hour LOS Summary for On-Site Study Intersections**

Study Intersection / Movement	Proposed Intersection Control							
	Roundabout		Signal		Two-Way Stop		All-Way Stop	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
A. Bella Coola Ln / Trowbridge Blvd	A	8.7	B	10.3	-	-	-	-
B. Ava Way / Trowbridge Blvd	C	15.4	C	22.5	-	-	-	-
C. Sol Duc Ave / Trowbridge Blvd								
Eastbound Left-Turn	-	-	-	-	B	10.2	-	-
Westbound Left-Turn	-	-	-	-	A	8.3	-	-
Northbound Approach	-	-	-	-	C	15.6	-	-
Southbound Approach	-	-	-	-	E	42.6	-	-
D. Unnamed N/S / Trowbridge Blvd	B	19.2	D	46.2	-	-	-	-
E. Gage Blvd / Corvina S								
Eastbound Approach	-	-	-	-	C	16.7	-	-
Westbound Approach	-	-	-	-	C	23.0	-	-
Northbound Left-Turn	-	-	-	-	A	7.9	-	-
Southbound Left-Turn	-	-	-	-	A	8.5	-	-
F. Gage Blvd / Trowbridge Blvd	A	6.6	B	14.2	-	-	-	-
G. Gage Blvd / Bella Coola Lane								
Eastbound Left-Turn	-	-	-	-	B	13.6	-	-
Eastbound Right-Turn	-	-	-	-	B	10.7	-	-
Northbound Left-Turn	-	-	-	-	A	8.1	-	-
H. Gage Blvd/ Unnamed E/W								
Eastbound Approach	-	-	-	-	B	14.9	-	-
Northbound Left-Turn	-	-	-	-	A	8.6	-	-
I. Gage Blvd / Morningside Pkwy								
Eastbound Approach	-	-	-	-	C	16.1	-	-
Westbound Approach	-	-	-	-	C	15.0	-	-
Northbound Left-Turn	-	-	-	-	A	7.8	-	-
Southbound Left-Turn	-	-	-	-	A	7.8	-	-
J. Unnamed N/S / Unnamed E/W								
Eastbound Left-Turn	-	-	-	-	D	27.8	-	-
Eastbound Shared Thru-Right	-	-	-	-	B	13.7	-	-
Westbound Left-Turn	-	-	-	-	D	34.8	-	-
Westbound Shared Thru-Right	-	-	-	-	C	18.9	-	-
Northbound Left-Turn	-	-	-	-	A	8.2	-	-
Southbound Left-Turn	-	-	-	-	A	7.6	-	-
K. Unnamed N/S / Bella Coola Lane	A	7.3	-	-	-	-	C	15.9
L. Clark Ridge Dr / Bella Coola Lane								
Eastbound Left-Turn	-	-	-	-	A	7.9	-	-
Westbound Left-Turn	-	-	-	-	A	7.7	-	-
Northbound Approach	-	-	-	-	C	15.0	-	-
Southbound Approach	-	-	-	-	C	17.0	-	-

**Table 10**  
**2040 With Full Buildout PM Peak Hour LOS Summary for On-Site Intersections**

Study Intersection / Movement	Proposed Intersection Control							
	Roundabout		Signal		Two-Way Stop		All-Way Stop	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
A. Bella Coola Ln / Trowbridge Blvd	B	14.6	B	14.8	-	-	-	-
B. Ava Way / Trowbridge Blvd	C	17.1	B	13.1	-	-	-	-
C. Sol Duc Ave / Trowbridge Blvd								
Eastbound Left-Turn	-	-	-	-	B	10.2	-	-
Westbound Left-Turn	-	-	-	-	B	10.0	-	-
Northbound Approach	-	-	-	-	C	19.0	-	-
Southbound Approach	-	-	-	-	D	31.0	-	-
D. Unnamed N/S / Trowbridge Blvd	D	30.1	D	47.4	-	-	-	-
E. Gage Blvd / Corvina S								
Eastbound Approach	-	-	-	-	C	21.5	-	-
Westbound Approach	-	-	-	-	D	27.9	-	-
Eastbound Approach	-	-	-	-	A	8.7	-	-
Northbound Left-Turn	-	-	-	-	A	9.2	-	-
F. Gage Blvd / Trowbridge Blvd	A	8.9	B	16.4	-	-	-	-
G. Gage Blvd / Bella Coola Lane								
Eastbound Left-Turn	-	-	-	-	C	16.3	-	-
Eastbound Right-Turn	-	-	-	-	B	10.6	-	-
Northbound Left-Turn	-	-	-	-	A	8.3	-	-
H. Gage Blvd/ Unnamed E/W								
Eastbound Approach	-	-	-	-	B	12.0	-	-
Northbound Left-Turn	-	-	-	-	A	8.0	-	-
I. Gage Blvd / Morningside Pkwy								
Eastbound Approach	-	-	-	-	B	14.1	-	-
Westbound Approach	-	-	-	-	B	12.1	-	-
Northbound Left-Turn	-	-	-	-	A	7.8	-	-
Southbound Left-Turn	-	-	-	-	A	8.1	-	-
J. Unnamed N/S / Unnamed E/W								
Eastbound Left-Turn	-	-	-	-	B	11.6	-	-
Eastbound Shared Thru-Right	-	-	-	-	A	9.7	-	-
Westbound Left-Turn	-	-	-	-	B	11.9	-	-
Westbound Shared Thru-Right	-	-	-	-	B	10.1	-	-
Northbound Left-Turn	-	-	-	-	A	7.5	-	-
Southbound Left-Turn	-	-	-	-	A	7.5	-	-
K. Unnamed N/S / Bella Coola Lane	A	7.4	-	-	-	-	C	17.9
L. Clark Ridge Dr / Bella Coola Lane								
Eastbound Left-Turn	-	-	-	-	A	7.9	-	-
Westbound Left-Turn	-	-	-	-	A	8.1	-	-
Northbound Approach	-	-	-	-	C	17.2	-	-
Southbound Approach	-	-	-	-	C	16.4	-	-

## Roadway Functional Classification for BMS Roads

This section uses the future 2040 future traffic volumes projections to compare to the City's roadway functional classifications and recommends roadway classifications for primary roadways within the BMS development. Future 2040 average daily traffic (ADT) for roadways within BMS were estimated based on the weekday AM and PM peak hour volumes multiplied by a k-factor of 9%.

Recommended roadway classifications for the internal roadways serving BMS were assessed based on the City of Richland's preliminary functional classification recommendations, which are provided in **Appendix H**. Those functional classifications include a range of average daily traffic (ADT) for a range of roadway types, including principal arterial, minor arterial, major collector, and local road.

**Table 11** summarizes recommended roadway classifications and number of travel lanes for the primary roadways within and serving the BMS development. The recommendations are based on review of 2040 ADT and comparison to the City's functional classification recommendations (**Appendix H**). These recommendations are generally consistent with the functional classifications identified by the City for the BMS internal roadways with a few exceptions which are recommended to be re-considered by the City based on the future ADT projections in 2040.

Dallas Road between Ava and I-82 – propose re-consideration as a Principal Arterial with 4-5 travel lanes.

Trowbridge Blvd between Dallas Road and east of Ava Way to Unnamed N/S Road – propose re-consideration as a Principal Arterial with 4-5 travel lanes.

The number of travel lanes identified in **Table 11** is based on the future ADT by 2040 as well as the anticipated intersection control at the intersections along each roadway segment. Consideration may be given to whether 4 lane roadways should be 5 lanes in order to accommodate left-turns onto future internal roadway connections.



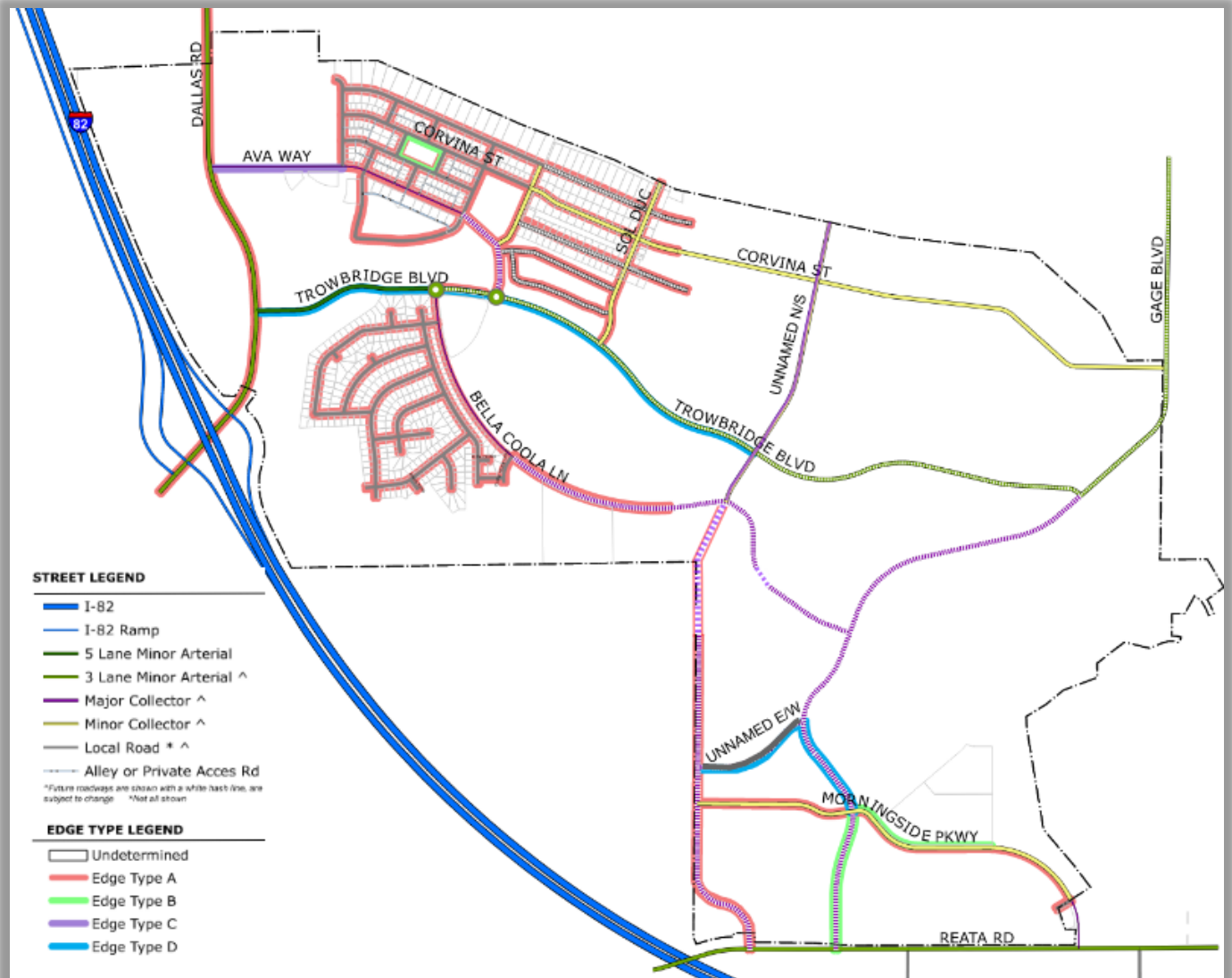
**Table 11**  
**Preliminary Functional Classification Recommendations for BMS Internal Roadways**

Roadway / location	2040 PM Peak Hour Traffic Volume (total of both directions)	Estimated Average Daily Traffic (ADT) <sup>1</sup>	Preliminary # of Lanes	Preliminary Functional Classification Recommendation
<u>Dallas Road</u>				
north of Ava Way	1,463	16,300	2-3	Minor Arterial
south of Trowbridge Blvd	3,012	33,500	4-5	Principal Arterial <sup>2</sup>
<u>Ava Way</u>				
east of Dallas Rd	691	7,700	2-3	Major Collector
north of Trowbridge Blvd	394	4,400	2-3	Major Collector
<u>Trowbridge Blvd</u>				
east of Dallas Rd	2,488	27,600	4-5	Principal Arterial <sup>2</sup>
east of Bella Coola Ln	1,713	19,000	5	Principal Arterial <sup>2</sup>
east of Ava Way	1,942	21,600	3	Principal Arterial <sup>2</sup>
east of Unnamed N/S	1,298	14,400	3	Minor Arterial
west of Gage Blvd	1,060	11,800	3	Minor Arterial
<u>Bella Coola Ln</u>				
south of Trowbridge Blvd	748	8,300	2-3	Major Collector
west of Unnamed N/S	542	6,000	2-3	Major Collector
east of Unnamed N/S	744	8,300	2-3	Major Collector
west of Gage Blvd	542	6,000	2-3	Major Collector
<u>Unnamed N/S</u>				
South of Trowbridge Blvd	719	8,000	2-3	Major Collector
South of Bella Coola Ln	318	3,500	2-3	Major Collector
North of Unnamed E/W	247	2,700	2-3	Major Collector
South of Unnamed E/W	302	3,400	2-3	Major Collector
<u>Unnamed E/W</u>				
East of Unnamed N/S	125	1,400	2	Local Road
West of Gage Blvd	111	1,200	2	Local Road
<u>Gage Blvd</u>				
Northeast of Corvina St	1,102	12,200	2-3	Minor Arterial
North of Trowbridge Blvd	1,128	12,500	2-3	Minor Arterial
South of Trowbridge Blvd	433	4,800	2-3	Major Collector
South of Bella Coola Ln	725	8,100	2-3	Major Collector
South of Unnamed E/W	621	6,900	2-3	Major Collector
North of Reata Rd	588	6,500	2-3	Major Collector

1. ADT volumes were estimated from PM peak hour volumes with an applied K-factor of 9%.

2. Recommended for re-consideration as a Principal Arterial based on ADT projection by 2040.

The snip below illustrates a preliminary draft version of the internal roadway network plan for BMS showing primary roadways and alignments within the development area. The preliminary roadway classifications are generally consistent with those identified in **Table 11**. It is anticipated that this information will be reviewed as part of this traffic analysis and may be updated based on discussions with City staff in determining the most appropriate roadway classifications for BMS roads as those future phases develop.



## Planned Non-Motorized Transportation Facilities

Future non-motorized pedestrian and bicycle facilities within the BMS project area are anticipated to be designed to the final adopted LUDR road sections at the time of development approval. Potential non-motorized facilities within the BMS subarea may include bicycle lanes on principal arterials, minor arterials, and minor collectors and sidewalks or pedestrian paths on all new roadways within BMS.

## MITIGATION MEASURES

This section summarizes the measures necessary for Badger Mountain South (BMS) to mitigate anticipated transportation impacts at off-site study intersections with full buildout of the development (year 2040) based on the traffic analysis documented in this updated TIA. The identified mitigation at off-site study intersections was assigned to one of the following categories:

- Mitigation Proposed to Meet LOS Standard
- Future Monitoring Mitigation
- Alternative Mitigation Strategies
- No Mitigation Identified

The specific mitigation measures and strategies at all 26 off-site study intersections are summarized in **Table 12**; descriptions of the specific mitigation strategies are provided after Table 12. **Table 12** also identifies the development phase/year in which the mitigation strategy is anticipated, and provides an estimated pro-rata share of mitigation for the BMS development at some of the intersections based on year 2040 traffic volumes with full buildout of BMS.

The specific mitigation strategy, timing, and the pro-rata share contributions for BMS are anticipated to be confirmed based on discussions with the City of Richland, and potentially other stakeholders (WSDOT, West Richland, and Benton County) as necessary. The final mitigation measures and strategies are anticipated to be established in a new or updated Master Agreement for the BMS development.

**Table 12**  
**Summary of Mitigation Measures at Off-Site Study Intersections**

Study Intersection	Meets LOS standard in 2040?	Mitigation Measure <sup>1</sup>	BMS Phase/Year Triggered <sup>2</sup>	Estimated BMS Pro-Rata Share of Mitigation <sup>3</sup>
<b>Mitigation Proposed to Meet LOS Standard</b>				
1. Dallas Road / I-82 EB Ramps	No	RAB or signal	2025	100%
2. Dallas Road / I-82 WB Ramps	No	RAB or signal	2025	100%
4. Dallas Road / Ava Way	No	RAB or signal	2025	100%
6. Bombing Range Rd / Kennedy Rd	No	RAB or signal	2030	31%
9. Kennedy Rd / Keene Road	No	NB+SB right-turn overlap phases	2030	11%
19. Leslie Road / Reata Road	No	RAB or signal	2030	25%
23. Bermuda Road / Reata Road	No	RAB or signal	2030	38%
24. Gage Blvd / Reata Road	No	RAB or signal	2030	53%
<b>Future Monitoring Mitigation</b>				
12. Duportail Street / Queensgate Drive	No	Monitoring		
18. Leslie Road / Gage Blvd	No	Monitoring		
20. Badger Rd / Clearwater Ave / Leslie Rd	No	Monitoring		
<b>Alternative Mitigation Strategies *</b>				
3. Dallas Road / Trowbridge Blvd	No	RAB	2025	100%
5. Dallas Road / Arena Road		Arena cul-de-sac		43%
8. Kennedy Road / Arena Road		Arena cul-de-sac		29%
16. Gage Blvd/Queensgate Dr/Bermuda Rd		RAB		38%
24. Morningside Pkwy / Reata Road		TIP/Frontage		
25. Gage Blvd / Reata Road		TIP/Frontage		
26. Unnamed N/S / Reata Road		TIP/Frontage		
<b>No Mitigation Identified</b>				
7. Bombing Range Rd / Keene Rd	<p><i>No mitigation identified because intersections meet LOS standard in 2040 with full buildout of BMS</i></p>			
10. Duportail Street / Keene Road				
11. Duportail Street / Kennedy Road				
13. Queensgate Drive / I-182 WB Ramps				
14. Queensgate Drive / I-182 EB Ramps				
15. Keene Rd / Queensgate Drive				
17. Keene Road / Gage Blvd				
21. Badger Road / I-82 WB Ramps				
22. Badger Road / I-82 EB Ramps				

1. RAB = roundabout

2. Based on the anticipated year buildout of the development phase (either 2025, 2030, 2035 or 2040).

3. Estimated pro-rata share based on weekday year 2040 AM and PM peak hour traffic volumes with BMS full buildout.

\* Alternative mitigation strategies at these intersections discussed further below.

*Mitigation Proposed to Meet LOS Standard*

As shown in **Table 12**, mitigation measures (signal, roundabout, or overlap phasing) are proposed at 8 off-site study intersections that are forecast to operate at LOS F (not meeting LOS standards) in 2040 with full buildout of BMS.

**Table 12** also identifies the development phase/year in which the mitigation is anticipated, and provides an estimated pro-rata share of mitigation for the BMS development based on year 2040 traffic volumes with full buildout of BMS. It is anticipated that the BMS development would have full responsibility (100% pro-rata share) for mitigation at the following 3 intersections:

- #1 Dallas Road / I-82 EB Ramps
- #2 Dallas Road / I-82 WB Ramps
- #4 Dallas Road / Ava Way

*Future Monitoring Mitigation*

As shown in **Table 12**, future monitoring is proposed at 3 off-site study intersections that are forecast to operate at LOS F (not meeting LOS standards) in 2040 with full buildout of BMS:

- #12 Duportail Road / Queensgate Drive
- #18 Leslie Road / Gage Blvd
- #20 Badger Road / Clearwater Ave / Leslie Road

All three of these intersections were either recently improved or would require substantial improvements to operate at an acceptable LOS (LOS D or better) in 2040.

*Alternative Mitigation Strategies*

As shown in **Table 12**, alternative mitigation strategies are identified at the following 8 off-site study intersections:

- #3 Dallas Road / Trowbridge Blvd. This intersection is assumed to be a roundabout in the 2040 roadway network. It is anticipated that the BMS development would have full responsibility (100% pro-rata share) for intersection improvements at this intersection.
- #5 Dallas Road / Arena Road. As requested by the City of Richland, Arena Road is assumed to dead-end east of Dallas Road via a new cul-de-sac by 2040. As a result, the Dallas Road / Arena Road intersection would be a three-leg unsignalized intersection with the west leg (Arena Road) stop-controlled and Dallas Road free flow. BMS is estimated to add 480 AM peak hour trips (44.0% of total entering traffic) and 666 PM peak hour trips (41.2% of total entering traffic).
- #8 Kennedy Road / Arena Road. Although this intersection is anticipated to have a side-street movement that operates at LOS F (not meeting LOS standards) in 2040, the delay for the minor side-street southbound left-turn movement improved significantly as a result of the planned project to dead-end Arena Road with a cul-de-sac east of Dallas Road; therefore, additional mitigation was not identified at this intersection. BMS is estimated to add 317 AM peak hour trips (30.8% of total entering traffic) and 437 PM peak hour trips (27.1% of total entering traffic).



- #16 Gage Blvd / Queensgate Drive / Bermuda Road. As requested by the City of Richland, this intersection is assumed to be a roundabout in the 2040 roadway network as part of the Queensgate Drive Extension Project identified in the City of Richland's 2021-2026 TIP. BMS is estimated to add 522 AM peak hour trips (35.5% of total entering traffic) and 701 PM peak hour trips (39.5% of total entering traffic).
- #24 Morningside Pkwy / Reata Road, #25 Gage Blvd / Reata Road, #26 Unnamed N/S Reata Road. Reata Road is assumed to be widened to include a center turn lane before 2040 per Benton County TIP project. The proposed BMS project would dedicate right-of-way to accommodate the planned roadway widening along its Reata Road frontage as its share of mitigation.

No Mitigation Identified

As shown in **Table 12**, no mitigation is identified at 9 off-site study intersections that are expected to operate at acceptable LOS in 2040 with full buildout of BMS.

LOS Analysis for Off-Site Study Intersections Where Mitigation is Identified

Weekday AM and PM peak hour LOS analyses were conducted for each of the mitigation options at the 8 off-site study intersections for which mitigation measures were identified to meet the LOS standard. The LOS results are summarized in **Tables 13 and 14**, respectively. A summary of the channelization assumptions at each intersection with more than one mitigation option is included **Appendix G** and the detailed LOS reports are included in **Appendix I**.

As shown in **Tables 13 and 14**, at the off-site study intersections anticipated to not meet LOS standards in 2040, all identified mitigation measures are expected to result in LOS D or better operations during both the AM and PM peak hours in 2040 with full buildout of the BMS development.

**Table 13**  
**2040 Full Buildout and Mitigation - AM Peak Hour Intersection LOS Summary**

Study Intersection	Mitigation Measures					
	<u>Roundabout</u>		<u>Signal</u>		<u>Overlap Phasing</u>	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (Sec)
1. Dallas Road / I-82 EB Ramps	C	18.0	D	37.5	-	-
2. Dallas Road / I-82 WB Ramps	B	11.3	A	8.7	-	-
3. Dallas Road / Trowbridge Road	-	-	-	-	-	-
4. Dallas Road / Ava Way	A	7.0	B	19.8	-	-
5. Dallas Road / Arena Road	-	-	-	-	-	-
6. Bombing Range Rd / Kennedy Rd	A	6.4	B	19.4	-	-
7. Bombing Range Rd / Keene Rd	-	-	-	-	-	-
8. Kennedy Road / Arena Road	-	-	-	-	-	-
9. Kennedy Rd / Keene Road	-	-	-	-	D	40.0
10. Duportail Street / Keene Road	-	-	-	-	-	-
11. Duportail Street / Kennedy Road	-	-	-	-	-	-
12. Duportail Street / Queensgate Drive	-	-	-	-	-	-
13. Queensgate Drive / I-182 WB Ramps	-	-	-	-	-	-
14. Queensgate Drive / I-182 EB Ramps	-	-	-	-	-	-
15. Keene Rd / Queensgate Drive	-	-	-	-	-	-
16. Gage Blvd / Queensgate Dr / Bermuda Rd	-	-	-	-	-	-
17. Keene Road / Gage Blvd	-	-	-	-	-	-
18. Leslie Road / Gage Blvd	-	-	-	-	-	-
19. Leslie Road / Reata Road	D	29.5	B	19.4	-	-
20. Badger Road / Clearwater Ave / Leslie Rd	-	-	-	-	-	-
21. Badger Road / I-82 WB Ramps	-	-	-	-	-	-
22. Badger Road / I-82 EB Ramps	-	-	-	-	-	-
23. Bermuda Road / Reata Road	B	10.7	B	16.1	-	-
24. Morningside Pkwy / Reata Road	-	-	-	-	-	-
25. Gage Blvd / Reata Road	A	9.6	B	17.1	-	-
26. Unnamed N/S / Reata Road	-	-	-	-	-	-

**Table 14**  
**2040 Full Buildout and Mitigation - PM Peak Hour Intersection LOS Summary**

Study Intersection	Mitigation Options					
	<u>Roundabout</u>		<u>Signal</u>		<u>Overlap Phasing</u>	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (Sec)
1. Dallas Road / I-82 EB Ramps	D	31.6	D	47.7	-	-
2. Dallas Road / I-82 WB Ramps	C	21.8	B	14.5	-	-
3. Dallas Road / Trowbridge Road	-	-	-	-	-	-
4. Dallas Road / Ava Way	C	17.1	C	29.1	-	-
5. Dallas Road / Arena Road	-	-	-	-	-	-
6. Bombing Range Rd / Kennedy Rd	D	33.5	D	51.7	-	-
7. Bombing Range Rd / Keene Rd	-	-	-	-	-	-
8. Kennedy Road / Arena Road	-	-	-	-	-	-
9. Kennedy Rd / Keene Road	-	-	-	-	D	51.4
10. Duportail Street / Keene Road	-	-	-	-	-	-
11. Duportail Street / Kennedy Road	-	-	-	-	-	-
12. Duportail Street / Queensgate Drive	-	-	-	-	-	-
13. Queensgate Drive / I-182 WB Ramps	-	-	-	-	-	-
14. Queensgate Drive / I-182 EB Ramps	-	-	-	-	-	-
15. Keene Rd / Queensgate Drive	-	-	-	-	-	-
16. Gage Blvd / Queensgate Dr / Bermuda Rd	-	-	-	-	-	-
17. Keene Road / Gage Blvd	-	-	-	-	-	-
18. Leslie Road / Gage Blvd	-	-	-	-	-	-
19. Leslie Road / Reata Road	C	15.2	C	24.5	-	-
20. Badger Road / Clearwater Ave / Leslie Rd	-	-	-	-	-	-
21. Badger Road / I-82 WB Ramps	-	-	-	-	-	-
22. Badger Road / I-82 EB Ramps	-	-	-	-	-	-
23. Bermuda Road / Reata Road	B	11.3	B	15.5	-	-
24. Morningside Pkwy / Reata Road	-	-	-	-	-	-
25. Gage Blvd / Reata Road	A	8.4	B	17.5	-	-
26. Unnamed N/S / Reata Road	-	-	-	-	-	-



## Exhibit 8

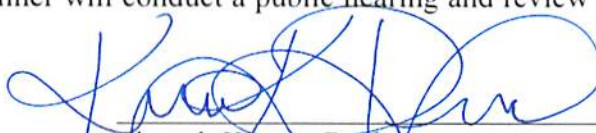
### Public Notice and Affidavits

AFFIDAVIT OF MAILING

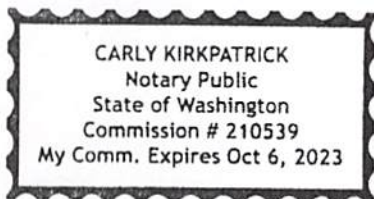
STATE OF WASHINGTON )  
 ) ss.  
COUNTY OF BENTON )

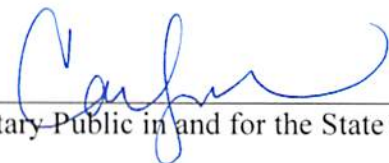
COMES NOW, Kirsten Recker, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning Division of the Development Services Department for the City of Richland.
2. On the 22<sup>nd</sup> day of May, 2023, I mailed a copy of the attached NOTICE OF PUBLIC HEARING (SA2023-102) to the attached list of individuals via regular USPS on the date indicated above. The Richland Hearing Examiner will conduct a public hearing and review of the application on Monday, June 12<sup>th</sup>, 2023.

  
Signed: Kirsten Recker

SIGNED AND SWORN to before me this 22<sup>nd</sup> day of May, 2023 by Kirsten Recker.



  
Notary Public in and for the State of Washington,

  
Print Name

Residing at Benton County

My appointment expires: Oct. 6, 2023



1	BAUMGARTNER CRAIG S & AMANDA R	2806 KARLEE DRIVE	WA	RICHLAND	99352
2	HOOVER ANDREW J & KATHERINE M	2852 KARLEE DR	WA	RICHLAND	99352
3	SILER JOSHUA M & HOLLY M	2864 KARLEE DRIVE	WA	RICHLAND	99352
4	BECK TRAVIS H	2878 KARLEE DR	WA	RICHLAND	99352
5	CONLEY STEVEN R & CARRIE L	2890 KARLEE DR	WA	RICHLAND	99352
6	ROSAS JEREMY H & YESICA	2894 KARLEE DR	WA	RICHLAND	99352
7	TEJEDA NICANOR & BRITTNEY V	2914 KARLEE DR	WA	RICHLAND	99352
8	SCHAEFER LOUIS A & SHELLAGH K	2926 KARLEE DR	WA	RICHLAND	99352
9	CAMPBELL BRANDON PAUL & KELLI ANNE	2938 KARLEE DR	WA	RICHLAND	99352
10	BENAVIDES NICHOLAS	2950 KARLEE DR	WA	RICHLAND	99352
11	ECCLESTONE BRUCE R & JANIE	2962 KARLEE DR	WA	RICHLAND	99352
12	WELLS DONNIE & SUSAN	2974 KARLEE DR	WA	RICHLAND	99352
13	MCCABE COLLIN & KAYLA	2986 KARLEE DR	WA	RICHLAND	99352
14	HUDSON SHELLY L & LIMBOCKER ROBERT C	2998 KARLEE DR	WA	RICHLAND	99352
15	SLOCUM STEPHEN E & DEBRA L	2997 KARLEE DR	WA	RICHLAND	99352
16	NIPPER JAMES M & MARY M	2985 KARLEE DR	WA	RICHLAND	99352
17	KNIGGE RICHARD A & JESSICA A	2973 KARLEE DR	WA	RICHLAND	99352
18	CORTEZ CARLOS & AMANDA D	2961 KARLEE DR	WA	RICHLAND	99352
19	LIEBING STEVE C & SHAREE N	2949 KARLEE DR	WA	RICHLAND	99352
20	SISTRUNK JONATHAN & JILL	2937 KARLEE DR	WA	RICHLAND	99352
21	RAINSBERRY SCOTT N & NICOLE L	2925 KARLEE DR	WA	RICHLAND	99352- 9307
22	BURROUGHS JEFF L & AMBER L	2913 KARLEE DR	WA	RICHLAND	99352
23	PRIMUS KENNETH J & MELANIE	2895 KARLEE DR	WA	RICHLAND	99352
24	HEAD JOSHUA & ANGIE	2883 KARLEE DR	WA	RICHLAND	99352
25	LARSON SCOTT C & CYNTHIA A	6612 COMISKEY DR	WA	PASCO	99301
26	KELLY TIMOTHY G & KARI M	2867 KARLEE DR	WA	RICHLAND	99352
27	CASTLE MICKY N & NICOLE M	2859 KARLEE DR	WA	RICHLAND	99352
28	HOPWOOD JOSHUA & JACQUELINE	2147 KARLEE DR	WA	RICHLAND	99352
29	HOPWOOD JOSHUA	2847 KARLEE DR	WA	RICHLAND	99352
30	WARF DONALD & MARTHA CHAVEZ	2839 KARLEE DR	WA	RICHLAND	99352
31	BYERS JON RICHARD & MUIR LISA EILEEN	2831 KARLEE DR	WA	RICHLAND	99352
32	LEE STEVEN A & WANDA F	2817 KARLEE DR	WA	RICHLAND	99352
33	HALL JESSE & HAMADA LAUREN	2561 ALLISON WAY	WA	RICHLAND	99352
34	MURSTIG DEAN E & MARTHA E	2603 ALLISON WAY	WA	RICHLAND	99352

AFFIDAVIT OF MAILING - 2  
Address list attached.

1	ROWLEY STEVEN P & KATHERINE E	2625 ALLISON WAY	WA	RICHLAND	99352
		3011 MORNINGSIDE			
2	ZYLMAN ROBERT A & KAREN M	PKWY	WA	RICHLAND	99352
	MCLEMORE BRYAN R & ASHLEY B	2689 ALLISON WAY	WA	RICHLAND	99352
		2853 SUNSHINE			
3	HOFSTAD KEN & REENTS TERESA	RIDGE ROAD	WA	RICHLAND	99352
4	BORT ANTHONY B & STACY D	PO BOX 5635	WA	WEST RICHLAND	99353
		12513 DUBOIS AVE			98498-
	NOR AM INVESTMENT LLC	SW	WA	LAKEWOOD	5242
5	TILLENBURG ROGER & ERIN M	86503 E REATA RD	WA	KENNEWICK	99338
	BADGER MOUNTAIN IRRIG DIST	87525 E REATA RD	WA	KENNEWICK	99338
6	GERBER LISA JILL	88817 E REATA ROAD	WA	KENNEWICK	99338
					99336-
7	PUBLIC UTILITY DISTRICT #1	2721 W 10TH AVE	WA	KENNEWICK	4813
					99336-
8	KENNEWICK SCHOOL DISTRICT	1000 W 4TH AVE	WA	KENNEWICK	5533
	DANNA MARK A & JODI L	86105 REATA RD	WA	KENNEWICK	99338
9		85604 BADGER VIEW			
	GENTRY BENJAMIN L & SHARON C	DR	WA	KENNEWICK	99338
10	MANSFIELD STEVE E	82647 E REATA RD	WA	KENNEWICK	99338
	HAREN JAMIE & ROY JOSH	82943 E REATA RD	WA	KENNEWICK	99338
11	WARD JOHN F & GAIL H	83239 E REATA RD	WA	KENNEWICK	99338
	LILLY TERRY	83535 E REATA RD	WA	KENNEWICK	99338
12	MYERS LOREN & KRISTINE	83931 E REATA RD	WA	KENNEWICK	99338
	GAITHER PAUL J & KARLA J	84227 E REATA ROAD	WA	KENNEWICK	99338
13	MORRISON DAVID STUART &				
	MAYUGA HENRIETTA LORENA	6618 W 20TH AVE	WA	KENNEWICK	99338
14	HUMMEL JAMES & SHERYL	84719 E REATA RD	WA	KENNEWICK	99338
	MARSH CAROLYN D	85126 E JENNA LN	WA	KENNEWICK	99338
15	FLOHR DOUGLAS N & JANET R	85115 E REATA RD	WA	KENNEWICK	99338
16	BENDER CODY W & CHARMAINE J	1525 S IRVING PL	WA	KENNEWICK	99338
	CANDY MOUNTAIN LLC	PO BOX 1307	WA	GIG HARBOR	98335
17		12513 DUBOIS AVE			98498-
	NOR AM INVESTMENT LLC	SW	WA	LAKEWOOD	5242
18		625 SWIFT BLVD. MS-			
	CITY OF RICHLAND	09	WA	RICHLAND	99352
19					99336-
	KENNEWICK SCHOOL DISTRICT	1000 W 4TH AVE	WA	KENNEWICK	5533
20		12513 DUBOIS AVE			98498-
	NOR AM INVESTMENT LLC	SW	WA	LAKEWOOD	5242
21	BADGER COMMUNITIES LLC	PO BOX 1307	WA	GIG HARBOR	98335

AFFIDAVIT OF MAILING - 3  
Address list attached.



## **CITY OF RICHLAND NOTICE OF APPLICATION, PUBLIC HEARING (SA2023-102)**

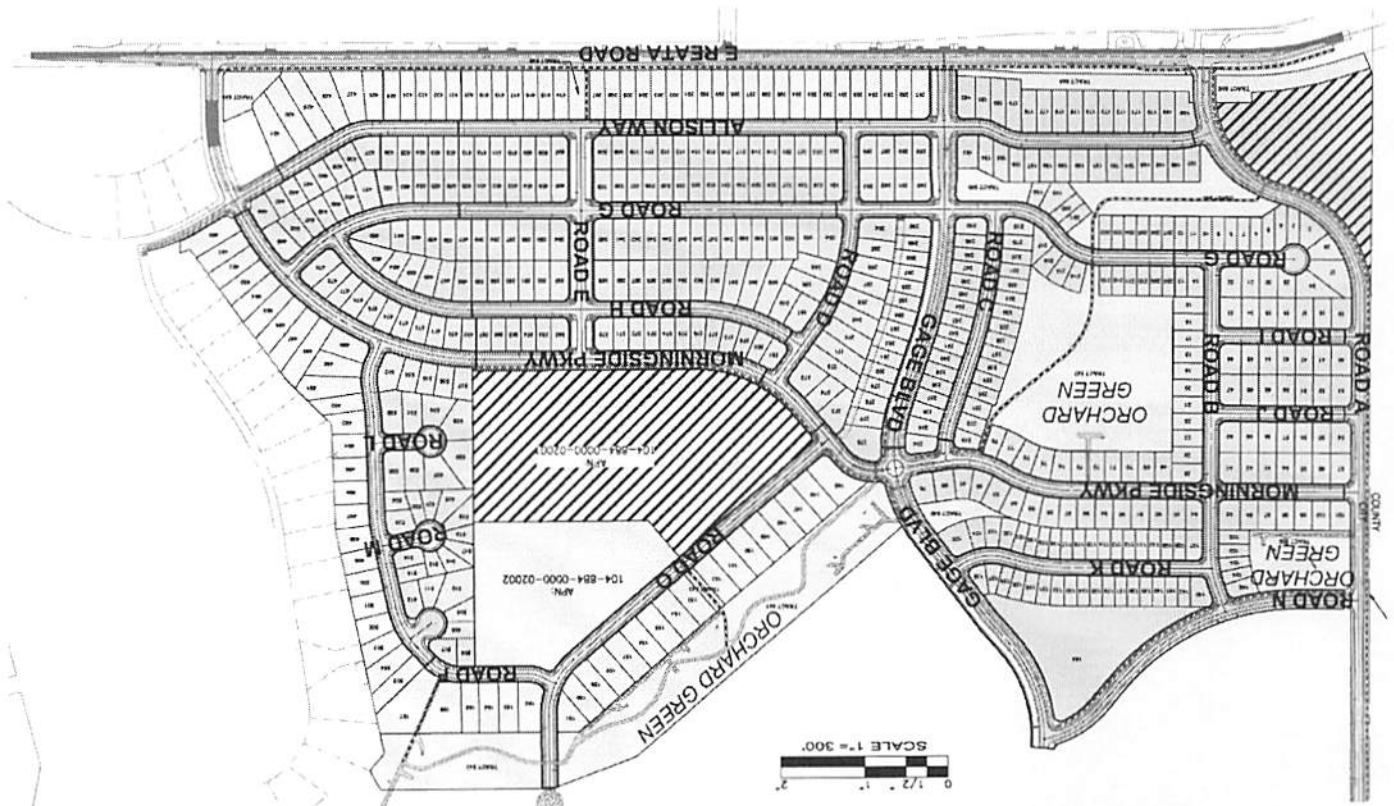
Notice is hereby given that Darrin Sweeney, on behalf of Badger Communities, LLC has filed preliminary plat major amendment to subdivide a 174-acre site into 535 single-family residential lots, 2 multi-family residential lots, and 12 public-amenity tracts to revise an earlier-approved preliminary plat called BMS South Orchard (S2021-104). The South Orchard site spreads across four (4) parcels (APN 1-04882000006000, 1-04882000003000, 1-04882000004000, 1-04882000005000) north of Reata Road and west of Karlee Drive.

The Richland Hearings Examiner will conduct a virtual public hearing and review of the application at 6:00 p.m., Monday, June 12<sup>th</sup>, 2023. All interested parties are invited to participate in the virtual public hearing by visiting the City of Richland website ([www.ci.richland.wa.us](http://www.ci.richland.wa.us)).

**Environmental Review:** A Supplemental Final Environmental Impact Statement was completed for this site at the time the City adopted the Badger Mountain South Subarea Plan in 2010. The property was annexed at that time and the City adopted a Planned Action Ordinance (19.50 RMC). The effect of the Planned Action Ordinance is that standard SEPA review is not required, provided that any project proposed within the boundaries of the master planned community is consistent with the master plan and with the mitigation measures identified in the adopted SEPA documents. Projects determined to be consistent with the subarea plan, the master agreement between the City and Nor Am Investment and the mitigation measures enumerated in the adopted SEPA documents are issued a Planned Action Consistency Determination (PACD).

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Matthew Howie, Senior Planner, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may emailed to [mhowie@ci.richland.wa.us](mailto:mhowie@ci.richland.wa.us). The deadline for written comments is 5:00 p.m., June 12<sup>th</sup>. However, written comments must be received no later than 5:00 p.m. on Monday, June 5<sup>th</sup>, 2022 to be incorporated into the staff report. Comments received after that time will be entered into the record during the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 23 Zoning, Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above referenced applications are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.



AFFIDAVIT OF POSTING

STATE OF WASHINGTON )  
 ) ss.  
COUNTY OF BENTON )

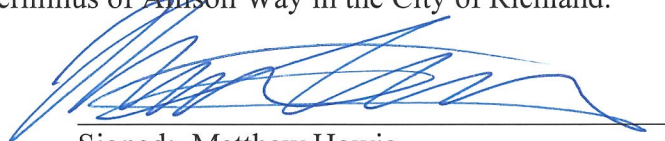
COMES NOW, **Matthew Howie**, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning Division of the Development Services Department for the City of Richland.

2. On the 22<sup>nd</sup> day of May, 2023, I posted the attached NOTICE OF PUBLIC HEARING, File Number SA2023-102 (Major Preliminary Plat Amendment) in the following location:

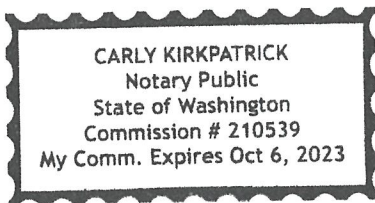
Directly across from and north of 82647 E Reata Rd, Kennewick, WA 99338.

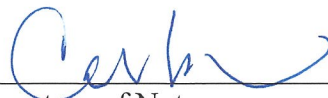
At the current western terminus of Allison Way in the City of Richland.



Signed: Matthew Howie

SIGNED AND SWORN to before me this 22<sup>nd</sup> day of May, 2023, by Matthew Howie.



  
Signature of Notary

Carly Kirkpatrick  
Printed Name

Notary Public in and for the State of Washington,

Residing in Benton County

My appointment expires: Oct. 6, 2023





Beaufort Gazette  
Belleville News-Democrat  
Bellingham Herald  
Bradenton Herald  
Centre Daily Times  
Charlotte Observer  
Columbus Ledger-Enquirer  
Fresno Bee

The Herald - Rock Hill  
Herald Sun - Durham  
Idaho Statesman  
Island Packet  
Kansas City Star  
Lexington Herald-Leader  
Merced Sun-Star  
Miami Herald

el Nuevo Herald - Miami  
Modesto Bee  
Raleigh News & Observer  
The Olympian  
Sacramento Bee  
Fort Worth Star-Telegram  
The State - Columbia  
Sun Herald - Biloxi

Sun News - Myrtle Beach  
The News Tribune Tacoma  
The Telegraph - Macon  
San Luis Obispo Tribune  
Tri-City Herald  
Wichita Eagle

## AFFIDAVIT OF PUBLICATION

Account #	Order Number	Identification	Order PO	Amount	Cols	Depth
36823	424902	Print Legal Ad-IPL01241230 - IPL0124123	HE PHN SA 2023-102	\$232.49	2	42 L

**Attention:** Jennifer Anderson

CITY OF RICHLAND/LEGALS  
625 SWIFT BLVD. MS-05  
RICHLAND, WA 99352

purchasing@ci.richland.wa.us

### CITY OF RICHLAND NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS

Notice is hereby given that Darrin Sweeney, on behalf of Badger Communities, LLC, has filed a preliminary plat major amendment to subdivide a 174-acre site into 535 single-family residential lots, 2 multi-family residential lots, and 12 public-amenity tracts to revise an earlier-approved preliminary plat called BMS South Orchard (S2021-104). The South Orchard site spreads across four (4) parcels (APN 1-04882000006000, 1-04882000003000, 1-04882000004000, 1-04882000005000) north of Reata Road and west of Karlee Drive.

The Richland Hearing Examiner will conduct a public hearing and review of the application on **Monday, June 12, 2023 at 6:00 p.m.** in the Richland City Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing or visit the City of Richland's website at [www.ci.richland.wa.us](http://www.ci.richland.wa.us) and join via Zoom.

**Environmental Review:** A Supplemental Final Environmental Impact Statement was completed for this site at the time the City adopted the Badger Mountain South Subarea Plan in 2010. The property was annexed at that time and the City adopted a Planned Action Ordinance (19.50 RMC). The effect of the Planned Action Ordinance is that standard SEPA review is not required, provided that any project proposed within the boundaries of the master-planned community is consistent with the master plan and with the mitigation measures identified in the adopted SEPA documents. Projects determined to be consistent with the subarea plan, the master agreement between the City and Nor Am Investment, LLC and the mitigation measures enumerated in the adopted SEPA documents are issued a Planned Action Consistency Determination (PACD).

Any person desiring to express their views or be notified of any decisions pertaining to this application should notify Matthew Howie, Senior Planner, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may be emailed to [mhowie@ci.richland.wa.us](mailto:mhowie@ci.richland.wa.us). The deadline for written comments is June 12, 2023 at 5:00 p.m. However, written comments must be received no later than 5:00 p.m. on Monday, June 5, 2023, to be incorporated into the staff report. Comments received after that time will be entered into the record during the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 23 Zoning, Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above-referenced applications are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above-referenced address with questions related to the available appeal process.

Date Published: Sunday, May 28, 2023  
IPL0124123  
May 28 2023

COUNTY OF BENTON)

SS

STATE OF WASHINGTON)

Stefani Beard, being duly sworn, deposes and says, I am the Legals Clerk of The Tri-City Herald, a daily newspaper. That said newspaper is a local newspaper and has been approved as a legal newspaper by order of the superior court in the county in which it is published and it is now and has been for more than six months prior to the date of the publications hereinafter referred to, published continually as a daily newspaper in Benton County, Washington. That the attached is a true copy as it was printed in the regular and entire issue of the Tri-City Herald and not in a supplement thereof, ran 1 time (s) commencing on 05/28/2023, and ending on 05/28/2023 and that said newspaper was regularly distributed to its subscribers during all of this period.

1 insertion(s) published on:

05/28/23

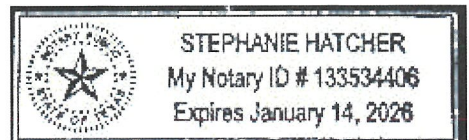
*Stefani Beard*

(Signature of Legals Clerk)

Sworn to and subscribed before me this 30th day of May in the year of 2023

*Stephanie Hatcher*

Notary Public in and for the state of Texas, residing in Dallas County



Extra charge for lost or duplicate affidavits.  
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## Exhibit 9

# Agency Comments

**From:** [JoDee Peyton](#)  
**To:** [Howie, Matthew](#)  
**Cc:** [Cristian Gonzalez](#); [Sean Domagalski](#)  
**Subject:** SA2023-102 South Orchard Plat, Major Amendment  
**Date:** Tuesday, May 23, 2023 8:47:49 AM  
**Attachments:** [image001.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)

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**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

This office has reviewed the above referenced proposal and has no objections provided: Municipal services, such as sewer and water, are provided to the proposed lots.  
Please feel free to give me a call with any questions or concerns. Thank you.

Please feel free to give me a call with any questions or concerns. Thank you.

**JoDee A. Peyton, EHS III**

Supervisor

Land Use, Sewage and Water Section

**Benton-Franklin Health District**

7102 W. Okanogan Place

Kennewick, WA 99336

p: 509.460.4318

Pronouns: she/her

[www.bfhd.wa.gov](http://www.bfhd.wa.gov) [jodeer@bfhd.wa.gov](mailto:jodeer@bfhd.wa.gov)



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**From:** [Brett Flippo](#)  
**To:** [Howie, Matthew](#)  
**Subject:** RE: SA2023-102 South Orchard Plat, Major Amendment  
**Date:** Wednesday, May 24, 2023 2:36:09 PM  
**Attachments:** [image001.png](#)  
[20230524-SA2023-102-Comment Letter.pdf](#)

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**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

Mr. Howie,

Please see the attached comment letter for the subject application.

Thanks,

**Brett Flippo, PLS, CFedS**  
Kennewick Irrigation District

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**From:** Howie, Matthew <mhowie@ci.richland.wa.us>  
**Sent:** Monday, May 22, 2023 1:52 PM  
**To:** Acevedo, Mizael <macevedo@CI.RICHLAND.WA.US>; Ashley Garza <agarza3605@gmail.com>; Badger Mountain Irrigation District <bmidmanager@badgermountainirrigation.com>; Benton County - Segregations <Segregations@co.benton.wa.us>; Bill Barlow <bbarlow@bft.org>; Orr, Bruce <borr@CI.RICHLAND.WA.US>; Buechler, Ken <KBuechler@CI.RICHLAND.WA.US>; Clark Posey <clark.posey@co.benton.wa.us>; Hamilton, Craig <C.Hamilton@bces.wa.gov>; DAlessandro, Carlo <cdalessandro@CI.RICHLAND.WA.US>; Darrick Dietrich <darrick@basindisposal.com>; David Billetdeaux <david@portofbenton.com>; Davis, Deanna <d.davis@bces.wa.gov>; Rodgers, Deborah (CONTR) - TERR-TRI CITIES RMHQ <dxrodgers@bpa.gov>; Deskins, John <jdeskins@CI.RICHLAND.WA.US>; 'Doan, Charles' <cdoan@ci.richland.wa.us>; gis@co.benton.wa.us; Hill, Kelly <khill@CI.RICHLAND.WA.US>; Jason McShane <JMcShane@kid.org>; Joseph Cottrell <jecottrell@bpa.gov>; Junior Campos <junior.campos@charter.com>; Katherine Cichy <katherine.cichy@ziply.com>; Kelly Cooper <kelly.cooper@doh.wa.gov>; Kevin Knodel <kevin.knodel@rsd.edu>; Kevin Sliger <KSliger@bft.org>; Development <development@kid.org>; Matthew Berglund <MBerglund@kid.org>; M. Deklyne <mjdeklyne@bpa.gov>; MAP <map@bces.wa.gov>; Mattheus, Pamela <pmattheus@CI.RICHLAND.WA.US>; Michael Tovey <michael.tovey@ziply.com>; Paul Gonseth <gonsetp@wsdot.wa.gov>; Reathaford, Jason <JReathaford@CI.RICHLAND.WA.US>; Richard Krasner <richard.krasner@rsd.edu>; USPS Richland Postmaster <99352RichlandWA-Postmaster@usps.gov>; Rob Rodger <rob.rodger@bentoncleanair.org>; Robin Priddy <robin.priddy@bentoncleanair.org>; Schiessl, Joe <JSchiessl@CI.RICHLAND.WA.US>; Seth Defoe <SDefoe@kid.org>; South Central Region Planning <scplanning@wsdot.wa.gov>; Westphal, Nichole <nwestphal@ci.richland.wa.us>; Whittier, John <jwhittier@CI.RICHLAND.WA.US>; Sean Domagalski <seand@bfhd.wa.gov>; Hester, Laura <lhester@CI.RICHLAND.WA.US>  
**Subject:** SA2023-102 South Orchard Plat, Major Amendment

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you

recognize the sender and know the content is safe.

Hello all,

Please see the attached Referral Packet for a Major Amendment to the South Orchard preliminary plat to subdivide 147.37 acres into 537 lots and 12 tracts. The original plat called S2021-104 BMS South Orchard only proposed 475 units on 194.54 acres. The referral packet contains new information from this application as well as the original Hearing Examiner Decision on S2021-104.

Comments are due by Monday, June 5<sup>th</sup>, at 5pm.



**Matthew Howie**

Senior Planner

625 Swift Blvd., MS-35 | Richland, WA 99352

(509) 942-7587

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2015 South Ely Street  
Kennewick, WA 99337  
Customer Service 509-586-9111  
Business 509-586-6012  
FAX 509-586-7663  
[www.kid.org](http://www.kid.org)

May 24, 2023

Matthew Howie, Senior Planner  
**City of Richland – Development Services**  
625 Swift Blvd., MS-35  
Richland, WA 99352

Subject: SA2023-102 South Orchard Major Plat Amendment - Review Comments

Dear Mr. Howie:

This letter provides Kennewick Irrigation District (KID) review comments for the South Orchard Major Plat Amendment (SA2023-102). The proposed Plat Amendment is comprised of Assessor Parcel Numbers 104882000003000 through 104882000006000, and is located in Section 4, Township 8 North, Range 28 East, W.M., Richland, Benton County, Washington. The subject property is located outside of KID's boundaries.

Due to the project's location in relation to KID's Badger East Drain, KID would like to inform the City of the following information regarding the effect of the proposed Plat Amendment upon the structural integrity, including lateral support, of KID's facilities, other risk exposures, and the safety of the public and irrigation district, and related conditions of approval that KID deems to be necessary as a result:

- 1) *Stormwater systems for the project should be designed to retain on-site, at minimum, a 100-year storm event.*

If you have any questions regarding these comments, please contact me at the address/phone number listed above.

Sincerely,

Brett Flippo, PLS, CFedS  
Professional Land Surveyor

**CITY OF RICHLAND  
PUBLIC WORKS ENGINEERING  
DEVELOPMENT COMMENTS**

DATE: June 5, 2023

TO: MATT HOWIE, SENIOR PLANNER

PLAT REVIEW BY: JASON REATHAFORD, ENGINEERING TECH 4  
JOHN DESKINS, TRAFFIC ENGINEER  
CARLO D'ALLESANDRO, TRANSPORTATION AND DEVELOPMENT  
MANAGER  
PETE ROGALSKY, PUBLIC WORKS DIRECTOR

PROJECT NAME: SOUTH ORCHARD PRE-PLAT (MAJOR AMENDMENT) S2023-102

PROJECT LOCATION: BADGER MOUNTAIN SOUTH COMMUNITY, ADJACENT TO REATA RIDGE  
AND NORTH OF REATA ROAD

The Public Works Engineering Division has reviewed the amended preliminary plat received in this office on May 22, 2023 for the above referenced property and has the following conditions.

**Pre-Plat Specific Conditions**

1. The following street names have previously been approved for this preliminary plat, and should be reflected on the submitted pre-plat amendment:
  - "Road A" = Southgate Way
  - "Road B" = Tarragon Ave.
  - "Road F" = Sumac Ave.
  - "Road G" = Nuthatch St.
  - "Road I" = Scout St.
  - "Road J" = Boxberger St.
  - "Road K" = Stardust St.
  - "Road N" = Grapeview St.
  - "Road O" = Savanna St.
  - Proposed road names for Roads "L" and "M" need to be submitted for review.
2. If any of the tracts have the potential to one day become building lots, utility stubs should be provided to them to avoid the need to cut new streets.
3. Any future storm drainage tracts will be dedicated to the city for ownership. The "Tract Note" on sheet 5 of the pre-plat should be amended to include this.

**General Conditions:**

4. All final, approved plans for public improvements shall be submitted prior to pre-con on a 24" x 36" hardcopy format and also electronically. Addendums are not allowed, all information shall be supplied in full size (and electronic) format. When construction of the public infrastructure has been substantially completed, the applicant shall provide paper and electronic record drawings in accordance with the City's "Record Drawing Requirements". The electronic record drawings shall be submitted in an AutoCAD format compatible with the City's CAD software. The final record drawings shall be submitted and approved by the City before the final punchlist inspection will be performed. All final punchlist items shall be completed or financially guaranteed prior to final plat.

5. A copy of the construction drawings shall be submitted for review to the appropriate jurisdictions by the developer and his engineer. All required comments / conditions from all appropriate reviewing jurisdictions (e.g.: Benton County, any appropriate irrigation districts, other utilities, etc.) shall be incorporated into one comprehensive set of drawings and resubmitted (if necessary) for final permit review and issuance. Any and all necessary permits that may be required by jurisdictional entities outside of the City of Richland shall be the responsibility of the developer to obtain.
6. Any work within the public right-of-way or easements or involving public infrastructure will require the applicant to obtain a right-of-way construction permit prior to beginning work, per RMC Chapter 12.08. The applicant shall pay a plan review fee based on a cost-per-sheet of engineering infrastructure plans. This public infrastructure plan review fee shall apply each time a project is submitted for review. Please visit the published fee schedule on the City's webpage to find the current per-sheet fee. A permit fee in the amount equal to 3% of the construction costs of the work within the right-of-way or easement will be collected at the time the construction permit is issued.
7. Public utility infrastructure located on private property will require recording of a City standard form easement prior to final acceptance of the infrastructure. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final platting. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City.
8. A pre-construction conference will be required prior to the start of any work within the public right-of-way or easement. Contact the Public Works Engineering Division at 942-7500 to schedule a pre-construction conference.
9. The contractor and developer shall be responsible for any and all public infrastructure construction deficiencies for a period of one year from the date of the letter of acceptance by the City of Richland.
10. All plan sheets involving construction of public infrastructure shall have the stamp of a current Washington State licensed professional engineer.
11. A copy of the preliminary plat shall be supplied to the Post Office and all locations of future mailbox clusters approved prior to installation or final platting.

**Design Standards:**

12. Public improvement design shall follow the following general format:
  - A. All materials and workmanship shall be in conformance with the latest revision of the City of Richland Standard Specifications and Details, Public Infrastructure Design Guidelines and the current edition of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction. Please confirm that you have the latest set of standard specs and details by visiting the City's web page.
  - B. Fire hydrant location shall be reviewed and approved by the City Fire Marshal.
  - C. All utilities shall be extended to the adjacent property (properties) at the time of construction.
  - D. The minimum centerline finish grade shall be no less than 0.30% and the maximum centerline finish grade shall be no more than 10.0% for local streets. 12% can be allowed for local streets for short distances.
  - E. The minimum centerline radius for local streets shall be 100-feet.
  - F. Final design of the public improvements shall be approved at the time of the City's issuance of a Right-of-way Construction Permit for the proposed construction.
  - G. All public improvements shall comply with the State of Washington and City of Richland requirements, standards and codes.

13. If the City Fire Marshal requires a secondary emergency vehicle access, it shall be included in the construction plan set and be designed to the following standards:
- A. 2-inches compacted gravel, minimum (temp. SEVA only).
  - B. 2% cross-slope, maximum.
  - C. 5% slope, maximum. Any access road steeper than 5% shall be paved or be approved by the Fire Marshal.
  - D. Be 20-feet in width.
  - E. Have radii that are accommodating with those needed for City Fire apparatus.

Secondary emergency vehicles accesses (SEVA's) shall be 20-feet wide, as noted. Longer secondary accesses can be built to 12-feet wide with the approval of the City of Richland Fire Marshal, however turn-outs are required at a spacing acceptable to the Fire Dept. Temporary SEVA's shall be constructed with 2-inches of compacted gravel, at a minimum. Permanent SEVA's shall be paved with 2-inches of asphalt over 4-inches of gravel, at a minimum.

14. SURVEY MONUMENT DESTRUCTION:

All permanent survey monuments existing on the project site shall be protected. If any monuments are destroyed by the proposed construction the applicant shall retain a professional land surveyor to replace the monuments and file a copy of the record survey with the City.

- A. No survey monument shall be removed or destroyed (*the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible*) before a permit is obtained from the Department of Natural Resources (DNR). (WAC 332-120-030(2) and RCW 58.09.130).
- B. Any person, corporation, association, department, or subdivision of the state, county or municipality responsible for an activity that may cause a survey monument to be removed or destroyed shall be responsible for ensuring that the original survey point is perpetuated. (WAC 332-120-030(2)).
- C. Survey monuments are those monuments marking local control points, geodetic control points, and land boundary survey corners. (WAC 332-120-030(3)).

When a monument must be removed during an activity that might disturb or destroy it, a licensed Engineer or Land Surveyor must complete, sign, seal and file a permit with the DNR. It shall be the responsibility of the designing Engineer to identify the affected monuments on the project plans and include a construction note directing them to the DNR permit.

**Traffic & Streets:**

15. The South Orchard preliminary plat is subject to the City's traffic impact fee program (RMC 12.03). The program includes street and intersection improvements sufficient to mitigate the off-site impacts of this project. The developer of this proposed project may receive credit for construction of the improvements listed in RMC 12.03.
16. The developer provided a Badger Mountain South Traffic Impact Analysis dated February 16, 2022 as required in Exhibit B, Section 5.3 of the Master Development Agreement. The City has accepted the analysis with City proposed changes and transmitted such to the developer. The developer has 30 days upon receipt to contest the proposed changes. If no rebuttal from the developer is received, the City considers the requirements in Exhibit B, Section 5.3 of the Master Development Agreement satisfied for this plat. Final plat approval will not be granted for the first phase of this project until the Badger Mountain South Traffic Impact Analysis is accepted by the Public Works Department.
17. This project will create impacts that shall be mitigated with the following improvements:

- A. The Gage Blvd./Reata Road intersection improvements shall include the construction of a roundabout designed for the 2040 anticipated full build-out traffic volumes. This intersection should be completed with the phase of construction that connects Gage Boulevard to Reata Road.
  - B. The Gage Blvd./Morningside Parkway intersection improvements shall include a roundabout or mini-roundabout to account for both on-site and planned off-site future peak traffic volumes related to development traffic from the west. These intersection improvements shall be completed along with the phase that constructs the Gage/Morningside intersection.
  - C. The Road A ("Southgate Way")/Reata Road intersection improvements shall include a westbound right turn lane from Reata onto Road A, and a southbound right turn lane from Road A onto Reata. These intersection improvements shall be completed along with the phase that constructs the Road A/Reata Road intersection.
  - D. The Morningside Parkway/Reata Road intersection improvements shall include a westbound right turn lane from Reata onto Morningside, an eastbound left turn lane from Reata onto Morningside, and a southbound right turn lane from Morningside onto Reata. These intersection improvements shall be completed along with the phase that completes the Morningside Parkway corridor.
  - E. Allison Way and Morningside Parkway shall have frontage improvements installed on these existing roadways beginning from Lot 431, proceeding around the corner to the intersection with Reata Road. The east side of Morningside Parkway shall also have frontage improvements installed from Reata Road to the SE corner of the intersection. Frontage improvements shall consist of curb & gutter, sidewalk (or separated pedestrian pathway), additional paving as needed, storm drainage facilities, and street lighting. Pedestrian connectivity is needed from the South Orchard plat to Reata Road.
18. The Gage Blvd./Road N ("Grapeview St.") intersection is anticipated as needing a roundabout when future development continues the extension of Gage Blvd. to the north. Adequate right-of-way shall be provided at this intersection for the anticipated roundabout.
  19. The developer shall conduct a preliminary design of the horizontal and vertical alignment of Gage Blvd. and Road A ("Southgate Way") to a point at least 500-feet offsite to the north, or to its next northerly intersection, whichever is further, to confirm the most appropriate alignment. These designs shall be completed concurrent with phase 1.
  20. Gage Blvd., Road A ("Southgate Way") and Road N ("Grapeview St.") will be classified as "Major Collectors". On-street parking and driveway accesses for single family lots will not be permitted onto Major Collector streets. Morningside Parkway will be classified as a Minor Collector.
  21. A note will be included on the face of the final plat stating that no driveways will be allowed directly onto Reata Road with the exception of Lot 1. Proposed driveways from Lot 1 onto Reata Road will need to be approved by the City of Richland Traffic Engineer.
  22. Lots fronting on Gage Blvd. shall take access from a rear alley easement. Single family residential driveway access to Gage Blvd. will not be permitted.
  23. The City anticipates an update to the LUDR in the near future that will revise the standard street cross sections throughout Badger Mountain South. The developer is requested to consult with Public Works regarding the anticipated cross section changes and to utilize them in anticipation of the LUDR update being completed. Alternatively, this project shall utilize street cross section designs in the LUDR as it exists at the time of infrastructure permitting.
  24. Benton County has transferred the Reata Road right of way adjacent to the South Orchard plat to the City's jurisdiction. The intersection designs and Reata Road widening shall be reviewed and approved by the City.



25. Traffic calming measures may be required, as approved by the Traffic Engineer.
26. The entire road section of Morningside Parkway shall be constructed full-width when the phase that constructs it adjacent to the vacant parcel is developed ("APN 1-0488-400-0002-001"). Sidewalks and street lights can be installed when that vacant parcel is developed.
27. A ten-foot public utility easement adjacent to the Reata Road frontage shall be provided on the face of the final plat.
28. Sidewalks shall be installed along all public right-of-way frontages that building lots do not front on during construction of those phases (e.g., storm drainage ponds, parks, HOA tracts, etc.).
29. The developer and his engineer shall demonstrate on the construction plans that all future driveways, sidewalks and pedestrian ramps will meet City and ADA requirements, and also provide at least 5-feet of separation between driveway and/or pedestrian ramp transitions.
30. Pedestrian ramps shall be designed to current City standard details and A.D.A. standards. Adequate right-of-way shall be provided at corners to allow for at least 1-foot of ROW behind the ped. ramp landing. Crosswalks between pedestrian ramps shall be designed to City standards. Crosswalks at stop-controlled intersections shall have cross-slopes less than 2%. Crosswalks crossing thru-streets shall have cross-slopes less than 5%. The road profile shall be designed to accommodate this.
31. The vision-clearance triangle shall be shown on all corner lots (including access easements that serve multiple homes) on both the construction plans and the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in or within 500-feet of a curve, it will have to be evaluated per AASHTO guidelines. The assumed speeds for sight triangle evaluation are 35 mph for Major Collectors, 30 mph for Minor Collectors and 25 mph for local streets. This information shall be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
32. All private roads (alleys) shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements.
33. The proposed "alley" road section shall be a private access which is for the use and benefit of the homeowners that abut it, and are to be maintained by the adjacent property owners and/or the HOA. The City of Richland accepts no maintenance responsibility for these rear alley easements.
34. All intersections of private shared driveways and alleys with City streets shall be standard commercial driveway drops constructed to City standards.
35. Street signs indicating any restricted parking areas shall be installed prior to final platting at the developer's expense. The restricted parking areas shall be indicated on the construction plans and the final plat. All signage will be installed by the developer prior to final platting.
36. All roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements. Homes whose sole access is the proposed "rear alley" road section may have to place their garbage cans at locations acceptable to City solid waste collection vehicles.
37. If the project is to be constructed in phases, all dead-end streets longer than 150-feet that will be continued later need to have temporary turnarounds built at the end of them. If the temporary turnaround is not located within the final plat an easement with a 50-foot radius will be required.

**Domestic Water:**

38. Any grading operations that take place near or over the top of the existing domestic water main shall ensure that adequate cover remains over the water main so as to protect it from breakage or freezing. It shall be the responsibility of the developer to re-install any water mains that have too little (or too much) cover over them as a result of grading operations, or that will result in this water main being in a building lot. This water main needs to be within the roadway whenever possible. The existing main shall be exposed and surveyed at multiple locations as part of the grading permit application.
39. The proposed preliminary plat is located within the "Tapteal IV" water pressure zone. It shall be the responsibility of the developer to extend a watermain to and through this property to serve domestic water at the time of plat construction. The water system shall be sized to adequately supply domestic water and fire flows to the proposed development. These water mains shall be extended to the boundaries of the pre-plat.
40. If the homes within this preliminary plat are required to install residential fire sprinkler systems the sprinkler systems shall be the flow-through type in compliance with the City's cross connection control program.
41. The fire hydrant layout shall be approved by the City Fire Marshal.
42. In accordance with Richland Municipal Code Chapter 18.16.080, an irrigation source and distribution system, entirely separate from the City's domestic water system, shall be provided for this development. *Construction plans will not be accepted for review until adequate and viable proof of an irrigation source is made available by the developer.* The designing Engineer shall submit plans for the proposed irrigation system to the Irrigation District with jurisdiction over the property at the same time that they are submitted to the City for construction review. Plans shall be reviewed and accepted by said irrigation district prior to issuance of a Right-of-Way permit by the City. Easements shall be provided on the final plat for this system where needed.

**Sanitary Sewer:**

43. It shall be the responsibility of the developer to extend a sewer main to this property to serve sanitary sewer at the time of plat construction.
44. This preliminary plat may receive City sanitary sewer service only after completion of a new sewer pump station and required improvements to the existing Dallas Road sewer pump station are completed. The developer shall complete the sewer system design and construction required to serve this project. If the developer constructs capacity beyond the needs of this project it will be eligible for a latecomer agreement per Richland Municipal Code.
45. A 10-foot wide exclusive sanitary sewer easement shall be provided for any sewer main that is outside of the public Right-of-Way. Wider easements are required for mains that are buried deeper than 10-feet. If any manholes are located outside of the public Right-of-Way, maintenance truck access to said structure may be required.
46. Sanitary sewer shall be extended to the adjoining properties adjacent to the preliminary plat, where appropriate and where grade allows.

**Storm Water:**

47. All construction projects that don't meet the exemption requirements outlined in Richland Municipal Code, Section 16.06 shall comply with the requirements of the Washington State Department of Ecology issued Eastern Washington NPDES Phase II Municipal Stormwater Permit. The Developer shall be responsible for compliance with the permit conditions. All construction activities subject to this title shall be required to comply with the standards and

requirements set forth in the Stormwater Management Manual for Eastern Washington (SWMMEW) and prepare a Stormwater Site Plan. In addition, a Stormwater Pollution Prevention Plan (SWPPP) or submission of a completed erosivity waiver certification is required at the time of plan submittal. The City has adopted revised standards affecting the construction of new stormwater facilities in order to comply with conditions of its NPDES General Stormwater Permit program. This project, and each phase thereof, shall comply with the requirements of the City's stormwater program in place at the time each phase is engineered. The project will require detailed erosion control plans.

48. All public storm drainage systems shall have their flow rate and storage capacity designed by a professional engineer following the core elements defined in the latest editions of the Stormwater Management Manual for Eastern Washington, the current Richland municipal codes, the Phase II Municipal Stormwater Permit, and the City's "Public Infrastructure Construction Plan Requirements and Design Guidelines". The storm water calculations shall be stamped by a professional engineer and shall include a profile of the storm system showing the hydraulic grade line. The calculations should include an accurate delineation of the contributing drainage area to accurately size the stormwater facilities. Passing the storm water downhill to an existing storm system will require an analysis of the downstream storm system to determine its capability of accepting the storm water without being overwhelmed. The applicant's design shall provide runoff protection to downstream property owners.
49. If any existing storm drainage or ground water seepage drains onto the proposed site, said storm drainage shall be considered an existing condition, and it shall be the responsibility of the property developer to design a system to contain or treat and release the off-site storm drainage.
50. If there are any natural drainage ways across the proposed pre-plat, the engineered construction plans shall address it in accordance with Richland Municipal code 24.16.170 ("Easements-watercourses").
51. Any proposed storm drainage retention facilities within the boundary of the proposed preliminary plat shall not adversely affect neighboring properties.
52. Prior to or concurrent with the submittal of the first phase the developer shall provide a Geotechnical report including the percolation rate of the soils in the area of any storm retention ponds. If the project constructs a storm retention pond then the engineer will need to demonstrate that the pond will drain itself within 72 hours after the end of a storm event, and not have standing water in it longer than that. Engineering solutions are available for retention ponds that do not percolate within 72 hours.
53. As per RMC chapter 24.20.070 and the City of Richland's Comprehensive Stormwater Management Plan, the storm drainage system installed as part of this plat may need to be oversized in order to handle the additional flow from future developments in the vicinity. The storm drainage system for this development, both its conveyance and retention / infiltration components, shall be designed to effectively manage runoff from upstream properties that can be anticipated to convey stormwater onto this property because of a pre-development runoff condition, or as a result of flows discharged that are in excess of the design storm from the upstream property. Additionally, as this property is upslope of developed properties the stormwater system shall include provisions for possible discharge of runoff onto downslope properties from storms in excess of the design storm as described above. Those provisions may be required to include off-site downslope conveyance facilities and/or flowage easements allowing for the conveyance of stormwater to and across downslope properties.
54. The amount of post-development storm runoff from the proposed site shall be in compliance with RMC Chapter 16.06.

55. Stormwater collection pipes shall be extended to the adjoining properties adjacent to the plat, where appropriate and where grade allows.
56. The parcel occupied by the stormwater basin shall be identified as a separate parcel or tract on the final plat and shall be dedicated to the City stormwater utility. The design of the basin shall include access features meeting the city's needs for maintenance.
57. The developer shall consider the long-term appearance of the storm basin, particularly if it will occupy a prominent location in the development. The City's typical storm pond maintenance practices consist of semi-annual vegetation trimming and silt and debris removal. If the pond location is deemed by City staff as being in a prominent location the developer shall design and install fencing and/or landscaping to mitigate the pond's visible character for the surrounding properties. If the City requires this type of treatment to the pond site the developer may propose landscaping treatments consistent with the development and establish maintenance responsibilities to remain with the development. These maintenance responsibilities shall be noted on the final plat. Basins designed as detention and evaporative basins need to include plantings that will tolerate or thrive in standing water. Planting designs for areas not routinely exposed to water shall include plants that will thrive without irrigation unless the developer intends to maintain an irrigated pond site. At a minimum the landscaping plan should be consistent with the City's intended maintenance standard as described above.
58. The developer shall be responsible for landscaping the storm pond and for its maintenance and the plantings through the one-year infrastructure warranty period. At 11 months after the final acceptance date the developer shall clean the storm system and basin of all accumulated oil, sediment, and debris. After this maintenance is completed and inspected the City will begin routine maintenance of the system and basin. The developer shall replace any plantings that have failed to survive the warranty period. The developer shall also perform trimmings required to control weeds in excess of 18-inches in height for the 12-months following the date of final plat acceptance.

**Final Platting / Project Acceptance Requirements:**

59. When the construction is substantially complete a paper set of "record drawings" shall be prepared by a licensed surveyor and include all changes and deviations. Please reference the Public Works document "RECORD DRAWING REQUIREMENTS & PROCEDURES" for a complete description of the record drawing process. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
60. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of a certificate of occupancy. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final acceptance. Off-site ("third party") easements or right-of-ways for City infrastructure are the responsibility of the developer to obtain. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to final platting.
61. Any off-site easements or permits necessary for this project shall be obtained and secured by the applicant and supplied to the City at the time of plat construction and prior to final plat acceptance by the City.
62. Ten-foot wide public utility easements will be required on the final plat along both sides of all Right-of-Ways within the proposed plat.

63. The vision-clearance triangle needs to be shown on all corner lots on the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
64. The final plat shall include notes identifying all common areas including the private streets and tracts and acknowledging the ownership and maintenance responsibility by the homeowners association. A note shall be added to the face of the final plat that states: "*The proposed rear alley easements shall be private roadways which are for the use and benefit of the homeowners that abut said roads, and are to be maintained by the adjacent property owners or the HOA. The City of Richland accepts no maintenance responsibility for rear alley easements*".
65. A note shall be added to the face of the plat that states: "*The private rear alley easements within this plat are fire lanes and parking is restricted. The required no-parking signs shall be installed by the developer where applicable.*"
66. All landscaped areas within the plat that are in the public Right of Way shall be the responsibility of the property owners to maintain.
67. A one-foot "No access / screening easement" will be required along the Reata Road, Gage Blvd., Grapeview St., and the Southgate Way Right of Ways.
68. The intended use and ownership of all tracts within the plat shall be noted on the final plat.
69. Property with an unpaid L.I.D. assessment towards it must be paid in full or segregated per Richland Municipal Code 3.12.095.
70. Any restricted parking areas shall be indicated on the final plats.



**From:** [Prilucik, Jacob](#)  
**To:** [Howie, Matthew](#)  
**Subject:** RE: [EXTERNAL] SA2023-102 South Orchard Plat, Major Amendment  
**Date:** Monday, June 5, 2023 9:44:27 AM  
**Attachments:** [image001.png](#)  
[Richland South Orchard Plat Amd \(2023\).pdf](#)

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**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

Matthew,  
WSDOT's comment letter regarding the subject proposal is attached. Let me know if you have any questions, thanks.

Jacob Prilucik  
Office: (509) 577-1635 – [prilucj@wsdot.wa.gov](mailto:prilucj@wsdot.wa.gov)  
Cell: (509) 225-0637

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**From:** Howie, Matthew <mhowie@ci.richland.wa.us>  
**Sent:** Monday, May 22, 2023 1:52 PM  
**To:** Acevedo, Mizaël <macevedo@CI.RICHLAND.WA.US>; Ashley Garza <agarza3605@gmail.com>; Badger Mountain Irrigation District <bmidmanager@badgermountainirrigation.com>; Benton County - Segregations <Segregations@co.benton.wa.us>; Bill Barlow <bbarlow@bft.org>; Orr, Bruce <borr@CI.RICHLAND.WA.US>; Buechler, Ken <KBuechler@CI.RICHLAND.WA.US>; Clark Posey <clark.posey@co.benton.wa.us>; Hamilton, Craig <C.Hamilton@bces.wa.gov>; DAlessandro, Carlo <cdalessandro@CI.RICHLAND.WA.US>; Darrick Dietrich <darrick@basindisposal.com>; David Billetdeaux <david@portofbenton.com>; Davis, Deanna <d.davis@bces.wa.gov>; Rodgers, Deborah (CONTR) - TERR-TRI CITIES RMHQ <dxroddgers@bpa.gov>; Deskins, John <jdeskins@CI.RICHLAND.WA.US>; 'Doan, Charles' <cdoan@ci.richland.wa.us>; gis@co.benton.wa.us; Hill, Kelly <khill@CI.RICHLAND.WA.US>; Jason McShane <jmcshane@kid.org>; Joseph Cottrell <jecottrell@bpa.gov>; Junior Campos <junior.campos@charter.com>; Katherine Cichy <katherine.cichy@ziply.com>; Cooper, Kelly (DOH) <Kelly.Cooper@DOH.WA.GOV>; Kevin Knodel <kevin.knodel@rsd.edu>; Kevin Sliger <KSliger@bft.org>; KID Development <development@kid.org>; KID Webmaster <webmaster@kid.org>; M. Deklyne <mjddeklyne@bpa.gov>; MAP <map@bces.wa.gov>; Mattheus, Pamela <pmattheus@CI.RICHLAND.WA.US>; Michael Tovey <michael.tovey@ziply.com>; Gonseth, Paul <GonsetP@wsdot.wa.gov>; Reathaford, Jason <JReathaford@CI.RICHLAND.WA.US>; Richard Krasner <richard.krasner@rsd.edu>; USPS Richland Postmaster <99352RichlandWA-Postmaster@usps.gov>; Rob Rodger <rob.rodger@bentoncleanair.org>; Robin Priddy <robin.priddy@bentoncleanair.org>; Schiessl, Joe <JSchiessl@CI.RICHLAND.WA.US>; Seth DeFoe <SDeFoe@kid.org>; WSDOT SC Planning Mailbox <SCPlanning@WSDOT.WA.GOV>; Westphal, Nichole <nwestphal@ci.richland.wa.us>; Whittier, John <jwhittier@CI.RICHLAND.WA.US>; Sean Domagalski <seand@bfhd.wa.gov>; Hester, Laura <lhester@CI.RICHLAND.WA.US>  
**Subject:** [EXTERNAL] SA2023-102 South Orchard Plat, Major Amendment

**WARNING:** This email originated from outside of WSDOT. Please use caution with links and attachments.

Hello all,

Please see the attached Referral Packet for a Major Amendment to the South Orchard preliminary plat to subdivide 147.37 acres into 537 lots and 12 tracts. The original plat called S2021-104 BMS South Orchard only proposed 475 units on 194.54 acres. The referral packet contains new information from this application as well as the original Hearing Examiner Decision on S2021-104.

Comments are due by Monday, June 5<sup>th</sup>, at 5pm.



**Matthew Howie**

Senior Planner

625 Swift Blvd., MS-35 | Richland, WA 99352

(509) 942-7587

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June 5, 2023

City of Richland  
625 Swift Blvd.  
Richland, WA 99352

Attn: Matthew Howie

RE: SA2023-102 – South Orchard Plat, Major Amendment  
SR 82 MP 106 Lt – Reata Road vicinity

We have reviewed the proposed plat amendment and have the following comments.

The subject property is within the Badger Mountain South (BMS) subarea and in the vicinity of Interstate 82 (I-82) including the Exit 104 (Dallas Road) and Exit 109 (Badger Road) interchanges. We are not opposed to the proposed subdivision, or other developments within this subarea; however, we are concerned with the cumulative impact these projects are having on I-82. WSDOT anticipates the majority of vehicle trips generated by this proposal will utilize these interchanges, and, according to our records, the level of build-out within the BMS subarea has triggered required mitigation to I-82 and the Dallas Road ramp terminals.

As stated in our comments regarding this and other subdivisions in the subarea, mitigation inside I-82 right-of-way must follow current WSDOT and FHWA design documentation and approval processes. The developer should be aware, the state's preferred alternative for intersection control is the roundabout. Signalization of the ramp terminals, as identified in the BMS master agreement, may not be allowed. At this time, we recommend the city and/or developer begin coordinating improvements to I-82 with WSDOT, in order to avoid any potential delays.

Thank you for the opportunity to review and comment on this proposal. If you have any questions regarding this letter, please contact Jacob Prilucik at (509) 577-1635.

Sincerely,

Paul Gonseth, PE  
Region Planning Engineer

PG:jjp

cc: SR 82, File #2020\_006



# Exhibit 10

## Public Comments

**From:** [Kristine Myers](#)  
**To:** [Howie, Matthew](#)  
**Cc:** [Loren Myers](#)  
**Subject:** Notice of Application, Public Hearing (SA2023-102)  
**Date:** Monday, June 5, 2023 7:16:15 AM

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**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

Good Morning,

We are Loren & Kristine Myers at 83931 E Reata Rd and have a couple questions we would like entered into the staff report.

1. Is the proposed Gage Blvd on this map going to be connected to the existing Gage Blvd?
2. Is the plan still to have a roundabout at the intersection of Gage & Reata Rd?
3. Will the public have an opportunity to voice questions and concerns during the public hearing?

Thank you for your attention to these concerns,

Loren & Kristine Myers



**From:** [kipjg@frontier.com](mailto:kipjg@frontier.com)  
**To:** [Howie, Matthew](#)  
**Cc:** [kipjg@frontier.com](mailto:kipjg@frontier.com)  
**Subject:** City of Richland Notice of Application, Public Hearing (SA2023-102) Comments - Application to amend preliminary plat call BMS South Orchard  
**Date:** Saturday, June 3, 2023 9:54:02 AM

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**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

Mr. Matthew Howie,

Our concerns have been previously communicated to City of Richland planners, a Benton County Commissioners representative and Darrin Sweeney.

Our first concern is placement of roads within the proposed plat and their intersections with Reata Road. Specifically, the extension of Gage Blvd. appears to intersect Reata Road directly north of our property and opposite to our driveway. We envision this could easily create a situation where inattentive drivers miss their turn unto Reata Road and use our circular driveway to recover from their mistake. This presents both safety and privacy issues for us. Of further concern is that during our past communication efforts with the City we were made aware of a proposed single lane round-about to be constructed at the intersection of the Gage Blvd. extension and Reata Road. The proposed around-about has three legs; the end of Gage Blvd. leg and the west and east legs of Reata Road. If there were to be a fourth leg, it would be placed where our front yard driveway currently sits. It is unclear how we and our next-door neighbors would access Reata Road with the round-about placement. Additionally, we can't see how the round-about would not affect the general functionality, thus value, of our property.

There are locations along the south side of Reata Road that are better suited, either gallies not suited for building or established roadways (such as Badger View Drive), as the terminal point of Gage Blvd. or placement of a round-about. We request the placement of proposed roads in the plat be reconsidered.

Our residential property is lot 7 of Reata Place Plat, tax parcel 104884040000007, address 84227 E Reata Road.

Paul and Karla Gaither  
[kipjg@frontier.com](mailto:kipjg@frontier.com)  
509 420 3771

**From:** [Cassie Boston](#)  
**To:** [Howie, Matthew](#)  
**Subject:** Badger Mountain South Plan  
**Date:** Monday, June 5, 2023 2:40:20 PM

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[EXTERNAL EMAIL] Exercise caution before clicking links or opening attachments.

To whom it may concern,

I live on sunshine ridge road and just received a plat map of the proposed housing going in behind our neighborhood and on Reata. I do understand the need for expansion but the way this is plotted out is taking away from the unique area we live in. I am astonished at how many homes are going up in such a small area.

I think we all pride ourselves living in Tri-cities and having the space to feel free of the city and raise our families. This proposal, and what seems like work already begun, is taking that away. We are taking a beautiful landscape we have and covering it with rooftops. The view from the top of Badger will be homes, not our expansive land. This saddens me incredibly.

I hope my opinion on this is clear, I hope something can be done to increase the lot sizes and lessen the number of homes going in.

Thank you for your time,  
Cassandra Boston

Sent from my iPhone



# Exhibit I I

## Applicant Request for Continuance

**From:** [Stevens, Mike](#)  
**To:** [Howie, Matthew](#)  
**Subject:** FW: South Orchard-Major Plat Amendment  
**Date:** Monday, June 12, 2023 11:52:39 AM

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FYI: Ask for continuance to address PW conditions.

---

**From:** Darrin Sweeney <darrinmsweeney@gmail.com>  
**Sent:** Monday, June 12, 2023 11:43 AM  
**To:** Stevens, Mike <mstevens@CI.RICHLAND.WA.US>  
**Cc:** Geoff Clark <thefourcs@comcast.net>; Kaleb Mapstead <kmapstead@barghausen.com>  
**Subject:** South Orchard-Major Plat Amendment

**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

Mike,

This email serves as documentation of Badger Communities' request for a continuance to the Hearing Examiner public hearing for the South Orchard Major Plat Amendment scheduled for June 12, 2023 to a date TBD.

We are requesting the continuance for the following reasons:

1. We did not receive the City of Richland staff report until Friday, June 9th at 9:14 am. This gave us less than 2 business days to analyze the 215 page staff report along with the conditions of approval before the public hearing.
2. The conditions from Public Works are particularly onerous based on our application and require much more analysis than 2 business days before agreeing/disagreeing with them.

We are not requesting this continuance for our convenience. This request comes because we have not had the adequate time (less than 2 business days) to analyze the new conditions the City of Richland is trying to put on this plat.

Darrin Sweeney  
Badger Communities, LLC  
509-380-7978

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## Exhibit I2

# Correspondence Between Applicant and Public Works Staff



**From:** [DAlessandro, Carlo](#)  
**To:** [Howie, Matthew](#)  
**Subject:** Fw: BCE#22467.6 South Orchard Major Amendment Conditions  
**Date:** Friday, July 14, 2023 5:31:49 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image006.png](#)  
[image007.png](#)  
[image008.png](#)

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**From:** DAlessandro, Carlo  
**Sent:** Thursday, July 13, 2023 4:39 PM  
**To:** Darrin Sweeney <darrinmsweeney@gmail.com>  
**Subject:** RE: BCE#22467.6 South Orchard Major Amendment Conditions

Darrin,

The City agrees with your interpretation of RMC 24.20. We support the removal of Condition 26.



**Carlo D'Alessandro, PE**  
Transportation and Development Manager  
625 Swift Blvd., MS-26 | Richland, WA 99352  
(509) 942-7461

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**From:** DAlessandro, Carlo  
**Sent:** Thursday, July 13, 2023 7:47 AM  
**To:** Darrin Sweeney <darrinmsweeney@gmail.com>  
**Subject:** RE: BCE#22467.6 South Orchard Major Amendment Conditions

My notes below in **red**. I'll be pretty busy this morning. Can you call me to discuss in the afternoon on my cell 509-539-0171?



**Carlo D'Alessandro, PE**  
Transportation and Development Manager  
625 Swift Blvd., MS-26 | Richland, WA 99352  
(509) 942-7461

---

**From:** Darrin Sweeney <[darrinmsweeney@gmail.com](mailto:darrinmsweeney@gmail.com)>  
**Sent:** Wednesday, July 12, 2023 1:25 PM  
**To:** DAlessandro, Carlo <[cdalessandro@CI.RICHLAND.WA.US](mailto:cdalessandro@CI.RICHLAND.WA.US)>  
**Subject:** Fwd: BCE#22467.6 South Orchard Major Amendment Conditions

**[EXTERNAL EMAIL]** Exercise caution before clicking links or opening attachments.

Carlo,

Would you have a few minutes to discuss these items with us before our Hearing Examiner meeting on Friday?

Thanks,

Darrin Sweeney

----- Forwarded message -----

From: **Kaleb Mapstead** <[kmapstead@barghausen.com](mailto:kmapstead@barghausen.com)>

Date: Wed, Jul 12, 2023 at 12:49 PM

Subject: BCE#22467.6 South Orchard Major Amendment Conditions

To: Darrin Sweeney <[darrinmsweeney@gmail.com](mailto:darrinmsweeney@gmail.com)>

Darrin,

Below are snippets of the conditions we discussed this afternoon. From my understanding these are things we agree with in nature but would like to have more dialogue with the City to determine specifics.

17.D

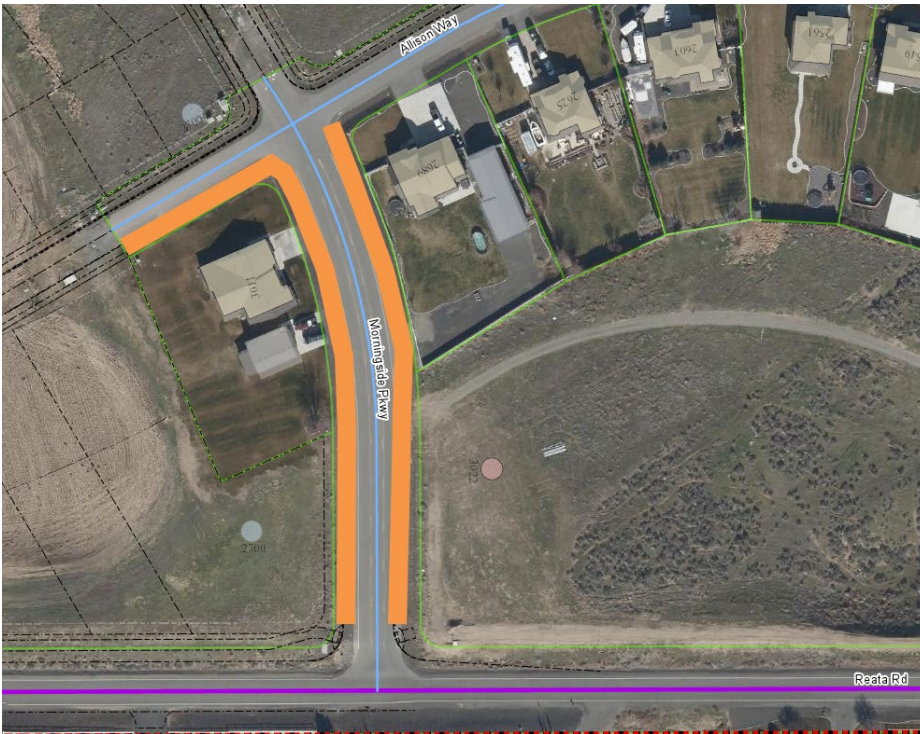
- D. The Morningside Parkway/Reata Road intersection improvements shall include a westbound right turn lane from Reata onto Morningside, an eastbound left turn lane from Reata onto Morningside, and a southbound right turn lane from Morningside onto Reata. These intersection improvements shall be completed along with the phase that completes the Morningside Parkway corridor.**

The above condition we agree with, we are fortunate that Geoff is within control of the property that would dedicate portions of land to us to make this happen. This condition also will provide a degree of intersection safety to offset the additional 64 lots and the trips they will generate. **This is good news.**

17.E

- E. Allison Way and Morningside Parkway shall have frontage improvements installed on these existing roadways beginning from Lot 431, proceeding around the corner to the intersection with Reata Road. The east side of Morningside Parkway shall also have frontage improvements installed from Reata Road to the SE corner of the intersection. Frontage improvements shall consist of curb & gutter, sidewalk (or separated pedestrian pathway), additional paving as needed, storm drainage facilities, and street lighting. Pedestrian connectivity is needed from the South Orchard plat to Reata Road.**

We interpret this as improvements on both sides of Morningside Parkway given the language of the condition. The roadway is currently at an appropriate width for 2-6' shoulders, 2-11' travel lanes, and 1-12' center lane so our improvements would amount to curb/gutter, pedestrian facilities, streetlighting and stormwater facilities. I would like to keep the stormwater facilities for this area of improvement separate from the stormwater system installed with South Orchard if possible. I am proposing roadside swales behind the curb/gutter between the sidewalk/trails. We will need city input on this if they'll allow it. **City standard is 6 ft bike lanes, 11 ft travel lanes, 12 ft left turn lane. Existing Morningside is 44 ft which is the appropriate pavement width (for 5' bike + 11' lane + 12' turn + 11' lane + 5' bike) plus 1 foot for each gutter to face of curb. Allison will need to meet the local street standard 32 ft wide street. See below in orange for extents.**



25.

**25. Traffic calming measures may be required, as approved by the Traffic Engineer.**

While this is for public safety, I was wondering if the City can elaborate on what features they would like to see on the plat in addition to the features currently conditioned. We don't intend on altering the roadway network of the plat so having an idea on what measures the City would like in place prior to permitting the design would be helpful. In general, speed humps or traffic circles on the long block lengths. This would not result in changing the network. Allison and the unnamed E/W street north of it are likely candidates.

26.

**26. The entire road section of Morningside Parkway shall be constructed full-width when the phase that constructs it adjacent to the vacant parcel is developed ("APN 1-0488-400-0002-001"). Sidewalks and street lights can be installed when that vacant parcel is developed.**

24.20.010 of RMC states that streets "whether dedicated by the plat or already dedicated, but not improved, need to be improved by the subdivider only to the center of the street". I am not sure which parcel this is referring to or exactly what this comment is about.

**Kaleb Mapstead | Project Engineer**

Office: 425-251-6222 | Ext: 7370

Barghausen Consulting Engineers, Inc.

18215 72nd Avenue South, Kent, WA 98032

[www.barghausen.com](http://www.barghausen.com)

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