IN THE BOARD OF COMMISSIONERS OF THE STATE OF OREGON
FOR THE COUNTY OF YAMHILL
SITTING FOR THE TRANSACTION OF COUNTY BUSINESS

In the Matter of Approving a Newberg Urban Reserve Area Expansion and Amending the Yamhill County Comprehensive Plan; Adopting Findings; Setting the Effective Date

ORDINANCE 930

THE BOARD OF COMMISSIONERS OF YAMHILL COUNTY, OREGON (the Board) sat for the transaction of county business on September 28, 2023, Commissioners Lindsay Benschauer, Kit Johnston, and Mary Starrett being present.

IT APPEARING TO THE BOARD as follows:

WHEREAS, Brian and Kathy Bellairs and Bestwick LLC (collectively, the “Applicants”) have applied for an expansion to the Newberg Urban Reserve Area at 31544 NE Corral Creek Road, 30445 NE Fernwood Road, 31095 NE Fernwood Road, and 30575 NE Fernwood Road, Yamhill County Tax Lots R3222 02700, R3222 02500, R3222 2800, and R3222 02900 (the “Proposed Urban Area Expansion”); and

WHEREAS, The procedure for approving an expansion to the Newberg Urban Reserve Area is laid out in the Newberg Urban Area Growth Management Agreement, adopted by the Board on June 10, 1979, including as amended (the “Agreement”); and

WHEREAS, The Agreement requires an application to expand the Newberg Urban Reserve Area to be initially referred to the Newberg Urban Area Management Commission (NUAMC) for public hearing and consideration; and

WHEREAS, NUAMC held duly noticed public hearings on August 23, 2022, November 22, 2022, January 24, 2023, March 28, 2023, and April 25, 2023 to discuss the Proposed Urban Area Expansion; and

WHEREAS, NUAMC adopted Resolution No. 2023-23 recommending approval of the Proposed Urban Area Expansion as modified; and

WHEREAS, As required by the Agreement, NUAMC forwarded its findings and decision directly to the governing bodies of the City of Newberg and the County for further deliberation; and
WHEREAS, The City of Newberg adopted Ordinance No. 2023-2911 on July 17, 2023 approving the Proposed Urban Area Expansion; and

WHEREAS, The Board held a public hearing on the matter on August 31, 2023, and based on the testimony presented, findings, and other supporting documents provided to the County at the hearing, the Board voted 2-1 to approve the Proposed Urban Reserve Area expansion; and now, therefore

THE BOARD ORDAINS AS FOLLOWS:

Section 1. The Yamhill County Comprehensive Land Use Plan is hereby amended to reflect the revised Urban Reserve Area boundary as provided in the attached Exhibit “A”; and

Section 2. The findings attached hereto as Exhibit “B” are hereby adopted in support of this Ordinance.

Section 3. This Ordinance shall be submitted to the Department of Land Conservation and Development (“DLCD”) Commission for review and approval as provided under ORS 197.626.

Section 4. The first reading of this Ordinance occurred on September 14, 2023; the second reading on September 28, 2023. The effective date of this ordinance shall be either the date of approval by DLCD or December 27, 2023, whichever is later.

DATED this 28th day of September 2023 at McMinnville, Oregon.

YAMHILL COUNTY BOARD OF COMMISSIONERS

ATTEST

KERI HINTON
County Clerk

Chair LINDSAY BERSHAUER

Deputy CAROLINA ROOK

Commissioner KIT JOHNSTON

FORM APPROVED BY:

JODI GOLLEHON
Assistant Yamhill County Counsel
Office of County Counsel

Commissioner MARY STARRETT

Yamhill County Ordinance No. 930
B.O. 23-369
Page 2 of 2
HEARING DATE: August 31, 2023

DOCKET NO.: PA-01-21

REQUEST: For approval of a Comprehensive Plan amendment to include the below properties in the Newberg Urban Reserve area for future urban uses.

APPLICANT/OWNER: Brian and Kathy Bellairs and Bestwick LLC

TAX LOTS: R3222 02700, R3222 02500, R3222 2800, and R3222 02900

LOCATION: 31544 NE Corral Creek Road, 30445 NE Fernwood Road, 31095 NE Fernwood Road, and 30575 NE Fernwood Road, Newberg, Oregon

ZONE: Agriculture/Forestry Large Holding/EF-20, Exclusive Farm Use

REVIEW CRITERIA: Newberg Urban Area Management Agreement
Statewide Planning Goals
Yamhill County Comprehensive Goals and Policies
ORS 197.298
OAR 660-021

FINDINGS OF FACT:

A. Background Facts

1. Parcel Size:

   Tax Lot R3222 02700 is 59.5 acres
   Tax Lot R3222 02500 is 10 acres
   Tax Lot R3222 2800 is 18.1 acres
   Tax Lot R3222 02900 is 2.99 acres

   TOTAL: 90.59 acres (95.3 gross acres, including road right-of-way)
2. **On-site Land Use:** The tract consists of four parcels with three existing dwellings and multiple outbuildings with the remainder being largely vacant with minimal farming activities. The tract of land is located northwest of the intersection of NE Corral Creek Road and NE Fernwood Road. The tract contains scattered vegetation and trees and is comprised of a mixture of agricultural Class I, II, III, and IV soils.

3. **Exception Lands:** “Exception lands” are rural lands for which an exception to statewide planning goals 3 or 4, or both, as defined in ORS 197.732 and OAR 660-004-0005(1), has been acknowledged. The subject tract is not exception land but resource land. Rural exception land includes Yamhill County property that is zoned AF-10 Agriculture/Forestry Small Holding, VLDR Very Low Density Residential, LDR, Low Density Residential, all commercial, industrial, and public zones.

4. **Resource Lands:** “Resource Lands” are rural lands subject to the statewide planning goals listed in OAR 660-004-0010(1)(a) through (g), except subsections (c) and (d). They include farm and forest land, as designated by statewide planning goals 3 and 4. The subject property has a Comprehensive Plan designation of Agriculture/Forestry Large Holding and a zoning designation of EF-20 Exclusive Farm Use.

5. **Urban Reserve Area (URA):** On March 20, 1995, the Newberg City Council adopted Newberg City Ordinance No. 95-2397, and on July 19, 1995, the Board of Commissioners adopted Ordinance 596 which both identified the Newberg Urban Reserve Area. The Urban Reserve Rule identified property which would eventually be included in the Urban Growth Boundary (UGB).

6. **Population Projections:** Portland State University (PSU) most recent population forecast for the city of Newberg, which was released in 2020, expects the city’s population to be 33,199 by 2041 and 37,764 by 2051. The average annual growth rate (AAGR) between 2041 and 2051 is approximately 1.37 percent.

7. **Buildable Lands Inventory (BLI) and Land Needs Analysis:** The application includes an assessment of the city's current buildable lands and the data shows the city can accommodate forecasted growth through 2041. Additional lands will be required to accommodate forecasted growth through 2051, for a 30-year growth horizon per OAR 660-021-0030. The applicant maintains a need for additional land in the Newberg URAs to meet the 2051 land needs that cannot be met by the land currently in the URAs. The applicant proposes amending the URA to include the subject site, which would contribute 65.8 buildable acres to the 397 buildable acres of URAs land needed to accommodate the 2051 land need. See Exhibit G, “2051 Buildable Lands Inventory & Lands Need Assessment” submitted with the application.

**B. Urban Reserve Area Amendment Criteria**

1. **Oregon Administrative Rule, Designation of Urban Reserve Areas (URA):** Designation of Urban Reserve Areas (URA) is found in Oregon Administrative Rules 660-021-0030, which states:
(1) Urban reserve areas shall include an amount of land estimated to be at least a 10-year supply and no more than a 30-year supply of developable land beyond the 20-year time frame used to establish the urban growth boundary. Local governments designating urban reserves shall adopt findings specifying the particular number of years over which designated urban reserves are intended to provide a supply of land.

(2) Inclusion of land within an urban reserve area shall be based upon the locational factors of Goal 14 and a demonstration that there are no reasonable alternatives that will require less, or have less effect upon, resource land. Cities and counties cooperatively, and the Metropolitan Service District for the Portland Metropolitan Area Urban Growth Boundary, shall first study lands adjacent to, or nearby, the urban growth boundary for suitability for inclusion within urban reserve areas, as measured by the factors and criteria set forth in this section. Local governments shall then designate for inclusion within urban reserve areas that suitable lands which satisfies the priorities in section (3) of this rule.

(3) Land found suitable for an urban reserve may be included within an urban reserve area only according to the following priorities:
   a. First priority goes to land adjacent to, or nearby, an urban growth boundary and identified in an acknowledged comprehensive plan as an exception area or nonresource land. First priority may include resource land that is completely surrounded by exception areas unless these are high value crop areas as defined in Goal 8 or prime or unique agricultural lands as defined by the United States Department of Agriculture;
   b. If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, second priority goes to land designated as marginal land pursuant to ORS 197.247;
   c. If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, third priority goes to land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

(4) Land of lower priority under section (3) of this rule may be included if land of higher priority is found to be inadequate to accommodate the amount of land estimated in section (1) of this rule for one or more of the following reasons:
   a. Future urban services could not reasonably be provided to the higher priority area due to topographical or other physical constraints; or
   b. Maximum efficiency of land uses within a proposed urban reserve area requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

An analysis of each respective provision follows.
a. **Timeframe.** As noted above, the timeline for designating URA land must be tied to findings specifying the number of years of developable land the area is intended to supply above those lands found within the UGB. As discussed within the City of Newberg findings, attached hereto as Exhibit B-1 and incorporated herein, the City’s supply meets the land supply needs through 2041. The applicant is providing findings for an additional 10 years, giving it a 2051 timeline.

b. **No Reasonable Alternatives.** As stated above, OAR 660-021-0030(2) requires, “a demonstration that there are no reasonable alternatives that will require less, or have less effect upon, resource land.” This requirement necessitates an extensive amount of data to show that there are no reasonable alternatives that will require less or have less effect upon resource land. The application included a “Comparative Site Analysis” in its “Exhibit H” (attached hereto as Exhibit B-2 and incorporated herein) which discusses the areas looked at that are adjacent to, or nearby, the UGB and their suitability for inclusion. Pages 29 and 30 of Exhibit B-2 discuss the subject parcels which are included in an area that is identified as “East A” with other resource and exception parcels. Within this study area, there are approximately 1,500 acres of exception land.

The Newberg Engineering Department reviewed the public utilities cost estimates and provided some modifications based on their local knowledge. These comments can be found in the memo dated August 16, 2021, from Karyn Hanson, PE, of KGH Engineering, attached hereto as Exhibit B-3 and incorporated herein. The memo states, “[i]dentification of the costs and comparison of the exception areas based on these cost does not assess whether the costs are reasonable. This exercise simply suggests that less costly areas may be more reasonable than more costly areas.” It concludes that, “...the applicant has not demonstrated that there are no reasonable alternatives to the Bellairs Proposed Urban Reserve Area that will require less, or have less effect upon, resource land.” The memo includes a recommended analysis in order to determine the “reasonableness” of providing public facilities to each study area.

In response to the KGH Engineering report, the applicant submitted additional findings via a memorandum dated November 22, 2022 (included within Exhibit B-2, starting on page 144). In their findings, DOWL used anticipated infrastructure costs as the determining factor as to whether the land is considered “reasonably serviceable” and based on their definition, determined that there are only approximately 213.62 acres of exception land eligible for consideration as a URA, leaving a deficit of approximately 183.38 acres to satisfy a land need of 397 buildable acres to the year 2051. Assuming the city includes this identified exception land in the URA, DOWL’s interpretation of OAR 660-021-030(3) allows the city to consider lower priority resource lands for inclusion in order to meet the identified land need. Their memorandum provided an analysis of peripheral resource lands within a one-mile radius of the current city limits and the city’s UGB for suitability as a URA; specifically looking at the feasibility of water and sewer services to the city’s existing

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*PA-01-21/Findings in Support of Approval*

*Exhibit B*

*Page 4 of 8*
system, and additional information regarding soil composition of those areas to determine their priority for URA eligibility. These findings are sufficient to demonstrate that there are no reasonable alternatives that will require less, or have less effect upon, resource land.

2. **Priority List.** The priority list for land to include within the URA is found in OAR 660-021-0030(3) which states:

   "(3) Land found suitable for an urban reserve may be included within an urban reserve area only according to the following priorities:

   (a) First priority goes to land adjacent to, or nearby, an urban growth boundary and identified in an acknowledged comprehensive plan as an exception area or nonresource land. First priority may include resource land that is completely surrounded by exception areas unless these are high value crop areas as defined in Goal 8 or prime or unique agricultural lands as defined by the United States Department of Agriculture;

   (b) If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, second priority goes to land designated as marginal land pursuant to ORS 197.247;

   (c) If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, third priority goes to land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use."

Because the application is proposing the inclusion of the lowest priority of land, to include these lower priority lands within the URA the request must be found to satisfy OAR 660-021-0030(4) which states:

"(4) Land of lower priority under section (3) of this rule may be included if land of higher priority is found to be inadequate to accommodate the amount of land estimated in section (1) of this rule for one or more of the following reasons:

   (a) Future urban services could not reasonably be provided to the higher priority area due to topographical or other physical constraints; or
(b) Maximum efficiency of land uses within a proposed urban reserve area requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

The subject parcels are resource land, so they fall under OAR 660-021-0030(3)(c). Because the soils are predominantly high value, the parcels would have lower priority for eventual inclusion within the URA than a parcel with predominantly non-high value soils. However, other exception areas and areas with predominantly non-high value soils would need to be eliminated as being able to serve the proposed use for high value resource land to be brought in to the URA. In the “Comparative Site Analysis” found in Exhibit B-2, the study included 15 subareas that are located within an approximate 1-mile radius of the Newberg city limits and the UGB. Exception lands were considered first, then resource lands with priority given to resource lands of lower soil capability classifications. For each study area, the study assessed the cost to provide urban services, topographic and physical constraints, existing development patterns, and buildable land area.

Based on the information in the application and the engineering report prepared by KGH Engineering, it can be concluded that there are some existing exception areas that can be considered “reasonably serviceable.” Those areas are noted in Table 2 of the KGH Engineering memo and are further discussed on pages 5 - 8 of Exhibit B-3. The costs are based on public facility costs and does not include private costs as a factor. Based on this information, it appears there are more than the identified 397 acres of exception land out of the approximately 1,500 acres of exception land within the subareas evaluated, that could be considered “reasonably serviceable.” (The City’s estimate is 793 acres of the 1500 acres of exception land is “reasonably serviceable”.)

The East A subarea, which includes the applicant’s subject site consists of Class I, II, III, and IV soils and is made up of almost entirely resource land. Other exception areas need to be eliminated first in order for resource land to be brought into the URA. That is difficult to do because there is a large amount of exception land bordering the UGB and city limits. As noted above, there are more than the identified 397 acres of exception land that could potentially be included in the URA which could satisfy the need for additional URA land without taking in resource land. The Newberg Engineering Department recommends a more in-depth analysis in order to provide the information necessary to determine that there are no reasonable alternatives to a future proposed URA that will require less, or have less effect upon, resource land.

In the November 22, 2022 memorandum from DOWL, they determined with further analysis that there are approximately 231.62 acres of exception land that are eligible for consideration as a URA, which leaves a deficit of approximately 183.38 acres to satisfy a land need of 397 buildable acres to the year 2051. Looking at next priority of land for inclusion is resource lands. As identified by DOWL in Exhibit B-2, page 147, approximately 513 acres of resource land within East A, North A, and Northwest B study areas can be reasonably served by both
gravity sanitary sewer and water services, including the applicant’s subject parcels. As further identified by DOWL in Exhibit B-2, page 152, the two reasonably serviceable resource lands with the lowest composition of high-value farmland are the applicant’s proposed URA site (approximately 94% high-value farmland with no Class I soils) and the subarea immediately north of the applicant’s site (approximately 92% high-value farmland). Together these two areas are approximately 130 acres, which is within the identified deficit of approximately 183.38 acres to satisfy a land need of 397 buildable acres to the year 2051.

2. Yamhill County Comprehensive Plan Goals and Policies. In addition to the administrative rules for the Urban Reserve Area, the request must be shown to be in compliance with the Yamhill County Comprehensive Plan Goals and Policies. These goals and policies are important to be used as a guide to aid decision makers. Some of the goals and policies even conflict with one another. When there is a conflict between them it results in a balancing act for the decision maker. They must weigh the evidence and decide which goal or policy the request more closely satisfies. The NUAMC would need to decide whether the parcels are more appropriate to be preserved for its present use or whether it is better suited for the proposed urban development. In order to eliminate redundancy, the applicant has addressed the Yamhill County Comprehensive Plan Goals and Policies in pages 29 – 35 of the application.

As noted above, the property is designated in the Yamhill County Comprehensive Plan (YCCP) as Agriculture/Forestry Large Holding and zoned EF-20 Exclusive Farm use with a 20-acre minimum lot size for the creation of new parcels. In addition, the subject property contains Class I-IV soils. The resource designation and soils on the subject property relate to a number of comprehensive plan goals and policies to consider in the decision.

The YCCP, Section I.A., Goal 1, directs the County:

To encourage the containment of growth within existing urban centers, provide for the orderly, staged, diversified and compatible development of all of the cities of Yamhill County, and assure an efficient transition from rural to urban land use.

Whenever possible, our office encourages development of property that is already within the UGB or URA rather than encourage expansion of the boundary. If land is not available, the next step is to look at land outside of the UGB and to go through the priority list of lands available for expansion. The order of lands to be considered is found in Oregon Administrative Rules OAR 660-021-0030. First priority goes to land adjacent to or near the UGB that is designated as exception or nonrecourse land. As noted earlier there is approximately 1,500 acres of exception land in the study areas near the city. As noted above, further analysis by DOWL showed approximately 213.36 acres of exception land eligible for consideration leaving an additional 183.38 acres needed to satisfy the 2051 buildable lands need.

YCCP, Section II, Goal 1, directs Yamhill County:
To conserve Yamhill County's farm land for the production of crops and livestock and to ensure that the conversion of farm land to urban use where necessary and appropriate occurs in an orderly and economical manner.

In addition, YCCP, Section II, Goal 2, Policy a. states:

*Yamhill County will continue to preserve those areas for farm use which exhibit Class I through IV soils as identified in the Capability Classification System of the U.S. Soil Conservation Service.*

To assure there is an efficient transition from rural to urban land uses there needs to be a demonstration of the need for additional urban land and a determination of the most suitable location for land of that identified need. The order of lands to be considered is found in Oregon Administrative Rules OAR 660-021-0030. The subject property could be taken into the URA if other, higher-priority lands were not suitable for inclusion in the URA. The applicant's additional findings show that the proposed 95.3 gross acres can be considered for inclusion based on additional deficit after inclusion of existing exception lands.

The YCCP, Section I. E, Goal 1, Housing directs the County:

*To assure the provisions of safe, sanitary and decent housing for all residents of the county at a reasonable cost.*

Yamhill County is experiencing a tight supply of available housing leading to rising home prices and the high cost of rent. The proposed URA expansion would eventually provide additional housing opportunities for citizens of the community and encourage establishment of housing within an urban area, thereby assisting with the accomplishment of the above goal.

C. **Other Issues.**

ORS 197.626 requires cities with 2,500 or more in population to have any amendment to include more than 50 acres in the UGB or URA to submit the amendment to the Land Conservation and Development Commission (LCDC) in the manner provided for under periodic review.

**CONCLUSIONS FOR APPROVAL:**

1. The proposal is consistent with Oregon Administrative Rule 660-021-0030.

2. The proposal is consistent with the Yamhill County Comprehensive Plan Goals and Policies.

3. The application is subject to the approval of LCDC pursuant to ORS 197.626.
ORDINANCE NO. 2023-2911

An Ordinance approving an Urban Reserve Area expansion at 31544 NE Corral Creek Road, 30445 NE Fernwood Road, 31095 NE Fernwood Road, 30575 NE Fernwood Road, Yamhill County Tax Lots R3222 02700, R3222 02500, R3222 2800, R3222 02900 and abutting right-of-way

Recitals:

1. Brian and Kathy Bellairs (Applicant), and Bestwick LLC represented by DOWL, are requesting approval of an amendment to the City of Newberg (City) and Yamhill County (County) Comprehensive Plan Maps to expand the City’s Urban Reserve Areas (URAs) to include a 95.3 gross acre area generally located northwest of the intersection of NE Corral Creek Road and NE Fernwood Road. The site consists of four properties and Yamhill County right-of-way.

2. After proper notice, the Newberg Urban Area Management Commission (NUAMC) reviewed the proposal at public hearings on August 23, 2022, October 25, 2022, November 22, 2022, January 24, 2023, March 28, 2023, and April 25, 2023, considered public testimony and deliberated.

3. The Newberg Urban Area Management Commission (NUAMC) adopted Resolution No. 2023-23 recommending the application be approved minus the 20 acres located outside the Zone 1 Water Service Area. NUAMC found that the proposed amendment was in the best interests of the City.

The City of Newberg Ordains as Follows:

1. The Newberg Comprehensive Plan Map is amended as shown in Exhibit “A”.

2. The adoption is based upon the findings in Exhibit “B”.

3. The area of East A resource land above Zone 1 of the City’s water system is acceptable to be within the Urban Reserve Area provided that the cost of any water booster pump station is the responsibility of the developer of the land. See Map above for 300-foot contour delineation between Zone 1 and Zone 2 included as Exhibit “C”.

4. Exhibits “A”, “B”, and “C” are hereby adopted and by this reference incorporated.

Effective Date of this ordinance is 30 days after the adoption date, which is: August 16, 2023.

Adopted by the City Council of Newberg, Oregon, this 17th day of July, 2023, by the following votes:

AYE: 5  NAY: 1  ABSENT: 1

Zaira Robles Muñiz, Administrative Specialist
Attest by the Mayor this 20th day of July, 2023.

Bill Rosacker, Mayor
Exhibit "B" to Ordinance No. 2023-2911
Findings Urban Reserve Area Expansion – File City CPMA21-0002/County PA-01-21

City of Newberg Regulations

Newberg Development Code
15.100.050 Type III procedure – Quasi-judicial hearing.
A. All Type III decisions shall be heard and decided by the planning commission. The planning commission’s decision shall be final unless the decision is appealed or the decision is a recommendation to the city council.

B. Type III actions include, but are not limited to:
   1. An appeal of a Type I or Type II decision: This action of the planning commission is a final decision unless appealed to the city council.
   2. Conditional use permits: This action is a final decision unless appealed.
   3. Planned unit developments: This action is a final decision unless appealed.
   4. Substantial change to the exterior appearance of a historic landmark: This action is final unless appealed.
   5. Establishment of a historic landmark: This is a final decision by the planning commission, unless appealed.
   6. Establishment of a historic landmark subdistrict: This is a recommendation to the city council.
   7. Comprehensive plan map amendments: This action is a recommendation to the city council.
   8. Zoning map amendments and designation of subdistricts: This action is a recommendation to the city council.
   9. Annexation: This action is a recommendation to the city council.
   10. Subdivisions with certain conditions requiring them to be processed using the Type III process, pursuant to NMC 15.235.030(A).

   1. Planning Commission Decision. Development actions shall be decided by the planning commission for those land use actions that require a Type III procedure and do not require the adoption of an ordinance. The decision shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq. A Type III decision may be appealed to the city council by a Type III affected party in accordance with NMC 15.100.160 et seq.
   2. Planning Commission Recommendation to City Council. Land use actions that would require the adoption of an ordinance shall be referred to the city council by the planning commission together with the record and a recommendation. The recommendation shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq.

D. City Council Action. If a recommendation to the city council is required, the matter shall be reviewed by the city council as a new hearing. The final decision on these actions is made by the city council.

E. The applicant shall provide notice pursuant to NMC 15.100.200 et seq.

F. The hearing body may attach certain conditions necessary to ensure compliance with this code.
G. If the application is approved, the director shall issue a building permit when the applicant has complied with all of the conditions and other requirements of this code.

H. If a Type III application is denied, or if the applicant wishes to make substantive modifications to an approved application, the applicant may modify the application after the planning commission hearing and request a new planning commission hearing to consider the application. An application so modified shall be considered a new application for purposes of the 120-day time limit for processing applications in accordance with NMC 15.100.100 and state statutes. The applicant shall acknowledge in writing that this is a new application for purposes of the 120-day rule. The city council shall establish a fee for such a reconsideration or modification by resolution. Application of this provision is limited to three times during a continuous calendar year.

**Finding:** The Applicant has requested an expansion of the Newberg URAs to include the subject area. The subject properties consist of 95.3 gross acres of land across four parcels and a portion of right-of-way under Yamhill County jurisdiction. The request requires a Newberg Urban Area Management Commission (NUAMC) hearing and approval to amend the Newberg Comprehensive Plan Map rather than review by the Newberg Planning Commission. NUAMC is the governing body of the Area of Influence as defined by the Newberg Urban Area Growth Management Agreement (NUAGMA), which is defined as the area of land designated by the City of Newberg and Yamhill County that extends one mile outside Newberg's UGB. Therefore, NUAMC is the recommending body for the decision. Once a decision is reached, NUAMC must present that decision to City and County governing bodies for public hearings. The process is a public hearing and review by ordinance adoption by the City of Newberg followed by public hearing and review by ordinance adoption by the Yamhill County Board of Commissioners.

**15.302.030 Procedures for comprehensive plan map and zoning map amendments.**

**A. Type III Plan and Zoning Map Amendments – One Parcel or Small Group of Parcels.**

1. Property owners or the city may initiate a map amendment for one parcel or a small group of parcels under the Type III procedure may be initiated by a resolution of the planning commission or city council. Unlike other Type III procedures, the decision of the planning commission on a Type III plan map amendment shall be in the form of a recommendation to the city council. The city council shall hold another new hearing and make a final decision.

**Finding:** The subject site includes a small group of lots and property owners, and therefore the application is subject to a Type III legislative review. Because this is a request for URA designation NUAMC will review the application and make a recommendation to the City Council. NUAMC is the governing body of the Area of Influence as defined by the Newberg Urban Area Growth Management Agreement (NUAGMA).

Property owners have initiated the application request. NUAMC is the hearing body for an Urban Reserve Area designation and the Newberg Planning Commission does not review the application per the Newberg Urban Area Growth Management Agreement. The subject area consists of 95.3 gross acres consisting of four parcels.
and Yamhill County right-of-way, and therefore is subject to a Type III procedure. The amendment and the City and County staff reports were brought directly to NUAMC for a public hearing on August 23, 2022, October 25, 2022, November 22, 2022, January 24, 2023, March 28, 2023, and April 25, 2023. Minutes of the NUAMC meetings are included as Attachment 2. The City Council hearing is scheduled for May 15, 2023.

2. Where an application has been denied, no new application for the same purpose shall be filed within one year of the date of the previous denial unless the city council for good cause shall grant permission to do so.

**Finding:** At the time of preparation of this report no decision has been made on the submitted application. NUAMC has only made a recommendation to the Newberg City Council and Yamhill County Board of Commissioners.

The application is under review by the City and the County. A recommendation has been made by NUAMC for approval of the application. The City Council will hold a hearing on the application on May 15, 2023. Following a City Council decision, the application will go before the Yamhill County Board of Commissioners. No final decisions have been made on the application.

3. Amendment Criteria. The owner must demonstrate compliance with the following criteria:

a. The proposed change is consistent with and promotes the goals and policies of the Newberg comprehensive plan and this code;

**Finding:** The proposed change is consistent with the applicable objectives of the Newberg Comprehensive Plan. If the area were designated as an Urban Reserve Area and determined it complies with the Urban Reserve Rule (OAR 660, Division 21) it can provide for the orderly and efficient transition from rural to urban land uses as stated by Urbanization Goal 1. Further details on the analysis for compliance with the Comprehensive Plan are detailed later in this report.

b. Public facilities and services are or can be reasonably made available to support the uses allowed by the proposed change;

**Finding:** The Applicant completed an analysis determining the serviceability of the site (see Attachment 15, Exhibit J). The site is reasonably serviceable with moderate costs per buildable acre when compared to other areas considered for URA inclusion. The serviceability to the site is as follows.

- **Water:** Approximately 68 acres of the requested URA expansion area is within Pressure Zone 1, which can be served by the Corral Creek Reservoir. A connection to the existing 24-inch water main, located just north of the area, could provide water service to the northern portions of the area. A connection to the existing 8-inch water main within E Hook Drive and N Fairway Street could serve the western and southern portions of the area. The remaining higher elevation portions of the area, approximately 22 acres, are within Pressure Zone 2, which would require a new reservoir at a higher elevation, or upgrades to the...
existing Corral Creek Reservoir, or the construction of a local Pressure Zone 2 system within the requested URA expansion area with a dedicated pump system feeding an isolated portion of the water distribution system to service the higher elevations of the requested URA expansion area. The Applicant contends that alternatively, if not developed for residential uses, these lands could be utilized for park, open space, and recreational uses.

- **Wastewater:** The requested URA expansion area is serviceable by gravity sewer lines as the area generally slopes to the southwest toward NE Fernwood Road. The area would connect to the Fernwood Pump station located approximately 1,300 feet to the west. As identified in the City’s Wastewater Master Plan, upgrades to the Fernwood Pump Station and the pressurized and gravity sewer mains downstream of the pump station would be required, as the pump station and mains are already at capacity. A preferred alternative for these upgrades is identified in the Wastewater Master Plan.

- **Stormwater:** The requested URA expansion area is serviceable by a gravity stormwater conveyance system. The on-site stormwater conveyance system could discharge to the 12-inch stormwater main within NE Fernwood Road, which eventually outfalls into Springbrook Creek.

Therefore, the requested URA expansion site’s serviceability and adjacency to existing urbanized areas and services can facilitate more orderly and efficient urbanization and development of public facilities to serve as a framework for urban development, including the provision of extensive areas that may be utilized for open space and recreational opportunities.

However, although the site can be served by public facilities, this is one of a number of factors that dictate priority land for inclusion into future URAs. As noted earlier, staff has concluded there are Exception Lands that were analyzed that can be served and meet some of the future land supply needs that are not Resource Lands. OAR 660-021-0030(4) provides that lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need. The Applicant contends that this provision does not state that all reasonably serviceable Exception Land must first be brought into the URA before reasonably serviceable Resource Land, simply that if the identified demand cannot be met by higher priority lands, lower priority land may be included within the URA.

As part of the proposed URA expansion, the Applicant completed the 2051 Buildable Lands Inventory & Lands Need Assessment (see Attachment 15, Exhibit G), which determined Newberg’s buildable land need for the 2051 planning horizon is 397 buildable acres, which the staff concurs with. Further, the Applicant completed a Comparative Site Analysis (see Attachment 15, Exhibit H), as well as a subsequent addendum submitted on March 1, 2022 (see Attachment 15, Exhibit H), that found approximately 213.62 acres of Exception Land within a one mile radius of the City’s Urban Growth Boundary (UGB) that can be reasonably served by extensions of public utilities (water and gravity sanitary sewer service), and is
therefore eligible for consideration as a URA. Therefore, if such lands were designated URA, the City would continue to have a deficit of approximately 183.3 acres of land to satisfy the identified land need through 2051.

As the Applicant has determined that there is not a sufficient amount of reasonably serviceable Exception Land available to meet Newberg’s identified land need through 2051, lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need, consistent with OAR 660-021-0030(4). The Applicant contends that this provision does not state that all reasonably serviceable Exception Land must first be brought into the URA before reasonably serviceable Resource Land, simply that if the identified demand cannot be met, lower priority land may be included within the URA.

c. Compliance with the State Transportation Planning Rule (OAR 660-012-0060) for proposals that significantly affect transportation facilities.

**Finding:** An analysis on public facilities per the requirements of OAR 660-021 are addressed in this report.

No development or zone changes are proposed at this time. Before any development could occur on the property, it would be necessary to bring the site into the UGB, annex it into the City of Newberg, and gain approval for a desired land use. Because the requested URA amendment will not permit the construction of any development or generate any potential increase in trips to the site, the Transportation Planning Rule is satisfied. There will not be a significant effect on the transportation system because of the requested URA amendment.

660-012-0060 Plan and Land Use Regulation Amendments
1. If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:
   (c) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);
   (b) Change standards implementing a functional classification system; or
   (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.
   (A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;
(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or
(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Subsections (a) and (b) are not triggered since the proposed land use action will not impact or alter the functional classification of any existing or planned facility and the proposal does not include a change to any functional classification standards.

Regarding subsection (c), the requested URA amendment cannot trigger subsections (A) through (C) since the URA amendment will not result in the generation of any trips or any potential increase in trips. As such, there is not a “significant effect” to the transportation system and the TPR is satisfied. A detailed and comprehensive analysis of the transportation impacts associated with the site would be required at the time of either the UGB amendment or annexation into the City. Oregon law allows that detailed TPR findings can be deferred to the time of annexation. At that time, a full transportation impact analysis will be required that provides an in-depth examination of the impacts of development on the site, conditions at the applicable planning horizon, and identification of specific improvements that would be required to mitigate the impact from development.

The Applicant has provided a Transportation Planning Rule memorandum that is included in Attachment 15, Exhibit I.

These criteria are met.

4. The property owner who desires to have their property reclassified has the burden of establishing that the requested classification meets the requirements of this section. As part of the application, the property owner requesting a change shall file a waiver stating that the owner will not file any demand against the city under Ballot Measure 49, approved November 6, 2007, that amended ORS Chapters 195 and 197.

Finding: The Applicant has submitted application material to support their request.

5. A traffic study shall be submitted for any proposed change that would significantly affect a transportation facility, or that would allow uses that would increase trip generation in excess of 40 trips per p.m. peak hour. This requirement may be waived by the director when a determination is made that a previous traffic study adequately addresses the proposal and/or when off-site and frontage improvements have already been completed, which adequately mitigate any traffic impacts and/or the proposed use is not in a location, which is adjacent to an intersection, which is functioning at a poor level of service. A traffic study may be required by the director for changes in areas below 40 trips per p.m. peak hour where the use is located immediately adjacent to an intersection functioning at a poor level of service. The traffic study shall be conducted according to the City of Newberg design standards.
**Finding:** Not applicable because no development is proposed. The TPR requirements are addressed above.

**B. Type IV Plan and Zoning Map Amendments – Large Area of the City and Multiple Ownerships.**

1. The city may initiate plan map amendments affecting large areas and multiple ownerships under the Type IV procedure. No public notice is required to initiate the amendment. Initiation must be done by resolution of the planning commission or city council. These map changes include those that have widespread and significant impact beyond the immediate area of change.

**Finding:** The subject area consists of 95.3 gross acres across four parcels and Yamhill County right-of-way, and therefore is subject to a Type III procedure. The amendment and the City and County staff reports were brought directly to NUAMC for a public hearing on August 23, 2022, October 25, 2022, November 22, 2022, January 24, 2023, March 28, 2023, and April 25, 2023. The City Council staff report was presented on May 15, 2023, June 5, 2023 and July 17, 2023.

2. Amendment Criteria. The city must demonstrate:

   a. The proposed change is consistent with and promotes the objectives of the Newberg comprehensive plan and this code:

   **Finding:** The proposed change is consistent with the applicable objectives of the Newberg Comprehensive Plan. If the area were designated as an Urban Reserve Area and determined it complies with the Urban Reserve Rule (OAR 660, Division 21) it could provide for the orderly and efficient transition from rural to urban land uses as stated by Urbanization Goal 1.

   Under the Comprehensive Plan, N. URBANIZATION, Policies, 1. Urban Growth Boundary and Urban Reserve Area Policies it states:

   “a. The designated Urban Reserve Area identifies the priority lands to include within the Newberg Urban Growth Boundary to meet projected growth needs to provide a thirty (30) to fifty (50) year land supply. Designated Urban Reserve Area lands will be included within the Urban Growth Boundary on a phased basis at periodic review. Property owners will also have the opportunity to request that land within the designated Urban Reserve Area be included within the Newberg Urban Growth Boundary, based on the criteria outlined in LCDC Goal 14 and the Urban Growth Management.”

   The Applicant has provided an analysis for a 30-year land supply, which shows that Newberg’s buildable land need for the 2051 planning horizon is 397 buildable acres, which staff concurs with. (see Attachment 15, Exhibit H). The Applicant is making the request for inclusion in the Urban Reserve Area on the established land need of 397 buildable acres.

   This criterion is met.
b. There is a public need for a change of the kind in question:

**Finding:** The Applicant has demonstrated a need for additional land in the Newberg URAs to meet the 2051 land needs that cannot be met by the land currently in the URAs. The Applicant proposes amending the URAs to include the subject area, which would contribute 95.3 gross acres and approximately 68 buildable acres to the 320 buildable acres of URA lands needed to accommodate the 2051 land need. In the 30-year horizon the Applicant forecasts need for more residential, employment, and public land in the URAs.

The Applicant demonstrated a need for additional land within the URAs based on the 2051 forecast. That analysis indicates that, after considering Exception Land that is “reasonably serviceable”, there is a need for 183 acres of Resource Land to meet the overall need of 397 acres. A detailed description of URA land suitability, the hierarchy for inclusion, and available sites in Newberg are described in the “Issues and Analysis” section below.

Per the Newberg Urban Area Growth Management Agreement, the Newberg URA provides lands that can support the future expansion of urban level uses, including housing. Given the demonstrated need for additional land within the URA to support Newberg’s projected population growth, it is in the public’s best interest that URA expansions occur to meet identified land needs.

This criterion is met.

c. The need will be best served by changing the classification of the particular piece of property in question as compared with other available property:

**Finding:** Pursuant to the Urban Reserve Rule, the Applicant completed an analysis of the areas available for URA inclusion located within 1-mile of the Newberg UGB, segmenting them into 15 subareas. Staff assessment of the analysis and addendums has determined that after excluding Exception Land that cannot be reasonably served there is a deficiency of 183 acres to meet the 2051 Buildable Lands analysis need of 397 acres. A detailed description of URA land suitability, the hierarchy for inclusion, and available sites in Newberg are described in the “Issues and Analysis” section below. As described within the “Issues and Analysis” section, the Applicant’s proposed URA site is the most appropriate Resource Land available for expansion of the Newberg URA.

OAR 660-021-0030(4) provides that lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need. The Applicant contends that this provision does not state that all reasonably serviceable Exception Land must first be brought into the URA before reasonably serviceable Resource Land, simply that if the identified demand cannot be met, lower priority land may be included within the URA. Therefore, the
Applicant's proposed URA site is eligible to be brought into the URA based on the results of the land suitability analysis.

This criterion is met.

d. **Compliance with the State Transportation Planning Rule (OAR 660-012-0060) for proposals that significantly affect transportation facilities:**

**Finding:** No development or zone changes are proposed at this time. Before any development could occur on the property, it would be necessary to bring the site into the UGB, annex it into the City of Newberg, and gain approval for a desired land use. Because the requested URA amendment will not permit the construction of any development or generate any potential increase in trips to the site, the Transportation Planning Rule is satisfied. There will not be a significant effect on the transportation system because of the requested URA amendment.

660-012-0060 Plan and Land Use Regulation Amendments
1. If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:
   (a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);
   (b) Change standards implementing a functional classification system; or
   (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP.

As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Subsections (a) and (b) are not triggered since the proposed land use action will not impact or alter the functional classification of any existing or planned facility and the proposal does not include a change to any functional classification standards.
Regarding subsection (c), the requested URA amendment cannot trigger subsections (A) through (C) since the URA amendment will not result in the generation of any trips or any potential increase in trips. As such, there is not a "significant effect" to the transportation system and the TPR is satisfied. A detailed and comprehensive analysis of the transportation impacts associated with the site would be required at the time of either the UGB amendment or annexation into the City. Oregon law allows that detailed TPR findings can be deferred to the time of annexation. At that time, a full transportation impact analysis will be required that provides an in-depth examination of the impacts of development on the site, conditions at the applicable planning horizon, and identification of specific improvements that would be required to mitigate the impact from development.

The Applicant has provided a Transportation Planning Rule memorandum that is included in Attachment 15, Exhibit I.

This criterion is met.

Newberg Comprehensive Plan

Applicable goals and policies of the Newberg Comprehensive Plan are set forth below with findings demonstrating the project's consistency with these goals and policies.

Goals and Policies
Citizen Involvement

Goal: To maintain a Citizen Involvement Program that offers citizens the opportunity for involvement in all phases of the planning process.

Finding: The Applicant's requested URA expansion is subject to a quasi-judicial procedure to amend the City and County Comprehensive Plans, which requires public notification and public hearings before NUAMC, Newberg City Council, and Yamhill County Board of Commissioners. The public hearing notice of action and decision, and the hearings on this proposal before the NUAMC, City Council, and Yamhill County Board of Commissioners provides opportunities for citizen participation.

Additionally, the applicant held a virtual neighborhood meeting on May 4, 2021, and invited over 200 project neighbors to this meeting for the purpose of reviewing and discussing the proposal. This meeting was attended by over 50 neighboring property owners and residents, and included a presentation describing the Applicant's URA expansion request, as well as a question and answer session intended to address any questions or concerns raised by neighbors. An overview of the topics discussed during the meeting, are summarized below:

- The applicant described the various steps from URA to development and described what land is prioritized for URA inclusion per state requirements.
- For the proposed recreational facilities in the conceptual plan, neighbors asked if they will they be public. The applicant said they intend to provide public use access to the conceptual parks.
- Applicant noted they had completed a transportation impact analysis. Since no development is proposed at this time, no significant transportation impacts are anticipated.
- For natural Resource protection, applicant noted that required natural resource protections on the site pursuant to local, state, and federal regulations will be met.
- Neighbors questioned the roadway connections between the subject site and the adjacent subdivision (The Greens at Springbrook). The applicant noted that the subject site and conceptual plan can provide a more complete vehicular network in the area.

The Goal is met.

Land Use Planning

Goal: To maintain an on-going land use planning program to implement statewide and local goals. The program shall be consistent with natural and cultural resource needs.

Policies:

2. The Comprehensive Plan and implementing ordinances shall be reviewed continually and revised as needed. Major reviews shall be conducted during the State periodic review process.

Finding: The Comprehensive Plan and implementing ordinances should be continually reviewed and revised as needed. The requested Comprehensive Plan amendment is no a part of a major review. However, new information, in particular the 2021 ECONorthwest land needs evaluations accepted by the Newberg City Council but not adopted provide new forecasts on land needs that are not reflected in the Comprehensive Plan.

The Applicant’s 2051 BLI provided a land need forecast within the URA horizon based on the 2021 studies. That updated information was used as the basis for the decision regarding this requested URA expansion.

The Land Use Planning Chapter goal is to implement statewide land use program goals and provisions. This includes the Urban Reserve Rule (OAR 660 Division 21’), which established the required land supply in URAs and hierarchy of priority land for inclusion in URAs. The requested URA expansion to the Applicant’s area, based on all of their application material, indicates that some Resource Land will need to be designated as Urban Reserve to meet the need out to 2051. Therefore, the request conforms with the land use planning goal of the Comprehensive Plan.

The Goal is met.
Agricultural Lands

Goal: To provide for the orderly and efficient transition from rural to urban land uses.

Policies:

1. The conversion of urbanizable land from agricultural to urban land uses shall be orderly and efficient.

2. Agriculture is a part of our heritage, uniqueness, culture and future. Inclusion of lands in agricultural use within the Urban Growth Boundary is recognition of a commitment to future urbanization, as such lands are necessary to meet long-range population and economic needs, based on criteria outlined in the statewide Urbanization Goal. Urbanization of agricultural land shall be carefully considered and balanced with the needs of the community as a whole.

Finding: The Applicant’s request to expand the City’s URA does not alter the area’s zoning designation and does not convert the area’s agricultural lands to an urban use. The Applicant’s request to expand the City’s URA is the first step in a process that may lead to the site’s eventual conversion to urban uses away from agricultural land. An expansion of the City’s UGB, as well as annexation to the City, would be required before urbanization could occur.

The 95.3-gross acre property is almost entirely located on land with a Yamhill County Comprehensive Plan designation of Agricultural/Forestry Large Holding (AFLH), and zoned for agriculture, and designated as Exclusive Farm Use (EF-20) pursuant to Yamhill County zoning. As noted in the Comprehensive Plan policy, inclusion of agricultural land into the UGB would assume future development. Generally, URA inclusion is one step between the current resource status of the subject site and the eventual inclusion of the land in the UGB.

OAR 660-021-0030 describes the hierarchy of priority lands to be included in the URAs. Resource Land, including land zoned EF-20, is the last priority for inclusion in a URA. The provision is intended to protect Resource Land from urbanization. When land needs require inclusion of Resource Land, the Resource Land is then prioritized by soil classifications.

As part of the proposed URA expansion, the Applicant completed the 2051 Buildable Lands Inventory & Lands Need Assessment (see Attachment 15, Exhibit G), which determined Newberg’s buildable land need for the 2051 planning horizon is 397 buildable acres, which the staff concurs with. Further, the Applicant completed a Comparative Site Analysis (see Attachment 15, Exhibit H), as well as a subsequent addendum submitted on March 1, 2022 (see Attachment 15, Exhibit H’), that ultimately found approximately 213.62 acres of Exception Land within a one mile radius of the City’s Urban Growth Boundary (UGB) can be reasonably served by extensions of public utilities (water and gravity sanitary sewer service), and are therefore eligible for consideration as a URA. Therefore, the City would continue to have a deficit of approximately 183.38 acres of land to satisfy the identified land need through 2051.
As the Applicant has determined that there is not a sufficient amount of reasonably serviceable Exception Land available to meet Newberg’s identified land need through 2051, OAR 660-021-0030(4) provides that lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need. Notably, this provision does not state that all reasonably serviceable Exception Land must first be brought into the URA before reasonably serviceable Resource Land, simply that if the identified demand cannot be met, lower priority land may be included within the URA.

As described within the Staff Report, the Applicant has completed a comprehensive analysis of potential alternative URA expansion sites. Consistent with this goal, the urbanization of agricultural land has been carefully considered consistent with applicable statutes and the Applicant’s proposed site is eligible to be brought into the Newberg URA.

The Goal is met.

**Wooded Areas**

**Goal:** *To retain and protect wooded areas.*

**Policies:**

1. The City shall encourage the preservation of wooded areas for wildlife habitat and limited recreational uses.

2. Development in drainageways shall be limited in order to prevent erosion and protect water quality. Trees provide needed protection from erosion and should be maintained.

**Finding:** The western portion of the requested URA expansion area contains a large stand of Douglas Fir trees. While the requested URA expansion will not directly result in development, it is possible that, if the site is ultimately slated for urban development, some of these trees may ultimately be removed for site grading for future development. Further analysis, including an arborist study for tree health and protection capability, will be required before prior to removal of trees on the site should the site be included in the Urban Growth Boundary and subsequently annexed into the City and eligible for urban development.

More generally, the Applicant’s Comparative Site Analysis (see Attachment 15, Exhibit H), conducted with the Comparative Site Analysis (Exhibit H) determined that alternative sites considered for expansion, such as the East B, Southeast B, and Southwest D study areas, contain larger amounts of wooded areas. Certain wooded areas in these study areas are adjacent to creeks and streams that are tributaries to the Willamette River. Adjacent wooded areas enhance the functional value and water quality of these waterways and the riparian habitat areas adjacent to them. As described within the Staff Report and the Applicant’s materials, the Applicant’s proposed URA expansion site can promote compact and efficient urban development due to its adjacency to existing urbanized land.

Thus, by directing urban uses toward the proposed URA expansion site, and away from other, more expansive wooded areas, the proposed URA expansion promotes...
the goal of retaining and protecting wooded areas for the community and region as a whole.

The Goal is met.

Air, Water, and Land Resource Quality

Goal: To maintain and, where feasible, enhance the air, water and land resource qualities within the community.

Policies:

2. Water quality in the Willamette River and tributary streams shall be protected.

3. As public sanitary sewer systems become available, all development shall connect to the public system. To encourage economic development, the City may permit subsurface sewage disposal where the system meets State and County requirements and where unique circumstances exist.

4. The Newberg Watershed shall be protected from excessive pollution levels resulting from urbanization.

Finding: The requested expansion of the City’s URAs will not preclude compliance with this goal and policies. Future development requests will be required to comply with applicable City requirements prior to approval, including connection to public wastewater systems.

The applicant has presented information on the subject area that has determined the area to be serviceable by the public wastewater system. They have also noted that stormwater can be properly treated and conveyed to established discharge points, and that water quality in the Willamette River and its tributary system will be protected.

Further, the requested URA expansion area is not within the Willamette River Greenway and is directing urbanization away from the Willamette River.

The Goal is met.

Open Space, Scenic, Natural, Historic and Recreational Resources

Goals:

1. To ensure that adequate land shall be retained in permanent open space use and that natural, scenic and historic resources are protected.

2. To provide adequate recreational resources and opportunities for the citizens of the community and visitors.

Policies:

1. Open Space & Natural Resources Policies
   a. The City shall ensure that as development continues, adequate land shall be retained in permanent open space use.
   g. The City shall coordinate with State and Federal agencies to protect
identified wetland areas. The National Wetlands Maps prepared by the
U.S. Fish and Wildlife Service in 1981 provides an initial inventory of wetlands
in Newberg.

Finding:
The area consists of primarily agricultural land with some forested areas. There are
also wetlands on the site. The applicant completed a preliminary reconnaissance of
the location of wetlands on the site.

Future urban development in the area, if permitted through UGB expansion and
annexation into the City, would be subject to various requirements for open space
creation and resource protection. Newberg Municipal Code (NMC) Title 15
(Development Code) maintains requirements for recreational facilities, outdoor
living areas, and open space areas for various types of development. NMC 15.240
(Planned Unit Developments) requires that sufficient usable recreation facilities,
outdoor living area, and open space areas be accessible for use by residents of the
proposed development. NMC 15.420 (Landscaping and Outdoor Areas) maintains
provisions for minimum usable outdoor recreation space on a per-unit basis for
proposed residential developments. Per NMC 15.220 (Site Design Review),
multifamily residential projects are required to use a minimum amount of certain
design elements, which includes options such as playground equipment, “outdoor”
rooms created by well-defined spaces between buildings, and preservation of
existing natural features. Future development within the requested URA expansion
site would be required to meet applicable provisions of Title 15, in support of this
goal.

Per the U.S. Fish and Wildlife Service National Wetlands Inventory, a portion of an
approximately 1.49-acre freshwater forested/shrub wetland is shown to exist within
the requested URA expansion site. Further, the applicant has contracted with a
professional wetland scientist who has completed a preliminary reconnaissance of
the requested URA expansion area to determine the approximate location of possible
on-site wetlands. These locations are shown on the Conceptual Development Plan
(Attachment 15, Exhibit F). A formal delineation would be necessary to determine
the extent and precise location of these wetlands. If wetlands are determined to be
present within the area with a future delineation, they will be subject to City, state,
and federal requirements, and any proposed impacts will require permitting and
mitigation.

The Goal is met.

The Economy

Goal: To develop a diverse and stable economic base.

Finding:
The 2051 BLI, determined a land need of 397 acres of land needed in the URAs.
Theoretically, the requested URA expansion for the subject site could contribute
95.3 acres (gross) to meet a portion of the 170-acre land need identified in the
Applicant’s report for employment land into 2051. The applicant has provided a
concept plan (see Attachment 15, Exhibit F) that relies on residential development
of the area as opposed to employment lands. The concept plan demonstrates a
variety of housing types can be provided, including single-family detached homes, duplexes, triplexes, cottage clusters, townhomes, and multi-family residential (apartments), as well as commercial (employment) land. A greater variety of housing options offers increased opportunities for renters and homeownership across multiple price levels, which is conducive to attracting new industries and maintaining a stable economic base in support of this goal.

The Goal is met.

**Housing**

**Policies**

x. Where large parcels or groups of parcels are to be brought into the urban growth boundary and designated low or medium density residential, the City shall apply a mixture of residential designations, to include some HDR-designated lands, consistent with the policy of distributing multi-family housing throughout the community. Such designations shall be applied to portions of the property that are most suitable for high density development.

For the purpose of this policy, “large” is defined as an area greater than 15 net acres, after subtracting for land in stream corridor overlays. “Some” is defined as 10% of the net size of the application.

**Finding:** The 2051 BLI, determined a land need of 397 acres of land needed in the URAs. The requested URA expansion could contribute 95.3 acres (gross) towards meeting the 2051 need of 239-acres of residential land. Any future urban (City of Newberg) zoning for the site would not be determined or applied until the site was brought into the UGB and annexed. Pursuant to policy, high density residential designated land would be required on a portion of the area upon annexation.

The Goal is not applicable because an Urban Growth Boundary expansion is not being requested.

**Transportation**

**Goal 2:** Establish consistent policies which require concurrent consideration of transportation/land use system impacts.

**Policies:**

a. Transportation improvements should be used to guide urban development and should be designed to serve anticipated future needs.

**Finding:** The requested URA expansion area is bordered by two existing County minor arterials, NE Corral Creek Road and NE Fernwood Road. The applicant has conceptually demonstrated that the site can provide an efficient and compact internal road network that guides the areas urban development and integrates with existing facilities. Future development of the area would also be subject to the City’s Transportation Utility Fee (TUF) which provides funds in support of City-wide transportation maintenance projects and needed improvements.
The Goal is not applicable because development is not proposed that would transportation improvements.

**Goal 4: Minimize the impact of regional traffic on the local transportation system.**

**Policies:**

a. **Enhance the efficiency of the existing collector/arterial street system to move local traffic off the regional system.**

b. **Provide for alternate routes for regional traffic.**

**Finding:** The Applicant’s requested URA expansion will not significantly affect the transportation system within the vicinity of the requested URA expansion site. A complete traffic study that thoroughly analyzes possible impacts from the area to certain transportation facilities would be required at the time when the City’s UGB is amended to include the site if it is designated a URA, or when the site is annexed into the City. A complete traffic study would provide an in-depth examination of the impacts of the development of the site, conditions at the applicable planning horizon, and identification of specific improvements and enhancements to the existing transportation system that may be required to mitigate the impact of the areas development on existing facilities.

Future applications, including comprehensive plan amendments to amend the City’s UGB, as well as annexation, will be required to demonstrate compliance with applicable goals and policies of the City’s Comprehensive Plan, including the above policies.

The Goal is not applicable because development is not proposed that would transportation improvements.

h. **For the purposes of compliance with the Transportation Planning Rule, OAR 660-12-0060 and in order to support the goal exception that Yamhill County took to advance construction of the Bypass, the City of Newberg acknowledges that reliance upon the full Bypass as a planned improvement to support comprehensive plan amendments or changes is premature. (Ordinance 2008-2708, December 1, 2008, Ordinance 2011-2734, March 7, 2011; Ordinance 2016-2810, December 19, 2016)** The Phase 1 Bypass is considered a planned improvement for the 20-year planning horizon and may be relied upon for planning purposes. The City of Newberg will continue to work with ODOT on improvements to the local transportation system in accordance with post-Phase 1 Bypass impacts. This may include adopting alternative mobility standards for Oregon 99W and Oregon 219. For purposes of the Newberg TSP, alternative mobility standards are consistent with the planned function of Oregon 99W through Newberg as a lower speed local arterial intended to provide access to businesses and residences and a more pedestrian friendly environment. Alternative mobility standards may continue to be necessary on Oregon 99W and Oregon 219 until the full Bypass can be completed.
Finding: Phase I of the Bypass is already constructed and completed. Phase II of the Bypass is currently in design stages. According to ODOT’s project webpage, as of April 1, 2022, “Phase 2A We are designing and building improvements for the interchange where OR 18 meets OR 219, including the realignment of NE Wynooski Road. We expect to start Phase 2A construction in 2023, and anticipate completing construction by 2025.” “Phase 2B Not funded for construction. We are also designing a road connecting the new interchange with OR 99W. Phase 2B is not yet funded for construction.” The general location of Phase 2B improvements is located near the area along Oregon 99W; however, it is unlikely it will affect the subject area directly.

If the requested URA expansion is approved, future development on the site would be required to address specific TPR requirements for compliance. As well, any future TPR analysis should have the benefit of the adopted Phase 2 Bypass design to make clear TPR findings with accurate Bypass considerations. The requested URA’s expansion consistency with the TPR is addressed in the response to NMC 15.302.030.B.2.d.

This Goal is not applicable as it relates the URA expansion.

Public Facilities and Services

Goal: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban development.

Policies:

1. All Facilities & Services Policies

   a. The provision of public facilities and services shall be used as tools to implement the land use plan and encourage an orderly and efficient development pattern.

   d. Services shall be planned to meet anticipated community needs.

2. Wastewater, Stormwater and Water Policies

   c. Developments with urban densities should be encouraged to locate within the area which can be serviced by Newberg’s present wastewater system.

Finding: The applicant completed an analysis determining the serviceability of the site (see Attachment 15, Exhibit J). The site is reasonably serviceable with moderate costs per buildable acre when compared to other areas considered for URA inclusion. The serviceability to the site is as follows.

   • Water: Approximately 68 acres of the requested URA expansion area is within Pressure Zone 1, which can be served by the Corral Creek Reservoir. A connection to the existing 24-inch water main, located just north of the area, could provide water service to the northern portions of the area. A connection to the existing 8-inch water main within E Hook Drive and N Fairway Street could serve the western and southern portions of the area. The remaining higher elevation portions of the area are within Pressure
Zone 2, which would require a new reservoir at a higher elevation or the construction of a local Pressure Zone 2 system within the requested URA expansion area with a dedicated pump system feeding an isolated portion of the water distribution system to service the higher elevations of the requested URA expansion area. The Applicant contends that alternatively if not developed for residential uses, these lands could be utilized for park, open space, and recreational uses in support of Newberg Comprehensive Plan goals and policies that encourage the provision of open space and recreational opportunities and “complete communities”.

The City Council discussed the issue of Zone 1 and Zone 2 water serviceability on June 5, 2023 concluding the area of East A resource land above Zone 1 of the City’s water system is acceptable provided that the cost of any water booster pump station is the responsibility of the developer of the land. Additionally, NUAMC noted that retaining these lands within the proposed URA expansion site allows the lands to be used for other uses necessary for efficient urbanization, such as parks, open space, and recreational opportunities, as well as public street connections that can allow for more efficient development within the remainder of the URA expansion site. (See Map above for 300-foot contour delineation between Zone 1 and Zone 2). Staff was directed to amend the findings per their direction to include the Zone 2 water area for inclusion into the Urban Reserve Area.

- **Wastewater:** The requested URA expansion area is serviceable by gravity sewer lines as the area generally slopes to the southwest toward NE Fernwood Road. The area would connect to the Fernwood Pump station located approximately 1,300 feet to the west. As identified in the City’s Wastewater Master Plan, upgrades to the Fernwood Pump Station and the pressurized and gravity sewer mains downstream of the pump station would be required, as the pump station and mains are already at capacity. A preferred alternative for these upgrades is identified in the Wastewater Master Plan.

- **Stormwater:** The requested URA expansion area is serviceable by a gravity stormwater conveyance system. The on-site stormwater conveyance system could discharge to the 12-inch stormwater main within NE Fernwood Road, which eventually outfalls into Springbrook Creek.

Therefore, the requested URA expansion site’s serviceability and adjacency to existing urbanized areas and services can facilitate more orderly and efficient urbanization and development of public facilities to serve as a framework for urban development.

However, although the site can be served by public facilities, this is one of a number of factors that dictate priority land for inclusion into future URAs. The Applicant’s site has an area that is higher in elevation than the Corral Creek Reservoir and cannot be severed by the reservoir unless a booster pump station is
added, or a new reservoir is constructed. The applicant provided supplemental information (Attachment 17) that further addressed this issue. The Engineering Division has recommended that 20 acres of the subject application area should be removed from consideration because it is above water Zone 1 and the City does not support local Zone 2 water service areas or water pump stations.

While NUAMC and City Council understands the Engineering Division’s concerns with retaining the 20 acres of the Applicant’s proposed URA expansion site that aren’t serviceable by Zone 1 of the City’s water system, retaining these lands within the proposed URA expansion site allows the lands to be used for other uses necessary for efficient urbanization, such as parks, open space, and recreational opportunities, as well as public street connections that can allow for more efficient development within the remainder of the URA expansion site.

The City of Newberg Engineering Division evaluated the November 22, 2022, Comparative Site Analysis Addendum (Attachment 17) and provided the following comments:

a. Approximately 20 acres of East A Resource Land, 20 acres of which are within the Applicant’s proposed URA expansion site, are not serviceable by Zone 1 of the City’s water system. (See Map below for 300-foot contour delineation between Zone 1 and Zone 2)

b. The information provided does describe two approaches to provide water service to these areas of East A resources lands not serviceable by Zone 1.

c. What is not described is if any sub areas within the other Resource Lands evaluated might also have areas that could be served in a similar manner that might also be considered reasonably serviceable by the Applicant’s methodology.

d. The two approaches described for providing water service to the 20 acres of East A Resource Land within the Applicant’s proposed URA expansion site not serviceable by Zone 1 are:

e. Construction of a local Zone 2 within the Applicant’s proposed URA expansion site.

f. Extension of the City’s Zone 3 service area.

Neither of the approaches described are consistent with the current City of Newberg Water Master Plan.

g. It is not recommended to create additional local Zone 2 water service areas or water pump stations.

h. The planned Zone 3 water service area is not located in proximity to the Applicant’s proposed URA expansion site.

i. The Newberg Engineering Division recommends that the 20 acres of East A Resource Land within the Applicant’s proposed URA expansion site not serviceable by Zone 1 of the City’s water system be removed from consideration for inclusion in the Applicant’s proposed URA expansion site.
The City Council discussed the issue of Zone 1 and Zone 2 water serviceability on June 5, 2023 concluding the area of East A resource land above Zone 1 of the City’s water system is acceptable provided that the cost of any water booster pump station is the responsibility of the developer of the land. Additionally, NUAMC noted that retaining these lands within the proposed URA expansion site allows the lands to be used for other uses necessary for efficient urbanization, such as parks, open space, and recreational opportunities, as well as public street connections that can allow for more efficient development within the remainder of the URA expansion site. (See Map above for 300-foot contour delineation between Zone 1 and Zone 2). Staff was directed to amend the findings per their direction to include the Zone 2 water area for inclusion into the Urban Reserve Area.

The Goal is met for water, wastewater and stormwater.

Energy

Goal: To conserve energy through efficient land use patterns and energy-related policies and ordinances.

Policies:

1. Planning Policies
   a. The City will encourage energy-efficient development patterns. Such patterns shall include the mixture of compatible land uses and a compactness of urban development.
Finding: The area of the requested URA expansion is primarily vacant or agricultural land. Therefore, if the land was brought into the URAs, there is an opportunity for a master-planned development which could create energy-efficient development patterns consistent with the Comprehensive Plan and applicable provisions of the NMC. However, there is no conditions requiring the site be developed as a master-planned community.

Large parcel size, ideal for master planning, was included by the applicant as a reason for inclusion the subject site into the URAs. However, this factor, while beneficial from a comprehensive planning perspective, does not fall under any of the criteria listed in OAR 660-021-0030. The Engineering Division comments (Attachment 3a 3b and 3c), indicate that existing development in exception areas that are highly parcelized could be seen as a physical constraint. In certain subareas, the constraint is represented through utility costs. However, that is not consistent with the hierarchy as it relates to both exception and Resource Lands, that implements the provisions of OAR 660-0021.

The Goal can be met.

Urbanization

Goals:

1. To provide for the orderly and efficient transition from rural to urban land uses.
2. To maintain Newberg’s identity as a community which is separate from the Portland Metropolitan area.

Policies:

1. Urban Growth Boundary and Urban Reserve Area Policies

b. The City shall oppose urban development outside the City limits but within the Newberg Area Influence.

h. The designated Urban Reserve Area identifies the priority lands to include within the Newberg Urban Growth Boundary to meet projected growth needs to provide a thirty (30) to fifty (50) year land supply. Designated Urban Reserve Area lands will be included within the Urban Growth Boundary on a phased basis at periodic review. Property owners will also have the opportunity to request that land within the designated Urban Reserve Area be included within the Newberg Urban Growth Boundary, based on the criteria outlined in LCDC Goal 14 and the Urban Growth Management.

Finding: The Newberg Area of Influence is described in the NUAGMA as an area of land that extends one mile outside the City’s UGB and includes the requested URA expansion area. NUAMC by approval of the Newberg City Council and Yamhill County Board of Commissioners governs the NUAGMA.
The Applicant’s request to expand the City’s URAs do not alter the areas zoning designation and does not convert the areas agricultural lands to an urban use. The Applicant’s request to expand the City’s URAs is the first step in a process that may lead to the site’s eventual conversion to urban uses. An expansion of the City’s UGB, as well as annexation to the City, would be required before urbanization could occur.

As established in these findings, the City has an identified land need of approximately 397 more buildable acres within its URAs to ensure that the City’s URAs provide sufficient land for a minimum of a 30-year growth horizon per OAR 660-021-0030(1). OAR 660-021-0030(2-5) establishes criteria determining and prioritizing land for inclusion in the URAs, which are addressed in the findings of OAR 660 Division 21.

Staff considerations of the Applicant’s Comparative Site Analysis, Engineering Division comments, and the Urban Reserve Rule determined that the Applicant’s site is a potential priority for URA inclusion at this time. Given that the site is Resource Land with high-quality soils, it is the lowest priority for URA inclusion, excluding lands that cannot be “reasonably serviced.” Approving the inclusion of Resource Land in the URAs is consistent with Goal 14 to preserve rural land and character outside of the UGB when balanced against other Resource Land Areas, and prioritizing Exception Lands, which are more reflective of urban development within the URAs.

As the Applicant has determined that there is not a sufficient amount of reasonably serviceable Exception Land available to meet Newberg’s identified land need through 2051, OAR 660-021-0030(4) provides that lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need. Notably, this provision does not state that all reasonably serviceable Exception Land must first be brought into the URA before reasonably serviceable Resource Land, simply that if the identified demand cannot be met, lower priority land may be included within the URA.

The Goal is met.

F. Summary of Land Needs

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**Finding:**

The City’s adopted future land needs data, identified in Table V-14 above, is not based on the current PSU Population Research Center population forecasts. Because the Applicant’s requested URA expansion requires an amendment to acknowledged Comprehensive Plans, the current PSU Population Research Center population forecast numbers must be used as the basis for a decision on the Applicant’s requested URA expansion request pursuant to ORS 195.033(3). The ECONorthwest studies completed in 2021 were based on the most recent PSU population forecast and only accepted (not adopted) by the Newberg City Council and have not been acknowledged by DLCD. The results of those reports were the basis for the Applicant’s 2051 BLI. Therefore, the analyses on population forecasts and associated land needs are assumed to be more accurate than the land needs identified above.

**Newberg Urban Area Growth Management Agreement (NUAGMA)**

The following provisions of the NUAGMA apply to the submitted application. The full NUGMA is included as Attachment 14.

**VII. Establishment of Land Use Review Procedures**

2. *Urban Reserve Area Expansions*

   a. **Procedures to establish Urban Reserve Area.**

   An application to amend the Urban Reserve Area may be initiated by the Yamhill County Board of Commissioners, the Newberg City Council, or by a property owner who requests inclusion in or exclusion from the Urban Reserve Area.

   Amendment of the Urban Reserve Area shall be treated as a map amendment to both the City and County Comprehensive Plan maps.

   Individual amendment applicants shall pay the fees established from time to time by each governing body.

   Each application shall include a map and sufficient information to make a decision based upon the applicable requirements of Statewide Land Use Planning Goal 14, ORS Chapter 197 or 197A, and related Oregon Administrative Rules.

   A property owner requesting inclusion or exclusion from the Urban Reserve Area shall file applications simultaneously with the Newberg Community Development Department, Planning Division, and the Yamhill County Planning and Development Department. The City and County shall each collect fees from the applicant. The City and County shall coordinate with each other to process the application. The City of Newberg may initiate an amendment to the Urban Reserve Area.
Growth Area by filing its completed application and required fees with the Yamhill County Planning and Development Department for processing. Yamhill County may initiate an amendment to the Urban Reserve Area by filing its completed application and required fees with the Newberg Community Development Department, Planning Division, for processing. Applications must be complete prior to consideration by the Newberg Urban Area Management Commission.

Applications shall be accumulated and referred quarterly to the Newberg Urban Area Management Commission for a Public Hearing for which at least ten days advance public notice shall be given by publication in a newspaper of general circulation in the County (or published in the territory so concerned ORS 215.060).

Following the Public Hearing, the NUAMC shall make and forward its findings and decision directly to the governing body of each jurisdiction. The City shall review NUAMC’s findings and decision in a public hearing (de novo), and adopt its final decision by ordinance. The City shall forward its ordinance to the County, which shall make its final decision based on the NUAMC record, the City’s ordinance, and public testimony. The County shall adopt its final decision by ordinance and issue a Board order.

Nothing included in this process requires or prohibits the City or County from referring the application to its respective Planning Commissions for information.

If the governing bodies do not concur in their final decision within sixty days of referral of the matter to them by the NUAMC, a joint meeting shall be held to resolve differences. If agreement cannot be reached, the parties agree to mediate the issue using a jointly selected mediator.

Finding: This application was initiated by a private property owner. The proposal is being treated as a map amendment to both the City and County Comprehensive Plan maps. The applicant paid fees to process the request to both the City of Newberg and Yamhill County. The property owner filed applications with the City of Newberg and Yamhill County. Notice of a public hearing before NUAMC was provided in the Newberg Graphic at least 10 days prior to opening the initial evidentiary hearing on August 23, 2022. At the conclusion of the NUAMC public hearing its findings and decision will be forwarded to the City Council and County Board of Commissioners for their review. The City Council hearing was noticed provided in the Newberg Graphic at least 10 days prior to the hearing on May 15, 2023. Notice to property owners within 500 feet of the subject proposal was provided on May 3, 2023 by mail.

3. Comprehensive Plan Amendment

a. Inside the Urban Growth Boundary, but outside the city limits. The amendment shall be filed with Yamhill County, and shall otherwise be subject to the same procedures as an Urban Growth Boundary Amendment under this Agreement.
Finding: Nct applicable because the proposed Comprehensive Plan Amendment is outside of the UGB and outside of the Newberg city limits.

b. Inside the Urban Reserve Area, but outside the City limits. This amendment shall be filed with Yamhill County, and shall otherwise be treated subject to the same procedures as an amendment to the Urban Reserve Area, with referral to the City for its recommendation.

Finding: Not applicable because the application addresses land not designated an Urban Reserve Area and is outside of the Newberg city limits.

c. Outside the Urban Growth Boundary, but within the "Area of Influence". This amendment shall be processed by Yamhill County and shall be referred to the City of Newberg for a recommendation.

Finding: The proposed application is outside of the UGB but is within the area of influence (within 1 mile of the Newberg UGB). The City and Yamhill County have been coordinating on the application in accordance with Oregon Administrative Rules OAR 660-024. NUAMC will be reviewing the application request as has occurred with previous Urban Reserve Area application requests in 1995, 2006 (Resolution 2006-16), 2007 (Resolution No. 2007-20), 2007 (Resolution No. 2007-21). NUAMC will hold a public hearing and adopt a Resolution regarding the application that will be forwarded to the Newberg City Council and Yamhill County Board of Commissioners for a decision.

State Regulations
Statewide Planning Goals

Applicable Statewide Planning Goals are set forth below with findings demonstrating the project's consistency with each applicable Goal. Goals 7, 13, 15, 16, 17, 18, and 19 are not applicable to the proposed comprehensive plan amendment.

Goal 1: Citizen Involvement

To ensure opportunities for citizens to be involved in the development of public policies and all phases of the planning process.

Finding: The Applicant's requested URA expansion is subject to a quasi-judicial procedure to amend the City and County Comprehensive Plans, which requires public notification and public hearings before NUAMC, Newberg City Council, and Yamhill County Board of Commissioners. The public hearing notice of action and decision, and the hearings on this proposal before the NUAMC, City Council, and Yamhill County Board of Commissioners provides opportunities for citizen participation.

Additionally, the applicant held a virtual neighborhood meeting on May 4, 2021, and invited over 200 project neighbors to this meeting for the purpose of reviewing and discussing the proposal. This meeting was attended by over 50 neighboring
property owners and residents, and included a presentation describing the Applicant’s URA expansion request, as well as a question and answer session intended to address any questions or concerns raised by neighbors. Concerns around transportation impacts and natural resource protection were raised by neighbors.

The Goal is met.

Goal 2: Land Use Planning

To maintain a transparent land use planning process in which decisions are based on factual information and reviewed in accordance with implementing ordinances.

Finding: The procedure to expand the City’s URAs requires a Comprehensive Plan amendment to both the City and County’s adopted Comprehensive Plans. This process requires the Applicant to demonstrate consistency with the goals and policies of these Comprehensive Plans, as well as the Newberg Municipal Code, the Statewide Planning Goals, the Oregon Administrative Rules, and Oregon Revised Statutes so that NUAMC, the City, and the County can make a decision based on findings of fact. This process includes public notice and review for the NUAMC public hearing. NUAMC is the recommending body of the NUAGMA area with final decisions resting with the Newberg City Council and Yamhill County Board of Commissioners. NUAMC includes representatives from both City of Newberg and Yamhill County.

The Land Use Planning Chapter goal is to implement statewide land use program goals and provisions. This includes the Urban Reserve Rule (OAR 660 Division 21), which established the required land supply in the URAs and hierarchy of priority land for inclusion in the URAs. As previously discussed, the City meets the current URAs land supply needed into 2041. The requested URA expansion to the Applicant’s area, based on all of their application material, indicates that some Resource Land will need to be designated as Urban Reserve to meet the need out to 2051. Therefore, the request does conform with the land use planning goal of the Comprehensive Plan.

The Goal is met.

Goal 3: Agricultural Lands

To preserve and maintain agricultural lands and to support agriculture through farm zoning.

Finding: The Applicant’s request to expand the City’s URA does not alter the area’s zoning designation and does not convert the area’s agricultural lands to an urban use. The Applicant’s request to expand the City’s URA is the first step in a process that may lead to the site’s eventual conversion to urban uses away from agricultural land. An expansion of the City’s UGB, as well as annexation to the City, would be required before urbanization could occur. Unless and until urbanized as allowed under the applicable state and local statutes, the site’s rural character will remain intact and the URA expansion will not directly impact the site’s rural character.
The subject area is zoned Exclusive Farm Use, in total about 90 acres of Exclusive Farm Use land. Exclusive Farm Use land is protected through Goal 3 and its implementing provisions. The area consists of Class I, II, III, and IV soils. The Applicant’s 2051 BLI demonstrated a need for more land in the URAs. However, pursuant to the Urban Reserve Rule, Resource Lands, which includes agricultural land, is the lowest priority land for inclusion.

The 95.3-gross acre property is almost entirely located on land with a Yamhill County Comprehensive Plan designation of Agricultural/Forestry Large Holding (AFLH), and zoned for agriculture, and designated as Exclusive Farm Use (EF-20) pursuant to Yamhill County zoning. As noted in the Comprehensive Plan policy, inclusion of agricultural land into the UGB would assume future development. Generally, URA inclusion is one step between the current resource status of the subject site and the eventual inclusion of the land in the UGB.

OAR 660-021-0030 describes the hierarchy of priority lands to be included in the URAs. Resource Land, including land zoned EF-20, is the last priority for inclusion in a URA. The provision is intended to protect Resource Land from urbanization. When land needs require inclusion of Resource Land, the Resource Land is then prioritized by soil classifications.

As part of the proposed URA expansion, the Applicant completed the 2051 Buildable Lands Inventory & Lands Need Assessment (see Attachment 15, Exhibit G), which determined Newberg’s buildable land need for the 2051 planning horizon is 397 buildable acres, which the staff concurs with. Further, the Applicant completed a Comparative Site Analysis (see Attachment 15, Exhibit H), as well as a subsequent addendum submitted on March 2, 2022 (see Attachment 15, Exhibit H), that found approximately 213.62 acres of Exception Land within a one mile radius of the City’s Urban Growth Boundary (UGB) that can be reasonably served by extensions of public utilities (water and gravity sanitary sewer service), and are therefore eligible for consideration as a URA. Therefore, the City would continue to have a deficit of approximately 183.38 acres of land to satisfy the identified land need through 2051.

As the Applicant has determined that there is not a sufficient amount of reasonably serviceable Exception Land available to meet Newberg’s identified land need through 2051, OAR 660-021-0030(4) provides that lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need. Notably, this provision does not state that all reasonably serviceable Exception Land must first be brought into the URA before reasonably serviceable Resource Land, simply that if the identified demand cannot be met, lower priority land may be included within the URA.

As described within the Staff Report, the Applicant has applied a comprehensive analysis of potential alternative URA expansion sites. Consistent with this goal, the urbanization of agricultural land has been carefully considered with the determination that the Applicant’s proposed site is eligible to be brought into the Newberg URA.
The Goal is met.

**Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces**

*To protect and maintain unique scenic, open space and natural areas.*

**Finding:** Historic resources are inventoried by both the City and County and are not shown to exist in the subject area. The Applicant’s requested URA expansion will not alter protections that currently exist within the Newberg Municipal Code and the Yamhill County Zoning Ordinance (YCZO). Future development, whether urban or rural in nature, will have to comply with Goal 5 and existing protections maintained by both the City and County, depending on future jurisdiction.

The applicant has completed a preliminary reconnaissance to determine the approximate location of possible on-site wetlands. A formal delineation will be necessary to determine the extent and precise location of these wetlands prior to any future development activity.

The Goal is met.

**Goal 6: Air, Water and Land Resource Quality**

*To maintain and improve the quality of air, land, and water resources consistent with state and federal regulations.*

**Finding:** The Applicant’s requested URA expansion will not alter protections that currently exist within the NMC or the YCZO. Future development, whether urban or rural in nature, will comply with Goal 6 and existing protections maintained by the City and County as applicable. The applicant has completed a preliminary reconnaissance to determine the approximate location of possible on-site wetlands. A formal delineation will be necessary to determine the extent and precise location of these wetlands prior to development.

The Goal is met.

**Goal 9: Economic Development**

*To inventory commercial and industrial lands, identify future demand, and plan for ways to meet that demand.*

**Finding:** The 2051 BLI, determined a land need of an additional 397 acres of land needed in the URAs. Theoretically, the requested URA expansion for the subject site could contribute 90 acres to meet a portion of the 170-acre land need identified in the Applicant’s report for employment land into 2051. The Applicant, however, has provided a concept plan (see Attachment 15, Exhibit F) that relies on residential development of the area as opposed to employment lands. The concept plan demonstrates a variety of housing types can be provided, including single-family detached homes, duplexes, triplexes, cottage clusters, townhomes, and multi-family residential (apartments), as well as commercial (employment) land. A greater
variety of housing options offers increased opportunities for renters and homeownership across multiple price levels, which is conducive to attracting new industries and maintaining a stable economic base in support of this goal.

The Goal is met.

**Goal 10: Housing**

*Top plan for and accommodate needed housing types based on residential land inventories.*

**Finding:** The 2051 BLI, determined a land need of an additional 397 acres of land needed in the URAs. The requested URA expansion could contribute 95.3 gross acres towards meeting the 2051 need of 239-acres of residential land. Any future urban (City of Newberg) zoning for the area would not be determined or applied until the site was added to the UGB and annexed. The applicant, however, has provided a concept plan (see Attachment 15, Exhibit F) that demonstrates a variety of housing types can be provided, including single-family detached homes, duplexes, triplexes, cottage clusters, townhomes, and multi-family residential (apartments), as well as commercial (employment) land. A greater variety of housing options offers increased opportunities for renters and homeownership across multiple price levels, consistent with Goal 10.

The Goal can be met.

**Goal 11: Public Facilities and Services**

*To plan, develop, and maintain public facilities and services that serve the needs of the community in an orderly and efficient manner.*

**Finding:** The Applicant completed an analysis determining the serviceability of the area (see Attachment 15, Exhibit J). The area is reasonably serviceable with moderate costs per buildable acre when compared to other areas considered for URA inclusion. The serviceability to the area is as follows.

- **Water:** Approximately 68 acres of the requested URA expansion area is within Pressure Zone 1, which can be served by the Corral Creek Reservoir. A connection to the existing 24-inch water main, located just north of the area, could provide water service to the northern portions of the area. A connection to the existing 8-inch water main within E Hook Drive and N Fairway Street could serve the western and southern portions of the area. The remaining higher elevation portions of the area are within Pressure Zone 2, which would require a new reservoir at a higher elevation or the construction of a local Pressure Zone 2 system within the requested URA expansion area with a dedicated pump system feeding an isolated portion of the water distribution system to service the higher elevations of the requested URA expansion area. The Applicant contends that alternatively if not developed for residential uses, these lands could be utilized for park, open space, and recreational uses in support of Newberg Comprehensive Plan goals and policies that encourage the provision of open space and recreational opportunities and “complete communities”.
The City Council discussed the issue of Zone 1 and Zone 2 water serviceability on June 5, 2023 concluding the area of East A resource land above Zone 1 of the City’s water system is acceptable provided that the cost of any water booster pump station is the responsibility of the developer of the land. (See Map above for 300-foot contour delineation between Zone 1 and Zone 2). Staff was directed to amend the findings per their direction to include the Zone 2 water area for inclusion into the Urban Reserve Area.

- **Wastewater:** The requested URA expansion site is serviceable by gravity wastewater lines as the area generally slopes to the southwest toward NE Fernwood Road. The area would connect to the Fernwood Pump station located approximately 1,300 feet to the west. As identified in the City’s Wastewater Master Plan, upgrades to the Fernwood Pump Station and the pressurized and gravity sewer mains downstream of the pump station would be required, as the pump station and mains are already at capacity. A preferred alternative for these upgrades is identified in the Wastewater Master Plan.

- **Stormwater:** The requested URA expansion area is serviceable by a gravity stormwater conveyance system. The on-site stormwater conveyance system could discharge to the 12-inch stormwater main within NE Fernwood Road, which eventually outfalls into Spring Brook Creek.

Therefore, the requested URA expansion site’s serviceability and adjacency to existing urbanized areas and services can facilitate more orderly and efficient urbanization and development of public facilities to serve as a framework for urban development.

The Applicant’s site has an area that is higher in elevation than the Corral Creek Reservoir and cannot be served by the reservoir unless a booster pump station is added, or a new reservoir is constructed. The applicant provided supplemental information (Attachment 17) that further addressed this issue. The Engineering Division has recommended that 20 acres of the subject application area should be removed from consideration because it is above Water Zone 1 and the City does not support local Zone 2 water service areas or water pump stations.

While NUAMC understands the Engineering Division’s concerns with retaining the 20 acres of the Applicant’s proposed URA expansion site that aren’t serviceable by Zone 1 of the City’s water system, retaining these lands within the proposed URA expansion site allows the lands to be used for other uses necessary for efficient urbanization, such as parks, open space, and recreational opportunities, as well as public street connections that can allow for more efficient development within the remainder of the URA expansion site.

The City of Newberg Engineering Division evaluated the November 22, 2022, Comparative Site Analysis Addendum (Attachment 17) and provided the following comments:
a. Approximately 20 acres of East A Resource Land, 20 acres of which are within the Applicant’s proposed URA expansion site, are not serviceable by Zone 1 of the City’s water system. (See Map below for 300-foot contour delineation between Zone 1 and Zone 2)

b. The information provided does describe two approaches to provide water service to these areas of East A resources lands not serviceable by Zone 1.

c. What is not described is if any sub areas within the other Resource Lands evaluated might also have areas that could be served in a similar manner that might also be considered reasonably serviceable by the Applicant’s methodology.

d. The two approaches described for providing water service to the 20 acres of East A Resource Land within the Applicant’s proposed URA expansion site not serviceable by Zone 1 are:

e. Construction of a local Zone 2 within the Applicant’s proposed URA expansion site.

f. Extension of the City’s Zone 3 service area.

Neither of the approaches described are consistent with the current City of Newberg Water Master Plan.

g. It is not recommended to create additional local Zone 2 water service areas or water pump stations.

h. The planned Zone 3 water service area is not located in proximity to the Applicant’s proposed URA expansion site.

i. The Newberg Engineering Division recommends that the 20 acres of East A Resource Land within the Applicant’s proposed URA expansion site not serviceable by Zone 1 of the City’s water system be removed from consideration for inclusion in the Applicant’s proposed URA expansion site.
The City Council discussed the issue of Zone 1 and Zone 2 water serviceability on June 5, 2023 concluding the area of East A resource land above Zone 1 of the City’s water system is acceptable provided that the cost of any water booster pump station is the responsibility of the developer of the land. Additionally, NUAMC noted that retaining these lands within the proposed URA expansion site allows the lands to be used for other uses necessary for efficient urbanization, such as parks, open space, and recreational opportunities, as well as public street connections that can allow for more efficient development within the remainder of the URA expansion site. (See Map above for 300-foot contour delineation between Zone 1 and Zone 2). Staff was directed to amend the findings per their direction to include the Zone 2 water area for inclusion into the Urban Reserve Area.

The Goal is met for water, wastewater and stormwater.

**Goal 12: Transportation**

*To provide a safe, convenient, and economic transportation system.*

**Finding:**

For instances involving comprehensive plan amendments, Goal 12 is implemented by the Transportation Planning Rule (TPR) per OAR 660-0012. No development or zone changes are proposed at this time. Before any development could occur on the property, it would be necessary to bring the site into the UGB, annex it into the City of Newberg, and gain approval for desired land uses. Because the requested URA amendment will not permit the construction of any development or generate any potential increase in trips to the site, the Transportation Planning Rule is satisfied. There will not be a significant effect on the transportation system as a result of the requested URA amendment.
660-012-0060 Plan and Land Use Regulation Amendments

1. If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:
   (a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);
   (b) Change standards implementing a functional classification system; or
   (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on
   projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.
   (A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;
   (B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or
   (C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Subsections (a) and (b) are not triggered since the proposed land use action will not impact or alter the functional classification of any existing or planned facility and the proposal does not include a change to any functional classification standards.

Regarding subsection (c), the requested URA amendment cannot trigger subsections (A) through (C) since the URA amendment will not result in the generation of any trips or any potential increase in trips. As such, there is not a "significant effect" to the transportation system and the TPR is satisfied. A detailed and comprehensive analysis of the transportation impacts associated with the area would be required at the time of either the UGB amendment or annexation into the City. Oregon law allows that detailed TPR findings can be deferred to the time of annexation. At that time, a full transportation impact analysis will be required that provides an in-depth examination of the impacts of development on the site, conditions at the applicable planning horizon, and identification of specific improvements that would be required to mitigate the impact from development.

The Goal can be met.
Goal 14: Urbanization

To provide for an orderly and efficient transition from rural to urban land use; to accommodate urban populations and employment inside urban growth boundaries, to preserve rural character outside urban growth boundaries, and to preserve small town character.

Finding: The Applicant’s request to expand the City’s URAs does not alter the areas zoning designation and does not convert the areas agricultural lands to an urban use. The Applicant’s request to expand the City’s URA is the first step in a process that may lead to the site’s eventual conversion to urban uses. An expansion of the City’s UGB, as well as annexation to the City, would be required before urbanization could occur. Prior to urbanization, the site’s rural character will be preserved in compliance with Goal 14.

As established in these findings, the City has an identified land need of approximately 397 more buildable acres within its URAs to ensure that the City’s URAs provide sufficient land for a minimum 30-year growth horizon per OAR 660-021-0030(1). OAR 660-021-0030(2-5) establishes criteria determining and prioritizing land for inclusion in a URA, which are addressed with findings of OAR 660 Division 21.

Staff considerations of the Applicant’s Comparative Site Analysis, Engineering Division comments, and the Urban Reserve Rule determined that the Applicant’s site is a potential priority for URA inclusion at this time. Given that the site is Resource Land with high-quality soils, it is the lowest priority for URA inclusion, excluding lands that cannot be “reasonably serviced.” Approving the inclusion of resource land in the URAs is consistent with Goal 14 to preserve rural land and character outside of the UGB when balanced against other Resource Land Areas, and prioritizing exception lands, which are more reflective of urban development within the URAs.

As the Applicant has determined that there is not a sufficient amount of reasonably serviceable exception land available to meet Newberg’s identified land need through 2051, OAR 660-021-0030(4) provides that lower priority land (i.e., resource land) may be included within the URA if land of higher priority cannot meet the identified land need. Notably, this provision does not state that all reasonably serviceable exception land must first be brought into the URA before reasonably serviceable resource land, simply that if the identified demand cannot be met, lower priority land may be included within the URA.

The Goal is met.

Oregon Administrative Rules

Applicable provisions of the Oregon Administrative Rules (OAR) are set forth below with findings demonstrating the project’s consistency with these provisions.
Chapter 660 – Land Conservation and Development Department
Division 12 – Transportation Planning

660-012-0060 Plan and Land Use Regulation Amendments

(1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Finding: See response to Statewide Planning Goal 12 findings.

Division 18 – Post-Acknowledgement Amendments

660-018-0020 Notice of a Proposed Change to a Comprehensive Plan or Land Use Regulation

(1) Before a local government adopts a change to an acknowledged comprehensive plan or a land use regulation, unless circumstances described in OAR 660-018-0022 apply, the local government shall submit the proposed change to the department, including the information described in section (2) of this rule. The local government must submit the proposed change to the director at the department's Salem office at least 35 days before holding the first evidentiary hearing on adoption of the proposed change.
Finding: The Applicant is requesting an amendment to both the City and County Comprehensive Plans. The City will be required to provide notice to the Department of Land Conservation and Development (DLCD) at least 35 days prior to the first evidentiary hearing before the NUAMC.

(2) The submittal must include applicable forms provided by the department, be in a format acceptable to the department, and include all of the following materials:

(b) If a comprehensive plan map or zoning map is created or altered by the proposed change, a copy of the relevant portion of the map that is created or altered;

(c) A brief narrative summary of the proposed change and any supplemental information that the local government believes may be useful to inform the director and members of the public of the effect of the proposed change;

(d) The date set for the first evidentiary hearing;

(e) The notice or a draft of the notice required under ORS 197.763 regarding a quasi-judicial land use hearing, if applicable; and

(f) Any staff report on this proposed change or information that describes when the staff report will be available and how a copy may be obtained.

Finding: The Applicant is requesting an amendment to both the City and County Comprehensive Plans to expand the City’s URAs. The submittal to DLCD will include the materials identified above.

(3) The proposed text submitted to comply with subsection (2)(a) of this rule must include all of the proposed wording to be added to or deleted from the acknowledged plan or land use regulations. A general description of the proposal or its purpose, by itself, is not sufficient. For map changes, the material submitted to comply with Subsection (2)(b) must include a graphic depiction of the change; a legal description, tax account number, address or similar general description, by itself, is not sufficient. If a goal exception is proposed, the submittal must include the proposed wording of the exception.

Finding: The Applicant is requesting an amendment to both the City and County Comprehensive Plans to expand the City’s URA, which involves changes to both Comprehensive Plan Maps. The submittal to DLCD shall include the materials as identified by OAR 660-018-0020(2)(b). A goal exception is not proposed with the Applicant’s requested URA expansion.

(4) If a local government proposes a change to an acknowledged comprehensive plan or a land use regulation solely for the purpose of conforming the plan and regulations to new requirements in a land use statute, statewide land use planning goal, or a rule implementing the statutes or goals [...]
new requirements in a land use statute, statewide land use planning goal, or a rule implementing the statutes or goals.

(5) For purposes of computation of time for the 35-day notice under this rule and OAR 660-018-0035(1)(c), the proposed change is considered to have been "submitted" on the day that paper copies or an electronic file of the applicable notice forms and other documents required by section (2) this rule are received or, if mailed, on the date of mailing. The materials must be mailed to or received by the department at its Salem office.

Finding: The Applicant is requesting an amendment to both the City and County Comprehensive Plans to expand the City's URAs. The City will be required to provide notice to DLCD at least 35 days prior to the first evidentiary hearing before NUAMC. The Applicant's requested URA expansion shall be considered submitted on the day that paper copies or an electronic file are either mailed or received by DLCD at its Salem office.

660-018-0021 Joint Submittal of Notices and Changes

(1) Where two or more local governments are required by plan provisions, coordination agreements, statutes or goals to agree on and mutually adopt a change to a comprehensive plan or land use regulation, the local governments shall jointly submit the notice required in OAR 660-018-0020 and, if the change is adopted, the decision and materials required by OAR 660-018-0040. Notice of such proposed changes must be jointly submitted at least 35 days prior to the first evidentiary hearing. For purposes of notice and appeal, the date of the decision is the date of the last local government's adoption of the change.

(2) For purposes of this rule, a change to a comprehensive plan or land use regulation that requires two or more local governments to agree on and mutually adopt the change includes, but is not limited to, the establishment or amendment of an urban growth boundary or urban reserve by a city and county in the manner specified in Goal 14.

Finding: The Applicant's requested URA expansion requires an amendment to both the City and County Comprehensive Plans, which requires their mutual participation and agreement per the NUAGMA. The City and County jointly submitted the notice required by OAR 660-018-0020, and OAR 660-018-0040 following a decision. Notice shall be provided at least 35 days prior to the first evidentiary hearing before NUAMC.

660-018-0022 Exemptions to Notice Requirements Under OAR 660-018-0020

(1) When a local government determines that no goals, commission rules, or land use statutes apply to a particular proposed change, the notice of a proposed change under OAR 660-018-0020 is not required.

(2) If a local government determines that emergency circumstances beyond the control of the local government require expedited review such that the local government cannot submit the proposed change consistent with the 35-day deadline under OAR 660-018-
0020, the local government may submit the proposed change to the department as soon as practicable. The submittal must include a description of the emergency circumstances.

(3) A local government must submit any adopted change to an acknowledged comprehensive plan or land use regulation to the department within 20 days after the decision to adopt the change, as required by OAR 660-018-0040, regardless of the reason for not submitting the proposed change in advance, as provided in ORS 197.615(1) and (2).

(4) Notwithstanding the requirements of ORS 197.830(2) to have appeared before the local government in the proceedings concerning the proposal, if a local government does not provide any notice described in OAR 660-018-0020, regardless of the reason for not providing the notice, the director or any other person may appeal the decision to the board under ORS 197.830 to 197.845, except as provided in ORS 197.620(3).

Finding: The Applicant’s requested URA expansion is subject to numerous goals, Oregon Administrative Rules and land use statutes and is not requested for an emergency situation beyond the control of the City or County. The exemptions provided by OAR 660-018-022 are, therefore, not applicable.

660-018-0025 Requests for Department Notice of Proposed Changes

(1) Within 15 days of receipt of a notice of a proposed change to an acknowledged comprehensive plan or a land use regulation described under OAR 660-018-0020, the department shall provide notice of the proposed change to persons that have requested notice of such changes. The notice shall be provided using electronic mail, electronic bulletin board, electronic mailing list server or similar electronic method.

(2) The department shall notify persons that are generally interested in proposed changes to acknowledged comprehensive plans by posting notices received under OAR 660-018-0020 on a weekly basis on the department website using the Internet or a similar electronic method.

Finding: The Applicant’s requested URA expansion requires an amendment to the City and County Comprehensive Plans. DLCD shall provide notice of the proposed change to interested persons that have requested notice of such changes.

660-018-0040 Submittal of Adopted Change

(1) When a local government adopts a proposed change to an acknowledged comprehensive plan or a land use regulation it shall submit the decision to the department, with the appropriate notice forms provided by the department, within 20 days. […]

Finding: The Applicant’s requested URA expansion requires an amendment to the City and County Comprehensive Plans. Once a NUAMC recommendation is rendered and forwarded to the Newberg City Council and Yamhill County Board of Commissioners for public hearings, the City and County will be required to submit the decisions to DLCD within 20 days.
660-018-0050 Notice to Other Parties of Adopted Changes

(1) Notice of an adopted change to a comprehensive plan or land use regulation to persons other than the department is governed by ORS 197.615(4) and (5), which require that on the same day the local government submits the decision to the director the local government shall mail or otherwise deliver notice of the decision to persons that:

(a) Participated in the local government proceedings that led to the decision to adopt the change to the acknowledged comprehensive plan or the land use regulation; and

(b) Requested in writing that the local government provide them with notice of the change to the acknowledged comprehensive plan or the land use regulation.

Finding:

The Applicant’s requested URA expansion requires an amendment to the City and County Comprehensive Plans. Once a NUAMC decision is rendered and forwarded to the Newberg City Council and Yamhill County Board of Commissioners for public hearings, notice of the NUAMC recommendation and City and County decisions shall be delivered to interested persons that participated in the proceedings and/or requested in writing to the City and/or County that notice be provided to them.

660-018-0055 Notice by the Department of Local Adoption

(1) Within five working days of the receipt of a local government notice of adoption of a change to a comprehensive plan or a land use regulation described under OAR 660-018-0046, the department shall provide notice of the decision and an explanation of the requirements for appealing the land use decision under ORS 197.830 to 197.845, to persons that have requested notice from the director of such adopted changes. The notice shall be provided using electronic mail, electronic bulletin board, electronic mailing list server or similar electronic method.

(2) The department shall notify persons that are generally interested in changes to acknowledged comprehensive plans by posting notices received under OAR 660-018-0040 periodically on the department website using the Internet or a similar electronic method.

Finding:

The Applicant’s requested URA expansion requires an amendment to the City and County Comprehensive Plans. Once a NUAMC recommendation is rendered and forwarded to the Newberg City Council and Yamhill County Board of Commissioners for public hearings, DLCD will be required to provide notice of the decision and an explanation of the requirements for appealing the decision under CRS 197.830-845 to persons that have requested notice of such adopted changes. DLCD shall periodically post notice on the DLCD website as required by OAR 660-018-0055(2).
Division 21 – Urban Reserves

660-021-0020 Authority to Establish Urban Reserve

(1) Cities and counties cooperatively, and the Metropolitan Service District for the Portland Metropolitan area urban growth boundary, may designate urban reserves under the requirements of this division, in coordination with special districts listed in OAR 660-021-0030(2) and other affected local governments, including neighboring cities within two miles of the urban growth boundary. Where urban reserves are adopted or amended, they shall be shown on all applicable comprehensive plan and zoning maps, and plan policies and land use regulations shall be adopted to guide the management of these reserves in accordance with therequirements of this division.

Finding: The City of Newberg, in coordination with Yamhill County, has designated URAs for the City under the requirements of this division. The Applicant is requesting an amendment to the City and County Comprehensive Plans to expand the City’s URAs to include the Applicant’s proposed URA expansion site. Therefore, compliance with OAR 660-021 is required. Coordination with special districts has occurred by referral notice. The City of Dundee is beyond the 2-mile distance based on the application site submittal.

660-021-0030 Determination of Urban Reserve

(1) Urban reserves shall include an amount of land estimated to be at least a 10-year supply and no more than a 30-year supply of developable land beyond the 20-year time frame used to establish the urban growth boundary. Local governments designating urban reserves shall adopt findings specifying the particular number of years over which designed urban reserves are intended to provide a supply of land.

Finding: In 2020, the City hired ECONorthwest to prepare updates to the City’s HNA and EOA, as well as a Public and Semi-Public Land Need Memorandum which addressed the City’s residential, employment, and public and semi-public land needs over a 20-year period. These analyses are based on the current PSU Population Research Center’s population forecasts (published in June 2020), which are required to be used for the purpose of land use planning per ORS 195.033(3). These studies showed that in the 2021 to 2041 period there is a land deficiency within Newberg’s UGB of 192 acres. Residential has a surplus of 31 acres factoring in employment uses and public/semi-public needs in Low Density Residential (LDR) land, a deficiency of 37 acres factoring in employment uses and public/semi-public needs in Medium Density Residential (MDR) land, and a deficiency of 44 acres factoring in employment uses, public/semi-public and group quarter needs in High Density Residential (HDR) land (February 2021 HNA). Commercial has a surplus of 22 acres factoring in public/semi-public needs, and industrial has a deficit of 164 factoring in public/semi-public needs.

An amendment to the February 2021 HNA in June 2021 was added to reflect the OAR 660-046-0330(4)(c) requirement to assume a 3% production of middle housing in forecasting future development. With the middle housing requirements shift, the residential land need shifted to a land deficiency within Newberg’s UGB
of 185 acres. Residential has a surplus of 35 acres factoring in employment uses and public/semi-public needs in Low Density Residential (LDR) land, a deficiency of 34 acres factoring in employment uses and public/semi-public needs in Medium Density Residential (MDR) land, and a deficiency of 44 acres factoring in employment uses, public/semi-public and group quarter needs in High Density Residential (HDR) land. Commercial has a surplus of 22 acres factoring in public/semi-public needs, and industrial has a deficit of 164 factoring in public/semi-public needs.

Per Newberg Comprehensive Plan Policy N. l. i., the City’s designated URAs shall provide a 30-to-50-year land supply to meet projected growth as required by this division. The 2051 BLI (see Attachment 15, Exhibit G) assessed the sufficiency of the City’s current URAs to provide a supply of buildable land through 2051. Resulting forecasted land need for 2051 was a total of 475 buildable acres. Modifying the total land need to be consistent with the revised HNA, the total land need is 472 acres.

According to the Applicant’s 2051 BLI, the existing URAs contains 557 gross acres of land, of which 320 acres are considered buildable. Accounting for subtractions of 25 percent of this value for future public infrastructure and right-of-way, there are approximately 240 acres of net buildable land within the City’s existing URAs. After reconciling the existing URAs land with UGB expansion land needs there is a remaining surplus of 72 acres within the existing URAs. The Applicant determined the surplus that can meet land demands through 2041, but that additional land is needed to meet demand through 2051 to maintain a minimum 30-year supply into 2051. Staff concurs with the Applicant’s 2051 BLI and the identified residential land need for the 2041-2051 period.

Per Newberg Comprehensive Plan Policy N. l. h, the City’s designated URAs shall provide a 30-to-50-year land supply to meet projected growth as required by this division. The Applicant’s 2051 BLI identifies that the identified land need for 2051 cannot be met by Newberg’s current URA; therefore, the URA may be expanded to meet the identified land need.

(2) Inclusion of land within an urban reserve shall be based upon the locational factors of Goal 14 and a demonstration that there are no reasonable alternatives that will require less, or have less effect upon, resource land. Cities and counties cooperatively, and the Metropolitan Service District for the Portland Metropolitan Area Urban Growth Boundary, shall first study lands adjacent to, or nearby, the urban growth boundary for suitability for inclusion within urban reserves, as measured by the factors and criteria set forth in this section. Local governments shall then designate, for inclusion within urban reserves, that suitable land which satisfies the priorities in section (3) of this rule.

Finding: The Applicant completed a Comparative Site Analysis (Attachment 15, Exhibit H; Attachment 17), in accordance with this division, considered all areas adjacent to or near the City’s current UGB in its analysis to determine suitability for inclusion with the City’s URAs. The study areas extend approximately one mile from the City’s current UGB and include all adjacent exception areas as well as agricultural
(resource) land. The one-mile radius is consistent with the NUAGMA “area of influence.” A total of 15 subareas were evaluated. The areas are generally consistent with the 2007 URA study area, but have different labels. Additionally, the Newberg Engineering Division provided additional comments regarding costs of public utility infrastructure to applicable exception areas.

Goal 14 locational factors:
1. Efficient accommodation of identified land needs;
2. Orderly and economic provision of public facilities and services;
3. Comparative environmental, energy, economic and social consequences; and
4. Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

The Applicant’s Comparative Site Analysis analyzed potential URA lands for suitability based on the provisions identified by OAR 660-021-0030(3) and the locational factors of Goal 14 identified above. Findings are provided in response to OAR 660-021-0030(3) demonstrating the Applicant’s proposed URA expansion site is eligible for inclusion within the Newberg URA.

(3) Land found suitable for an urban reserve may be included within an urban reserve only according to the following priorities:

(a) First priority goes to land adjacent to, or nearby, an urban growth boundary and identified in an acknowledged comprehensive plan as an exception area or nonresource land. First priority may include resource land that is completely surrounded by exception areas unless these are high value crop areas as defined in Goal 8 or prime or unique agricultural lands as defined by the United States Department of Agriculture;

Finding:
In Exhibit H of Attachment 15 (Application) the Applicant provides estimated costs of the various subareas. Utility cost estimates in the study have been determined by calculating the inflationary increase to estimates in the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, prepared by the City in support of the 2007 URA Report. DOWL has not conducted detailed engineering cost estimates for the study areas, so the estimates in the report should be considered high level and for planning and comparison purposes only. The full methodology for the utility cost estimates used in this study is included in Exhibit A of the Comparative Site Analysis Report (Attachment 15, Exhibit H).

There are 1,504 buildable acres of Exception Land within the 15 subareas evaluated. Pursuant to subsection (4)(a) of Division 21, exception areas that are not reasonably serviceable are excluded from the list of possible land for inclusion. The Newberg Engineering Division reviewed the public utilities cost estimates and provided modification suggestions based on their local knowledge. Their comments are found in Attachment 3a, 3b and 3c. Further, they note the previous study 2007 (which DOWL’s analysis was based on) is 15 years old and suggested it “warrants a review of the previous study’s determination of “reasonableness” of provision of public facilities.” The Engineering Division recommended a more in-depth analysis in order to provide the information necessary to determine that there are no
reasonable alternatives to a future proposed URAs that will require less, or have less effect upon, Resource Land. An approach to this would be to complete a contour analysis of the 15 subareas to determine which areas, or portions of the subareas, could be served without wastewater lift stations or water pump stations.

The Applicant provided an Addendum to Attachment 15, Exhibit H in response to the memorandum dated 8/16/2021 from KGH Engineering/Newberg Engineering Division and the City’s request to the Applicant for further evaluation of subareas to determine if portions of these subareas could be reasonably served with public facilities. Newberg Engineering staff has determined that the Applicant’s supplemental information in the Addendum to Exhibit H (see Attachment 15) generally provides the requested further evaluation of Exception land sub areas. In the DOWL information submitted on November 15, 2022, on Combined Serviceability of Exception Land Area the data indicates that there are 213.62 acres of Combined Gravity Sanitary Sewer & Water Service Area in Exception Areas that can be reasonably served (Attachment 16). The letter indicates that based on serviceability there remains a deficit of approximately 183.38 acres to satisfy the established need of 397 acres as shown in the table below, which staff concurs with.

Table 1: Combined Serviceability Summary (Areas Eligible for URA Consideration), Update

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Total Gross Area (ac., approx.)</th>
<th>Exception Land Area (minus Constraints) (ac., approx.)</th>
<th>Combined Gravity Sanitary Sewer &amp; Water Service Area (ac., approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North A</td>
<td>671.32</td>
<td>61.70</td>
<td>0</td>
</tr>
<tr>
<td>North B</td>
<td>472.39</td>
<td>281.32</td>
<td>0</td>
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<tr>
<td>Northeast A</td>
<td>298.20</td>
<td>115.65</td>
<td>63.93</td>
</tr>
<tr>
<td>Northeast B</td>
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<td>76.16</td>
<td>0</td>
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<tr>
<td>East A</td>
<td>619.30</td>
<td>40.08</td>
<td>2.67</td>
</tr>
<tr>
<td>East B</td>
<td>439.92</td>
<td>303.59</td>
<td>0</td>
</tr>
<tr>
<td>Southeast A</td>
<td>198.88</td>
<td>82.19</td>
<td>0</td>
</tr>
<tr>
<td>Southeast B</td>
<td>299.83</td>
<td>1.81</td>
<td>1.7</td>
</tr>
<tr>
<td>Southeast C</td>
<td>235.60</td>
<td>114.45</td>
<td>82.32</td>
</tr>
<tr>
<td>Southwest A</td>
<td>255.54</td>
<td>190.60</td>
<td>20 (previously 1 acre)</td>
</tr>
<tr>
<td>Southwest B</td>
<td>213.66</td>
<td>164.12</td>
<td>0</td>
</tr>
<tr>
<td>Southwest C</td>
<td>277.22</td>
<td>250.75</td>
<td>0</td>
</tr>
<tr>
<td>Southwest D</td>
<td>514.40</td>
<td>370.54</td>
<td>0</td>
</tr>
<tr>
<td>Northwest A</td>
<td>500.65</td>
<td>99.27</td>
<td>14 (previously 0 acres)</td>
</tr>
<tr>
<td>Northwest B</td>
<td>302.10</td>
<td>28.78</td>
<td>29 (previously 0 acres)</td>
</tr>
</tbody>
</table>

Total Area Eligible for URA Consideration: 213.62 (previously 151.62 acres)

Intervening Resource Lands can sometimes be needed for urbanization; however, that is not the case in the current URA inclusion exercise. Staff analyses determined the East A subarea, which includes the subject site, is not a necessary intervening Resource Land. The East A subarea Exception Land connected by a small area of Resource Land is planned to house the extension of the Newberg Dundee Bypass, leaving little remaining land for development and limiting access to those properties. Contrary to the Applicant’s suggestions and the 2007 URA Report, staff also finds
the Resource Land in East A is not required to provide a cost-efficient provision of public utilities to the Southeast C exception area. In the site comparison, applicable intervening Resource Land is found in subareas North A, North B, and Northeast B. However, since the Exception Land at the top of the priority list does not include intervening Resource Land, no intervening Resource Land would need to be prioritized.

Collectively, the Exception Lands described as “reasonably serviceable” shown in the table above total approximately 213.62 acres. None of these exception areas require intervening Resource Land to be reached. Therefore, the prioritized Exception Lands can meet some, but not all, of the established 2051 land need for the Newberg URA of 397 acres. As mentioned, there remains a deficit of approximately 183.38 acres.

OAR 660-021-0030(4) provides that lower priority land (i.e., Resource Land) may be included within the URA if land of higher priority cannot meet the identified land need. Notably, this provision does not state that all reasonably serviceable exception land must first be brought into the URA before reasonably serviceable resource land, simply that if the identified demand cannot be met, lower priority land may be included within the URA. Therefore, Resource Land may be evaluated next.

(b) If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, second priority goes to land designated as marginal land pursuant to former ORS 197.247 (1991 edition):

Finding: Yamhill County does not have lands designated as marginal lands. Therefore, OAR 660-021-030(3)(b) does not apply.

(c) If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, third priority goes to land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic-foot site class, whichever is appropriate for the current use.

Finding: Addendum material submitted by the Applicant indicates that there are 213.62 acres of Exception Land that is reasonably serviceable. The information indicates that there is 183.38 acres of Resource Land that needs to be considered for URA designation to meet the 397-acre deficiency (Attachment 16).

The Applicant provided an additional supplemental addendum on the Comparative Site Analysis on November 22, 2022 (Attachment 17). This addendum includes an Executive Summary, Exhibit A Study Area Map, Exhibit B Study Area Constraints Map, Exhibit C Study Area Sanitary Sewer & Water Serviceability Maps, and Exhibit D Soil Composition Map for Reasonably Serviceable Resource Land. The analysis addressed the serviceability of resource lands. Using a similar methodology as the analysis of Exception Lands, the Applicant first determined
which resource lands could be reasonably served by extensions of urban services.

This analysis concluded that approximately 513 acres of resource land were reasonably serviceable, as shown in the table below.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Total Resource Land Area, Gross (ac., approx.)</th>
<th>Resource Land Area Excluded due to Constraints (ac., approx.)</th>
<th>Resource Land Area Remaining (ac., approx.)</th>
<th>Combined Gravity Sanitary Sewer &amp; Water Service Area (ac., approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North A</td>
<td>488.89</td>
<td>166.83</td>
<td>322.06</td>
<td>126</td>
</tr>
<tr>
<td>North B</td>
<td>56.35</td>
<td>24.69</td>
<td>31.66</td>
<td>0</td>
</tr>
<tr>
<td>Northeast B</td>
<td>134.62</td>
<td>31.58</td>
<td>103.04</td>
<td>0</td>
</tr>
<tr>
<td>East A</td>
<td>539.08</td>
<td>79.54</td>
<td>459.54</td>
<td>262</td>
</tr>
<tr>
<td>Southeast B</td>
<td>294.09</td>
<td>75.08</td>
<td>219.01</td>
<td>0</td>
</tr>
<tr>
<td>Southeast C</td>
<td>99.88</td>
<td>6.03</td>
<td>93.85</td>
<td>0</td>
</tr>
<tr>
<td>Northwest A</td>
<td>390.73</td>
<td>44.23</td>
<td>346.5</td>
<td>0</td>
</tr>
<tr>
<td>Northwest B</td>
<td>273.13</td>
<td>15.69</td>
<td>257.44</td>
<td>125</td>
</tr>
</tbody>
</table>

Total Area Reasonably Serviceable: **513 acres**

When incorporating resource land, OAR 660-021-0030(3)(c) states that “if land of higher priority is inadequate to accommodate the amount of land estimated in section (l) of this rule, third priority goes to land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.” ORS 215.710 describes “high-value farmland” within the Willamette Valley as being land predominantly comprised of Class I, II, III, and IV soils. In order to further assess eligibility of potential resource lands for consideration as a URA, areas of reasonably serviceable resource lands have been broken into five subareas for the purpose of analyzing soil composition and the presence of high-value farmland using soil classification data provided by Yamhill County and each resource land subarea’s soil composition by percentage of soil classification was determined. The five subareas are provided below:

- The Applicant’s proposed URA expansion site (approximately 92 acres, which excludes adjacent rights-of-way associated with NE Corral Creek Road and NE Fernwood Road that would be included within the proposed URA expansion site’s boundaries);

- East A North, which includes reasonably serviceable resource lands within the East A study area that are generally located north of the proposed URA expansion site and south of Highway 99W (approximately 38 acres);

- East A South, which includes reasonably serviceable resource lands within the East A study area that are generally located south of NE Fernwood Road (approximately 136 acres);

- North A, which includes all reasonably serviceable resource lands within the
North A study area (approximately 126 acres); and

- Northwest B, which includes all reasonably serviceable resource lands within the Northwest B study area (approximately 125 acres).

As identified in the table below, the two subareas with the lowest percentage of high-value farmland are the Applicant’s proposed URA expansion site (94%) and the East A North subarea (92%). All other subareas are comprised of more than 98% high-value farmland. Further, the Applicant’s proposed URA expansion site is the only subarea that completely lacks Class I soils. Given the lower composition of high-value farmland, both the Applicant’s proposed URA expansion site and the East A North subarea should be prioritized for consideration as a URA over other areas of reasonably serviceable resource land within the East A South, North A, and Northwest B subareas.

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Class I Area (ac.)</th>
<th>Class I %</th>
<th>Class II Area (ac.)</th>
<th>Class II %</th>
<th>Class III Area (ac.)</th>
<th>Class III %</th>
<th>Class IV Area (ac.)</th>
<th>Class IV %</th>
<th>Class V Area (ac.)</th>
<th>Class V %</th>
<th>High Value Farmland %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed URA Expansion Site</td>
<td>6.8</td>
<td>18</td>
<td>12.4</td>
<td>33</td>
<td>15.4</td>
<td>41</td>
<td>0.21</td>
<td>1</td>
<td>3.1</td>
<td>8</td>
<td>92</td>
</tr>
<tr>
<td>East A – North</td>
<td>6.9</td>
<td>5</td>
<td>96.2</td>
<td>71</td>
<td>30.3</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>2.4</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>East A – South</td>
<td>0.8</td>
<td>1</td>
<td>90.1</td>
<td>71</td>
<td>17.4</td>
<td>14</td>
<td>16.6</td>
<td>13</td>
<td>1.6</td>
<td>1</td>
<td>99</td>
</tr>
<tr>
<td>Northwest B</td>
<td>69.2</td>
<td>55</td>
<td>29.9</td>
<td>24</td>
<td>25.7</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on soil composition and presence of high-value farmland, the Applicant’s proposed URA site and the subarea immediately to the north are eligible for URA consideration. Together, these two areas are approximately 130 acres, which is within the identified deficit of approximately 183.38 acres to satisfy a land need of 397 buildable acres to the year 2051. Therefore, the Applicant’s proposal to include the approximately 95.3 gross acre site is justifiable and appropriate under the provisions of OAR 660-021-030(3)(c) in order to meet Newberg’s identified land needs through 2051 as discussed through this memorandum and the existing URA expansion application record.

(4) **Land of lower priority under section (3) of this rule may be included if land of higher priority is found to be inadequate to accommodate the amount of land estimated in section (1) of this rule for one or more of the following reasons:**

(a) **Future urban services could not reasonably be provided to the higher priority area due to topographical or other physical constraints; or**

(b) **Maximum efficiency of land uses within a proposed urban reserve requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.**
**Finding:** See comparison of urban services above in the Finding to OAR 660-021-0030(3)(a-c).

(5) Findings and conclusions concerning the results of the consideration required by this rule shall be adopted by the affected jurisdictions.

**Finding:** The Applicant's requested URA expansion does meet the provisions and considerations adopted by this Urban Reserve Rule. Staff recommends NUAMC approve the Applicant's request for a URA expansion. Thus, amending the City and County Comprehensive Plan Maps are not necessary.

660-021-0040 Urban Reserve Area Planning and Zoning

(1) Until included in the urban growth boundary, lands in urban reserves shall continue to be planned and zoned for rural uses in accordance with the requirements of this rule and the applicable statutes and goals, but in a manner that ensures a range of opportunities for the orderly, economic and efficient provision of urban services when these lands are included in the urban growth boundary.

**Finding:** The Applicant's request to expand the City's URA does not alter the site's comprehensive plan (Agriculture/Forestry Large Holding (AFLH) and zoning designation (EF20) and does not convert the site's agricultural lands designation (Exclusive Farm Use) to an urban use.

660-021-0070 Adoption and Review of Urban Reserve

(1) Designation and amendment of urban reserves shall follow the applicable procedures of ORS 197.610 through 197.650.

**Finding:** The Applicant's request to expand the City's URAs shall follow the post-acknowledged plan amendment procedures per ORS 197.610-650; compliance with these statutes is addressed within the findings of those provisions in this document.

(2) Disputes between jurisdictions regarding urban reserve boundaries, planning and regulation, or urban reserve agreements may be mediated by the department or commission upon request by an affected local government or special district.

**Finding:** The City and County staff discussed their individual recommendations and presented staff reports for approval to NUAMC. A recommendation will be made by NUAMC, who represents both the City and County. The City and County will hold public hearings to make a final decision.

Division 23 - Procedures and Requirements for Complying with Goal 5

660-023-0250 Applicability

(2) The requirements of this division are applicable to PAPAs initiated on or after September 1, 1996. OAR 660, division 16 applies to PAPAs initiated prior to September 1, 1996. For purposes of this section "initiated" means that the local
government has deemed the PAPA application to be complete.

Finding: The Applicant’s requested URAs expansion requires an amendment to acknowledged Comprehensive Plans and will be initiated after September 1, 1996. However, as demonstrated in the Finding to OAR 660-023-0250(3)(a-c), the Applicant’s request to expand the City’s URA will not affect Goal 5 resources, and the requirements of this provision are not applicable.

3) Local governments are not required to apply Goal 5 in consideration of a PAPA unless the PAPA affects a Goal 5 resource. For purposes of this section, a PAPA would affect a Goal 5 resource only if:

(a) The PAPA creates or amends a resource list or a portion of an acknowledged plan or land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5;

Finding: The Applicant’s requested URA expansion requires an amendment to acknowledged Comprehensive Plans but does not propose to create or amend a Goal 5 resource list, a portion of an acknowledged comprehensive plan, or a land use regulation adopted in order to protect a significant Goal 5 resource. Future development, whether urban or rural in nature, will have to comply with Goal 5 and existing protections maintained by both the City and County, depending on future jurisdiction.

(b) The PAPA allows new uses that could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list; or

Finding: The Applicant’s request to expand the City’s URA does not alter the site’s zoning designation and does not provide for new or additional uses. Future development, whether urban or rural in nature, will have to comply with Goal 5 and existing protections maintained by both the City and County, depending on future jurisdiction.

(c) The PAPA amends an acknowledged UGB and factual information is submitted demonstrating that a resource site, or the impact areas of such a site, is included in the amended UGB area.

Finding: The applicant is not proposing to amend the City’s UGB and is only proposing to expand the City’s URAs.

Oregon Revised Statutes
Applicable provisions of the Oregon Revised Statutes (ORS) are set forth below with findings demonstrating the project’s consistency with these provisions.
Chapter 195 – Local Government Planning Coordination
195.143 Coordination and concurrent process for designation of rural reserves and urban reserves.

(1) A county and a metropolitan service district must consider simultaneously the designation and establishment of:

(a) Rural reserves pursuant to ORS 195.141; and
(b) Urban reserves pursuant to ORS 195.145(1)(b).

Finding: The Applicant's requested URA expansion requires an amendment to acknowledged Comprehensive Plans, both City of Newberg and Yamhill County comprehensive plan maps. As identified by ORS 195.145(1), the City and County may cooperatively designate lands outside the current UGB as URAs to provide a minimum amount of buildable land for a 30-year growth horizon per OAR 660-021-0030(1). This procedure is subject to the post-acknowledged plan amendment procedure pursuant to ORS 197.610-626. Newberg and Yamhill County coordinated this report for the NUAMC hearing. The Newberg City Council will hold a separate public hearing based on the NUAMC decision. The Yamhill County Board of Commissioners will hold a separate public hearing following the City Council hearing.

195.145 Urban Reserves; when required; limitation; rules.

(1) To ensure that the supply of land available for urbanization is maintained:

(a) Local governments may cooperatively designate lands outside urban growth boundaries as urban reserves subject to ORS 197.610 to 197.625 and 197.626.

Finding: The City of Newberg and Yamhill County have an established coordinated governance of urban reserves. The NUAGMA is a growth management agreement between the City and County that establishes both area of governance, provisions for governance, and institutes a recommending decision-making body for the area, NUAMC. The existing URAs and prior expansions of the URAs are governed by NUAMC. NUAMC, Newberg City Council, and Yamhill County Board of Commissioner hearings are subject to the post-acknowledged plan amendment procedure pursuant to ORS 197.610-626. ORS 197.610-626 are addressed with findings of compliance are addressed in the appropriate section of this report.

Chapter 197 – Comprehensive Land Use Planning I

197.610 Submission of proposed comprehensive plan or land use regulation changes to Department of Land Conservation and Development; rules.

(1) Before a local government adopts a change, including additions and deletions, to an acknowledged comprehensive plan or a land use regulation, the local government shall submit the proposed change to the Director of the Department of Land Conservation and Development. The Land Conservation and Development Commission shall specify, by rule, the deadline for submitting proposed changes, but in all cases the proposed change must be submitted at least 20 days before the local
government holds the first evidentiary hearing on adoption of the proposed change. The commission may not require a local government to submit the proposed change more than 35 days before the first evidentiary hearing. [...]  

**Finding:** City Staff submitted a joint notice of amendments on behalf of the City and County to DLCD on 7/20/22, 35 days prior to the first evidentiary hearing before NUAMC. 

**Finding:** The Applicant’s requested URA expansion is not amending the City and County Comprehensive Plans for the purpose of conforming the plan and regulations to new requirements in a land use statute, statewide land use planning goal, or a rule implementing the statutes or goals. The provision is not applicable. 

**Finding:** The Applicant’s requested URA expansion requires an amendment to acknowledged Comprehensive Plans. The City will submit its decision to DLCD within 20 days after the City Council hearing. The County will submit its decision to DLCD within 20 days after its hearing. 

**Finding:** The Applicant’s requested URA expansion requires an amendment to acknowledged Comprehensive Plans. Consistent with this provision, the requirements of ORS 197.610 and ORS 197.615 as well as the applicable provisions set forth by ORS 197.625 must be followed for acknowledgement of the proposed amendment. Compliance with those provisions is addressed above. 

**Finding:** A local government shall submit for review and the Land Conservation and Development Commission shall review the following final land use decisions in the manner provided for review of a work task under ORS 197.633 and subject to subsection (3) of this section: [...]
Finding: The Applicant's requested URA expansion requires an amendment to acknowledged Comprehensive Plans. Therefore, the City and County shall separately submit to DLCD for review before the Commission the issued final land use decisions in the manner provided for review of a work task under ORS 197.633 and subject to ORS 197.626(3).
Exhibit “C” to Ordinance No. 2023-2911
Water Zone Map Urban Reserve Area Expansion – File City CPMA21-0002/County PA-01-21
Newberg Urban Reserve Area Expansion
Comparative Site Analysis
Yamhill County, Oregon

Prepared: May 2021

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A. Study Areas Public Facilities Costs Estimates Results and Methodology
B. Study Areas Buildable Lands Inventory Results and Methodology
1. Executive Summary

- This Comparative Site Analysis study has been prepared in support of a Comprehensive Plan Amendment application to expand the City of Newberg’s (City) Urban Reserve Area (URA). The proposed approximately 95.3 acre URA expansion site consists of four properties generally located northwest of the intersection of NE Corral Creek Road and NE Fernwood Road, along with adjacent segments of NE Corral Creek Road and NE Fernwood Road, within unincorporated Yamhill County (County). The subject site is located within the East A subarea and, within that, the former 2007 Corral Creek Road South URA. This study examines all areas within an approximately 1-mile radius from the current City limits and Urban Growth Boundary (UGB) for suitability as a URA and finds that the subject site is located in an area optimal for a URA expansion thus justifying the Comprehensive Plan Amendment application.

- As documented in the 2051 Buildable Lands Inventory & Land Needs Assessment, dated May 2021, prepared by DOWL, the City needs an additional 400 buildable acres within its URA to ensure that the City’s URAs provide sufficient land for a minimum of a 30-year growth horizon per Oregon Administrative Rule (OAR) Section 660-021-0030(1).

- This study applies the criteria stated in OAR Section 660-021-0030(2-5) in order to assess all land within an approximately 1-mile radius from the current City limits and UGB for suitability as a URA. The study area was divided into 15 subareas, consistent with the City of Newberg’s previous URA Locational Analysis conducted in 2007 that divided all land within a roughly 1-mile radius of the City into subareas based on topographic features. Exception lands were considered first, then resource lands with priority given to resource lands of lower soil capability classifications. For each study area, this study assessed the cost to provide urban services, topographic and physical constraints, existing development patterns, and buildable land area.

- Overall, the exception areas surrounding Newberg UGB are highly constrained and opportunities to provide urban services at a reasonable cost are limited. DOWL determined that topographical constraints such as steep slopes and rivers, and physical constraints presented by conditions such as rural development make the provision of utilities difficult and costly in most of the nearby exception lands.

- Only two areas of exception land—the Southeast C and East A exception areas—were determined to be reasonably serviceable and potentially appropriate locations for a URA expansion. Both exception areas would require inclusion of intervening resource land from the East A subarea, in order to efficiently serve the area.

- Four areas consisting of resource land were found to be suitable or conditionally suitable locations for a URA expansion. East A was found to be highly suitable. Southeast C is conditionally suitable as it would require inclusion of adjacent (East A) resource land as well as Southeast C exception land. The Southeast B and Northeast B areas are potentially suitable but were not determined to be optimal locations, compared to the East A and Southeast C areas.

- The East A area in particular is highly suitable for a URA expansion and could provide sufficient buildable acreage to meet the majority of the City’s land need (367 acres). The East A area contains a high quantity of continuous buildable land, comprised of relatively large lots and large vacant areas.
Therefore, where property owners are interested in future redevelopment, redevelopment could result in a sufficient yield of dwelling units or employment land, and would allow for cohesive larger-area planning. A high residential or commercial development yield would make the provision of urban services more feasible and cost effective. Within the East A area, the Corral Creek Road South area is particularly suitable as it contains few Class I soils and large tracts of vacant land that are not in active agricultural use.

- The Southeast C area is suitable but would require inclusion of intervening East A resource land to efficiently provide the area with urban services. The Southeast C exception area is made up of small lots with existing rural residential developments which could pose a challenge to redevelopment.

- The Southeast C, Northeast B, and Southeast B resource lands appear to consist primarily of active agricultural uses, as do portions of the East A area (primarily in the former 2007 URAs Wilsonville Road Exception, Wilsonville Road Southeast, and Corral Creek North). Therefore, if the City seeks to expand the URA beyond the subject application, further examination of the current and future agricultural value of these properties should be considered.

- This study demonstrates that the most appropriate areas for a URA expansion are located in a continuous area at the East and Southeast boundary of the City. The City can meet its identified land need by expanding the Urban Reserve to include all or some of the East A and Southeast C subareas.

- This analysis has been prepared in support of an application for a Comprehensive Plan Amendment application to expand the City’s URA; the subject URA expansion site consists of approximately 95.3 acres adjacent to the City boundary, located within the East A subarea and within the former 2007 Corral Creek Road South URA. This analysis demonstrates that the East A subarea is optimally suitable for an URA, therefore justifying this location for an URA expansion.

2. Introduction

This Comparative Site Analysis study has been prepared in support of a Comprehensive Plan Amendment application to expand the City’s URA. The proposed approximately 95.3 acre URA expansion site consists of four properties generally located northwest of the intersection of NE Corral Creek Road and NE Fernwood Road, along with adjacent segments of NE Corral Creek Road and NE Fernwood Road, within unincorporated Yamhill County (County). This study examines all areas within an approximately 1-mile radius from the current City limits and UGB for suitability as a URA and finds that subject site is located in an area optimal for an URA expansion thus justifying the Comprehensive Plan Amendment application.

The 2051 Buildable Lands Inventory & Land Needs Assessment prepared by DOWL (May 2021), demonstrates that the City will need 475 acres of buildable land to accommodate forecasted growth on a 30-year horizon to 2051. Approximately 75 acres of this need can be accommodated within the existing URAs, leaving a deficit of approximately 400 acres of buildable land. In order to ensure that the City’s URAs provide sufficient land for a minimum of a 30-year growth horizon per Oregon Administrative Rule (OAR) Section 660-021-0030 the City will need to expand its URA to include 400 additional buildable acres. This Comparative Site Analysis report provides an assessment of land near the City’s UGB to determine which areas are most suitable for inclusion within the URA.

This analysis roughly follows the framework used in the URA Locational Analysis included as Part II of the City of Newberg and Yamhill County 2007 Urban Reserve Area Justification and Findings Report, referred
to in this study as the “2007 URA Report”. The 2007 URA Report analyzed land within a mile of the Newberg UGB for suitability for inclusion in the City’s URA. The criteria used in the 2007 URA Report, described in greater detail in the following section, included land category, provision of urban services, and topographic and physical constraints. Since the OAR criteria for establishing URAs has not changed since the 2007 URA Report, and many of the site conditions remain the same, this DOWL study summarizes many of the applicable findings from the 2007 URA report. Additionally, to inform this study, DOWL has reviewed information in the City’s current Water Master Plan (Murraysmith, May 2017), the City’s current Wastewater Master Plan (Keller Associates, May 2018), the City’s current Stormwater Master Plan (Brown and Caldwell, June 2014), as well as the draft “City of Newberg Division 38 Preliminary Study Area Analysis – Serviceability” study prepared by Jacobs in December of 2018.

3. Criteria

This analysis justifies the location of a future URA expansion based on relevant provisions of the Urban Reserve Rule (OAR 660, Division 021). The Urban Reserve Rule sets forth locational criteria for establishment or amendment of URAs in OAR 660-021-0030(1-5) as follows:

(1) Urban reserves shall include an amount of land estimated to be at least a 10-year supply and no more than a 30-year supply of developable land beyond the 20-year time frame used to establish the urban growth boundary. Local governments designating urban reserves shall adopt findings specifying the particular number of years over which designated urban reserves are intended to provide a supply of land.

(2) Inclusion of land within an urban reserve shall be based upon the locational factors of Goal 14 and a demonstration that there are no reasonable alternatives that will require less, or have less effect upon, resource land. Cities and counties cooperatively, and the Metropolitan Service District for the Portland Metropolitan Area Urban Growth Boundary, shall first study lands adjacent to, or nearby, the urban growth boundary for suitability for inclusion within urban reserves, as measured by the factors and criteria set forth in this section. Local governments shall then designate, for inclusion within urban reserves, that suitable land which satisfies the priorities in section (3) of this rule.

(3) Land found suitable for an urban reserve may be included within an urban reserve only according to the following priorities:

(a) First priority goes to land adjacent to, or nearby, an urban growth boundary and identified in an acknowledged comprehensive plan as an exception area or nonresource land. First priority may include resource land that is completely surrounded by exception areas unless these are high value crop areas as defined in Goal 8 or prime or unique agricultural lands as defined by the United States Department of Agriculture;

(b) If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, second priority goes to land designated as marginal land pursuant to former ORS 197.247 (1991 edition);
If land of higher priority is inadequate to accommodate the amount of land estimated in section (1) of this rule, third priority goes to land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

(4) **Land of lower priority under section (3) of this rule may be included if land of higher priority is found to be inadequate to accommodate the amount of land estimated in section (1) of this rule for one or more of the following reasons:**

(a) *Future urban services could not reasonably be provided to the higher priority area due to topographical or other physical constraints; or*

(b) *Maximum efficiency of land uses within a proposed urban reserve requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.*

(5) **Findings and conclusions concerning the results of the consideration required by this rule shall be adopted by the affected jurisdictions.**

The locational criteria require that an analysis of suitable land for urban reserves first considers exception land. Pursuant to OAR 660-021-0010, exception lands are rural lands for which an exception to statewide planning goals 3 or 4, or both, as defined in ORS 197.732 and OAR 660-004-0005(1), has been acknowledged. Where exception lands cannot accommodate the amount of land needed, then land designated in an acknowledged comprehensive plan for agriculture or forestry (referred to as resource land throughout this study) is considered, with priority given first to resource lands of lower soil capability class. Resource lands may be included if future urban services cannot reasonably be provided to the higher priority area due to topographical or other physical constraints, or if a proposed urban reserves requires inclusion of lower priority lands to include or provide services to higher priority lands. This analysis therefore considers the following factors:

- **Category of land** – Each study area is categorized as exception or resource land based on Yamhill County zoning designations and requirements under state law (OAR 660-021-0010). Rural exception lands include Yamhill County zoning designations AF-10, HC, HI, LDR-(all), LI, MDR-5000, PAI, PALF, PWS, RI and VLDR-(all) zones. Resource lands include both agricultural and forest lands and include the AF-20, EF-20, EF-40, and EF-80 zoning designations.

- **Provision of urban services** – It is estimated that the cost of providing urban services to exception areas that require multiple sewer pump stations (i.e., lower elevation areas that cannot be served by gravity flow sewer), new sewer treatment plants, or water pump stations plus a new reservoir (i.e., higher elevation areas), is likely to cost two to three times that of providing urban services to land that does not require such facilities (see Exhibit A for details on utility cost estimates). In addition to initial construction cost, pump stations have significantly higher maintenance costs.

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1 Yamhill County does not have lands designated as marginal lands, therefore OAR 660-021-030(3)(b) does not apply for this study.
and consume much more energy than facilities that rely on gravity. The extent of facilities needed to overcome physical and topographic constraints in some areas is so great that it is unreasonable to serve those areas. Utility cost estimates in this study have been determined by calculating the inflationary Increase to estimates in the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, prepared by the City in 2007 in support of the 2007 URA Report. DOWL has not conducted detailed engineering cost estimates for the study areas, so the estimates in the report should be considered high level and for planning and comparison purposes only. The full methodology for the utility cost estimates used in this study is included in Exhibit A.

- **Topographic and physical constraints** – Certain areas cannot reasonably be provided with urban services because the cost to overcome topographic or physical constraints to provide utility service would be financially infeasible. Some areas are located on hillsides higher than could be served by the City’s water system and would require a new water reservoir. Other areas are separated from the City’s sewer system by stream canyons and a connection to the system would require crossing the creek or a pump station and pressurized bridge-mounted pipeline. Therefore, the following are considered constraints that may render provision of urban services cost prohibitive:
  - Major rivers or other water bodies that would require new creek crossings to serve an area.
  - Topographic features such as canyons or steep slopes that would require new water reservoirs or pump stations to serve an area.

- **Existing rural development/small parcels** – The 2007 URA Report categorized extensive rural development and small lot sizes as physical constraints to providing future urban services. As described in that report, if an area is already mostly subdivided and developed without services, the owners have little incentive to pay the high costs of extending services to their neighborhoods to reap marginal benefits of further development. Coordinating service provision in an area is also very problematic. If one property owner wants to develop, then that one owner would need to extend full urban services long distances past other properties, which would generally be financially prohibitive. Local improvement districts can be formed, but if there are a large number of property owners, achieving sufficient support for a district is problematic. Therefore, small parcels and rural development are considered a physical constraint that decreases the feasibility of redevelopment and can contribute to an area being deemed unsuitable as a URA.

- **Buildable area** – This study includes a buildable land inventory for the study areas. DOWL conducted a buildable lands inventory (BLI) within the study areas to determine the net buildable area. The full methodology for DOWL’s BLI is included as Exhibit B. To calculate net buildable area, DOWL first classified parcels as vacant, partially vacant or redevelopable, then deducted area occupied by constraints. Constraints that were deducted from buildable land area calculations include floodplains, wetlands, stream corridors, landslide hazards, slopes over 25 percent, and the area planned for the Newberg-Dundee Bypass. DOWL then deducted 25 percent for public

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2 Draft City of Newberg Division 38 Preliminary Study Area Analysis – Serviceability, 2018, Jacobs.
infrastructure and rights of way, consistent with Newberg’s Comprehensive Plan Policy I.1.b. The results of the BLI were used to calculate cost of urban services for buildable acre, described in Exhibit A and summarized throughout this report.

4. Study Area

In accordance with OAR 660-021-0030(2), this analysis considered all areas adjacent to or near the current City UGB for suitability for inclusion within the URA. For consistency with past studies, this analysis uses the same study areas and names as the 2007 URA Locational Analysis. The study areas extend approximately one mile from the current UGB and include all adjacent exception areas as well as agricultural land. These study areas are divided into subareas (A, B, C, D) based on topographic features. The study areas include:

- North Study Area (subareas A and B)
- Northeast Study Area (subareas A and B)
- East Study Area (subareas A and B)
- Southeast Study Area (subareas A and B)
- Southwest Study Area (subareas A, B, and C)
- Northwest Study Area (subareas A, B, C, and D)

The subareas are shown on Map A. Additionally, certain areas within these subareas contain distinct features relevant to this discussion, therefore DOWL also references the names associated with the 2007 URAs for ease of reference. Former 2007 URAs are depicted on Map S. Table 1 on the next page provides a summary of buildable acres by study area.

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The Target Densities stated in The Newberg Comprehensive Plan Housing Policies (I.1.b) include a 25 percent allowance for streets, walkways and other rights-of-way, utilities, small open spaces, preservation of resources, and similar features.
Table 1: Summary of Buildable Acres by Study Area

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Resource Land (ac.)</th>
<th>Exception Land (ac.)</th>
<th>Total (ac.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North A</td>
<td>239</td>
<td>37</td>
<td>276</td>
</tr>
<tr>
<td>North B</td>
<td>24</td>
<td>204</td>
<td>228</td>
</tr>
<tr>
<td>Northeast A</td>
<td>0</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Northeast B</td>
<td>75</td>
<td>54</td>
<td>129</td>
</tr>
<tr>
<td>East A</td>
<td>340</td>
<td>27</td>
<td>367</td>
</tr>
<tr>
<td>East B</td>
<td>0</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td>Southeast A</td>
<td>0</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Southeast B</td>
<td>158</td>
<td>1</td>
<td>159</td>
</tr>
<tr>
<td>Southeast C</td>
<td>65</td>
<td>82</td>
<td>147</td>
</tr>
<tr>
<td>Southwest A</td>
<td>0</td>
<td>137</td>
<td>137</td>
</tr>
<tr>
<td>Southwest B</td>
<td>0</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Southwest C</td>
<td>0</td>
<td>171</td>
<td>171</td>
</tr>
<tr>
<td>Southwest D</td>
<td>0</td>
<td>239</td>
<td>239</td>
</tr>
<tr>
<td>Northwest A</td>
<td>255</td>
<td>64</td>
<td>319</td>
</tr>
<tr>
<td>Northwest B</td>
<td>188</td>
<td>20</td>
<td>208</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,344</strong></td>
<td><strong>1,504</strong></td>
<td><strong>2,848</strong></td>
</tr>
</tbody>
</table>

Source: DOWL Study Areas Buildable Land Inventory Calculations - 2021.

5. Comparative Site Analysis

This section assesses each exception area in relation to the criteria for suitability as an urban reserve. Where applicable, this study cites the City’s 2007 URA Report, as well as the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, prepared by the City in 2007 in support of the 2007 URA Report. This study summarizes the substantial utility improvements identified in the City’s 2007 studies to serve each area, such as new pump stations or water reservoirs, that would make service to an area unreasonable. Standard sewer, water and storm line extensions are generally not described as these would be required with the development of any new URA. Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve each area would still be necessary. The complete list of public facilities estimated to be necessary to serve each subarea, along with cost estimates for these facilities, are provided in the 2021 Urban Reserve Area Public Facilities Cost Estimates report included as Exhibit A.

As shown on Map A, the study areas that are entirely exception land or include exception areas are:

- North A
- North B
- Northeast A

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4 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
5.1 Exception Areas

North A

The North A subarea is bounded by North Valley Road/Bell Road on the south and extends approximately one mile north of the present UGB. A portion of the area at the center and the north is exception land and is bounded by North A resource area to the east and west. Map B shows the location of the North A subarea and exception lands within this subarea.

The North A subarea contains steep slopes and rapid changes in elevation. Map C depicts topography and constraints for the North A area. The 2007 URA Report determined that the extensive facilities needed to serve the small buildable area makes service to this area unreasonable and therefore, North A subarea was not included in the 2007 URA. The 2007 Public Utilities Cost Estimates Report identified the following utility improvements necessary to develop the North A subarea:

- **Sewer** – Required improvements would include a new pump station as well as pump station upgrades. The western part would need to be pumped to cross a branch of Chehalem Creek. The entire area connects to existing pumped systems, so either existing pump station would need to be upgraded, or new systems developed.

- **Storm** – Storm drainage in the area will need to include storm detention to alleviate local overflows. The subarea largely drains to branches of Chehalem Creek that are fairly level and shallow, thus flooding is an issue.

The facts and circumstances that led to North A’s prior determination as non-suitable for the URA have not changed since the 2007 study. The specific constraints in the subarea, including steep slopes, rapid changes in elevation and the creek crossing, will require costly new infrastructure to serve new urban development. Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that a new pump station, pump station upgrades, and storm detention, as well as standard trunk line extensions, will still be requirements to provide urban services to the North A subarea. As demonstrated in Exhibit A, the cost of the required improvements for this subarea is estimated to be nearly $26 million. The BLI shows there are

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Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
approximately 276 buildable acres within the North A subarea. Therefore, the cost of urban services per buildable acre is approximately $94,000, which is the fourth highest cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 2 below summarizes the estimated cost of urban services for the North A subarea.

Table 2: Urban Services Cost Estimate - North A Subarea

<table>
<thead>
<tr>
<th></th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$25,978,895</td>
</tr>
<tr>
<td>Buildable Acres</td>
<td>276</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
<td>$94,162</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Due to the topographic and physical constraints and the high cost of urban services per buildable acre, DOWL finds that the North A subarea remains unsuitable for inclusion in the URA.

North B

The North B subarea is bounded by North Valley Road/Bell Road on the south and extends approximately one mile north of the present UGB. This subarea contains mostly exception land, with two small resource areas north of the North Hills URA. Map D shows the location of the North B subarea and exception lands within this subarea.

The North B subarea contains steep slopes and rapid changes in elevation. Map E depicts topography and constraints for the North B area. The 2007 URA Report determined that future urban services could not reasonably be provided to the North B subarea due to topographical and physical constraints and, therefore, North B subarea was not included in the 2007 URA. The 2007 Public Utilities Cost Estimates Report identified the following utility improvements necessary to develop the North B subarea:

- **Sewer** – Sewer would flow south to gravity lines located along Hess Creek or Springbrook Road. Capacity of conveyance pipelines downstream from these proposed improvements would be need to be further evaluated; the 2007 report did not assume sewer improvements beyond the direct sewer line extensions in the cost estimate for this area.

- **Water** – The majority of the subarea is above the 460-foot contour and therefore above the existing water service area. The subarea would require a new Zone 4 reservoir and pump station. A zone 5 reservoir or pump station may even be needed.

- **Storm** – Detention may be needed to prevent downstream flooding.

Of these improvements, the 2007 URA Report determined that the required water facilities are cost prohibitive. The facts and circumstances that led to North B’s prior determination as non-suitable for the URA have not changed since the 2007 study. Future Zone 4 facilities are not included in the City’s current Water Master Plan. The specific constraints in this area, including steep slopes, rapid changes in elevation, and location above the city’s existing water service level, will require costly new infrastructure to serve new urban development. Through review of current City master plans and conversations with City staff,  

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6 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
DOWL has determined that no significant Newberg capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that a new Zone 4 reservoir and pump station, and storm detention, as well as standard trunk line extensions, will be required to provide urban services to the North B subarea. Upgrades to downstream sewer mains may also be necessary. As demonstrated in Exhibit A, the cost of the required improvements for this subarea is estimated to be approximately $27.8 million. The BLI shows there are approximately 228 buildable acres within the North B subarea. Therefore, the cost of urban services per buildable acre is approximately $122,000, which is the third highest cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 3 below summarizes the estimated cost of urban services for the North B subarea.

<table>
<thead>
<tr>
<th>Table 3: Urban Services Cost Estimate - North B Subarea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
</tr>
<tr>
<td>Buildable Acres</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Due to the topographic and physical constraints and the high cost of urban services per buildable acre, DOWL finds that the North B subarea remains unsuitable for inclusion in the URA.

**Northeast A**

The Northeast A subarea is bounded by Springbrook Road and the existing UGB on the west, the existing city boundary on the south, and extends approximately one mile northeast of the present UGB. Northeast A is entirely exception land. Map F shows the location of the Northeast A subarea. Map G depicts topography and constraints for the Northeast A area.

The 2007 URA Report determined that future urban services could not reasonably be provided to the Northeast A subarea due to topographical and physical constraints and therefore, Northeast A subarea was not included in the 2007 URA. Northeast subarea A is nearly fully developed with rural residential uses on lots averaging less than two acres, which would make the provision of urban services to this area difficult. Additionally, the 2007 Public Utilities Cost Estimates Report identified the following utility improvements necessary to develop the North A subarea:

- **Sewer** – Sewer service for Northeast Area A would generally flow toward sewer lines in Springbrook Road. Some downstream capacity issues would need to be addressed. A pump station would be needed to serve the Putnam Road area.

- **Water** – The northern portion of the subarea is above the 460-foot contour and therefore above the existing water service area. The subarea would require a new Zone 4 reservoir and pump station.

The 2007 URA report determined that the extensive existing development, the significant infrastructure needed to overcome topographic constraints and the very low potential yield makes service to this area unreasonable. The facts and circumstances that led to Northeast A’s prior determination as non-suitable for the URA have not changed since the 2007 study. Through review of current City master plans and
conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, the specific constraints in this area, primarily location above the city’s existing water service level, will require costly new infrastructure to serve new urban development. DOWL anticipates that a new Zone 4 reservoir and pump station, and a new sewer pump station will be required to serve the area. Furthermore, existing rural residential development patterns provide further impediments to urbanization and limit the amount of buildable land within the area. As demonstrated in Exhibit A, the cost of the required Improvements for this subarea is estimated to be approximately $12 million. The BLI shows there are approximately 79 buildable acres within the Northeast A subarea. Therefore, the cost of urban services per buildable acre is approximately $151,000, which is the second highest cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 4 below summarizes the estimated cost of urban services for the Northeast A subarea.

<table>
<thead>
<tr>
<th>TABLE 4: Urban Services Cost Estimate – Northeast A Subarea</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$11,920,298</td>
</tr>
<tr>
<td>Buildable Acres</td>
<td>79</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
<td>$151,159</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 Inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Due to the topographic constraints, rural residential development patterns, and the high cost of urban services per buildable acre, DOWL finds that the Northeast A subarea remains unsuitable for inclusion in the URA.

**Northeast B**

The Northeast B subarea is bounded by the Northeast A area to the west, Highway 99W to the south and extends approximately one mile west of the present city boundary. A small portion of this subarea at the west and north is exception land. Additionally, there are three small areas of exception land on the east side of the subarea, surrounded by Northeast B resource land. Map F shows the location of the Northeast B subarea and exception lands within this subarea. The exception lands in the Northeast subarea B are nearly all fully developed with rural residences on lots averaging less than two acres, which would make the provision of urban services to this area difficult. Map G depicts topography and constraints for the Northeast B area.

The 2007 URA Report determined that future urban services could not reasonably be provided to the majority of the Northeast B subarea due to these physical constraints; however, approximately 70 acres of the Northeast B subarea was determined to be serviceable and was included in the 2007 URA as Benjamin Road. The Benjamin Road URA was primarily resource land with one 5 acre parcel of exception land at the northwest corner. Outside of this 5 acre parcel, the exception lands in Northeast B subarea

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7 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
were not included in the 2007 URA. The 2007 Public Utilities Cost Estimates Report identified the following utility improvement necessary to develop the Northeast B subarea:

- **Sewer**—A new pump station at Benjamin Road and upgrades to the existing Fernwood Road pump station would be required.

The 2007 URA Report determined the overall cost per acre to provide urban services to the Northeast B subarea was relatively low, which is why the Benjamin Road area was included as a URA. As demonstrated in Exhibit A, the cost of the required improvements for this subarea is estimated to be approximately $4.5 million. The BLI shows there are approximately 130 buildable acres, including 54 acres of exception land, within the Northeast B subarea. Therefore, the cost of urban services per buildable acre is approximately $34,700, which is the second lower cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 5 below summarizes the estimated cost of urban services for the North B subarea.

**Table 5: Urban Services Cost Estimate – Northeast B Subarea**

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th>Total Cost</th>
<th>Buildable Acres</th>
<th>Cost per Buildable Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$4,503,078</td>
<td>130</td>
<td>$34,740</td>
</tr>
</tbody>
</table>


However, the existing small parcel rural development patterns in the Northeast B exception lands create a considerable impediment to providing the area with urban services. The 2007 URA Report specifically stated the following regarding the challenges posed to serviceability by the existing development patterns:

- **The area is already mostly subdivided and developed.** The area consists of several rural residential subdivisions that are developed with homes. The average lot size is approximately 2 acres.

- **In the off chance that one property owner would decide to partition,** that one owner would need to extend full urban services (sewer, water, and drainage) past other properties. The road system in the area is rural. In order to further divide, an urban street system would need to be developed. Given that most property owners view their properties as fully developed, few if any would be motivated to form an LID or other mechanism needed to improve the roads. The few individual property owners choosing to develop could not reasonably upgrade the road system for the entire area.

- **Annexation is required in order to extend sanitary sewer and water services that facilitate urban development.** The presence of densely developed rural lots between the UGB and outlying, marginally larger lots makes it highly unlikely that annexation would be supported by the majority of landowners or property owners, as required by state law.

For the reasons cited above, the City did not include the Northeast B exception lands in the Benjamin Road URA.

The rural residential development patterns within the Northeast B exception lands are largely unchanged from the 2007 study. The average lot size of Northeast B exception lands is currently 2.5 acres and it is...
reasonable to assume that the rural residential development patterns in the area would pose a significant challenge to serviceability for the same reasons cited by the City in 2007. Therefore, the exception lands in the Northeast B subarea remain suitable for inclusion in the URA.

**East A**

This subarea is bounded by Highway 99W on the north, the existing city boundary to the west, Wilsonville Road on the South, and extends east to Corral Creek Road. A small portion of this subarea at the north end is exception land separated from the Klimek Lane URA by East A resource area. The remaining East A subarea is resource land. The entire East A subarea was included in the 2007 URA as Corral Creek North and Corral Creek South. The exception land occupies the northeast corner of Corral Creek North. Map H shows the location of the East A subarea and exception lands within this subarea. Constraints and topography in East A are depicted on Map I.

The 2007 URA Report determined that maximum efficiency of land use would require the extension of public facilities through the intervening Corral Creek Road North resource area to develop the Corral Creek Road North exception area. Additionally, the 2007 *Public Utilities Cost Estimates Report* identified the following utility improvements necessary to develop the East A subarea:

- Sewer — A new pump station at Trails End Lane would be required to serve the North A exception area. Upgrades to the existing Fernwood Road pump station would be required to serve the greater East A subarea.

The 2007 URA Report determined that intervening resource land would need to be included in the URA to efficiently serve the East A Exception land area. Consequently, the East A exception lands were included in the 2007 Corral Creek North URA along with the resource lands to the west.

The facts and circumstances that led the City to determine the East A exception lands as conditionally suitable as a URA still exist. The cost of urban services per buildable acre for the East A subarea is relatively low. As demonstrated in Exhibit A, the cost of the required improvements for the overall East A subarea is estimated to be approximately $14 million. The BLI shows there are approximately 367 buildable acres, including 27 acres of exception land, within the East A subarea. Therefore, the cost of urban services per buildable acre is approximately $38,000, which is the third lowest cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 6 below summarizes the estimated cost of urban services for the North B subarea.

### Table 6: Urban Services Cost Estimate – East A Subarea

<table>
<thead>
<tr>
<th></th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$14,092,420</td>
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<tr>
<td>Buildable Acres</td>
<td>367</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
<td>$38,389</td>
</tr>
</tbody>
</table>

Source: *Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2011 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021*

Because of the relatively low serviceability cost per acre for the overall East A subarea, the East A exception lands could be suitable as a URA if the intervening resource land were also included. However, the buildable land within the East A exception land area is limited to approximately 27 acres due to the ODOT Bypass, areas of high landslide susceptibility, floodplains, and a tributary to Springbrook Creek that
runs through the area. Therefore, it is reasonable to consider other areas for inclusion in the URA either in conjunction with, or instead of, the East A exception lands.

**East B**

The East B subarea is entirely exception area, bounded by Corral Creek Road to the west and south, Highway 99 to the north and extending just over a half mile east of the city boundary. Map I shows the location of the East B subarea. The subarea is on a steep hillside with 10 to 40 percent slopes. Constraints and topography in East A are depicted on Map I.

The 2007 *Public Utilities Cost Estimates Report* identified the following utility improvements necessary to develop the East B subarea:

- **Sewer** – East Area B would gravity flow sewer toward Corral Creek Road. From that point, sewer would have to be connected to new pumped systems.

- **Water** – East Area B hillside extends above the service level of the existing Corral Creek Road reservoir, and in some cases 2 or 3 service levels above. The slope in the area dictates that only a small band of property along the hillside can be served by any one service level. Therefore, each small band would need to be served with a separate water system. This would include a separate water line running horizontally across the area, a separate water reservoir, a water booster station or pressure reducing station. These extensive facilities would each only serve a small area of land.

The 2007 URA Report determined that the costs of developing the extensive facilities required to serve the area, coupled with the relatively small amount of buildable land and the difficult topography, makes urban facilities cost prohibitive to develop within this area.

The specific constraints driving high service costs estimates for the exception lands in East B, including steep slopes and topography that would require multiple separate water systems, have not changed since the 2007 study. Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that a new Zone 2-3 reservoir, a Zone 4 reservoir, a booster station, and a pump station upgrades would still be required to serve the area. As demonstrated in Exhibit A, the cost of the required improvements for this subarea is estimated to be approximately $34.8 million. The BLI shows there are approximately 223 buildable acres within the East B subarea. Therefore, the cost of urban services per buildable acre is approximately $156,000, which is the highest cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 7 below summarizes the estimated cost of urban services for the Northeast A subarea.

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8 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
Table 7: Urban Services Cost Estimate – East B Subarea

<table>
<thead>
<tr>
<th></th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$34,837,690</td>
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<tr>
<td>Buildable Acres</td>
<td>223</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
<td>$156,308</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Therefore, because of the topography, the significant infrastructure required to serve the area, and high cost of services per buildable acre, DOWL has determined that the entire East B subarea is unsuitable for inclusion in the URA.

**Southeast A**

This area is bounded by the existing UGB/URA to the north and the Willamette River to the west and extends approximately one mile southwest of the present UGB. Southeast A is entirely exception area. Map J shows the location of the Southeast A subarea and exception lands within this subarea. The northernmost portion of the subarea was included as the former 2007 “South” URA. The South URA has limited buildable area due to floodplain, wetlands, and areas of high landslide susceptibility. The remaining land in this subarea, along Dog Ridge Road, is already subdivided and developed with rural residential homes on lots averaging less than 3 acres. Furthermore, this area is physically separated from the remainder of the urban area by Hess Creek. Constraints and topography in the Southeast A subarea are shown on Map K.

The 2007 Public Utilities Cost Estimates Report identified the following utility improvement necessary to develop the Southeast A subarea:

- **Sewer** – A new pump station within the Hess Creek Canyon would be needed to provide this area with sewer service.

The 2007 URA report determined that the limited infill potential of this area along with the topographical and physical constraints would make serving the area with urban services unreasonable. In the 2007 URA report, the constraints for Southeast A were described as follows:

- The area is already mostly subdivided and developed. It consists of a rural residential subdivision that is developed with homes. The average lot size is approximately 3 acres, though those lot areas include large undevelopable portions within the Willamette River or Hess Creek floodplains.
- The area is separated from the City by Hess Creek itself. A sanitary sewer lift station would be needed to provide this area with sewer service. Given the limited infill potential of the area, this topographic constraint would make serving the area unreasonable.
- In the off chance that one property owner would decide to partition to urban densities, that one owner would need to extend the full urban services (sewer, water, and drainage) past other properties. This would be an unreasonable cost.
- The road system in the area is rural. In order to further divide, an urban street system would need to be developed. Given that most property owners view their properties as fully developed, few if any would be motivated to form an LID or other mechanism needed to improve the roads. The few
Individual property owners choosing to develop could not reasonably upgrade the road system for the entire area.

The specific constraints driving high service cost estimates for the exception lands in Southeast A, including Hess Creek and existing rural residential development patterns, have not changed since the 2007 study. The average lot size within this subarea is currently 3 acres, and it is reasonable to assume that the rural residential development patterns in the area would still pose a significant challenge to serviceability for the reasons cited above. Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City's previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that a new pump station at Dog Ridge Road would still be required to serve the area. As demonstrated in Exhibit A, the cost of the anticipated improvements for this subarea are estimated at $3.5 million. The BLI shows there are approximately 58 buildable acres within the Southeast A subarea. Therefore, the cost of urban services per buildable acre is approximately $61,000. Exhibit A provides details and methodology for these estimates. Table 8 below summarizes the estimated cost of urban services for the North B subarea.

Table 8: Urban Services Cost Estimate – Southeast A Subarea

<table>
<thead>
<tr>
<th></th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$3,536,515</td>
</tr>
<tr>
<td>Buildable Acres</td>
<td>58</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
<td>$61,007</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Because of the topographic and physical constraints, coupled with the rural development patterns and small parcels, future urban services could not reasonably be provided to the Southeast A exception area. Furthermore, the former “South” URA, which was the only part of the Southeast A subarea included in the 2007 URA, contains only about 5 acres of buildable land, fragmented across several small areas. Because of the small and fragmented shape of buildable areas, the former South URA is not an appropriate area for a URA expansion. Therefore, the entire Southeast A subarea is not considered suitable for inclusion in the URA.

Southeast C

The Southeast C subarea is bounded by Wilsonville Road on the north, Springbrook Creek to the west and extends approximately one mile to the southwest. The western half is exception land and the eastern half is resource land. Map J shows the location of the Southeast C subarea and exception lands within this subarea. Constraints and topography are shown on Map K. The entire Southeast C subarea was included in the 2001 URA, referred to as “Wilsonville Road Exception” and “Wilsonville Road Southeast” respectively. This area was determined to be serviceable if the intervening resource land (East A- Wilsonville Road Northwest) was also included in the URA. The 2007 Public Utilities Cost Estimates Report identified the following utility improvement necessary to develop the Southeast C subarea:

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8 Doug Rox, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 9th, 2021).
• **Sewer** – Southeast Area C will require connection to a new sewer pump station on Wilsonville Road. In addition, a new pump station will be needed along Neumann Lane.

The 2007 URA Report determined that the cost to provide Wilsonville Road Exception land with urban services would be reasonable if adjacent resource lands to the north were also included.

As demonstrated in Exhibit A, it has been estimated that the cost of the required improvements for this subarea is approximately $3.8 million. The RLI shows there are approximately 146 buildable acres within the Southeast C subarea, including 82 acres of exception land. Therefore, the cost of urban services per buildable acre is approximately $26,000, which is the lowest cost estimate of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 9 below summarizes the estimated cost of urban services for the North B subarea.

<table>
<thead>
<tr>
<th>Table 9: Urban Services Cost Estimate – Southeast C Subarea</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost Estimate</strong></td>
</tr>
<tr>
<td><strong>Total Cost</strong> $3,825,575</td>
</tr>
<tr>
<td><strong>Buildable Acres</strong> 146</td>
</tr>
<tr>
<td><strong>Cost per Buildable Acre</strong> $26,127</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Therefore, due to the relatively low cost estimate for urban services per buildable acre, the Southeast A/Wilsonville Road exception area could be suitable as a URA, if the intervening resource land to the north were also included in the URA. However, the adjacent resource land to the north is primarily Class I soils (see Map R). Additionally, the average lot size in the Wilsonville Road exception area is 4.5 acres, most of which are developed with rural residences; this could pose a challenge to redevelopment and urbanization. Therefore, Southeast C exception lands could be a suitable location for a URA expansion but must be considered in conjunction with adjacent East A resource lands. A comparison to other suitable areas is merited.

**Southwest**

The Southwest study area contains subareas A, B, C, and D all of which are entirely exception land. This area lies between Newberg and Dundee. It is bounded by Chehalem Creek on the east, Highway 240 on the north, and extends approximately one mile west. Maps L and N show the location of the Southwest area. Southwest A includes former 2007 URA areas “Honey Lane”, “West First Street” and “Canyon Lane”. The remaining land within this subarea was not included in the 2007 URA due to topographical and physical constraints. Chehalem Creek and Harvey Creek cross the areas south and west of Newberg. A considerable amount of the area is within the floodplain and stream corridors, making a large amount of this area unbuildable. Southwest subareas A, B, C and D are highly parcelized, with an average size of approximately two acres. Existing development and parcelization typically is most dense at the edge of the UGB. Constraints and topography in the Southwest area are shown on Maps M and O.

The 2007 URA Report stated “In the Southwest Study Area, from a practical standpoint, Newberg would need to “leapfrog” over intervening small, developed parcels to reach the relatively few larger exception parcels between Newberg and Dundee. Cherry stem annexations which are generally unaccepted by case law, would be required to achieve this dubious objective.”
The utility improvement identified as necessary to develop the Southwest subareas in the 2007 Public Utilities Cost Estimates Report subareas are summarized below:

- **Sewer** — A series of new sewer pump stations would need to be installed in addition to two miles of force main and gravity mains to get to the plant. Additionally, upgrades would be needed to the existing Highway 240 and Dayton Avenue pump stations. Alternatively, the City could construct a new sewer treatment plant on the west side to serve the area. A small area in the Honey Lane/Highway 240 area could be served using the same pump station needed to serve the Chehalem Drive area. A few small areas could reasonably be served by existing sewer systems the West First Street area, which is actually on the east side of Chehalem Creek, and the Canyon Lane area, which could possibly be served if sewer service is extended through that area to serve the Aspen Estates area.

The 2007 URA Report concluded that topographic and land development patterns generally make it infeasible to provide urban services to the majority of the Southwest Study Area, with the exception of the Honey Lane, West First Street and Canyon Lane areas. The specific constraints that led to the Southwest areas’ prior determination as non-suitable for the URA, primarily existing rural residential development patterns and Chehalem Creek, are largely unchanged since the 2007 study. Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that multiple new pump stations and pump station upgrades, as well as standard trunk line extensions, will be required to provide urban services to the Southwest. Any connection to existing sewer and water systems would need to cross Chehalem Creek, either mounted to an existing roadway bridge or by crossing beneath the creek itself. Either method of creek crossing would add cost to servicing the area. Additionally, it is unknown if the existing bridges would require a structural retrofit in order to carry a water or sewer main; this could result in additional cost to serve the area. As demonstrated in Exhibit A, the cost of the required improvements for the entire Southwest area is estimated to be approximately $38.3 million. The BJI shows there are approximately 655 buildable acres within the Southwest area. Therefore, the cost of urban services per buildable acre averages to approximately $58,460, with the cost to serve Southwest subareas B and C being the highest. Exhibit A provides details and methodology for these estimates. Table 10 below summarizes the estimated cost of urban services for the North B subarea.

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10 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 6th, 2021).
Table 10: Urban Services Cost Estimate — Southwest A, B, C, and D Subareas

<table>
<thead>
<tr>
<th></th>
<th>Southwest A</th>
<th>Southwest B</th>
<th>Southwest C</th>
<th>Southwest D</th>
<th>Southwest Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$6,197,059</td>
<td>$6,982,885</td>
<td>$12,098,800</td>
<td>$13,030,348</td>
<td>$38,309,092</td>
</tr>
<tr>
<td>Buildable Acres</td>
<td>137</td>
<td>108</td>
<td>171</td>
<td>239</td>
<td>655</td>
</tr>
<tr>
<td>Cost per Buildable Acre</td>
<td>$45,311</td>
<td>$64,447</td>
<td>$70,860</td>
<td>$54,434</td>
<td>$58,487</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

The small parcels and rural residential development patterns in the Southwest area pose further impediments to urbanization. The average parcel size across the entire Southwest study area is currently 2.4 acres. Only 11 percent of the parcels (54 of the 474) in the Southwest area are vacant and the vacant parcels are dispersed throughout the outskirts of all four subareas. Existing development and parcelization is most dense at the outskirts of the City. Therefore, Newberg would still need to “leapfrog” over intervening small, developed parcels to reach the relatively few larger exception parcels.

Southwest A, B, C and D subareas are not considered suitable for inclusion in the URA. The 2007 URA Report determined that the Southwest area was not suitable as a URA except the former “Honey Lane”, “West First Street”, and “Canyon Lane” areas, which were deemed reasonably serviceable and were included in the 2007 URA. However, DOWL finds that the entire Southwest area, including the former “Honey Lane”, “West First Street”, and “Canyon Lane” URAs, are not suitable for a URA expansion. The BLI calculations show that the Honey Lane area contains approximately 54 buildable acres. However, the average parcel size of this area is 2.1 acres and all lots within this area contain existing rural residential developments. This area would connect to the existing Highway 240 pump station, which would require capacity upgrades to serve the area. Additionally, a connection to the pump station would require crossing a creek via a pump station and pressurized bridge-mounted pipeline or crossing beneath the creek itself. It is unknown if the existing bridge structure at Highway 240 could carry a sewer main or if a structural retrofit would be required. Crossing the creek would require wetland permits from the Oregon Department of State Lands and the U.S. Army Corps of Engineers. Therefore, either method of creek crossing is likely to add significant cost beyond the estimate in Table 10. Considering the limited redevelopment potential due to existing development patterns, the cost and infrastructure necessary to serve the Honey Lane area is unreasonable. Furthermore, West First Street and Canyon Lane, which were determined to be reasonably serviceable and were included in the 2007 URA, total approximately only 4.5 buildable acres fragmented across three small areas and are therefore not considered suitable for inclusion in the URA. Therefore, DOWL finds that none of the exception areas in the Southwest area are suitable as a URA.

Northwest

The Northwest area is bounded by Highway 240 on the south, the existing UGB near Chehalem Drive on the east, North Valley Road on the north, and extends approximately one mile west. This area is divided into subareas Northwest A and Northwest B, both of which are predominantly resource land with an exception land at the south end along Highway 240. Map P shows the location of the Northwest area.

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11 Draft City of Newberg Division 38 Preliminary Study Area Analysis – Serviceability, 2018, Jacobs.
Constraints and topography are shown on Map Q. A portion of the exception lands were included as the 2007 URAs “Old Yamhill Highway”, “Honey Lane” and “Highway 240”. Additionally, the Northwest B resource land was included as the 2007 URAs “Cullen Road” and “Chehalem Drive”. The utility improvements identified as necessary to develop the Northwest subareas in the 2007 Public Utilities Cost Estimates Report are summarized below:

- **Sewer** – The Highway 240 area and Old Yamhill Highway area define the projected extent that the area could be served using the future Highway 240 sanitary sewer pump station. The remainder of the Northwest exception area would require sanitary sewer pump stations to connect into the City’s system due to topography.

- **Storm** – The Northwest area largely drains to branches of Chehalem Creek. These branches are fairly level and shallow, thus flooding is an issue. Storm drainage in the area will need to include storm detention to alleviate local overflows.

The Northwest exception area also is highly parcelized and mostly physically developed. The 2007 URA Report determined that future urban services could not reasonably be provided to the exception areas in the Northwest Area, except for the Highway 240 and Old Yamhill Highway subarea, due to topographical and physical constraints. Newberg included the Highway 240 area in the 2007 URA, despite high service costs, because services needed to be extended within existing roads to serve the more cost efficient Old Yamhill Highway area.

The facts and circumstances that led to the determination that portions of the Northwest exception areas were not suitable for the URA have not changed since the 2007 study. The specific constraints driving for the Northwest area, primarily topography and existing rural residential development patterns, will require costly infrastructure to serve the area.

Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that a Highway 240 pump station upgrade and standard trunk line extensions will be required to provide urban services to the Northwest exception areas. Additionally, the overall Northwest subareas (including resource areas) will require a pump station at Old Yamhill Highway, an upgrade to the Chehalem drive pump station and additional standard trunk line extensions. As demonstrated in Exhibit A, it is estimated that the cost of the required improvements for Northwest subareas A and B would be $17 million and $13 million respectively. The BLI shows there are approximately 320 buildable acres within the Northwest A subarea, which results in a cost of urban services per buildable acre of approximately $53,000. There are approximately 209 buildable acres in Northwest B, which would result in a cost per buildable acre of nearly $63,000. Exhibit A provides details and methodology for these estimates. Table 11 below summarizes the estimated cost of urban services for the Northwest subarea.

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12 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
Table 11: Urban Services Cost Estimate – Northwest A and B Subareas

<table>
<thead>
<tr>
<th></th>
<th>Northwest A</th>
<th>Northwest B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Cost</strong></td>
<td>$16,935,340</td>
<td>$13,114,980</td>
</tr>
<tr>
<td><strong>Buildable Acres</strong></td>
<td>320</td>
<td>209</td>
</tr>
<tr>
<td><strong>Cost per Buildable Acre</strong></td>
<td>$52,984</td>
<td>$62,889</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

The Northwest A exception areas to the west of the Old Yamhill Highway area, which were not included in the 2007 URA, remain unsuitable as a URA. A new pump station would be required to serve an area that contains only 61 buildable acres, most of which contain existing rural development (only two parcels in this area, totaling 20 acres, are vacant). Furthermore, DOWL finds that the Highway 240 and Old Yamhill Highway areas, which were included in the 2007 URA, are not reasonably serviceable either. These areas would connect to the existing Highway 240 pump station, which would require capacity upgrades to serve the areas. Additionally, a connection to the pump station would require crossing a creek via a pump station and pressurized bridge-mounted pipeline or crossing beneath the creek itself. 13 It is unknown if the existing bridge structure at Highway 240 could carry a sewer main or if a structural retrofit would be required. Crossing beneath the creek would require wetland permits from the Oregon Department of State Lands and the U.S. Army Corps of Engineers. Therefore, either method of creek crossing is likely to add significant cost beyond the estimate in Table 11. The Highway 240 and Old Yamhill Highway areas only contain approximately 27 and 17 buildable acres respectively. The average parcel size in the Highway 240 and Old Yamhill Highway areas is approximately 3 acres and these parcels all contain existing rural developments. Considering the low buildable acreage and limited redevelopment potential due to existing development patterns in the Highway 240 and Old Yamhill Highway, the cost and infrastructure necessary to serve this area is excessive to be feasible for future expansion. Therefore, DOWL finds that none of the exception areas in Northwest A or B are suitable as a URA.

Summary of Exception Areas Analysis

Overall, the exception areas surrounding the Newberg UGB are highly constrained and provide few opportunities to provide urban services at a reasonable cost. The 2007 URA Report determined that topographical constraints such as steep slopes and rivers, and physical constraints such as rural development patterns would make the provision of utilities difficult and costly in most of the nearby exception lands. The constraints identified in the 2007 URA Report still exist and would still require costly infrastructure in order to serve some of the subareas. Table 12 below summarizes DOWL’s cost estimates to serve each area with sewer, water, and storm service; Exhibit A provides additional details and methodology for these numbers.

13 Draft City of Newberg Division 38 Preliminary Study Area Analysis – Serviceability, 2018, Jacobs.
Table 12: Estimated Cost to Serve Urban Reserve Study Areas

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Cost / Subarea</th>
<th>Cost / Buildable Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Area B</td>
<td>$34,837,690</td>
<td>$156,308</td>
</tr>
<tr>
<td>Northeast A</td>
<td>$11,920,298</td>
<td>$151,159</td>
</tr>
<tr>
<td>North Area A</td>
<td>$27,881,625</td>
<td>$122,410</td>
</tr>
<tr>
<td>North Area A</td>
<td>$25,978,895</td>
<td>$94,162</td>
</tr>
<tr>
<td>Southwest Area C</td>
<td>$12,098,800</td>
<td>$70,860</td>
</tr>
<tr>
<td>Southwest Area B</td>
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<td>$64,447</td>
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<td>Northwest Area A</td>
<td>$13,030,348</td>
<td>$54,434</td>
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<td>Northeast B</td>
<td>$4,503,078</td>
<td>$34,740</td>
</tr>
<tr>
<td>Southwest Area C</td>
<td>$3,825,575</td>
<td>$26,127</td>
</tr>
</tbody>
</table>

Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments; DOWL’s Study Areas Buildable Land Inventory, 2021

Therefore, DOWL has determined the majority of nearby exception land is still not suitable for inclusion in the URA. The exception areas that cannot be reasonably provided with urban services and are therefore not suitable as urban reserves include:

- North A and B
- Northeast A
- Northeast B
- East B
- South A
- Southwest B, C, and D

Several exception lands could be provided with urban services under certain conditions:

- East A exception land could be provided with urban services if the intervening resource land were included in the URA. The buildable land within the East A exception land area is limited to approximately 27 acres due to the Newberg-Dundee Bypass, areas of high landslide susceptibility, floodplains, and a tributary to Springbrook Creek that runs through the area.

- Southeast C Wilsonville Road Exception land could be reasonably provided with urban services if adjacent resource lands are also included. However, because the average lot size in the Wilsonville Road exception area is 4.5 acres and most of these lots are developed with rural residences; this area is fragmented to a degree that presents a challenge to redevelopment and urbanization. Southeast C contains approximately 82 buildable acres of exception land.
DOWL's buildable land inventory of reasonably serviceable exception areas would yield approximately 109 buildable acres, which is not sufficient to meet the land need of 400 acres anticipated over the next 30 years. Additionally, the reasonably serviceable exception areas would require inclusion of resource land in order to efficiently serve each area. Therefore, per OAR 660-021-030(3)(c), the City must next consider resource lands of lower soil capability to meet land needs for the 30-year planning horizon. The subsequent section of this study assesses the suitability of nearby resource land to identify sufficient buildable acres to include within the URA to meet the City’s anticipated growth through 2051.

5.2 Resource Areas

In accordance with OAR 660-021-0030(3), local jurisdictions must consider resource lands if land of higher priority is determined to be inadequate to accommodate land need required by OAR 660-021-0030(1) (a 10-year supply and no more than a 30-year supply of developable land beyond the 20-year time frame used to establish the urban growth boundary). Section 5.1 of this report determined that the exception areas within one mile of the City's UGB cannot accommodate the quantity of land needed through 2051. Therefore, the City of Newberg must consider resource lands to meet the estimated land need through this period. Higher priority should be given to resource lands of lower soil capability (Class III-VIII soils), than lands of higher soil capability (Class I and II soils).

Resource land is found in the Northwest, North, Northeast, East, and Southeast study areas. Table 13 shows the soil capability classifications for all resource lands within the study area, based on the most recent available Yamhill County Soil Survey information from the National Resource Conservation Service. Soil classification for study area resource land is depicted on Map R.

Table 13: Soil Capability Classes of Resource Lands in Study Areas

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Approximate percent of agricultural land in each study area per Soil Capability Class</th>
<th>Priority Based on Soil Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>North A</td>
<td>19%</td>
<td>42%</td>
</tr>
<tr>
<td>North B</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Northeast B</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>East A</td>
<td>24%</td>
<td>44%</td>
</tr>
<tr>
<td>Southeast A</td>
<td>0%</td>
<td>17%</td>
</tr>
<tr>
<td>Southeast B</td>
<td>18%</td>
<td>50%</td>
</tr>
<tr>
<td>Southeast C</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Northwest A</td>
<td>69%</td>
<td>13%</td>
</tr>
<tr>
<td>Northwest B</td>
<td>37%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Source: GIS data derived from Yamhill County Soil Survey, Version 3, Sep 10, 2019, Nonirrigated Capability Class, National Resource Conservation Service

¹) Earlier findings showed that the subarea cannot reasonably be served with future public facilities due to topographical and physical constraints.

Based on the soil data in Table 13, North B and Southeast A are the highest priority resource lands to be considered for a URA expansion because they contain no Class I soil and primarily consist of lower capability soils. However, Section 5.1 of this report has demonstrated that these entire subareas, along with North A, cannot reasonably be provided with urban services. Therefore, the North A, North B and
Southeast A subareas are not suitable as URAs and the City must next consider areas with some higher capability class soils.

The Northeast B, East A, Southeast B, and Southeast C resource lands all contain less than 25 percent Class I soils. The suitability and development capacity of each subarea is summarized below. The Northwest A area contains primarily Class I soils and the majority of Northwest B soils are Class I and II, therefore these areas should only be considered when the City cannot accommodate land need through resource lands comprised of lower priority soils.

**Northeast B**

The Northeast B subarea is located north of Highway 99 and east of E Benjamin Road. Resource lands occupy the south and east portions of the Northeast subarea, as shown on Map F. As shown on Map R, the resource lands in Northeast B contain a mix of Class I, II, III, IV and VI soils distributed across the subarea. The Northeast B resource lands contain approximately 75 buildable acres. However, the eastern portion of this area contains Rex Hill Vineyards, which is a prominent and successful winery in the region and has occupied this location for over 35 years. Though the BLI calculations classified this area as partially vacant due to amount of land area unoccupied by buildings, it is unreasonable to assume these properties would be interested in or suitable for redevelopment. Presumably for this reason, only the western portion of the Northeast B resource lands (west of Rex Hill Vineyards) were included in the 2007 URA as the Benjamin Road URA.

The former Benjamin Road URA currently contains approximately 49 buildable acres, across three parcels, and contains all of the subarea's Class I soils. Current imagery from Google earth (August 13, 2020), show that the two largest southern parcels are at least partially in active agricultural use. As stated in Section 5.1, the cost of urban services per buildable acre is relatively low at approximately $34,700, which is the second lowest cost estimate of all 15 study areas.

Therefore, DOWL finds that the eastern portion of the Northeast B resource lands remains unsuitable for inclusion in the URA due to the established Rex Hill Vineyards site occupying this area. The western portion (the former Benjamin Road URA) may be suitable as a URA due to low infrastructure costs but does not justify prioritization for inclusion due to limited buildable area, presence of Class I soils and existing agricultural uses.

**East A**

The East A subarea borders the eastern and southeastern city boundary, as shown on Map H. The East A subarea is almost entirely made up of resource lands, except a small portion of exception land at the northeast corner (East A exception lands are discussed in Section 5.1 and shown on Map H). As shown on Map R, the East A subarea contains a mix of Class I, II, III, IV and VI soils. The entire East subarea area was included in the 2007 URA as the Corral Creek Road North, Corral Creek Road South, Wilsonville Road Northeast and Wilsonville Northwest URAs (see Map S). Class I soils make up less than 25 percent of the area and are primarily concentrated in the former Wilsonville Road Northeast URA, with smaller areas of Class I soils in the Corral Creek Road North and the southern portion of Corral Creek Road South. Class I soils in Corral Creek Road North largely overlap with the Newberg-Dundee bypass area and other constraints so are generally not included in the buildable land calculations.
East A resource lands contain 340 buildable acres. Relative to the other study areas, East A has large areas that are free of development constraints such as steep slopes, landslide susceptibility or other environmental constraints. The average parcel size in the East A area is approximately 15 acres, many of which are either vacant or have large portions of vacant land (greater than five acres) on site. Some parcels within East A do appear to contain active agricultural uses so, if considered as a URA, the City should work with property owners to determine most appropriate areas within the subarea for a URA expansion and redevelopment.

The new utility infrastructure required to serve the East A area is moderate and would come at a relatively low cost per buildable acre compared to the other study areas. Nearly the entire area is located at existing water service levels for Pressure Zone 1 (under elevation 310 feet) and would require standard trunk line extensions. Sewer service to the parts of East A (primarily the former Corral Creek Road South URA) would require only an upgrade to the Fernwood Road pump station. A new pump station on Wilsonville Road would be needed to serve areas that could not gravity flow to the Fernwood Road station (primarily the former Wilsonville Road URA areas). A new pump station would likely be needed at Trails End for sewer service the northern portion of the East A area (primarily Corral Creek Road North). Storm drainage generally flows toward branches of Springbrook Creek. New storm drain lines would need to be extended in some areas to connect to natural drainages. As stated in Section 5.1, the estimated cost of urban services per buildable acre for the East A is approximately $38,389, which is the third lowest cost estimate of all 15 study areas.

The East A area is therefore a suitable location for a URA expansion for a number of reasons. The presence of low capability soils and relative limited extent of high capability soils, makes the East A area an appropriate location to consider expanding the URA, given that most exception lands and resource lands of even lower soil capability have been excluded from consideration due serviceability cost, topographic and physical constraints. Furthermore, the areas of Class I soils within the East A are primarily concentrated in certain areas and could be avoided almost entirely if the City opted to limit the URA expansion to the former Corral Creek Road South URA. The Corral Creek Road South area also contains the largest areas of vacant land not currently in agricultural use. The East A area contains a high quantity of continuous buildable land, comprised of relatively large lots and large vacant areas. Therefore, where property owners are interested in redevelopment, redevelopment could result in a sufficient yield of dwelling units or employment land and would allow for cohesive larger-area planning. The infrastructure requirements and estimated cost of urban services per buildable acre is low relative to the other study areas and could be made even more cost effective through the provision of higher densities and efficient land development practices. Therefore, the entire East A subarea is suitable as a URA.

**Southeast B**

The Southeast B subarea is bordered by Wilsonville Road to the north, the Wynooski Road URA, the Southeast subarea A and Hess Creek to the west, and the Southeast subarea C and Spring Brook to the east. The subarea extends approximately .75 mile southeast from the city boundary. The Southeast subarea, shown on Map J, is entirely resource lands except two small parcels totaling 4.5 acres at the northeast corner. This subarea contains approximately 158 buildable acres of resource land. Class II soils make up 50 percent of the soils within the area, with 18 percent of the site occupied by Class I soils at the south end, and Class III and VI soils dispersed throughout the area. The average parcel size is approximately 16 acres and the majority of the area appears to be actively in use for agriculture.
The infrastructure requirements to provide utility service to the Southeast B subarea are moderate. The 2007 Public Utilities Cost Estimates Report identified the following utility improvements necessary to serve the area:

- **Southeast Area B could be served by a new sewer pump station along Highway 219. A new force main would be needed to tie to the sewer treatment plant. Water service could be provided with standard water line extensions. Storm sewers could be directed toward Hess Creek and Springbrook Creek.**

Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous analysis and the facilities identified as necessary to serve this area would still be necessary. Therefore, DOWL anticipates that a new pump station and standard trunk line extensions are still requirements to provide urban services to the Southeast B subarea. As demonstrated in Exhibit A, the cost of the required improvements for this subarea is estimated to be approximately $7.4 million. The BLI shows there are approximately 160 buildable acres within the Southeast B subarea. Therefore, the cost of urban services per buildable acre is approximately $47,000, which is the fifth lowest of all 15 study areas. Exhibit A provides details and methodology for these estimates. Table 14 below summarizes the estimated cost of urban services for the North A subarea.

**Table 14: Urban Services Cost Estimate – Southeast B Subarea**

<table>
<thead>
<tr>
<th></th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Cost</strong></td>
<td>$7,468,327</td>
</tr>
<tr>
<td><strong>Buildable Acres</strong></td>
<td>160</td>
</tr>
<tr>
<td><strong>Cost per Buildable Acre</strong></td>
<td>$46,792</td>
</tr>
</tbody>
</table>

*Source: Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report, 2007, updated by DOWL with 2021 inflationary adjustments, DOWL’s Study Areas Buildable Land Inventory, 2021*

The Southeast B subarea consists of resource land of medium priority in terms of soil capabilities (mix of Class I-VI) and the area would require relatively moderate infrastructure cost requirements. This area could be suitable as an URA if other more suitable lands proved insufficient to meet the City’s identified land needs. However, current imagery from Google Earth (August 13, 2020) shows that the majority of the land in this area appears to be actively used for agricultural. Therefore, this subarea may be suitable but may not be the optimal choice for a URA expansion; a comparison with other suitable areas is merited.

**Southeast C**

Resource land occupies the eastern half of the Southeast C subarea, as shown on Map J. The East A subarea borders Southeast C resource land and Wilsonville Road at the north. As shown on Map R, the resource lands in Northeast B contain a mix of Class I, II, III, IV and VI soils with Class I soils concentrated at the southwest and poorer quality soils in the northeast portion of the subarea. Southeast C contains 65 acres of buildable resource land across three parcels, including two large parcels greater than 40 acres each. The parcels making up Southeast C, based on recent Google Earth imagery earth (August 13, 2020), appear to be at least partially in active use for agriculture. As stated in Section 5.1, the cost of urban

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14 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 8th, 2021).
services per buildable acre is low at approximately $26,000, which is the lowest cost estimate of all 15 study areas.

Because of the low cost of urban services, Southeast C could be suitable as a URA. However, this area is separated from the City by Southeast C exception land and East A resource land. Therefore, in order to include this area within the city boundary and efficiently provide the area with urban services, intervening resource and exception lands would also need to be included in the URA. A comparison with other suitable areas is merited.

**Summary of Resource Areas Analysis**

Resource land is found in the Northwest, North, Northeast, East, and Southeast study areas. The North A, North B, and Southeast A subareas were previously ruled out of consideration due to topographic and physical constraints and the cost of urban services per buildable acre, as described in Section 5.1 of this report. The next priority for consideration, based on the soil capability classification listed in Table 13, are subareas Northeast B, East A, Southeast B and Southeast C. All four have low to moderate cost estimates for urban services per buildable acre, relative to the exception areas. The western portion of Northeast B (the former Benjamin Road URA) may be suitable as a URA due to low infrastructure costs but should not be a high priority choice due to limited buildable area, presence of Class I soils, and existing agricultural uses. Similarly, Southeast B has moderately low cost estimates for urban services, but the buildable acreage is occupied primarily by active agricultural uses. Northwest A and B contains the highest percentage of Class I soils (69 and 37 percent respectively) and consist of a majority Class I and II soils (totaling 82 and 83 percent respectively). Therefore, DOWL has determined that Northwest A and B are the lowest priority resource lands and should not be considered for the URA unless all exception lands and resource lands of lower soil capability classifications have proven insufficient to meet the City’s land needs.

The results of the resource lands analysis conclude that the East A area is the most suitable resource land for a URA expansion. The East A area has a large quantity of buildable land, relatively low cost of urban services per buildable acre, a relatively high ratio of low soil classes compared to other resource lands, and large vacant or redevelopable parcels. The City should consider the East A subarea for a URA expansion. The Southeast C area is also suitable as a URA based on cost of urban services, but intervening exception land (Southeast C) and resource land (East A) would also need to be included to efficiently provide the area with urban services. The Northeast B and Southeast B areas may be suitable as URAs if the City has additional land need and property owners express interest in redevelopment. The remaining resource areas have been found to be unsuitable as URAs.

**6. Conclusion**

The City has identified a land need of an additional 400 buildable acres within its URA in order to ensure that the City's URAs provide sufficient land for a minimum of a 30-year growth horizon per Oregon Administrative Rule (OAR) Section 660-021-0030(1). This study has applied the criteria stated in OAR Section 660-021-0030(2-5) in order to assess all land within an approximately 1-mile radius from the current City limits and UGB for suitability as a URA.

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15 City of Newberg Buildable Lands Inventory and Land Needs Assessment, prepared by DOWL, February 2021.
Overall, the exception areas surrounding the City's UGB are highly constrained and provide few opportunities to provide urban services at a reasonable cost. The 2007 URA Report determined that topographical constraints such as steep slopes and rivers, and physical constraints such as rural development patterns would make the provision of utilities difficult and costly in most of the nearby exception lands. The facts and circumstances identified in the 2007 URA Report that led the City to exclude many exception areas from the urban reserve still exist. DOWL has determined the majority of nearby exception lands remain unsuitable for inclusion in the URA.

The exception areas that cannot be reasonably provided with urban services and are therefore not suitable as urban reserves include:

- North A and B
- Northeast A
- Northeast B
- East B
- South A
- Southwest B, C, and D

Several exception lands could be provided with urban services under certain conditions:

- East A exception land could be provided with urban services if the intervening East A resource land were included in the URA. The buildable land within the East A exception land area is limited to approximately 27 acres due to the Newberg-Dundee Bypass, areas of high landslide susceptibility, floodplains, and a tributary to Springbrook Creek that runs through the area.
- Southeast C Wilsonville Road Exception land could be reasonably provided with urban services if adjacent resource lands were also included. Southeast C exception lands contain approximately 82 buildable acres. However, the average lot size in the Wilsonville Road exception area is 4.5 acres and this high degree of fragmentation could pose a challenge to redevelopment and urbanization. Additionally, the area of intervening resource land which would need to be included to serve Southeast C exception lands is primarily Class I soils.

DOWL's BLT indicates that the above reasonably serviceable exception areas could yield approximately 109 gross acres, which is not sufficient to meet the land need of 400 acres anticipated over the next 30 years. Furthermore, both reasonably serviceable exception lands require the inclusion of intervening resource land (in the East A subarea) in order to efficiently serve the areas. Therefore, per OAR 660-021-030(3)(c), the City must next consider resource lands of lower soil capability to meet land needs for the 30 year planning horizon.

Resource land is found in the Northwest, North, Northeast, East, and Southeast study areas. The resource areas that cannot be reasonably provided with urban services and are therefore not suitable as urban reserves include:

- North A
- North B
Newberg Urban Reserve Area Expansion
Comparative Site Analysis

- Southeast C

The next priority in terms of soil capability classification are the Northeast B, East A, and Southeast B resource areas.

- The western portion of Northeast B (the former Benjamin Road URA) may be suitable as a URA due to low infrastructure costs, at approximately $34,700 per buildable acre. However, this subarea should not be a high priority choice due to limited buildable area (65 acres), presence of Class I soils, and existing agricultural uses.

- The entire East A area was found to be suitable as a URA. The East A area contains a high quantity of continuous buildable land (340 acres), comprised of relatively large lots and large vacant areas. Therefore, where property owners are interested in redevelopment, redevelopment could result in sufficient yield of dwelling units or employment land and would allow for cohesive larger-area planning. A high residential or commercial development yield would make the provision of urban services more feasible and cost effective. Finally, the infrastructure requirements and estimated cost of urban services per buildable acre is low, at $38,000 per buildable acre, when compared to the other study areas.

- Southeast C was found to be suitable as a URA based on cost of urban services, at approximately 26,000 per buildable acre. However, intervening exception land (Southeast C) and resource land (East A) would also need to be included to efficiently provide the area with urban services. Southeast C resource land contains 65 buildable acres.

- Southeast B has moderately cost estimates for urban services, approximately $47,000 per buildable acre, but the 158 acres of buildable land is occupied primarily by active agricultural uses.

Northwest A and B are the lowest priority resource lands and should not be considered as URAs unless all exception lands and resource lands of lower soil capability classifications have proven insufficient to meet the City’s land needs.

Tables 15 and 16 below summarize the exception and resource lands within the study area that were found to be suitable and potentially suitable along with the factors that led to this conclusion.

Table 15: Suitable and Potentially Suitable URA Expansion Summary

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Buildable Acreage</th>
<th>Urban Services Estimate ($/Buildable Acre)</th>
<th>URA Suitability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exception Land</td>
<td>Resource Land</td>
<td></td>
</tr>
<tr>
<td>East A</td>
<td>27</td>
<td>340</td>
<td>367</td>
</tr>
<tr>
<td>Southeast C</td>
<td>82</td>
<td>65</td>
<td>146</td>
</tr>
<tr>
<td>Northeast B*</td>
<td>0</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Southeast B</td>
<td>1</td>
<td>158</td>
<td>160</td>
</tr>
</tbody>
</table>

*Formerly referred to as the Benjamin Rd URA only.
Table 16. URA Site Suitability Factors

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Suitability Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>East A</td>
<td>• Exception area requires inclusion of intervening resource land.</td>
</tr>
<tr>
<td></td>
<td>• Resource land is highly suitable as a URA due to utility costs, soils,</td>
</tr>
<tr>
<td></td>
<td>quantity of buildable land, and large vacant parcels.</td>
</tr>
<tr>
<td></td>
<td>• Low utility costs.</td>
</tr>
<tr>
<td>Southeast C</td>
<td>• Exception area requires inclusion of intervening resource land (East A).</td>
</tr>
<tr>
<td></td>
<td>• Exception land consists of small parcels of existing rural development.</td>
</tr>
<tr>
<td></td>
<td>• Resource area would require inclusion of intervening exception land</td>
</tr>
<tr>
<td></td>
<td>(Southeast C) and resource land (East A).</td>
</tr>
<tr>
<td></td>
<td>• Resource lands contain existing agricultural uses.</td>
</tr>
<tr>
<td></td>
<td>• Low utility costs.</td>
</tr>
<tr>
<td>Northeast B</td>
<td>• Limited buildable area, Class I soils, and existing agricultural uses</td>
</tr>
<tr>
<td></td>
<td>across majority of area.</td>
</tr>
<tr>
<td></td>
<td>• Moderate utility costs.</td>
</tr>
<tr>
<td>Southeast B</td>
<td>• Existing agricultural uses across majority of area.</td>
</tr>
<tr>
<td></td>
<td>• Moderate utility costs.</td>
</tr>
</tbody>
</table>

The City has an additional need for 400 acres within its URA. This study has demonstrated that the most appropriate areas for a URA expansion are located in a continuous area at the East and Southeast boundary of the City. The City can meet its identified land need by expanding its URA to include all or some of the East A and Southeast C subareas.

The Southeast C area is suitable but would require inclusion of intervening East A resource land. The Southeast C exception area is made up of small lots with existing rural residential developments which could pose a challenge to redevelopment. Lastly, the Southeast C, Northeast B, and Southeast B resource lands appear to consist primarily of active agricultural uses, as do portions of the East A area (primarily in the former 2007 URAs Wilsonville Road Exception, Wilsonville Road Southeast, and Corral Creek North). Therefore, if the City seeks to expand the URA beyond the subject application, further examination of the current and future agricultural value of these properties should be considered.

The East A area in particular is highly suitable for a URA expansion and could provide sufficient buildable acreage to meet the majority of the City's land need (367 acres). The East A area contains a high quantity of continuous buildable land, comprised of relatively large lots and large vacant areas. Therefore, where property owners are interested in future redevelopment, redevelopment could result in a sufficient yield of dwelling units or employment land and would allow for cohesive larger-area planning. Dense and efficient land development within this area will further ensure feasible and cost effective provision of urban services. Within the East A area, the Corral Creek Road South area is particularly suitable as it contains few Class I soils and large tracts of vacant land that are not in active agricultural use.

This analysis has been prepared in support of an application for a Comprehensive Plan Amendment application to expand the City's URA; the subject URA expansion site consists of approximately 95.3 predominantly vacant acres adjacent to the City boundary, located within the East A subarea and within
the former 2007 Corral Creek Road South URA. This analysis demonstrates that the East A subarea is optimally suitable as a URA, therefore justifying an expansion of the City's URA to include the site.
Newberg Urban Reserves Area
Map A: Comparative Site Analysis Study Area Map
Exhibit A: Study Areas Public Facilities Cost Estimates Results and Methodology

Background and Purpose

DOWL conducted an assessment of the public facilities costs for land within a roughly 1-mile radius from the Newberg City limits and Urban Growth Boundaries (UGB), in support of the 2021 Newberg Urban Reserve Area (URA) Expansion application. These cost estimates were used in DOWL’s Comparative Site Analysis to help determine which areas were most suitable to be included in the City’s URA. The study area was divided into 15 subareas (shown on Map A of DOWL’s Comparative Site Analysis). For consistency with past studies, DOWL’s analysis uses the same study areas and names as the City’s 2007 URA Locational Analysis included Part II of the City of Newberg and Yamhill County 2007 Urban Reserve Area Justification and Findings Report. The City of Newberg and Yamhill County 2007 Urban Reserve Area Justification and Findings Report is referred to as the 2007 URA Report in this document. The study areas extend approximately one mile from the City’s current UGB and include all adjacent exception areas as well as agricultural land. These study areas are divided into subareas (A, B, C, D) based on topographic features. The study areas include:

- North Study Area (subareas A and B)
- Northeast Study Area (subareas A and B)
- East Study Area (subareas A and B)
- Southeast Study Area (subareas A and B)
- Southwest Study Area (subareas A, B, and C)
- Northwest Study Area (subareas A, B, C, and D)

The City prepared the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report in 2007 in support of the 2007 URA Report. The Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report is referred to as the 2007 Cost Estimate Report in this document. The 2007 Cost Estimates Report estimates the costs of providing sanitary sewer service, domestic water service, and storm water services to each of the urban reserve area study areas. The cost estimates included the major trunk lines and facilities needed to serve an area. They did not include the costs for providing facilities that will serve a single development or purely local area, such as the lines within a subdivision. The cost estimates were intended for planning level comparison purposes and were not intended to be used to base capital improvement plans. The 2007 studies found that some study areas contained topographic and physical constraints, such as steep slopes or creeks, that would require costly utility facilities to in order to provide urban services; a full description of the constraints in each subarea is contained in the Comparative Site Analysis.

Methodology

The site conditions and constraints in the study areas remain largely unchanged from 2007, and all study areas are still not served by City utilities. Therefore, DOWL reviewed the 2007 Cost Estimate Report as a starting point in developing a public utilities cost estimate for the current URA expansion request. DOWL closely reviewed the assumptions in the 2007 URA Report and Cost Estimates Report to determine if those assumptions still apply to each study area. Additionally, DOWL has reviewed information in the City’s
current Water Master Plan (Murray-Smith, May 2017), the City’s current Wastewater Master Plan (Keller Associates, May 2018), the City’s current Stormwater Master Plan (Brown and Caldwell, June 2014), as well as the draft “City of Newberg Division 38 Preliminary Study Area Analysis – Serviceability” study prepared by Jacobs in December of 2018.

Through review of current City master plans and conversations with City staff, DOWL has determined that no significant City capital facilities modifications have occurred outside of the UGB that would modify the results of the City’s previous 2007 analyses. Therefore, DOWL anticipates that the infrastructure requirements identified in the 2007 Cost Estimates Report would still be required to serve each of the study areas. Therefore, DOWL used utility improvements and quantities identified in the 2007 Cost Estimates Report as the foundation for the current cost estimates and calculated the inflationary increase in unit costs to arrive at an updated cost estimate for each subarea.

The inflationary increase in unit costs was calculated using the Construction Cost Index (CCI) from the Seattle Engineering News Record. The average CCI for 2007 was $8,623.61 and the most recent CCI, for March of 2021, is $11,865.08. The CCI increase from 2007 to 2021 is therefore $4,239.07, or a 49 percent increase. DOWL then applied a 49 percent increase to the unit costs from the 2007 calculations to arrive at the 2021 Public Facilities Cost Estimates shown in Tables 1 through 16 below.

DOWL calculated the buildable acreage for each of the study areas, in order to calculate the cost of urban services per buildable acre. DOWL’s Buildable Lands Inventory of the study area deducts areas of environmental constraints and public facilities, then deducts 25 percent of the land area for public infrastructure and rights of way, consistent with Newberg’s Comprehensive Plan Policy I.1.b. The methodology for DOWL’s BLI of the study areas is included as Exhibit B to the Comparative Site Analysis.

DOWL’s cost estimates are summarized in Table 1 and detailed in Tables 2 through 16 for each study area. DOWL has not conducted detailed engineering cost estimates for the study areas, so the estimates in the report should be considered for high level planning and comparison purposes only. Actual construction costs will vary from the estimates presented in this document.

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1 Doug Rux, Community Planning Director (December 3, 2020, January 22, 2021, March 22, 2021) and Brett Musick, Senior Engineer (April 3rd, 2021).
Table 1: Urban Reserve Study Areas Public Utilities Cost Estimates Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>East Area B</td>
<td>$20,398,000</td>
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<td>Northeast A</td>
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<td>$151,159</td>
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<td>North Area B</td>
<td>$13,113,000</td>
<td>$27,881,625</td>
<td>$122,410</td>
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<tr>
<td>North Area A</td>
<td>$10,443,000</td>
<td>$25,978,895</td>
<td>$94,162</td>
</tr>
<tr>
<td>Southwest Area C</td>
<td>$8,109,000</td>
<td>$12,098,800</td>
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<tr>
<td>Southwest Area B</td>
<td>$4,684,000</td>
<td>$6,982,885</td>
<td>$64,447</td>
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<td>$6,502,000</td>
<td>$13,114,980</td>
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<td>Southeast Area A</td>
<td>$2,371,000</td>
<td>$3,536,515</td>
<td>$61,207</td>
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<td>Southwest Area D</td>
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<td>Southeast Area B</td>
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<td>$4,503,078</td>
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<td>Southeast Area C</td>
<td>$2,195,000</td>
<td>$3,825,575</td>
<td>$26,127</td>
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# Table 2: North A Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>23,000</td>
<td>feet</td>
<td>$185</td>
<td>$4,249,480</td>
</tr>
<tr>
<td>10 in sewer</td>
<td>5,000</td>
<td>feet</td>
<td>$206</td>
<td>$1,028,100</td>
</tr>
<tr>
<td>8 in force main</td>
<td>6,000</td>
<td>feet</td>
<td>$128</td>
<td>$768,840</td>
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<td>North Valley Rd pump station</td>
<td>1</td>
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<td>$1,564,500</td>
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<td>$1,564,500</td>
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<tr>
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<tr>
<td>Water Improvements</td>
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<td></td>
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<tr>
<td>10 in water line</td>
<td>18,000</td>
<td>feet</td>
<td>$179</td>
<td>$3,218,400</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>Water Subtotal $3,218,400</td>
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<tr>
<td>Storm Drain Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>15,000</td>
<td>feet</td>
<td>$212</td>
<td>$3,173,700</td>
</tr>
<tr>
<td>36 in storm</td>
<td>12,500</td>
<td>feet</td>
<td>$368</td>
<td>$4,500,375</td>
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<tr>
<td>Detention</td>
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<td>acres</td>
<td>$14,900</td>
<td>$5,811,000</td>
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<td></td>
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<td></td>
<td>Storm Subtotal $13,585,075</td>
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<tr>
<td>Total</td>
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<td>Total</td>
</tr>
<tr>
<td>Buildable Acres</td>
<td>276</td>
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<tr>
<td>Cost per acre</td>
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<td>$94,162</td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 3: North B Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>15,000</td>
<td>feet</td>
<td>$185</td>
<td>$2,771,400</td>
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</tr>
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<td>10 in sewer</td>
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<td>feet</td>
<td>$206</td>
<td>$4,112,400</td>
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<tr>
<td><strong>Water Improvements</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>New Zone 4 reservoir</td>
<td>1</td>
<td>LS</td>
<td>$4,470,000</td>
<td>$4,470,000</td>
<td></td>
</tr>
<tr>
<td>New Zone 4 pump station</td>
<td>1</td>
<td>LS</td>
<td>$2,235,000</td>
<td>$2,235,000</td>
<td></td>
</tr>
<tr>
<td>8 in water line</td>
<td>14,000</td>
<td>feet</td>
<td>$134</td>
<td>$1,877,400</td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>14,000</td>
<td>feet</td>
<td>$179</td>
<td>$2,503,200</td>
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<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>7,500</td>
<td>feet</td>
<td>$212</td>
<td>$1,586,850</td>
<td></td>
</tr>
<tr>
<td>36 in storm</td>
<td>12,500</td>
<td>feet</td>
<td>$368</td>
<td>$4,600,375</td>
<td></td>
</tr>
<tr>
<td>Detention</td>
<td>250</td>
<td>acres</td>
<td>$14,900</td>
<td>$3,725,000</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$27,881,625</td>
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<tr>
<td>Buildable Acres</td>
<td>228</td>
<td></td>
<td></td>
<td>$122,410</td>
<td></td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 4: Northeast A Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item(^1)</th>
<th>Quantity(^2)</th>
<th>Units(^1)</th>
<th>Unit Price(^2)</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>10,000</td>
<td>feet</td>
<td>$185</td>
<td>$1,847,600</td>
<td></td>
</tr>
<tr>
<td>4 in force main</td>
<td>1,000</td>
<td>feet</td>
<td>$95</td>
<td>$95,360</td>
<td></td>
</tr>
<tr>
<td>Putnam pump station</td>
<td>1</td>
<td>LS</td>
<td>$372,500</td>
<td>$372,500</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$2,315,460</td>
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</tr>
<tr>
<td><strong>Water Improvements</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zone 4 reservoir</td>
<td>1</td>
<td>LS</td>
<td>$4,470,000</td>
<td>$4,470,000</td>
<td></td>
</tr>
<tr>
<td>New Zone 4 pump station</td>
<td>1</td>
<td>LS</td>
<td>$2,235,000</td>
<td>$2,235,000</td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>13,000</td>
<td>feet</td>
<td>$179</td>
<td>$2,324,400</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$9,029,400</td>
<td></td>
</tr>
<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm drain</td>
<td>800</td>
<td>feet</td>
<td>$212</td>
<td>$169,264</td>
<td></td>
</tr>
<tr>
<td>36 in storm drain</td>
<td>800</td>
<td>feet</td>
<td>$368</td>
<td>$294,424</td>
<td></td>
</tr>
<tr>
<td>99W Culvert upsize</td>
<td>1</td>
<td>LS</td>
<td>$111,750</td>
<td>$111,750</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>$575,438</td>
<td></td>
</tr>
</tbody>
</table>

**Total** \$11,920,298

**Buildable Acres** 79

**Cost per acre** \$151,159

---

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.
2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
### Table 5: Northeast B Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>7,000</td>
<td>feet</td>
<td>$185</td>
<td>$1,293,320</td>
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</tr>
<tr>
<td>4 in force main</td>
<td>2,000</td>
<td>feet</td>
<td>$95</td>
<td>$190,720</td>
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</tr>
<tr>
<td>Benjamin Road pump station</td>
<td>1</td>
<td>LS</td>
<td>$596,000</td>
<td>$596,000</td>
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</tr>
<tr>
<td>Fernwood Rd pump station</td>
<td>1</td>
<td>LS</td>
<td>$596,000</td>
<td>$596,000</td>
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<td><strong>Sewer Subtotal</strong></td>
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<tr>
<td><strong>Water Improvements</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>7,000</td>
<td>feet</td>
<td>$179</td>
<td>$1,251,600</td>
<td></td>
</tr>
<tr>
<td><strong>Water Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,251,600</td>
</tr>
<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm drain</td>
<td>800</td>
<td>feet</td>
<td>$212</td>
<td>$169,264</td>
<td></td>
</tr>
<tr>
<td>36 in storm drain</td>
<td>800</td>
<td>feet</td>
<td>$368</td>
<td>$294,424</td>
<td></td>
</tr>
<tr>
<td>99W Culvert upsize</td>
<td>1</td>
<td>LS</td>
<td>$111,750</td>
<td>$111,750</td>
<td></td>
</tr>
<tr>
<td><strong>Storm Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$575,438</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,503,078</td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
### Table 6: East A Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>22,000</td>
<td>feet</td>
<td>$185</td>
<td>$4,064,720</td>
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</tr>
<tr>
<td>Trails End pump station</td>
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<td>LS</td>
<td>$372,500</td>
<td>$372,500</td>
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<tr>
<td>Fernwood Road pump station</td>
<td>1</td>
<td>LS</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
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<tr>
<td>Wilsonville Road pump station</td>
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<td>$1,564,500</td>
<td>Sewer Subtotal $7,566,220</td>
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<td>Water Improvements</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8 in water line</td>
<td>7,000</td>
<td>feet</td>
<td>$134</td>
<td>$938,700</td>
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</tr>
<tr>
<td>12 in water line</td>
<td>18,000</td>
<td>feet</td>
<td>$201</td>
<td>$3,620,700</td>
<td>Water Subtotal $4,559,400</td>
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<tr>
<td>Storm Drain Improvements</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>24 in storm</td>
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<td>feet</td>
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<td>Storm Subtotal $1,966,800</td>
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<td></td>
<td></td>
<td></td>
<td>Total $14,092,420</td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 7: East B Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>15,000</td>
<td>feet</td>
<td>$185</td>
<td>$2,771,400</td>
<td></td>
</tr>
<tr>
<td>Fernwood Road pump station</td>
<td>1</td>
<td>LS</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
<td></td>
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<tr>
<td>upgrade</td>
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<td>Water Improvements</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zone 2-3 reservoir</td>
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<td>LS</td>
<td>$11,920,00</td>
<td>$11,920,000</td>
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<tr>
<td>New Zone 4 reservoir</td>
<td>1</td>
<td>LS</td>
<td>$4,470,000</td>
<td>$4,470,000</td>
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</tr>
<tr>
<td>New Booster Station</td>
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<td>$2,980,000</td>
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<tr>
<td>24 in water line</td>
<td>1,500</td>
<td>feet</td>
<td>$596</td>
<td>$894,000</td>
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</tr>
<tr>
<td>18 in water line</td>
<td>1,500</td>
<td>feet</td>
<td>$313</td>
<td>$469,350</td>
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</tr>
<tr>
<td>10 in water line</td>
<td>18,000</td>
<td>feet</td>
<td>$179</td>
<td>$3,218,400</td>
<td></td>
</tr>
<tr>
<td>Storm Drain Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>10,000</td>
<td>feet</td>
<td>$212</td>
<td>$2,115,800</td>
<td></td>
</tr>
<tr>
<td>36 in storm</td>
<td>8,000</td>
<td>feet</td>
<td>$368</td>
<td>$2,944,240</td>
<td></td>
</tr>
<tr>
<td>Detention</td>
<td>100</td>
<td>acres</td>
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<td>$1,490,000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Cost per acre</td>
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<td></td>
<td></td>
<td>$156,308</td>
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</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
<table>
<thead>
<tr>
<th>Item 1</th>
<th>Quantity 1</th>
<th>Units 1</th>
<th>Unit Price 2</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>4,000</td>
<td>feet</td>
<td>$185</td>
<td>$739,040</td>
<td></td>
</tr>
<tr>
<td>4 in force main</td>
<td>1,000</td>
<td>feet</td>
<td>$95</td>
<td>$95,360</td>
<td></td>
</tr>
<tr>
<td>Dog Ridge Road pump station</td>
<td>1</td>
<td>LS</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
<td>Sewer Subtotal $1,951,900</td>
</tr>
<tr>
<td>Water Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>4,000</td>
<td>feet</td>
<td>$179</td>
<td>$715,200</td>
<td>Water Subtotal $715,200</td>
</tr>
<tr>
<td>Storm Drain Improvements</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>1,500</td>
<td>feet</td>
<td>$212</td>
<td>$317,370</td>
<td></td>
</tr>
<tr>
<td>36 in storm</td>
<td>1,500</td>
<td>feet</td>
<td>$368</td>
<td>$552,045</td>
<td>Storm Subtotal $869,415</td>
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<td>Total Buildable Acres</td>
<td>58</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost per acre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$61,207</td>
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</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DCWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 9: Southeast B Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item1</th>
<th>Quantity¹</th>
<th>Units²</th>
<th>Unit Price³</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>11,200</td>
<td>feet</td>
<td>$185</td>
<td>$2,069,312</td>
<td></td>
</tr>
<tr>
<td>8 in force main</td>
<td>5,000</td>
<td>feet</td>
<td>$128</td>
<td>$640,700</td>
<td></td>
</tr>
<tr>
<td>Hwy 219 pump station</td>
<td>1</td>
<td>LS</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
<td>Sewer Subtotal</td>
</tr>
<tr>
<td>Water Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>13,000</td>
<td>feet</td>
<td>$179</td>
<td>$2,324,400</td>
<td>Water Subtotal</td>
</tr>
<tr>
<td>Storm Drain Improvements</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>1,500</td>
<td>feet</td>
<td>$212</td>
<td>$317,370</td>
<td></td>
</tr>
<tr>
<td>36 in storm</td>
<td>1,500</td>
<td>feet</td>
<td>$368</td>
<td>$552,045</td>
<td>Storm Subtotal</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$7,468,327</td>
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<tr>
<td>Buildable Acres</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
<td>Cost per acre</td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 10: Southeast C Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity^1</th>
<th>Units^1</th>
<th>Unit Price$</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>4,000</td>
<td>feet</td>
<td>$185</td>
<td>$739,040</td>
<td></td>
</tr>
<tr>
<td>4 in force main</td>
<td>2,000</td>
<td>feet</td>
<td>$95</td>
<td>$190,720</td>
<td></td>
</tr>
<tr>
<td>Neumann Lane pump station</td>
<td>1</td>
<td>LS</td>
<td>$372,500</td>
<td>$372,500</td>
<td></td>
</tr>
<tr>
<td>Wilsonville Rd. pump station upgrade</td>
<td>1</td>
<td>LS</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Sewer Subtotal</strong></td>
<td><strong>$2,419,760</strong></td>
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<tr>
<td>Water Improvements</td>
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<td></td>
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<td>10 in water line</td>
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<td>$179</td>
<td>$536,400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Water Subtotal</strong></td>
<td><strong>$536,400</strong></td>
</tr>
<tr>
<td>Storm Drain Improvements</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>18 in storm</td>
<td>1,500</td>
<td>feet</td>
<td>$212</td>
<td>$317,370</td>
<td></td>
</tr>
<tr>
<td>36 in storm</td>
<td>1,500</td>
<td>feet</td>
<td>$368</td>
<td>$552,045</td>
<td></td>
</tr>
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<td></td>
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<td></td>
<td><strong>Storm Subtotal</strong></td>
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<td><strong>Total</strong></td>
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<td>Buildable Acres</td>
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<td></td>
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</tr>
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<td></td>
<td></td>
<td>Cost per acre</td>
<td></td>
<td>$25,127</td>
<td></td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
### Table 11: Southwest A Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>7,650</td>
<td>feet</td>
<td>$185</td>
<td>$1,413,414</td>
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</tr>
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<td>Highway 240 Pump Station</td>
<td>1</td>
<td>LS</td>
<td>$1,341,000</td>
<td>$1,341,000</td>
<td></td>
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<tr>
<td>Upgrade</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>New pump station</td>
<td>1</td>
<td>LS</td>
<td>$596,000</td>
<td>$596,000</td>
<td></td>
</tr>
<tr>
<td>4 in force main</td>
<td>2,000</td>
<td>feet</td>
<td>$95</td>
<td>$190,720</td>
<td></td>
</tr>
<tr>
<td><strong>Sewer Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,541,134</td>
</tr>
<tr>
<td><strong>Water Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>4,500</td>
<td>feet</td>
<td>$179</td>
<td>$804,600</td>
<td></td>
</tr>
<tr>
<td><strong>Water Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$804,600</td>
</tr>
<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 in storm Detention</td>
<td>4,500</td>
<td>feet</td>
<td>$246</td>
<td>$1,106,325</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>acres</td>
<td>$14,900</td>
<td>$745,000</td>
<td></td>
</tr>
<tr>
<td><strong>Storm Subtotal</strong></td>
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<td></td>
<td></td>
<td></td>
<td>$1,851,325</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td></td>
<td></td>
<td></td>
<td>$6,197,059</td>
</tr>
<tr>
<td>Buildable Acres</td>
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<td></td>
<td></td>
<td>137</td>
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</tr>
<tr>
<td>Cost per acre</td>
<td></td>
<td></td>
<td></td>
<td>$45,311</td>
<td></td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 12: Southwest B Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>7,700</td>
<td>feet</td>
<td>$185</td>
<td>$1,422,652</td>
<td></td>
</tr>
<tr>
<td>New pump station</td>
<td>1</td>
<td>LS</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
<td></td>
</tr>
<tr>
<td>8 in force main</td>
<td>1,950</td>
<td>feet</td>
<td>$128</td>
<td>$249,873</td>
<td></td>
</tr>
<tr>
<td>Dayton Ave. Pump Station</td>
<td>1</td>
<td>LS</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
<td></td>
</tr>
<tr>
<td>upgrade</td>
<td></td>
<td></td>
<td></td>
<td>Sewer Subtotal</td>
<td>$3,907,525</td>
</tr>
<tr>
<td>Water Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water lines</td>
<td>8,950</td>
<td>feet</td>
<td>$179</td>
<td>$1,600,260</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Water Subtotal</td>
<td>$1,600,260</td>
</tr>
<tr>
<td>Storm Drain Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 in storm</td>
<td>6,000</td>
<td>feet</td>
<td>$246</td>
<td>$1,475,100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Storm Subtotal</td>
<td>$1,475,100</td>
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<tr>
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<td></td>
<td></td>
<td>Total</td>
<td>$6,982,885</td>
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<tr>
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<td>Buildable Acres</td>
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<td></td>
<td>$64,447</td>
</tr>
<tr>
<td></td>
<td>Cost per acre</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 13: Southwest C Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>18,000</td>
<td>feet</td>
<td>$185</td>
<td>$3,325,680</td>
<td>$6,967,240</td>
</tr>
<tr>
<td>8 in force main</td>
<td>4,000</td>
<td>feet</td>
<td>$128</td>
<td>$512,560</td>
<td></td>
</tr>
<tr>
<td>New pump station</td>
<td>1</td>
<td>LS</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
<td></td>
</tr>
<tr>
<td>Dayton Ave. Pump Station</td>
<td>1</td>
<td>LS</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
<td></td>
</tr>
<tr>
<td>upgrade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Subtotal</td>
<td></td>
<td></td>
<td></td>
<td>$6,967,240</td>
<td></td>
</tr>
<tr>
<td>Water Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water lines</td>
<td>14,500</td>
<td>feet</td>
<td>$179</td>
<td>$2,592,600</td>
<td>$2,592,600</td>
</tr>
<tr>
<td>Water Subtotal</td>
<td></td>
<td></td>
<td></td>
<td>$2,592,600</td>
<td></td>
</tr>
<tr>
<td>Storm Drain Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>12,000</td>
<td>feet</td>
<td>$212</td>
<td>$2,538,960</td>
<td>$2,538,960</td>
</tr>
<tr>
<td>Storm Subtotal</td>
<td></td>
<td></td>
<td></td>
<td>$2,538,960</td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$12,098,800</td>
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<tr>
<td>Buildable Acres</td>
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<td></td>
</tr>
<tr>
<td>Cost per acre</td>
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<td></td>
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1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Table 14: Southwest D Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>18,800</td>
<td>feet</td>
<td>$185</td>
<td>$3,473,488</td>
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</tr>
<tr>
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<td>LS</td>
<td>$1,937,000</td>
<td>$1,937,000</td>
<td></td>
</tr>
<tr>
<td>upgrade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hagey Rd. Pump Station</td>
<td>1</td>
<td>LS</td>
<td>$596,000</td>
<td>$596,000</td>
<td></td>
</tr>
<tr>
<td>4 in force main</td>
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<td>feet</td>
<td>$95</td>
<td>$95,360</td>
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</tr>
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<td><strong>Sewer Subtotal</strong></td>
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<td><strong>Water Improvements</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>25,000</td>
<td>feet</td>
<td>$179</td>
<td>$4,470,000</td>
<td></td>
</tr>
<tr>
<td><strong>Water Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,470,000</td>
</tr>
<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 in storm</td>
<td>10,000</td>
<td>feet</td>
<td>$246</td>
<td>$2,458,500</td>
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</tr>
<tr>
<td><strong>Storm Subtotal</strong></td>
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<td></td>
<td></td>
<td></td>
<td>$2,458,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td></td>
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</tr>
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<td>Cost per acre</td>
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<td></td>
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</tbody>
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1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>20,000</td>
<td>feet</td>
<td>$185</td>
<td>$3,695,200</td>
<td></td>
</tr>
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<td>Old Yamhill Rd. Pump Station</td>
<td>1</td>
<td>LS</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
<td></td>
</tr>
<tr>
<td>8 in force main</td>
<td>2,000</td>
<td>feet</td>
<td>$128</td>
<td>$256,280</td>
<td></td>
</tr>
<tr>
<td>Hwy 240 pump station upgrade</td>
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<td>$2,235,000</td>
<td>$2,235,000</td>
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</tr>
<tr>
<td><strong>Water Improvements</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>17,000</td>
<td>feet</td>
<td>$179</td>
<td>$3,039,600</td>
<td></td>
</tr>
<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>15,000</td>
<td>feet</td>
<td>$212</td>
<td>$3,173,700</td>
<td></td>
</tr>
<tr>
<td>35 in storm</td>
<td>2,000</td>
<td>feet</td>
<td>$368</td>
<td>$736,060</td>
<td></td>
</tr>
<tr>
<td>Detention</td>
<td>180</td>
<td>acres</td>
<td>$14,900</td>
<td>$2,682,000</td>
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<td><strong>Sewer Subtotal</strong></td>
<td></td>
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<td></td>
<td>$7,303,980</td>
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<td></td>
<td></td>
<td>$3,039,600</td>
<td></td>
</tr>
<tr>
<td><strong>Storm Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$6,591,760</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utility Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 43% inflationary adjustment.
Table 16: Northwest B Subarea Public Utilities Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Price</th>
<th>Item Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sewer Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 in sewer</td>
<td>12,000</td>
<td>feet</td>
<td>$185</td>
<td>$2,217,120</td>
<td>$2,217,120</td>
</tr>
<tr>
<td>Hwy 240 pump station upgrade</td>
<td>1</td>
<td>LS</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
<td>$1,564,500</td>
</tr>
<tr>
<td>Chehalem Drive pump station upgrade</td>
<td>1</td>
<td>LS</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
<td>$1,117,500</td>
</tr>
<tr>
<td><strong>Water Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 in water line</td>
<td>15,000</td>
<td>feet</td>
<td>$179</td>
<td>$2,682,000</td>
<td>$2,682,000</td>
</tr>
<tr>
<td><strong>Storm Drain Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 in storm</td>
<td>10,000</td>
<td>feet</td>
<td>$212</td>
<td>$2,115,800</td>
<td>$2,115,800</td>
</tr>
<tr>
<td>36 in storm</td>
<td>2,000</td>
<td>feet</td>
<td>$368</td>
<td>$736,060</td>
<td>$736,060</td>
</tr>
<tr>
<td>Detention</td>
<td>180</td>
<td>acres</td>
<td>$14,900</td>
<td>$2,682,000</td>
<td>$2,682,000</td>
</tr>
<tr>
<td><strong>Buildable Acres</strong></td>
<td>209</td>
<td></td>
<td></td>
<td></td>
<td>$62,889</td>
</tr>
<tr>
<td><strong>Cost per acre</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Infrastructure requirements and quantities are taken from the Newberg Urban Reserve Expansion Study Areas Public Utilities Cost Estimates Report (2007) and have not been prepared by DOWL.

2. Unit prices represent costs estimated in 2007 multiplied by a factor of 1.49 to represent a 49% inflationary adjustment.
Exhibit B: Study Areas Buildable Lands Inventory Results and Methodology

Methodology

DOWL conducted a buildable lands analysis of all land within a roughly 1-mile radius from the Newberg City limits and Urban Growth Boundaries (UGB), in support of the 2021 Newberg Urban Reserve Area (URA) Expansion application. This Buildable Lands Inventory (BLI) was used in DOWL’s Comparative Site Analysis, to determine cost of urban services per buildable acre and assess which areas were most suitable to be included in the City’s Urban Reserve Area (URA). The study area was divided into 15 subareas (shown on Map A of DOWL’s Comparative Site Analysis). For consistency with past studies, DOWL’s analysis uses the same study areas and names as the City’s 2007 URA Locational Analysis included as Part II of the City of Newberg and Yamhill County 2007 Urban Reserve Area Justification and Findings Report. The study areas extend approximately one mile from the current UGB and include all adjacent exception areas as well as agricultural land. The study areas are shown on Map A to this document. These study areas are divided into subareas (A, B, C, D) based on topographic features. The study areas include:

- North Study Area (subareas A and B)
- Northeast Study Area (subareas A and B)
- East Study Area (subareas A and B)
- Southeast Study Area (subareas A and B)
- Southwest Study Area (subareas A, B, and C)
- Northwest Study Area (subareas A, B, C, and D)

DOWL calculated the buildable land within each study area, in order to calculate the cost of urban services per buildable acre for the Urban Reserve Area Expansion application’s Comparative Site Analysis.

The methodology for DOWL’s buildable lands inventory (BLI) was based on the methodology used in the City’s most recent 2021 – 2041 Housing Needs Analyses (HNA) conducted by ECONorthwest\(^1\). The methodology for DOWL’s Study Area BLI is the same the methodology DOWL used to assess buildable land for the City’s current Urban Reserve Areas.\(^2\) The general structure of ECONorthwest’s BLI analysis was based on the Department of Land Conservation and Development (DLCD) HB 2709 workbook Planning for Residential Growth – A Workbook for Oregon’s Urban Areas.

The steps and substeps in the ECONorthwest HNA supply inventory are:

1. Calculate the gross vacant acres by plan designation, including fully vacant and partially vacant parcels.
2. Calculate gross buildable vacant acres by plan designation by subtracting unbuildable acres from total acres.

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\(^1\) This methodology was employed in ECONorthwest’s 2019 and 2021 Housing Needs Analyses.

\(^2\) 2051 Buildable Land Inventory & Land Needs Assessment, prepared by DOWL in April 2021 as an Exhibit to the Urban Reserve Area Expansion Application.
3. Calculate net buildable acres by plan designation, subtracting land for future public facilities from gross buildable vacant acres.

4. Calculate total net buildable acres by plan designation by adding redevelopable acres to net buildable acres.

DOWL’s analysis followed this methodology, with the exception of consideration of plan designations, since the City does not currently have plan designations for the study areas, which are outside of the City boundary. DOWL’s methodology is detailed below. DOWL’s BLI for the study areas included a geospatial analysis using the data sources listed in Table 1 below.

Table 1: Data sources for Newberg URA BLI

<table>
<thead>
<tr>
<th>Data</th>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax lots – Yamhill</td>
<td>Yamhill County Assessor</td>
<td>Tax lot boundaries for the entire County, Including roads.</td>
</tr>
<tr>
<td>City Boundaries</td>
<td>Yamhill County Planning &amp; Development</td>
<td>Includes City limits, UGB, and URAs</td>
</tr>
<tr>
<td>UGB</td>
<td>Yamhill County Planning &amp; Development</td>
<td>2015 UGBs</td>
</tr>
<tr>
<td>Counties</td>
<td>Yamhill County Planning &amp; Development</td>
<td>2015 County boundaries</td>
</tr>
<tr>
<td>Stream Corridors</td>
<td>City of Newberg</td>
<td>Perennial streams</td>
</tr>
<tr>
<td>Streams Centerlines</td>
<td>Oregon Spatial Data Library</td>
<td>Stream centerlines for the entire state</td>
</tr>
<tr>
<td>Zoning &amp; Comprehensive Plan Designations</td>
<td>Yamhill County Planning &amp; Development</td>
<td>Zoning &amp; Comprehensive Plan Designations outside incorporated city boundaries</td>
</tr>
<tr>
<td>Landslide areas</td>
<td>DOGAMI SLIDO 3.2 database</td>
<td>DOGAMI mapped landslide areas</td>
</tr>
<tr>
<td>Special Flood Area</td>
<td>Oregon Spatial Explorer – statewide FEMA FIRM database</td>
<td>Areas of special flood hazard</td>
</tr>
<tr>
<td>Wetlands</td>
<td>National Wetland Inventory</td>
<td>Wetlands defined in the National Wetland Inventory</td>
</tr>
<tr>
<td>ODOT Bypass Interchange Overlay</td>
<td>City of Newberg</td>
<td>Area planned for the Newberg- Dundee Bypass</td>
</tr>
</tbody>
</table>

The steps of DOWL’s BLI, adapted from the City’s 2021 – 2041 HNA, are listed below.

- **Classify lands.** To determine gross buildable area, DOWL classified land into the categories using the methodology in the 2021 – 2041 HNA Residential Buildable Lands Inventory. Using the County Assessor’s Real Estate Data file, each tax lot within the URA was classified into one of the following categories:
  - **Vacant land.** Lands were considered vacant where the improvement value equaled zero.
  - **Partially vacant land.** Partially vacant tax lots are those occupied by a use, but which contain enough land to be further subdivided without need of rezoning. This inventory used the methodology stated in Section 2 of the 2021 – 2041 HNA which “uses the OAR 660-024-0050(2)(a) safe harbor: “The infill potential of developed residential lots or
parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land."

- **Reprocessable land.** Land that was not considered vacant or partially vacant was classified as reprocessable where the ratio of improvement-to-land value is less than 1:2.

- **Public land.** Lands in public ownership are mostly considered unavailable for residential uses. The only buildable land within the URA under public ownership, excluding streets, was owned by the Oregon Department of Transportation (ODOT). These properties were removed from the BLU.

- **Unbuildable land.** Tax lots that are too small to practically have a dwelling unit (less than 3,000 square feet), buildable areas of a tax lots (after removing constraints) that are less than 3,000 square feet. These properties were removed from the BLU.

- **Identify constraints.** DOWL deducted portions of tax lots that fall within certain constraints from the vacant, partially vacant, and reprocessable lands (e.g., wetlands and steep slopes). DOWL used the same categories used by the City’s 2021 – 2041 HNA, which is consistent with OAR 660-008-0005(2):
  - **Lands within floodplains and floodways.** Yamhill County GIS Floodplain data was used to identify lands in floodways and 100-year floodplains.
  - **Land within natural resource protection areas.** Yamhill County GIS Wetlands data, which is derived from the National Wetlands Inventory, was used to identify wetland areas. Stream data from the City of Newberg was used to identify areas within the stream corridor. Since stream corridor data from the City of Newberg does not cover the entire URAs, DOWL also used stream centerline data from the Oregon Geospatial Data library, applying a 60-foot buffer to include the required 50-foot riparian buffer plus an estimated 10-foot wide stream.
  - **Land within landslide hazards.** The Department of Geology and Mineral Industries (DOGAMI) Statewide Landslide Information Database for Oregon (SLIDO) database and landslide susceptibility data sets were used to identify lands with landside hazards. DOWL included lands with “very high” or “high” susceptibility to landsides in the constrained area.
  - **Land with slopes over 25 percent.** Lands with slopes over 25 percent are considered unsuitable for residential development. These areas were calculated using DOGAMI Light Detection and Ranging (LIDAR) data.
  - **Land identified for future public facilities.** DOWL removed area planned for the Newberg-Dundee Bypass using GIS data obtained from the City of Newberg.

After deducting constraints, vacant, partially vacant, and reprocessable lands greater than 3,000 square feet were classified as "buildable lands." DOWL then deducted 25 percent for public infrastructure and
Rights of way, consistent with Newberg's Comprehensive Plan Policy I.1.b.³

**Study Area Buildable Lands Inventory Results**

The results of the DOWL's Buildable Lands Inventory for the study areas are shown in Table 2 below and depicted on Map B to this document.

**Table 2: Summary of Buildable Acres by Study Area**

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Total Gross Acres</th>
<th>Net Buildable Acres-Resource Land</th>
<th>Net Buildable Acres-Exception Land</th>
<th>Total Net Buildable Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>North A</td>
<td>671</td>
<td>239</td>
<td>37</td>
<td>276</td>
</tr>
<tr>
<td>North B</td>
<td>472</td>
<td>24</td>
<td>204</td>
<td>228</td>
</tr>
<tr>
<td>Northeast A</td>
<td>298</td>
<td>0</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Northeast B</td>
<td>239</td>
<td>75</td>
<td>54</td>
<td>129</td>
</tr>
<tr>
<td>East A</td>
<td>619</td>
<td>340</td>
<td>27</td>
<td>367</td>
</tr>
<tr>
<td>East B</td>
<td>440</td>
<td>0</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td>Southeast A</td>
<td>159</td>
<td>0</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Southeast B</td>
<td>300</td>
<td>158</td>
<td>1</td>
<td>159</td>
</tr>
<tr>
<td>Southeast C</td>
<td>236</td>
<td>65</td>
<td>82</td>
<td>146</td>
</tr>
<tr>
<td>Southwest A</td>
<td>256</td>
<td>0</td>
<td>137</td>
<td>137</td>
</tr>
<tr>
<td>Southwest B</td>
<td>214</td>
<td>0</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Southwest C</td>
<td>277</td>
<td>0</td>
<td>171</td>
<td>171</td>
</tr>
<tr>
<td>Southwest D</td>
<td>514</td>
<td>0</td>
<td>239</td>
<td>239</td>
</tr>
<tr>
<td>Northwest A</td>
<td>501</td>
<td>255</td>
<td>64</td>
<td>319</td>
</tr>
<tr>
<td>Northwest B</td>
<td>302</td>
<td>188</td>
<td>20</td>
<td>208</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,848</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: DOWL Study Areas Buildable Lands Analysis Calculations - 2021.*

The results of the BLI were used to calculate cost of urban services for buildable acre included the Comparative Site Analysis and used to inform the current Newberg Urban Reserve Area Expansion application; the full results and methodology for DOWL’s Public Utilities Cost Estimate are described in Exhibit A to the Comparative Site Analysis.

**List of Maps**

A. Study Areas Map

B. Buildable Lands Inventory Constraints Map

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³ The Target Densities stated in The Newberg Comprehensive Plan Housing Policies I.1.b. include a 25 percent allowance for streets, walkways and other rights-of-way, utilities, small open spaces, preservation of resources, and similar features.
TO: Doug Rux, AICP  
FROM: Ben Wewerka, PE  
Matt Robinson  
DATE: March 1, 2022  
SUBJECT: Newberg Urban Reserve Area Expansion (CPMA21-0002)  
Addendum to Exhibit H – Comparative Site Analysis

This memorandum and the attached exhibits are provided to supplement an application for a proposed amendment to the City of Newberg (City) and Yamhill County (County) Comprehensive Plans to expand the City's Urban Reserve Area (URA) to include an approximately 95.3 gross acre site. Specifically, this memorandum serves as an addendum to the Comparative Site Analysis, submitted as Exhibit H of the Newberg Urban Reserve Area Expansion application (CPMA21-0002), and analyzes the feasibility of water service and gravity connections to the City's existing sanitary sewer system for identified areas of exception land1 within a one mile radius from the current City limits and the City's Urban Growth Boundary (UGB).

1.0 Executive Summary

- The owners of the proposed 95.3 gross acre expansion site, Kathy and Brian Bellairs and Bestwick LLC, have submitted an application to the City and County to amend the City and County Comprehensive Plans to expand the City's URA for the inclusion of the land that is generally located northwest of the intersection of NE Corral Creek Road and NE Fernwood Road within unincorporated Yamhill County.

- This application is based on a demonstrated need for approximately 400 gross acres of buildable land within the City's URA to provide a minimum 30-year supply of land for future growth per OAR 660-021-0030(1), as concluded within the 2051 Buildable Lands Inventory & Lands Need Assessment2.

- As part of the application, the applicant prepared and submitted a Comparative Site Analysis3. This analysis applies the criteria stated in OAR Section 660-021-0030(2-5) in order to assess all land within an approximately one mile radius from the current City limits and the City's UGB for suitability as a URA. This analysis concluded that the exception lands surrounding the City's UGB are highly constrained and provide few opportunities to provide urban services at a reasonable cost.

- Topographical constraints such as steep slopes and rivers, and physical constraints presented by conditions such as rural development make the provision of utilities difficult and costly in most of the nearby exception lands. Only two areas of exception land, the Southeast C and East A exception areas, were determined to be reasonably serviceable and potentially appropriate locations for a URA expansion; however, both areas would likely require the inclusion of intervening resource land from the East A subarea in order to efficiently serve the area.

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1 Exception lands are rural lands for which an exception to Oregon Statewide Planning Goals 3 or 4, or both, as defined in Oregon Revised Statutes (ORS) 197.73 and OAR 660-004-0005(1), has been acknowledged.

2 Exhibit G of CPMA21-0002

3 Exhibit H of CPMA21-0002
MEMORANDUM

- As part of the City's review of the application, additional analysis of the identified exception lands was requested of the applicant to further evaluate if water and sanitary sewer services could reasonably be provided to all or portions of exception land subareas around the City through gravity and conventional infrastructure systems.

- This analysis further substantiates applicant findings submitted with the URA expansion application in response to Oregon Administrative Rules (OAR) Division 21 provisions that stipulate the conditions under which resource land may be included in a URA before peripheral exception lands. As noted in OAR 660-021-0020(4)(a), land of lower priority (e.g., resource land) may be included in a URA before exception lands if land of higher priority is found to be inadequate for reasons that include when future urban services can "not reasonably be provided to the higher priority area due to topographical or other physical constraints."

- This memorandum provides an assessment of the relative physical and practical constraints to reasonably provide sanitary sewer and water services to the exception lands immediately surrounding the City. For the purpose of this study, DOWL has analyzed and grouped the exception lands into the same study areas as those addressed and assigned in the URA Locational Analysis prepared as Part II of the City of Newberg and Yamhill County 2007 Urban Reserve Area Justification and Findings Report ("2007 URA Report"), which are also consistent with the study areas identified in the Initial Comparative Site Analysis submitted with the URA expansion application.

- As identified in Table 4 and shown in Maps A through H of Exhibit D, approximately 151.62 acres of exception land within a one mile radius of the City's UGB can be reasonably served by both gravity sanitary sewer and water services, and are therefore eligible for consideration as a URA.

- After considering possible URA expansion(s) into exception lands, the City would continue to have a deficit of approximately 248.4 acres of land to satisfy the 30-year land need of the URA. Therefore, per OAR 660-0021-030(3)(c), the City must next consider resource lands of lower soil capability to meet land needs for the 30-year planning horizon.

- As demonstrated in this memorandum and the existing URA expansion application record, the applicant's proposal to include approximately 95.3 gross acres of resource land adjacent to the City's current UGB is justifiable and appropriate under the provisions of OAR 660-021-0020 and is necessary to bring the City closer to a sufficient 30-year land supply, the minimum required for URAs.

2.0 Methodology

The study area for this analysis consisted of all lands within an approximately one mile radius from the current City limits and the City's UGB, which are divided into 15 subareas, consistent with the study area identified within the 2007 URA Report's Locational Analysis and the Initial Comparative Site Analysis; an overview of the entire study area is included as Map A of Exhibit A. Each parcel within the overall study area was classified as either resource or exception lands; resource lands have been removed from consideration with this analysis per OAR 660-021-0030(3)(a), which requires that exception lands be prioritized for inclusion within a URA. Additionally, lands that are subject to certain constraints have been removed from consideration consistent with OAR 660-008-0005(2), including:

4 Resource lands are defined as rural lands designated in an acknowledged comprehensive plan for agriculture or forestry uses.
5 Exhibit H of CPMA21-0002
• Lands within floodplains and floodways\(^6\);  
• Lands within natural resource protection areas\(^7\);  
• Lands within landslide hazard areas\(^8\);  
• Lands with slopes over 25 percent\(^9\); and  
• Lands identified for future public facilities (Newberg-Dundee Bypass)\(^10\).

After resource lands and constrained lands were removed from consideration, other exception lands that would require crossing intervening resource lands to provide water or gravity sanitary sewer service were also removed (North A, East A, and East B exception lands).

### 2.1 Gravity Sanitary Sewer Methodology

Following the removal of exception lands subject to the constraints described above, a capacity analysis of the City’s sanitary sewer system and the feasibility of gravity connections was performed for the remaining exceptional lands. GIS data provided by the City, including an inventory of the existing sanitary sewer system, was used to determine reasonable connection points. A capacity analysis of the most upstream pipe was performed to determine sanitary sewer volumes that could be accepted at each connection point. Once the pipe capacity was determined, a weighted development density of 6.48 dwelling units per acre was applied to determine the approximate resulting effluent volumes. This density basis is consistent with the target densities provided in the City’s Comprehensive Plan\(^11\) and the forecasted housing mix provided in Exhibit 49 of the 2021 Newberg Housing Needs Analysis. An assumed effluent volume of 260 gallons-per-day (gpd) per dwelling unit was used based on an average household size of 2.61 per new dwelling unit\(^12\). These calculations formed the basis for determining a maximum acreage that could be served by the existing sanitary sewer system via gravity.

After the capacity analysis was performed, several study areas were excluded based on constrained connection capabilities to the City’s existing sanitary sewer system. Additional discussion of each study area is included in Section 3.0 below and results are summarized in Tables 1 and 2. Exhibit A identifies resource lands, exception lands, and constrained lands within each study area. Exhibit B identifies the lands within each study area that are either serviceable or not serviceable via a gravity connection to the City’s existing sanitary sewer system.

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\(^6\) Yamhill County GIS floodplain data was used to identify lands in floodways and 100-year floodplains.

\(^7\) Natural resource protection areas consist of wetlands, and stream corridors with 60-foot buffers. Yamhill County GIS wetlands data was used to identify wetland areas. Stream data from the City of Newberg and the Oregon Geospatial Data Library were also used, with a 60-foot buffer applied to include the required 50-foot riparian buffer and estimated 10-foot wide stream.

\(^8\) Oregon Department of Geology and Mineral Industries (DOGAMI) Statewide Landslide Information Data for Oregon (SLIDO) data sets were used to identify lands with landslide hazards. DOWL included lands with "very high" or "high" susceptibility to landslides in the constrained areas.

\(^9\) Lands with slopes over 25 percent are considered unsuitable for residential development. These areas were calculated using DOGAMI Light Detection and Ranging (LIDAR) data.

\(^10\) Per GIS data provided by the City of Newberg.

\(^11\) Section I (Housing), Policy 1(b).

\(^12\) 2014-2018 American Community Survey
2.2 Water Service Methodology

To analyze the feasibility of water service to the remaining exception lands, elevations of these lands were compared to the water service zones identified in the City’s Water Master Plan (WMP). Four service zones are identified in the WMP, with the majority of the City falling within Zone 1, with the exception being a small area served by the Oak Knoll pump station. This area is identified as Zone 2. Zone 3 consists of lands within the existing North Hills URA between 310 feet and 440 feet of elevation. Zone 4 consists of lands within the North Hills URA that are above 440 feet. Per the WMP, these lands are not expected to be served within the WMP’s 20 year planning period, which extends through the year 2035.

DOWL’s analysis used the same elevation bands to determine the feasibility of providing water service with adequate pressure to the various study areas. Lands below 310 feet are shown in Zone 1, and are capable of being served with adequate system pressure without the inclusion of additional pump stations or reservoir tanks. Lands above 310 feet but below 440 feet are shown in Zone 3 and are capable of being served with the addition of pumps and/or reservoir tanks to the City’s water service system, with only certain areas being adjacent to improvements identified in the WMP. Lands above 440 feet are shown in Zone 4, and are not expected to be served within the planning period identified in the WMP. Additional discussion of each study area is included in Section 3.0 below and results are summarized in Table 3. Exhibit A identifies resource lands, exception lands, and constrained land within each study area. Exhibit C identifies the anticipated water service zone(s) for each study area.

Following the serviceability analysis for both gravity sanitary sewer and water services, the total acreage of exception lands that can be reasonably served by both, and are therefore eligible for consideration as a URA, was calculated and is summarized in Table 4. Exhibit D further identifies the lands that can be reasonably served by both sanitary sewer and water.

3.0 Technical Findings

3.1 North A

Sanitary Sewer

The entirety of the North A study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints and the need to cross intervening resource lands to provide services (Map A of Exhibit B).

Water

Water service to the exception lands within the North A study area are limited by the existing elevations of the study area, with approximately 72.22 acres of land falling with Zone 1 and capable of being served by the existing system (Map A of Exhibit C). Approximately 90.10 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be serviceable with the WMP’s identified planning period (Map A of Exhibit C). The remaining approximately 19.20 acres of land are above 440 feet and fall within Zone 4, with no expectation of service with the near future (Map A of Exhibit C). Further, all exception lands within the North A study area require the crossing of intervening resource lands to provide service (Map A of Exhibit C). As a result, water service to the North A study area is not considered feasible.

As identified in Table 4 and Map A of Exhibit D, neither gravity sanitary sewer nor water service can be reasonably provided to exception lands within the North A study area. Therefore, exception lands within the North A study area have been removed from further URA eligibility consideration.
3.2 North B

Sanitary Sewer

The North B study area provides approximately 268.87 acres that can technically be served by gravity sanitary sewer service after the exclusion of resource lands and exception lands that are encumbered by environmental constraints (Map B of Exhibit B). Two locations within the existing sanitary sewer system serve as connection points; the western connection point, #1554, is located within the Hwy 240 Lift Station basin.

Based on the City's 2021 Wastewater Master Plan (WWMP), the Hwy 240 Lift Station is currently undersized for both existing and future peak flows, with overflow directed to the Dayton Lift Station. It should be noted that projected future peak flows are based on the future growth areas identified on Figure 12 of the WWMP, which does not include the North B study area, or the existing North Hills URA. The existing Hwy 240 Lift Station wet well receives approximately 1,600 gallons per minute (gpm) under the design storm event with an additional 100 gpm being diverted to the Dayton Lift Station. The field measured capacity of the lift station is 1,410 gpm with all three pumps running.

As a result of these constraints, the approximately 205.31 acres that drain to this connection point are shown as constrained (Map B of Exhibit B). To eliminate the constraints for this area, improved pump capacity of the Hwy 240 Lift Station will be required beyond the improvements identified in the WWMP. As noted in the WWMP, improvements to the South River Street trunk line must also be completed prior to upsizing of the Hwy 240 Lift Station in order to prevent additional surcharging and overflows in the area. Per Table 6-6 of the WWMP, total costs for the South River Street improvements are estimated to be $2,764,000. Per Table 6-7 of the WWMP, total costs for the HWY 240 Lift Station improvements are estimated to be $454,000.

This results in a total of approximately 63.56 acres that can be served by gravity sanitary sewer service within the North B study area to the eastern connection point, #1280 (Map B of Exhibit B). The identified capacity of this connection point is based on an analysis of the City GIS sewer system pipes and is summarized in Table 1 below.

Water

Water service to the exception lands within the North B study area are limited by the existing elevations of the study area, with approximately 5.09 acres of land falling within Zone 1 and capable of being served by the existing water service system (Map B of Exhibit C). Approximately 65.12 acres of land fall within Zone 3, and are capable of being served by adjacent improvements to the system as envisioned within the WMP (Map B of Exhibit C). The remaining approximately 345.09 acres of land are above 440 feet and fall within Zone 4, with no expectation of service within the near future (Map B of Exhibit C).

As identified in Table 4 and Map B of Exhibit D, there are no exception lands within the North B study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the North B study area have been removed from further URA eligibility consideration.

3.3 Northeast A

Sanitary Sewer

The Northeast A study area provides approximately 112.06 acres of exception lands that are not encumbered by environmental constraints and are technically capable of being served by gravity sanitary sewer service (Map C of Exhibit B). However, a large portion of this land has been either subdivided or
partitioned and developed for rural residential uses. As initially noted in the Comparative Site Analysis, existing rural residential development patterns provide challenges to urbanization and limit the amount of buildable land within the area, and are a contributing factor to the high cost per buildable acre for this study area. Considering the existing development patterns of these lands, which includes fully developed residential lots averaging less than two acres, single-family dwellings, appurtenant structures, and public rights-of-way not built to urban standards, the expectation for future development that can meet identified future land needs for the City is minimal. The 2007 URA Report further identified likely challenges with annexing these areas (which is needed to provide urban level services) due to the area's highly parcelized nature, in which densely developed rural lots lie between the City's existing UGB and outlying, marginally larger lots that are more likely to redevelop. Nonetheless, these areas are technically capable of being served by gravity sanitary sewer service. The identified capacity of the two connection points, #994 (Area 1) and #485 (Area 2), is based on an analysis of the City GIS sewer system pipes and is summarized in Table 1 below.

**Water**

Water service to the exception lands within the Northeast A study area are limited by the existing elevations of the study area, with approximately 163.66 acres of land falling within Zone 1 and capable of being served by the existing system (Map C of Exhibit C). Approximately 75.80 acres of land fall within Zone 3, and are capable of being served by adjacent improvements to the system as envisioned within the WMP (Map C of Exhibit C). The remaining approximately 58.33 acres of land are above 440 feet and fall within Zone 4, with no expectation of service within the near future (Map C of Exhibit C).

As identified in Table 4 and Map C of Exhibit D, there are approximately 63.93 acres of exception land within the Northeast A study area that can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

**3.4 Northeast B**

**Sanitary Sewer**

The entirety of the Northeast B study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints, require the crossing of intervening resource lands to provide service, or due to identified topographic constraints (Map C of Exhibit B).

The topographically constrained lands cannot be served via gravity and would require that a lift station be used to provide sanitary sewer service. The elevation of Spring Brook's thalweg is approximately 162 feet and the identified connection point (#485) has an invert elevation in the sanitary sewer system of approximately 171.91 feet, or approximately ten feet higher than Spring Brook's thalweg, which precludes gravity sanitary sewer service to the exception lands within the Northeast B study area.

**Water**

Water service to exception lands within the Northeast B study area are limited by the existing elevations of the study area, with approximately 73.34 acres of land falling within Zone 1 and capable of being served by the existing system (Map C of Exhibit C). Approximately 17.12 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be

---

13 Existing subdivisions and partition plats within the Northeast A study area include Oxberg Lake Estates (SU512), Oxberg Lake Estates Division Two (SU513), Oxberg Lake Estates Division Three (SU514), Sandbak Acres (SU583), Vintage View Estates (SU682), Partition Plat 01-26, and Partition Plat 06-37.
serviceable within the WMP's identified planning period (Map C of Exhibit C). The remaining approximately 5.69 acres of land are above 440 feet and fall within Zone 4, with no expectation of service within the near future (Map C of Exhibit C).

As identified in Table 4 and Map C of Exhibit D, there are no exception lands within the Northeast B study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Northeast B study area have been removed from further URA eligibility consideration.

3.5 East A

Sanitary Sewer

The East A study area provides approximately 2.67 acres that can be served by gravity sanitary sewer service after the exclusion of resource lands and exception lands that are encumbered by environmental constraints, or where gravity sanitary sewer service must cross intervening resource lands to provide service (Map D of Exhibit B). Capacity of the identified connection point, #1049, is based on an analysis of the City GIS sewer system pipes and is summarized in Table 1 below.

Water

As none of the exception lands within the East A study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 77.75 acres) is capable of being served by the existing water system (Map D of Exhibit C). However, exception lands along Hwy 99W in the northeast corner of the study area would require the crossing of intervening resource lands for water service to occur.

As identified in Table 4 and Map D of Exhibit D, there are approximately 2.67 acres of exception land within the East A study area that can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

3.6 East B

Sanitary Sewer

The entirety of the East B study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints or require the crossing of intervening resource lands to provide service (Map D of Exhibit B).

Water

Water service to the exception lands within the East B study area are limited by the existing elevations of the study area, with approximately 58.04 acres of land falling with Zone 1 and capable of being served by the existing system (Map D of Exhibit C). Approximately 139.09 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be serviceable within the WMP's identified planning period (Map D of Exhibit C). The remaining approximately 242.12 acres of land are above 440 feet and fall within Zone 4, with no expectation of service within the near future (Map D of Exhibit C). Further, all exception lands within the East B study area require the crossing of intervening resource lands to provide service (Map D of Exhibit C). As a result, water service to the East B study area is not considered feasible.

As identified in Table 4 and Map D of Exhibit D, neither gravity sanitary sewer nor water service can be reasonably provided to exception lands within the East B study area. Therefore, exception lands within the East B study area have been removed from further consideration as a URA.
3.7 Southeast A

Sanitary Sewer

The entirety of the Southeast A study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints or due to identified topographic constraints (Map E of Exhibit B).

The topographically constrained lands cannot be served via gravity and would require that a lift station be used to provide sanitary sewer service. The elevation of Hess Creek's thalweg varies between approximately 87 feet and 79 feet along the length of the study area, and the elevation of the sanitary sewer main entering the wastewater treatment plant is approximately 87.26 feet at or above the thalweg of Hess Creek, which precludes gravity sanitary sewer service to the exception lands within the Southeast A study area.

Water

As none of the exception lands within the Southeast A study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 198.47 acres) is capable of being served by the existing water system (Map E of Exhibit C).

As identified in Table 4 and Map E of Exhibit D, there are no exception lands within the Southeast A study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Southeast A study area have been removed from further URA eligibility consideration.

3.8 Southeast B

Sanitary Sewer

The Southeast B study area provides approximately 1.70 acres that can be served by gravity sanitary sewer service after the exclusion of resource lands and exception lands that are encumbered by environmental constraints (Map E of Exhibit B). Capacity of the identified connection point, #1049, is based on an analysis of the City GIS sewer system pipes and is summarized in Table 1 below.

Water

As none of the exception lands within the Southeast B study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 4.86 acres) is capable of being served by the existing water system (Map E of Exhibit C).

As identified in Table 4 and Map E of Exhibit D, there are approximately 1.70 acres of exception land within the Southeast B study area that can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

3.9 Southeast C

Sanitary Sewer

The Southeast C study area provides approximately 82.09 acres that can be served by gravity sanitary sewer service after the exclusion of resource lands and exception lands that are encumbered by environmental constraints, or due to identified topographic or capacity constraints that preclude gravity sanitary sewer service (Map E of Exhibit C). Capacity of the identified connection point, #1049, is based on an analysis of the City GIS sewer system pipes and is summarized in Table 1 below.

As shown on Map E of Exhibit C, there is a single parcel of exception land (R3227 01100) in the Southeast C study area that is constrained by topography and intervening resource zoned lands, which cannot be
served via gravity without crossing resource lands or requiring that a lift station be used to provide sanitary sewer service. The elevation of the thalweg for the unnamed tributary to Spring Brook is approximately 132.6 feet and the invert elevation of the identified connection point (#1049) is approximately 166.59 feet, which is approximately 34 feet higher than the thalweg of the unnamed tributary to Spring Brook, which precludes gravity sanitary sewer service to this parcel within the Southeast C study area.

Further, five additional parcels of exception land are excluded from further consideration as a URA due to the inability to be served via gravity due to downstream sanitary sewer main size limitations, with the identified connection point (#1049) limiting the development capacity to approximately 91 acres (Map E of Exhibit C). The serviceable lands in the East A and Southeast B study areas is approximately 4.36 acres, resulting in approximately 86.64 acres within the Southeast C study area that can be served. The Southeast C study area provides approximately 109.54 acres of exception land that could technically gravity flow to the existing sanitary sewer system, exceeding the approximately 91 acre capacity of the existing sanitary sewer main. The process of excluding parcels in order to reduce the available acreage began with those that are the farthest: from Wilsonville Road and NE Neumann Lane and stopped when the available acreage met the approximately 91 acre threshold. A total of five parcels were removed for a total of approximately 27.45 acres.

Water

As none of the exception lands within the Southeast C study area are limited by existing elevations, and fall within Zone 3, the entirety of the study area (approximately 137.71 acres) is capable of being served by the existing water system (Map E of Exhibit C).

As identified in Table 4 and Map E of Exhibit D, there are approximately 82.32 acres of exception lands within the Southeast C study area that can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

3.10 Southwest A

Sanitary Sewer

The Southwest A study area provides approximately 1 acre that can be served by gravity sanitary sewer service after the exclusion of exception lands that are encumbered by environmental constraints or due to identified topographic constraints that preclude gravity sanitary sewer service (Map G of Exhibit B).

Lands that are west of East Fork Chehalem Creek are not gravity serviceable due to topographical constraints and would require the construction of a lift station in order to cross East Fork Chehalem Creek and connect to the existing sanitary sewer system. The elevation of East Fork Chehalem Creek's thalweg is approximately 131.6 feet and the identified connection point (#1582) has an invert elevation in the sanitary sewer system of approximately 155.3 feet, or approximately 22 feet higher than the East Fork Chehalem Creek's thalweg, which precludes gravity sanitary sewer service to these exception lands within the Southwest A study area.

The second identified connection point, #741, is located at the Sheridan Lift Station. A connection to the Sheridan Lift Station is also topographically constrained due to the need for the connection to cross East Fork Chehalem Creek to serve the Southwest A study area. The existing crossing of East Fork Chehalem Creek is a culvert with a low point in the roadway embankment of approximately 146.5 feet, and the identified connection point (#741) has an invert elevation prior to the Sheridan Lift Station of approximately 150.33 feet, or approximately 4 feet higher than the low point in the roadway embankment, which precludes a gravity sanitary sewer service connection at this crossing of East Fork Chehalem Creek.
MEMORANDUM

Water
As none of the exception lands within the Southwest A study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 254.69 acres) is capable of being served by the existing water system (Map G of Exhibit C).

As identified in Table 4 and Map G of Exhibit D, there is approximately one acre of exception land within the Southwest A study area that can be reasonably served by both gravity sanitary sewer and water services and is, therefore, eligible for consideration as a URA.

3.11 Southwest B
Sanitary Sewer
The entirety of the Southwest B study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints (Map G of Exhibit B). A connection to the existing sanitary sewer system would require a crossing of Chehalem Creek and the construction of a lift station for this crossing. The elevation of Chehalem Creek’s thalweg is approximately 99.8 feet and the identified connection point (#1452) has an invert elevation of approximately 150.8 feet, or approximately 51 feet higher than Chehalem Creek’s thalweg, which precludes gravity sanitary sewer service to exception lands within the Southwest B study area.

Water
As none of the exception lands within the Southwest B study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 213.36 acres) is capable of being served by the existing water system (Map G of Exhibit C).

As identified in Table 4 and Map G of Exhibit D, there are no exception lands within the Southwest B study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Southwest B study area have been removed from further URA eligibility consideration.

3.12 Southwest C
Sanitary Sewer
The entirety of the Southwest C study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints (Map F of Exhibit B). A connection to the existing sanitary sewer system would require a crossing of Chehalem Creek and the construction of a lift station for this crossing. There are two potential connection points for the Southwest C study area, #1018 and #1217. The elevation of Chehalem Creek’s thalweg is approximately 97.5 feet at the Hwy 99 crossing. The first identified connection point, #1018, has an invert elevation of 145.57 feet, and the second identified connection point, #1217, has an invert elevation of 147.25 feet. Both of these invert elevations are between 48 and 50 feet higher than Chehalem Creek’s thalweg, which precludes gravity sanitary sewer service to exception lands within the Southwest C study area.

Water
Water service to the exception lands within the Southwest C study area are limited by the existing elevations of the study area, with approximately 254.81 acres of land falling with Zone 1 and capable of being served by the existing system (Map F of Exhibit C). Approximately 21.76 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but
the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be serviceable within the WMP’s identified planning period (Map F of Exhibit C).

As identified in Table 4 and Map F of Exhibit D, there are no exception lands within the Southwest C study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Southwest C study area have been removed from further URA eligibility consideration.

3.13 Southwest D

Sanitary Sewer

The entirety of the Southwest D study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints (Map F of Exhibit B). A connection to the existing sanitary sewer system would require a crossing of Chehalem Creek and the construction of a lift station for this crossing. The elevation of Chehalem Creek’s thalweg is approximately 93.6 feet and the identified connection point (#462) has an invert elevation of approximately 122.9 feet, or approximately 19 feet higher than Chehalem Creek’s thalweg, which precludes gravity sanitary sewer service to exception lands within the Southwest D study area.

Water

As none of the exception lands within the Southwest D study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 509.44 acres) is capable of being served by the existing water system (Map F of Exhibit C).

As identified in Table 4 and Map F of Exhibit D, there are no exception lands within the Southwest D study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Southwest D study area have been removed from further URA eligibility consideration.

3.14 Northwest A

Sanitary Sewer

The entirety of the Northwest A study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints (Map H of Exhibit B). A connection to the existing sanitary sewer system would require a crossing of East Fork Chehalem Creek and the construction of a lift station for this crossing. The elevation of East Fork Chehalem Creek’s thalweg is approximately 131.6 feet and the identified connection point (#1582) has an invert elevation of approximately 155.3 feet, or approximately 22 feet higher than East Fork Chehalem Creek’s thalweg, which precludes gravity sanitary sewer service to exception lands within the Northwest A study area.

Water

As none of the exception lands within the Northwest A study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 109.92 acres) is capable of being served by the existing water system (Map H of Exhibit C).

As identified in Table 4 and Map H of Exhibit D, there are no exception lands within the Northwest A study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Northwest A study area have been removed from further URA eligibility consideration.
3.15 Northwest B

Sanitary Sewer

The entirety of the Northwest B study area is considered constrained due to an inability to provide gravity sanitary sewer service to exception lands that are not encumbered by environmental constraints (Map H of Exhibit B). A connection to the existing sanitary sewer system would require a crossing of East Fork Chehalem Creek and the construction of a lift station for this crossing. The elevation of East Fork Chehalem Creek’s thalweg is approximately 131.6 feet and the identified connection point (1582) has an invert elevation of approximately 155.3 feet, or approximately 22 feet higher than East Fork Chehalem Creek’s thalweg, which precludes gravity sanitary sewer service to exception lands within the Northwest B study area.

Water

As none of the exception lands within the Northwest B study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 28.72 acres) is capable of being served by the existing water system (Map H of Exhibit C).

As identified in Table 4 and Map H of Exhibit D, there are no exception lands within the Northwest B study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, exception lands within the Northwest B study area have been removed from further URA eligibility consideration.

4.0 Conclusion

As identified in Table 4 and shown in Maps A through H of Exhibit D, approximately 151.62 acres of exception land within a one mile radius of the City’s UGB can be reasonably served by both gravity sanitary sewer and water services, and are therefore eligible for consideration as a URA.

As concluded in the 2051 Buildable Lands Inventory & Lands Need Assessment, the City requires an addition of approximately 400 gross acres of buildable land within its URA to provide for a minimum 30-year supply of land for future growth per OAR 660-021-0030(1). Therefore, after considering possible URA expansion(s) into exception lands, the City would continue to have a deficit of approximately 248.4 acres of land to satisfy the 30-year land need of the URA. Therefore, per OAR 660-0021-030(3)(c), the City must next consider resource lands of lower soil capability to meet land needs for the 30 year planning horizon.

As demonstrated in this memorandum and the existing URA expansion application record, the applicant’s proposal to include approximately 95.3 gross acres of resource land adjacent to the City’s current UGB is justifiable and appropriate under the provisions of OAR 660-021-0020 and is necessary to bring the City closer to a sufficient 30-year land supply, the minimum required for URAs.

Tables:

1. Sanitary Sewer Capacity Summary
2. Sanitary Sewer Available Service Area Summary
3. Water Serviceability Summary
4. Combined Serviceability Summary (Areas Eligible for URA Consideration)

Exhibits:

A. Study Area Constraints Maps
B. Study Area Sanitary Sewer Serviceability Maps
C. Study Area Water Serviceability Maps
D. Study Area Combined Serviceability Maps
### Table 1: Sanitary Sewer Capacity Summary

<table>
<thead>
<tr>
<th>Study Area (Exception Lands Only)</th>
<th>Connection Point</th>
<th>Sewer Size (in)</th>
<th>Upstream Invert</th>
<th>Downstream Invert</th>
<th>Pipe Length (ft)</th>
<th>Slope (ft/ft)</th>
<th>Capacity (gpm)</th>
<th>Acres per Pipe Capacity</th>
<th>Available Acres</th>
<th>Serviceable Acres</th>
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<td>North B</td>
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<td>298.21</td>
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**Table 2: Sanitary Sewer Available Service Area Summary**

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<th>Study Area (Exception Lands Only)</th>
<th>Available Service</th>
<th>Acres (approx.)</th>
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<tr>
<td>North B</td>
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<td>Constrained Gravity Service</td>
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*Total — Available and Gravity Serviceable 263.30*
Table 3: Water Serviceability Summary

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<th>Zone 1 (ac., approx.)</th>
<th>Zone 3 (ac., approx.)</th>
<th>Zone 4 (ac., approx.)</th>
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Table 4: Combined Serviceability Summary (Areas Eligible for URA Consideration)

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<thead>
<tr>
<th>Study Area</th>
<th>Total Gross Area (ac., approx.)</th>
<th>Resource Land Area (ac., approx.)</th>
<th>Exception Land Area Excluded due to Constraints (ac., approx.)</th>
<th>Exception Land Area Remaining (minus Constraints) (ac., approx.)</th>
<th>Combined Gravity Sanitary Sewer &amp; Water Service Area (ac., approx.)</th>
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<td>North A</td>
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<td>408.60</td>
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<td>130.73</td>
<td>51.70</td>
</tr>
<tr>
<td>North B</td>
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<td>56.35</td>
<td>416.04</td>
<td>134.72</td>
<td>281.32</td>
</tr>
<tr>
<td>Northeast A</td>
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<tr>
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<td>5.54</td>
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</tr>
<tr>
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<tr>
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</table>

Total Area Eligible for URA Consideration 151.62
EXHIBIT A

Study Area Constraints Maps
Newberg Urban Reserves Area
Map A: Comparative Site Analysis Study Area Map
Newberg Urban Reserves Area
Map C: North A Constraints Map
Newberg Urban Reserves Area
Map L: Southwest C and D Subareas Map
Newberg Urban Reserves Area
Map M: Southwest C and D Constraints Map

Legend
- Study area
- Tax Lots
- Urban Growth Boundary
- Newberg City Boundary
- Constraints
  - Slopes > 25%
  - High Landslide Susceptibility
  - ODOT Bypass
  - Floodplain
  - Stream Buffer (50 ft)
  - Stream Centerline
  - Contours (10 ft)

Source: City of Newberg, ODOT ELDD 3.2 database, DOWL calculations, Oregon State Data Library, Oregon Spatial Explorer— statewide FEMA flood maps, Yamhill County Assessor, Yamhill County Planning & Development; 2000.

Newberg, OR
Exhibit B-C
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EXHIBIT B

Study Area Sanitary Sewer Serviceability Maps
Newberg Urban Reserves Area
Map H: Sanitary Sewer Serviceability Analysis- Northwest A and B Study Area
EXHIBIT C

Study Area Water Serviceability Maps
Newberg Urban Reserves Area
Map A: Water Serviceability Analysis- North A Study Area
Newberg Urban Reserves Area
Map D: Water Serviceability Analysis- East A and B Study Area
EXHIBIT D

Study Area Combined Serviceability Maps
Legend:
- Study Area
- Tax Lot
- Current Urban Reserve Area
- Urban Growth Boundary
- Newberg City Boundary
- Resource Areas
- Exception Areas
- Sanitary Sewer and Water Availability

*No lands were found to be reasonably serviceable by sanitary sewer and water in this subarea.*

Newberg Urban Reserves Area
Map A: Sanitary Sewer and Water Serviceability Analysis- North A Study Area
*No lands were found to be reasonably serviceable by sanitary sewer and water in this subarea.*

Newberg Urban Reserves Area

Map B: Sanitary Sewer and Water Serviceability Analysis - North B Study Area
This memorandum and the attached exhibits are provided to supplement an application for a proposed amendment to the City of Newberg (City) and Yamhill County (County) Comprehensive Plans to expand the City's Urban Reserve Area (URA) to include an approximately 95.3 gross acre site. This memorandum serves as a supplement to the following two documents previously submitted:

- Exhibit H, Comparative Site Analysis (submitted May 28, 2021)
- Addendum to Exhibit H, Comparative Site Analysis (submitted March 1, 2022)

In response to comments contained within the previously issued staff report and findings, dated October 25, 2022, this memorandum provides an analysis of peripheral resource lands within a one-mile radius of the current City limits and the City's Urban Growth Boundary (UGB) for suitability as a URA. Specifically, this memorandum analyzes the feasibility of water service and gravity sanitary sewer connections to the City's existing system for areas of resource land and provides further information regarding soil composition of those areas to determine priority for URA eligibility.

1.0 Executive Summary

- This application is based on a demonstrated need for approximately 397 gross acres of buildable land within the City's URA to provide a supply of land for future growth to the year 2051, which is within the 30-year growth period (2025 – 2055) allowed for URAs per OAR 660-021-0030(1).

- As part of the application, the applicant prepared and submitted a Comparative Site Analysis. This analysis applies the criteria stated in OAR Section 660-021-0030(2-5) in order to assess all land within an approximately one-mile radius from the current City limits and the City's UGB for suitability as a URA. This analysis concluded that the exception lands surrounding the City's UGB are highly constrained and provide few opportunities for urban services at a reasonable cost.

- As part of the City's initial review of the application, additional analysis of the identified exception lands was requested of the applicant to further evaluate if water and sanitary sewer services could reasonably be provided to all or portions of exception land subareas around the City through gravity and conventional infrastructure systems.

- The applicant submitted an addendum to the Comparative Site Analysis on March 1, 2022, which found that approximately 151.62 acres of exception land within a one-mile radius of the City's UGB can be reasonably served by both gravity sanitary sewer and water services, and are therefore eligible for consideration as a URA.

- In the summer of 2022, the City completed an extension of the public sanitary sewer system within Highway 240 and NE Chehalem Drive to a point approximately 500 feet north of NE Chehalem Drive's intersection with Highway 240. Based on this extension, DOWL determined that

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1 Per OAR 660-021-0010(2), resource lands are rural lands intended for agriculture or forest resource uses.

2 Exhibit H of CPMA21-0002
an additional 62 acres of Exception Land within the Northwest A, Northwest B, and Southwest A study areas were reasonably serviceable by gravity sanitary sewer connections to the City’s existing system. As the applicant’s March 1, 2022 comparative site analysis addendum previously found that the entirety of the Northwest A, Northwest B, and Southwest A exception land areas could also be served by extensions of the City’s existing water system, an additional 62 acres of exception land were found to be eligible for consideration as a URA.

- DOWL has determined that, in total, there are approximately 213.62 acres of exception land eligible for consideration as a URA. This means there is still a deficit of approximately 183.38 acres to satisfy a land need of 397 buildable acres to the year 2051. Per OAR 660-021-030(3), the City may consider lower priority resource lands in order to meet the identified land for the 30 year planning horizon.

- As identified in Table 1 and shown in Maps A-F of Exhibit C, approximately 513 acres of resource land within the East A, North A, and Northwest B study areas can be reasonably served by both gravity sanitary sewer and water services, including the applicant’s proposed URA expansion site.

- As shown in Exhibit D, these areas of reasonably serviceable resource lands were broken into five subareas for the purpose of analyzing soil composition and presence of high-value farmland. Three subareas are within the East A study area (including the applicant’s proposed URA expansion site), with the other two subareas located in the North A and Northwest B study areas. Oregon Revised Statutes (ORS) 215.710 describes “high-value farmland” within the Willamette Valley of being land compromised predominantly of Class I, II, III and IV soils.

- As identified in Table 2 and shown in Exhibit D, the two subareas with the lowest composition of high-value farmland are the applicant’s proposed URA site (approximately 94% high-value farmland) and the subarea immediately north of the applicant’s site (approximately 92% high-value farmland). Notably, the applicant’s proposed URA site is the only subarea that completely lacks Class I soils.

- Based on soil composition and presence of high-value farmland, the applicant’s proposed URA site and the subarea immediately to the north are eligible for URA consideration. Together, these two areas are approximately 130 acres, which is within the identified deficit of approximately 183.38 acres to satisfy a land need of 397 buildable acres to the year 2051. Therefore, the applicant’s proposal to include the approximately 95.3 gross acre site is justifiable and appropriate under the provisions of OAR 660-021-030(3)(c) in order to meet Newberg’s identified land needs through 2051 as justified through this memorandum and the existing URA expansion application record.

### 2.0 Serviceability Methodology

This memorandum provides an assessment of the relative physical and practical constraints to reasonably provide sanitary sewer and water services to the resource lands immediately surrounding the City. For the purpose of this study, DOWL has analyzed and grouped the resource lands into the same study areas as those addressed and assigned in the URA Locational Analysis prepared as Part II of the City of Newberg and Yamhill County 2007 Urban Reserve Area Justification and Findings Report (“2007 URA Report”), which are also consistent with the study areas identified in the Initial Comparative Site Analysis submitted with the URA expansion application. The study area for this analysis consisted of all lands within an approximately one mile radius from the current City limits and the City’s UGB, which are divided into 15

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3 This acreage excludes adjacent public rights-of-way along NE Corral Creek Road and NE Fernwood Road that would be included if the proposed URA expansion site is brought into the URA.
subareas, consistent with the study area identified within the 2007 URA Report’s Locational Analysis and the initial Comparative Site Analysis (see Exhibit A). Each parcel within the overall study area was classified as either resource or exception lands; exception lands have already been analyzed as previously discussed, with DOWL determining there are approximately 213.62 acres of exception land eligible for consideration as a URA. Additionally, lands that are subject to certain constraints (see Exhibit B) have been removed from consideration consistent with DAR 660-008-0005(2), including:

- Lands within floodplains and floodways⁴;
- Lands within natural resource protection areas⁵;
- Lands within landslide hazard areas⁶;
- Lands with slopes over 25 percent⁷; and
- Lands identified for future public facilities (Newberg-Dundee Bypass)⁸.

2.1 Gravity Sanitary Sewer Methodology

Following the removal of resource lands subject to the constraints described above, a capacity analysis of the City’s sanitary sewer system and the feasibility of gravity connections was performed for the remaining resource lands. GIS data provided by the City, including an inventory of the existing sanitary sewer system, was used to determine reasonable connection points. A capacity analysis of the most upstream pipe was performed to determine sanitary sewer volumes that could be accepted at each connection point. Once the pipe capacity was determined, a weighted development density of 6.48 dwelling units per acre was applied to determine the approximate resulting effluent volumes. This density basis is consistent with the target densities provided in the City’s Comprehensive Plan⁹ and the forecasted housing mix provided in Exhibit 49 of the 2021 Newberg Housing Needs Analysis. An assumed effluent volume of 260 gallons-per-day (gpd) per dwelling unit was used based on an average household size of 2.61 per new dwelling unit¹⁰. These calculations formed the basis for determining a maximum acreage that could be served by the existing sanitary sewer system via gravity.

After the capacity analysis was performed, several study areas were excluded based on constrained connection capabilities to the City’s existing sanitary sewer system. Additional discussion of each study area is included in Section 3.0 below and results are summarized in Tables 1. Exhibit B identifies resource lands, exception lands, and constrained lands within each study area. Exhibit C identifies the lands within each study area that are either serviceable or not serviceable via a gravity connection to the City’s existing sanitary sewer system.

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⁴ Yamhill County GIS floodplain data was used to identify lands in floodways and 100-year floodplains.
⁵ Natural resource protection areas consist of wetlands, and stream corridors with 60-foot buffers. Yamhill County GIS wetlands data was used to identify wetland areas. Stream data from the City of Newberg and the Oregon Geospatial Data Library were also used, with a 60-foot buffer applied to include the required 50-foot riparian buffer and estimated 10-foot wide stream.
⁶ Oregon Department of Geology and Mineral Industries (DOGAMI) Statewide Landslide Information Data for Oregon (SLIDO) data sets were used to identify lands with landslide hazards. DOWL included lands with “very high” or “high” susceptibility to landslides in the constrained areas.
⁷ Lands with slopes over 25 percent are considered unsuitable for residential development. These areas were calculated using DOGAMI Light Detection and Ranging (LIDAR) data.
⁸ Per GIS data provided by the City of Newberg.
⁹ Section 1 (Housing), Policy 1(b).
¹⁰ 2014-2018 American Community Survey
2.2 Water Service Methodology

To analyze the feasibility of water service to the remaining resource lands, elevations of these lands were compared to the water service zones identified in the City’s Water Master Plan (WMP). Four service zones are identified in the WMP. The majority of the City falls within Zone 1. However, a small area can be served by the Oak Knoll pump station. This area is identified as Zone 2. Zone 3 consists of lands within the existing North Hills URA between 310 feet and 440 feet of elevation. Zone 4 consists of lands within the North Hills URA that are above 440 feet. Per the WMP, these lands are not expected to be served within the WMP’s 20 year planning period, which extends through the year 2035.

DOWL’s analysis used the same elevation bands to determine the feasibility of providing water service with adequate pressure to the various study areas. Lands below 310 feet are shown in Zone 1, and are capable of being served with adequate system pressure without the inclusion of additional pump stations or reservoir tanks. Lands above 310 feet but below 440 feet are shown in Zone 3 and are capable of being served with the addition of pumps and/or reservoir tanks to the City’s water service system, with only certain areas being adjacent to improvements identified in the WMP. Lands above 440 feet are shown in Zone 4, and are not expected to be served within the planning period identified in the WMP. Additional discussion of each study area is included in Section 3.0 below and results are summarized in Table 1. Exhibit B identifies resource lands, exception lands, and constrained land within each study area. Exhibit C identifies the anticipated water service zone(s) for each study area.

Following the serviceability analysis for both gravity sanitary sewer and water services, the total acreage of resource lands that can be reasonably served by both was calculated and is summarized in Table 1 below. As shown, approximately 513 acres of resource land within the North A, East A, and Northwest B study areas can be reasonably served by sanitary sewer and water services. Exhibit C further identifies the lands that can be reasonably served by both sanitary sewer and water.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Total Resource Land Area, Gross (ac., approx.)</th>
<th>Resource Land Area Excluded due to Constraints (ac., approx.)</th>
<th>Resource Land Area Remaining (ac., approx.)</th>
<th>Combined Gravity Sanitary Sewer &amp; Water Service Area (ac., approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North A</td>
<td>488.89</td>
<td>166.83</td>
<td>322.06</td>
<td>126</td>
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<tr>
<td>North B</td>
<td>56.35</td>
<td>24.69</td>
<td>31.66</td>
<td>0</td>
</tr>
<tr>
<td>Northeast B</td>
<td>134.62</td>
<td>31.58</td>
<td>103.04</td>
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<tr>
<td>East A</td>
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<td>79.54</td>
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</tr>
<tr>
<td>Southeast C</td>
<td>99.88</td>
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<td>93.85</td>
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</tr>
<tr>
<td>Northwest A</td>
<td>390.73</td>
<td>44.23</td>
<td>346.5</td>
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</tr>
<tr>
<td>Northwest B</td>
<td>273.13</td>
<td>15.69</td>
<td>257.44</td>
<td>125</td>
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</table>

**Table 1: Summary of Reasonably Serviceable Resource Land Area**

<table>
<thead>
<tr>
<th>Study Area</th>
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<tbody>
<tr>
<td>North A</td>
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<tr>
<td>North B</td>
</tr>
<tr>
<td>Northeast B</td>
</tr>
<tr>
<td>East A</td>
</tr>
<tr>
<td>Southeast B</td>
</tr>
<tr>
<td>Southeast C</td>
</tr>
<tr>
<td>Northwest A</td>
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<tr>
<td>Northwest B</td>
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</tbody>
</table>

**Total Area Reasonably Serviceable:** 513 acres

3.0 Technical Findings

3.1 North A

**Sanitary Sewer**

Portions of the North A study area are considered topographically constrained because of the elevation of the tributaries to Chehalis Creek, which precludes gravity sanitary sewer service. Topographically constrained lands would require a lift station or sanitary sewer siphon in order to provide service. In total,
approximately 155 acres of North A resource lands are gravity serviceable (see Map E of Exhibit C). Further, North A resource lands can only be served following the inclusion of Northwest B resource lands and the provision of a sewer service through these areas to the south.

**Water**

Water service to the North A resource lands are limited by the existing elevations of the study area, with approximately 126 acres of land falling within Zone 1 and capable of being served by the existing system (see Map E of Exhibit C). Approximately 29 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be serviceable within the WMP’s identified planning period (see Map E of Exhibit C). The remaining approximately 3 acres of land are above 440 feet and fall within Zone 4, with no expectation of service with the near future (see Map E of Exhibit C).

As identified in Table 1 and Map E of Exhibit C, approximately 126 acres of North A resource land can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

**3.2 North B**

As all North B resource lands are above 440 feet and fall within water service Zone 4, there is no expectation of water service within the near future per the WMP (see Map D of Exhibit C). Therefore, no portion of North B’s resource lands are eligible for consideration as a URA.

**3.3 Northeast A**

There are no resource lands within the Northeast A study area.

**3.4 Northeast B**

**Sanitary Sewer**

The entirety of the Northeast B study area is considered constrained due the elevation of Spring Brook, which crosses through the western portion of the study area, which precludes gravity sanitary sewer service. Topographically constrained lands would require a lift station or sanitary sewer siphon in order to provide service. The elevation of Spring Brook's thalweg is approximately 160 feet at the proposed sewer crossing, which is approximately 12 feet lower than the proposed connection point, which has an invert elevation of approximately 171.61 feet (see Map C of Exhibit C).

**Water**

Water service to the Northeast B resource lands are limited by the existing elevations of the study area, with approximately 84 acres of land falling within Zone 1 and capable of being served by the existing system (see Map C of Exhibit C). Approximately 17 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be serviceable within the WMP’s identified planning period (see Map C of Exhibit C). The remaining approximately 1 acre of land are above 440 feet and fall within Zone 4, with no expectation of service with the near future (see Map C of Exhibit C).

As identified in Table 1X and Map C of Exhibit C, there are no resource lands within the Northeast B study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, resource lands within the Northeast B study area were found to be ineligible for URA expansion consideration.
3.5 East A

Sanitary Sewer

Portions of the East A study area are considered topographically constrained because of the elevation of Spring Brook, which crosses the western portion of the study area. Topographically constrained lands would require a lift station in order to provide service. The elevation of Spring Brook's thalweg is approximately 110 feet at the proposed sewer crossing, which is approximately 57 feet lower than the proposed connector point, which has an invert elevation of approximately 166.79 feet (see Maps A and B of Exhibit C). In total, approximately 242 acres of East A resource lands are gravity serviceable (see Maps A and B of Exhibit C). Area of East A resource land that are gravity serviceable include the entirety of the applicant’s proposed URA expansion site.

Water

Water service to the East A resource lands are limited by the existing elevations of the study area, with approximately 242 acres of land falling within Zone 1 and capable of being served by the existing system (see Maps A and B of Exhibit C). Approximately 21 acres of East A resource land fall within Zone 3, approximately 20 acres of which fall within the applicant’s proposed URA expansion site where elevations are above 310 feet. COWL engineers have determined two possible approaches to providing water service to these areas:

1. Construction of a local Zone 2 area within the applicant’s proposed URA expansion site with a dedicated pump system feeding an isolated portion of the water distribution system to service the higher elevation areas. While costs to develop this portion of the study area would be more expensive than lower areas that fall within Zone 1 (below 310 feet), it would ultimately be less expensive than a potential expansion of the City-wide Zone 3 network to serve this area of the study area, or other areas that require service from Zone 3 as identified through this memorandum.

2. Extension of the City’s Zone 3 service area. The City’s WMP anticipates future establishment of a Zone 3 service area which would be served by additional water lift stations and a future reservoir located at the higher elevations north of the City. Zone 3 could significantly expand the City’s water service area. Based on the most recent WMP, all infrastructure for Zone 3 is planned to be located in northern parts of the City, generally northeast of Highway 99W. With the closest Zone 3 water main planned within NE Zimri Drive, approximately 2.5 miles northwest of the study area, extension of service from this source, while feasible, would be prohibitively expensive.

Given the option to construct a local Zone 2 service network within the applicant’s proposed URA expansion site, which is considerably cheaper than extensions of the City’s Zone 3 service area to locations where the WMP does not identify planned water service infrastructure, providing water service to these 20 acres is considerably more reasonable considering the area is also serviceable by gravity sanitary sewer.

As identified in Table 1 and Maps A and B of Exhibit C, approximately 262 acres of East A resource land can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

3.6 East B

There are no resource lands within the East B study area.

3.7 Southeast A

There are no resource lands within the Southeast A study area.
3.8 Southeast B

Sanitary Sewer

The entirety of the Southeast B study area is considered constrained due to topographical constraints which preclude gravity sanitary sewer service. Topographically constrained lands would require a lift station in order to provide service given Southeast B resource lands are below 170 feet and adequate grades do not exist to allow for gravity flow to the connection point (see Map A of Exhibit C).

Water

As none of the resource lands within the Southeast B study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 219 acres) is capable of being served by the existing water system (see Map A of Exhibit C).

As identified in Table 1 and Map A of Exhibit C, there are no resource lands within the Southeast B study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, resource lands within the Southeast B study area have been removed from further URA eligibility consideration.

3.9 Southeast C

Sanitary Sewer

The entirety of the Southeast C study area is considered constrained due to the elevation of Spring Brook, which crosses through the western portion of the study area, which precludes gravity sanitary sewer service. Topographically constrained lands would require a lift station in order to provide service. The elevation of Spring Brook’s thalweg is approximately 110 feet at the proposed sewer crossing which is approximately 57 feet lower than the proposed connection point, which has an invert elevation of approximately 166.79 feet (see Map A of Exhibit C).

Water

Water service to the Southeast C resource lands are limited by the existing elevations of the study area, with approximately 90 acres of land falling within Zone 1 and capable of being served by the existing system (see Map A of Exhibit C). Approximately 4 acres of land fall within Zone 3, and are capable of being served with the addition of reservoir tanks or pumps to the system, but the necessary adjacent improvements are not currently identified in the WMP, and these lands are not expected to be serviceable within the WMP’s identified planning period (see Map A of Exhibit C).

As identified in Table 1 and Map A of Exhibit C, there are no resource lands within the Southeast C study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, resource lands within the Southeast C study area have been removed from further URA eligibility consideration.

3.10 Southwest A, B, C, and D

There are no resource lands within the Southwest A, B, C, or D study areas.

3.11 Northwest A

Sanitary Sewer

The entirety of the Northwest A study area is considered topographically constrained because of the elevation of the tributaries to Chehalis Creek, which precludes gravity sanitary sewer service. Topographically constrained lands would require a lift station/sanitary sewer siphon in order to provide service.
MEMORANDUM

Water

As none of the resource lands within the Northwest A study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 347 acres) is capable of being served by the existing water system (see Maps E and F of Exhibit C).

As identified in Table 1 and Maps E and F of Exhibit C, there are no resource lands within the Northwest A study area that can be reasonably served by both gravity sanitary sewer and water services. Therefore, resource lands within the Northwest A study area have been removed from further URA eligibility consideration.

3.12 Northwest B

Sanitary Sewer

Portions of the Northwest B study area are considered topographically constrained because of the elevation of tributaries to Chehalis Creek, which precludes gravity sanitary sewer service. Topographically constrained lands would require a lift station/sanitary sewer siphon in order to provide service. In total, approximately 125 acres of Northwest B resource lands are gravity serviceable (see Maps E and F of Exhibit C).

Water

As none of the resource lands within the Northwest B study area are limited by existing elevations, and fall within Zone 1, the entirety of the study area (approximately 258 acres) is capable of being served by the existing water system (see Maps E and F of Exhibit C).

As identified in Table 1 and Maps E and F of Exhibit C, approximately 125 acres of Northwest B resource land can be reasonably served by both gravity sanitary sewer and water services and are, therefore, eligible for consideration as a URA.

4.0 Soil Composition Analysis

In order to further assess eligibility of potential resource lands for consideration as a URA, areas of reasonably serviceable resource lands have been broken into five subareas for the purpose of analyzing soil composition and the presence of high-value farmland. The five subareas are provided below and are shown on Exhibit D:

- The applicant's proposed URA expansion site (approximately 92 acres, which excludes adjacent rights-of-way associated with NE Corral Creek Road and NE Fernwood Road that would be included within the proposed URA expansion site's boundaries);
- East A North, which includes reasonably serviceable resource lands within the East A study area that are generally located north of the proposed URA expansion site and south of Highway 99W (approximately 38 acres);
- East A South, which includes reasonably serviceable resource lands within the East A study area that are generally located south of NE Fernwood Road (approximately 136 acres);
- North A, which includes all reasonably serviceable resource lands within the North A study area (approximately 126 acres); and
- Northwest 3, which includes all reasonably serviceable resource lands within the Northwest B study area (approximately 125 acres).
MEMORANDUM

ORS 215.710 describes “high-value farmland” within the Willamette Valley as being land predominantly composed of Class I, II, III and IV soils. Using soil classification data provided by Yamhill County, each subarea’s soil composition by percentage of soil classification was determined as identified in Table 2 and shown on Exhibit D. As identified in Table 2, the two subareas with the lowest percentage of high-value farmland are the applicant’s proposed URA expansion site (94%) and the East A North subarea (92%). All other subareas are comprised of more than 98% high-value farmland.

Further, the applicant’s proposed URA expansion site is the only subarea that completely lacks Class I soils. Given the lower composition of high-value farmland, both the applicant’s proposed URA expansion site and the East A North subarea should be prioritized for consideration as a URA over other areas of reasonably serviceable resource land within the East A South, North A, and Northwest B subareas.

Table 2: Soil Composition for Reasonably Serviceable Resource Land Areas

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
<th>Class VI</th>
<th>High Value Farmland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area</td>
<td>%</td>
<td>Area</td>
<td>%</td>
<td>Area</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>(ac.)</td>
<td></td>
<td>(ac.)</td>
<td></td>
<td>(ac.)</td>
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<tr>
<td>Proposed URA</td>
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<td>0</td>
<td>58.2</td>
<td>63</td>
<td>12.3</td>
<td>13</td>
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<tr>
<td>Expansion Site</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East A – North</td>
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<td>18</td>
<td>12.4</td>
<td>33</td>
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<td>41</td>
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<tr>
<td>East A – South</td>
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<td>71</td>
<td>30.3</td>
<td>22</td>
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<td>14</td>
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<td>Northwest B</td>
<td>69.2</td>
<td>55</td>
<td>29.9</td>
<td>24</td>
<td>25.7</td>
<td>21</td>
</tr>
</tbody>
</table>

5.0 Conclusion

As concluded in the 2051 Buildable Lands Inventory & Lands Need Assessment, the City requires an addition of approximately 397 gross acres of buildable land within its URA to provide for a land supply to the year 2051, which falls within the 30-year land supply horizon (2055) allowed for URAs consistent with OAR 660-021-0030(1). After considering possible URA expansion(s) into exception lands, the City would continue to have a deficit of approximately 183.38 acres of land to satisfy land needs through 2051. Therefore, per OAR 660-0021-030(3)(c), the next appropriate step for the City is to consider resource lands to meet land needs for the 30 year planning horizon.

As identified in Table 1 and shown in Maps A through F of Exhibit C, approximately 513 acres of resource land within a one mile radius of the City’s UGB can be reasonably served by both gravity sanitary sewer and water services. As demonstrated within Table 2 and Exhibit D, the proposed URA expansion site (92 acres) and areas immediately to the north (East A – North subarea, 38 acres) have a lower overall composition of high-value farmland (Class I-V soils); therefore, of the reasonably serviceable resource land areas, these two subareas, totaling approximately 130 acres, should be prioritized for consideration as a URA based on the reduced impact to high-value farmlands as compared to other reasonably serviceable resource lands.

As demonstrated in this memorandum and the existing URA expansion application record, the applicant’s proposal to include approximately 95.3 gross acres of resource land adjacent to the City’s current UGB is justifiable and appropriate under the provisions of OAR 660-021-0030 and is a prudent expansion of the City’s URA to ensure an adequate supply of land options for future City expansion. As further identified through this memorandum, there are no reasonable alternative sites that will have less impact on resource land because resource land is required to meet the identified land need as there is not a sufficient...
supply of reasonably serviceable exception lands. In compliance with OAR 660-021-0030(2), the lands identified for URA consideration have the least effect upon resource land adjacent to Newberg.

Exhibits:

A. Study Area Map
B. Study Area Constraints Maps
C. Study Area Sanitary Sewer & Water Serviceability Maps
D. Soil Composition Map for Reasonably Serviceable Resource Land Areas
EXHIBIT A
Study Area Map
EXHIBIT B

Study Area Constraints Map
Newberg Urban Reserves Area
Map B: Buildable Lands Inventory Constraints Map

EXHIBIT C

Study Area Sanitary Sewer & Water Serviceability Maps
EXHIBIT D

Soil Composition Map for Reasonably Serviceable Resource Land Areas
MEMORANDUM

This memorandum is a response to the work assigned on August 9, 2021. The scope of work requested addresses OAR 660-021-003 and 004 and calls for a comparison of the Bellairs property to identified exception areas nearby the City boundary based on infrastructure. This report describes a recommended approach to analyzing the proposal to include the Bellairs properties in an Urban Reserve Area. This approach clarifies the need to first compare the value of development in exception areas to resource areas generally to establish reasonableness of the provision of public facilities to exception areas. It then proposes a comparison of the Bellairs property to other land also characterized by OAR 660-021 as low priority land. This step is appropriate after establishing the reasonableness of the provision of public facilities to exception areas. The exception lands identified in the scope of work are characterized based on costs to provide public facilities. These results are provided in Part 2 below as a response to element 1.a of the recommended analysis.

PART 1

Relevant sections of OAR 660-021-003

660-021-0030
Determination of Urban Reserve

(1) Urban reserves shall include an amount of land estimated to be at least a 10-year supply and no more than a 30-year supply of developable land beyond the 20-year time frame used to establish the urban growth boundary. Local governments designating urban reserves shall adopt findings specifying the particular number of years over which designated urban reserves are intended to provide a supply of land.

(2) Inclusion of land within an urban reserve shall be based upon the locational factors of Goal 14 and a demonstration that there are no reasonable alternatives that will require less, or have less effect upon, resource land. Cities and counties cooperatively, and the Metropolitan Service District for the Portland Metropolitan Area Urban Growth Boundary, shall first study lands adjacent to, or nearby, the urban growth boundary for suitability for inclusion within urban reserves, as measured by the factors and criteria set forth in this section. Local governments shall then designate, for inclusion within urban reserves, that suitable land which satisfies the priorities in section (3) of this rule.
(3) Land found suitable for an urban reserve may be included within an urban reserve only according to the following priorities:

(a) First priority goes to land adjacent to, or nearby, an urban growth boundary and identified in an acknowledged comprehensive plan as an exception area or nonresource land. First priority may include resource land that is completely surrounded by exception areas unless these are high value crop areas as defined in Goal 8 or prime or unique agricultural lands as defined by the United States Department of Agriculture.

(4) Land of lower priority under section (3) of this rule may be included if land of higher priority is found to be inadequate to accommodate the amount of land estimated in section (1) of this rule for one or more of the following reasons:

(a) Future urban services could not reasonably be provided to the higher priority area due to topographical or other physical constraints; or

(b) Maximum efficiency of land uses within a proposed urban reserve requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

Analysis recommended to evaluate the Bellairs Proposed Urban Reserve

The property proposed by the applicant as an urban reserve area includes four lots. It is zoned EF-20, Exclusive Farm Use and is comprised of a mixture of Class I, II, III, and IV soils. OAR 660-021 identifies this type of land as a lower priority for urbanization because of its value as an agricultural resource. OAR 660-221 requires exception land adjacent to the perimeter of the City to be considered a higher priority for inclusion as urban reserve areas unless it is unreasonable to serve the exception land with public facilities due to topography or other physical constraints. If it is determined that the amount of exception land that is reasonable to serve with public facilities is not adequate to provide the land needed as a buildable supply, then lower priority lands may be considered. Lower priority land may be included with the exception land if it is completely surrounded by that exception land and not an area producing a high value crop or it is land in between an exception land and the City boundary that would make the extension public facilities to the exception area most efficient.

A decision to include the Bellairs properties as an urban reserve area requires a characterization of the reasonableness of provision of public facilities to exception land nearby the City boundary, first. Then, based on the results of that analysis, lower priority lands like the Bellairs property may be reviewed geographically to determine if they are enclosed by approved exception lands or in between approved exception lands and the City boundary and are necessary for the efficient extension of public facilities to approved exception lands. If the Bellairs property does not meet these criteria and the supply of buildable land is still inadequate, then the Bellairs property may be compared to other lower priority resource land adjacent to the perimeter boundary of the City. This last comparison would also likely assess geographic proximity to approved exception areas and the potential to improve the indexed cost of provision of public facilities per buildable acre within a similar cost benefit context used for the previous analyses.
If the first of the analysis steps described above concludes that very little of the exception lands nearby the perimeter of the City are reasonably served with public facilities, then the Bellairs property should be compared with other adjacent lower priority lands within a similar cost benefit context used for the previous analysis steps.

Elements of the recommended analysis

The City of Newberg has conducted a study to assess if it is reasonable to serve study areas adjacent to the City boundary with public facilities. The study located several small areas within the larger study areas that were determined to be “reasonable” to serve. The analysis recommended to assess the proposed Bellairs urban reserve revisits that determination of reasonableness. The provision of public facilities to an exception area is unreasonable if the value of benefits derived from developing that land beyond the costs are demonstrably less than the value of the benefits of developing lower priority lands beyond the costs. An assessment of the costs of developing lower priority land takes the value of the lost agricultural resource into account. The value assessment derived by comparing these costs and benefits will be perceived by stakeholders in different ways as economic and environmental circumstances change over time. The previous study was completed 15 years ago. This warrants a review of the previous study’s determination of “reasonableness” of provision of public facilities. The elements of a recommended analysis are detailed below.

1. Reasonableness of provision of public facilities to nearby exception lands

   a. Characterization of costs to provide public facilities to nearby exception lands

      This analysis establishes the framework necessary to support an evaluation of the reasonableness of providing public facilities to exception areas nearby to the City perimeter through characterization of the cost of providing public facilities to the exception areas - these cost estimates are planning level estimates intended to establish a framework within which the scale of different options may be understood. The assumptions underlying this framework require scrutiny and buy in before options are chosen and further compared.

   b. Characterization of the value of the benefits of development of the exception areas.

   c. Analysis of the results of the previous characterizations to derive an index of cost per unit of benefit for use in comparing the value of development of nearby exception lands to the value of development of resource lands.

   d. Characterization of the costs to provide public facilities to resource lands – including the impact of the loss of the agricultural resource to the community.

   e. Characterization of the value of the benefits of development of the resource lands

   f. Analysis of the results of d and e above to derive an index of cost per unit of benefit for use in comparing the value of development of resource lands to exception lands.

   g. Comparison of the value of the development of exception land indices to the value of the development of resource land indices based on the results of c and f above to determine if
the exception land development value is demonstrably lower than the resource land and therefore unreasonable.

2. Geographical assessment of lower priority land as either surrounded by exception land approved or highly rated in the element 1 or in between that land and the City boundary and necessary for efficient provision of public facilities.

3. Assessment of remaining lower priority lands to identify those areas adjacent to approved exception land which maximize the comparison of cost benefit indexes, i.e. increase the value of development and minimize the loss of the agricultural resources.

OAR 660-221-3 and 4 establishes a hierarchy of priority for land included in urban reserves. The analyses detailed above will provide the necessary data to apply this hierarchy in a manner that is justifiable and provides the necessary structure to enable the scrutiny of stake holders with varied interest to produce broadly acceptable outcomes.

PART 2

Scope of Work Characterization as amended by explanation above:

The following analysis addresses element 1.a of the recommended analysis. It characterizes the costs to provide public facilities to exception land areas identified around the perimeter of the City. The results may be applied to compare the costs of providing public facilities to exception lands and resource lands. That comparison will help determine how many acres of exception land can be reasonably served with public facilities and subsequently identified as potential urban reserve areas. Once the higher priority exception lands that can serve as urban reserve areas are identified, lower priority lands may be considered. The proposed Bellairs URA site may then be evaluated according to OAR 660-221.

Public Facility Costs

The public facility cost estimates used in this analysis are taken from the DOWL report. Public facilities that are required by any newly developed area were removed from consideration in this analysis as they do not provide information that differentiates the potential sites. Water distribution lines, wastewater conveyance, capacity upgrades, and transportation facilities are not included. Water storage reservoirs and pump stations (water and wastewater) are the major facilities that differentiate the costs to provide services to the exception land areas considered. Stormwater is only considered where previous studies identified it as a significant cost. This analysis considers the potential that stormwater may be a valuable resource in the context of comparisons of value related to resource land protections.

Topography

The public facility costs described above are an appropriate measure of the impacts of topography on development costs.
Other Physical Constraints

This study only evaluates exception land that were determined by the DOWL study to be “buildable”. Those determinations excluded land constrained by flooding, landslides potential, and other regulatory environmental designations. The only physical constraints remaining to be evaluated are existing development. Previous studies have identified the challenges involved with providing public facilities to land already developed without them. These challenges will be addressed in this characterization.

Exception Areas Considered

All the exception areas considered in this analysis are delineated and described in the DOWL report. They are described in this report in the order of increasing costs for public facilities.

Northwest B Exception Area

There are no new pump stations or reservoirs required to serve this exception area. The DOWL report suggests the area may experience flooding if development increases impervious area. It identifies the need for 180 acres of detention recommended to address the stormwater management issues they believe would be create. The cost for these facilities was estimated as $2,682,000. These kinds of facilities are commonly built as properties develop and are usually private development costs. These costs were not added to the public facility costs associated with this element of the analysis. These costs should be evaluated as part of element 1b and c of the recommended analysis. This is appropriate because this exception area is bordered by resource land to the north at the base of Chehalem Mountain. This is area designated by the Oregon Water Resource Department as a ground water limited area. These lands are becoming more and more reliant on inexpensive irrigation sources. Stormwater management costs associated with the development of this exception area could be invested into a regional facility for supplying non-potable water for irrigation of adjacent agricultural uses.

This area is currently developed into larger parcel residential uses not reliant on public facilities. This has been described as constraining to development in the DOWL report. This will be revisited in aggregate when the public facility costs are compared for all exception lands. The magnitude of the concern is best evaluated with in that comparison.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

Northwest A Exception Area

Development of this exception area would require a new pump station on Old Yamhill Road. This makes the cost of providing public facilities to this area greater than Northwest B. The DOWL report described challenges associated with conveying wastewater across Chehalem Creek. No costs were associated. These potential costs could be assessed if the comparison of exception areas calls for further assessment.

Flooding concerns in the Chehalem Creek watershed were also cited as a potential in this area due to the potential for increased impervious area created by development. The DOWL report estimated the
same costs for stormwater management facilities as in NW B. These costs were not added to this public facility cost estimate as they are usually private costs. As described above, these costs could be invested in a regional facility for supplying non-potable water for irrigation of nearby agricultural uses. The market for such a resource is growing in all areas impacted by vulnerable groundwater supplies.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**Southwest Exception Area**

This exception area was divided into 4 sub areas. Each of these areas would require a pump station to convey wastewater. This makes these areas more expensive than the Northwest exemption areas. The DOWL report identifies the need to cross Chehalem Creek to make connections to existing water and wastewater conveyance systems. No costs are associated with these construction complexities. These potential costs could be assessed as the comparison of exception areas is further developed.

Land development patterns (residential development not reliant on public facilities) are also listed as a constraint for this area in the DOWL report. This will be revisited in aggregate when the public facility costs are compared for all exception lands. The magnitude of the concern is best evaluated with in that comparison.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**Northeast B Exception Areas**

A new pump station at NE Benjamin Road will be required to serve these exception areas. Current development adjacent to NE Benjamin Road is evaluating the feasibility of constructing a new pump station. This could reduce the cost of serving this exception area making the provision of public services more reasonable.

Land development patterns (residential development not reliant on public facilities) are also listed as a constraint for this area in the DOWL report. This will be revisited in aggregate when the public facility costs are compared for all exception lands. The magnitude of the concern is best evaluated with in that comparison.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**East A Exception Area**

This exception has only 27 buildable acres and requires a wastewater pump station. The cost of the pump station for such a small area makes this exception area more expensive to develop than the previously described areas.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**Southeast C Exception Area**

Two wastewater pump stations are required to serve this area. A portion of the area has developed rural residential. It is less than other areas where it is characterized as a constraint. This will be
revisited in aggregate when the public facility costs are compared for all exception lands. The magnitude of the concern is best evaluated with in that comparison.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**Southeast A Exception Area**

This area will require a wastewater pump station to convey sewage. Land development patterns (residential development not reliant on public facilities) are also listed as a constraint for this area in the DOWL report. This will be revisited in aggregate when the public facility costs are compared for all exception lands. The magnitude of the concern is best evaluated with in that comparison. This area is adjacent to the Riverfront Area which has been included in recent facilities plans. This could provide additional opportunities for public facility connections.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**North B Exception Area**

A new water storage reservoir and pump station would be required to serve this area. The DOWL report also identifies a significant area of detention based on their concerns that new impervious area in the Hess Creek or Springbrook Creek watersheds could cause flooding. Their cost estimate for this detention is $3,725,000. This was not added to this public facility cost estimate. This exception area is also located in the Chehalem Mountain Ground Water Limited Area designated by the Oregon Water Resources Department. As described above, these costs could be invested in a regional facility for supplying non-potable water for irrigation of nearby agricultural uses. The market for such a resource is growing in all areas impacted by vulnerable groundwater supplies.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**North A Exception Area**

A new wastewater pump station would be required to serve this area. The Dowel report also described the challenge of conveyance crossing Chehalem Creek. No cost estimates were included to address this construction complexity. It may be evaluated as this comparison is further developed.

A significant area of detention is also recommended by the DOWL report to address their concern that new impervious area in the Chehalem Creek watershed could cause flooding. Their cost estimate for this detention is $5,811,000. This was not added to this public facility cost estimate. This exception area is also located in the Chehalem Mountain Groundwater Limited Area designated by the Oregon Water Resources Department. As described above, detention costs could be invested in a regional facility for supplying non-potable water for irrigation of nearby agricultural uses. The market for such a resource is growing in all areas impacted by vulnerable groundwater supplies.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

**East B Exception Area**

This area requires two new water storage reservoirs and a booster pump station. The DOWL report recommends storm water detention facility costs of $1,490,000. This is not included in this public
facility estimate. This exception area is located near the Parrett Mountain Ground Water Limited Area designated by the Oregon Water Resources Department. As described above, detention costs could be invested in a regional facility for supplying non-potable water for irrigation of nearby agricultural uses. The market for such a resource is growing in all areas impacted by vulnerable groundwater supplies.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

Northeast A Exception Area

This is the most expensive exception area to provide public facilities for. It requires a new wastewater pump station and new water storage reservoir and booster pump station. The area is also fully developed with rural residential properties not relying on public facilities listed as a constraint in the DOWL report. This will be revisited in aggregate when the public facility costs are compared for all exception lands. The magnitude of the concern is best evaluated with in that comparison.

The cost of the public facilities described above are detailed in Table 1 at the end of this section.

Discussion of Characterization of Exception Area Public Facility Costs

Table 1 below lists the exception land areas in order of increasing costs for major public facilities. It is interesting to note that the East A exception area is not the least expensive to serve with public facilities.

OAR 660-221-003 states:

(4) Land of lower priority under section (3) of this rule may be included if land of higher priority is found to be inadequate to accommodate the amount of land estimated in section (1) of this rule for one or more of the following reasons:

(a) Future urban services could not reasonably be provided to the higher priority area due to topographical or other physical constraints

Costs for Major Public Facilities are a proxy for the impact of topography on the provision of public facilities. Areas with higher elevations are more costly to serve water to. Areas with lower elevations are more costly to provide wastewater collection for. Identification of the costs and comparison of the exception areas based on these cost does not assess whether the costs are reasonable. This exercise simply suggests that less costly areas may be more reasonable than more costly areas.

The City has adopted a URA that is impacted by higher elevations (North Hills). There are facility plans that include budget for reservoirs to serve this area. Additionally, neighboring cities have developed land in higher elevations. This analysis characterizing the cost of providing public facilities to exception areas addresses only the first element of the analysis recommended. A full assessment will take into account all of element 1 of the recommended analysis in order to establish adequate information to judge reasonableness.
Table 1. Costs for Major Public Facilities for Exception Areas

<table>
<thead>
<tr>
<th>Exception Area within Study Areas</th>
<th>Wastewater Pump Station Costs</th>
<th>Water Reservoir Costs</th>
<th>Water Pump Station Costs</th>
<th>Exception Land Buildable Acres</th>
<th>Major Public Facility Costs per Exception Land Buildable Acre</th>
<th>Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest B</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>0</td>
<td>yes</td>
</tr>
<tr>
<td>Northwest A</td>
<td>117,500</td>
<td></td>
<td></td>
<td>64</td>
<td>1,836</td>
<td>yes</td>
</tr>
<tr>
<td>Southwest D</td>
<td>596,000</td>
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<td>239</td>
<td>2,494</td>
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<tr>
<td>Southwest A</td>
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<td>yes</td>
</tr>
<tr>
<td>Southwest C</td>
<td>1,564,500</td>
<td></td>
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<td>171</td>
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</tr>
<tr>
<td>Southwest B</td>
<td>1,117,500</td>
<td></td>
<td></td>
<td>108</td>
<td>10,347</td>
<td>yes</td>
</tr>
<tr>
<td>Northeast B</td>
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<td></td>
<td></td>
<td>54</td>
<td>11,037</td>
<td>yes</td>
</tr>
<tr>
<td>East A</td>
<td>372,500</td>
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<td></td>
<td>27</td>
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<tr>
<td>Southeast C</td>
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<td>18,171</td>
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<tr>
<td>Southeast A</td>
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<td></td>
<td>58</td>
<td>19,267</td>
<td>yes</td>
</tr>
<tr>
<td>North B</td>
<td></td>
<td>4,470,000</td>
<td>2,235,000</td>
<td>204</td>
<td>32,868</td>
<td>no</td>
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<td>North A</td>
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<td>37</td>
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<tr>
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<td>2,235,000</td>
<td>79</td>
<td>89,589</td>
<td>yes</td>
</tr>
</tbody>
</table>

Previous studies of the reasonableness of providing public facilities to study areas surrounding the City have identified existing residential development that does not rely on public facilities as a constraint to future development. This assumption may benefit from a review under current planning regulations (middle housing) and current economic conditions. This review is outside my area of expertise.

Table 2 on the next page has resorted the data from Table 1 so that areas with the kind of development identified as constraining to future development are ranked in those categories. If existing development does constrain future development then exceptions areas with more expensive public facility needs and less development may be comparable to exceptions areas with less expensive public facility needs and more development. For instance, North B may be comparable to Southeast A.
Table 2. Cost for Major Public Facilities for Exception Areas by Development Status

<table>
<thead>
<tr>
<th>Exception Area within Study Areas</th>
<th>Wastewater Pump Station Costs</th>
<th>Water Reservoir Costs</th>
<th>Water Pump Station Costs</th>
<th>Exception Land Buildable Acres</th>
<th>Major Public Facility Costs per Exception Land Buildable</th>
<th>Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest B</td>
<td>117,500</td>
<td></td>
<td></td>
<td>20</td>
<td>0</td>
<td>yes</td>
</tr>
<tr>
<td>Northwest A</td>
<td>64</td>
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<td>yes</td>
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<tr>
<td>Southwest D</td>
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<td>239</td>
<td>2,494</td>
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</tr>
<tr>
<td>Southwest A</td>
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<td></td>
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<td>137</td>
<td>4,350</td>
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</tr>
<tr>
<td>Southwest C</td>
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<td></td>
<td></td>
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<td>9,149</td>
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<tr>
<td>Southwest B</td>
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<td>Northeast B</td>
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<td>East A</td>
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<td></td>
<td></td>
<td>82</td>
<td>18,171</td>
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<td>North B</td>
<td>4,470,000</td>
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<td>2,235,000</td>
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<td>32,868</td>
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<td>North A</td>
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<td>East B</td>
<td>16,390,000</td>
<td>2,980,000</td>
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<td>223</td>
<td>86,861</td>
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</tbody>
</table>

Conclusion:

OAR 660-021-0030 States:

Determination of Urban Reserve

(2) Inclusion of land within an urban reserve shall be based upon the locational factors of Goal 14 and a demonstration that there are no reasonable alternatives that will require less, or have less effect upon, resource land.

While this characterization is incomplete and does not adequately provide a judgement of the reasonableness of providing public facilities to exception lands nearby the perimeter boundary of the City, it does provide enough data to conclude that the applicant has not demonstrated that there are no reasonable alternatives to the Bellairs Proposed Urban Reserve Area that will require less, or have less effect upon, resource land. The full analysis recommended in this memorandum will provide the information necessary for the City to demonstrate that there are no reasonable alternatives to a future proposed URA that will require less, or have less effect upon, resource land.