VILLAGE OF OREGON URBAN SERVICE AREA AMENDMENT REQUEST: NETHERWOOD ROAD

FEBRUARY 5, 2018

VILLAGE OF OREGON

VANDEWALLE & ASSOCIATES

117 SPRING STREET • OREGON, WI 53575 • PHONE: 608.835.3118 • FAX: 608.835.6503

February 5, 2018

Mike Rupiper, Director of Environmental Resources Planning Capital Area Regional Planning Commission City County Building, Room 362 210 Martin Luther King Jr. Blvd. Madison, WI 53703

Dear Mr. Rupiper,

The Village of Oregon requests that the Capital Area Regional Planning Commission (CARPC) approve an 83-acre Urban Service Area amendment extension between West Netherwood Road and County Highway CC. The proposed amendment area is immediately adjacent to the west side of the current Oregon Urban Service Area. 81 acres of the proposed amendment area are currently within the Town of Oregon, the remainder is within the Village.

An amendment to the Oregon Service Area was approved in 2010 for an additional 8.9 acres adjacent to the current proposed amendment area for the site of a now-built Presbyterian Church.

The current proposed amendment would enable the efficient extension of urban services to a proposed Planned Neighborhood development on land that is currently in agricultural use. Developing the proposed development site within the Oregon Service Area is consistent with the Village's stated and adopted goals, policies, plans, and objectives.

The amendment area is within the Village's Extraterritorial Jurisdiction, depicted as Planned Neighborhood and within a "Potential Urban Service Area Expansion" boundary on the Village's adopted Comprehensive Plan Future Land Use Map, and depicted as "City and Village Plans Area" on the Town of Oregon's adopted Comprehensive Plan Planned Land Use Map.

The Town has been involved with discussions regarding the proposed amendment with both the Village of Oregon and the potential developer, Forward Development Group, since the inception of the development proposal and supports this amendment application.

This amendment application has also been reviewed and supported by the Village of Oregon Board and Plan Commission in October 2017.

Please contact Village staff or consultants for any questions that may arise during the review of the enclosed materials. We look forward to working with you.

Sincerely.

Michael G. Gracz
Village Administrator

Table of Contents

Introduction	1
Plan Consistency and Need	
1.1. Document Consistency	1
1.2. Applicable Neighborhood Plan or Studies	2
1.3. Need for the Addition to the USA	2
Intergovernmental Cooperation	2
2.1. Document Notification of Adjacent Local Governmental Units	
2.2. Adjacent Local Governmental Unit(s) Objections or Support	2
Land Use	3
3.1. Proposed USAA Boundary and Existing Rights-of-Way Map	
3.2. USA Amendment Area Data	3
3.3. Existing and Planned Land Use Map	4
3.4 Proposed Quantity and Type of Housing Units	4
3.5 Land Use Phasing	4
Natural Resources:	5
4.1. Natural Features	5
4.2. Parks and Stormwater Management Facilities Map	5
4.3. Environmental Corridors	5
4.4. Proposed Environmental Corridors Map	
4.5. Environmental Corridors Requirements	6
Utilities and Stormwater Management	6
5.1. Proposed Sanitary Sewer Map	6
5.2. USAA Average Daily and Peak Wastewater Flow	
5.3. Average Wastewater Treatment Plant Daily Flow	6
5.4. Wastewater Treatment Plant Capacity	
5.5. Proposed USAA Public Water Supply Map	
5.6. Estimated USAA Daily and Peak Hourly Water Demand	
5.7. Average Daily and Peak Hourly Water Demand	
5.8. Water Supply System Capacity	
5.9. Proposed Stormwater Management Standards Map	
5.10. Stormwater Management Plan	
5.11. Engineering Reports	
Map 1: Proposed Amendment Area	10
Map 2: Existing Land Use	11
Map 3: Planned Land Use	12
Map 3a: Future Land Use - ETJ Extent (with Proposed USAA)	13
Map 4: Natural Features	14
Map 4a: Natural Features (with Proposed USAA)	15

Introduction

The Village of Oregon is requesting an 83.0-acre addition to its Urban Service Area to provide sanitary sewer, water, and other urban services to a site immediately West of the Village's municipal boundary spanning between Netherwood Road to the north and County Highway CC to the south. As depicted in Map 1 in Section 3.1, this would include 1.9 acres currently within the Village of Oregon, and 81.1 acres currently within the Town of Oregon. This is immediately adjacent to the current USA.

The portion currently within the Village is also owned by the Village; it was annexed in 2016 and was the planned location of the Village's future Well #6. It is currently in agricultural use. The well location may be shifted within the adjacent park planned in the amendment area.

The portion of the amendment area currently within the Town is anticipated to be annexed into the Village. 71.9 acres currently in agricultural use are split between two parcels presently owned by "LUTHERAN CHURCH EXTENSION FUND-MISSOURI SYNOD". One parcel with 5.0 acres, owned by Brian Tarkenton, has an existing house. The remaining area is street right-of-way.

Forward Development Group, LLC, is planning to obtain and develop the Lutheran Church parcels and develop a Planned Neighborhood residential area called "The Highlands at Netherwood". The Tarkenton parcel is anticipated to redevelop in time as well to one or more of the Planned Neighborhood land uses described in Section 1.1, likely as part of the same Planned Neighborhood.

Plan Consistency and Need

1.1. Document Consistency

With the exception of existing right-of-way on Netherwood Road and County Highway CC, the bulk of the proposed USA addition is depicted as "Planned Neighborhood" on the Village's Future Land Use Map (Map 3a), which is part of the Village's Comprehensive Plan. This map was updated in 2017, which included modifying the northern end of the amendment area to include generalized stormwater and public recreation areas. More detailed versions of the stormwater and recreation areas are delineated in the developer's concept plan discussed in Sections 3 through 5.

The Village's "Planned Neighborhood" land use category is described in the Comprehensive Plan as, "A carefully planned mixture of predominantly Single-Family Residential, combined with one or more of the following land use categories: Two-Family Residential, Mixed Residential, Neighborhood Office, Neighborhood Commercial, Institutional, and Parks and Open Space."

The preliminary plans for the amendment area are consistent with this description. The site is expected to include primarily Single-Family Residential, a stormwater management area, public recreation, public utilities (primarily in the form of planned Well #6), and smaller pockets of Mixed Residential in the form of townhomes. The Comprehensive Plan also notes (p. 52) that areas were only depicted as Planned Neighborhood if they could "logically be served by current and planned sanitary sewer facilities." The Future Land Use Map also depicts a "Potential Urban Service Expansion Area" which includes the requested amendment area in this application.

The planned land use is also a logical continuation of the single family residential housing currently abutting the eastside of the amendment area.

Map 8 from the Village's Comprehensive Plan, the Utilities and Community Facilities Map, also depicts both a planned future park and well within the amendment area (see <u>Attachment A</u>). The current draft of the Village's Future Facilities map from the Park and Open Space plan, which is currently being updated, also depicts a near-term neighborhood Park within the amendment area (see <u>Attachment B</u>).

As noted, most of the site in question is currently in the Town of Oregon. The Town of Oregon's adopted Comprehensive Plan Planned Land Use Map (Attachment C) depicts the amendment area as "City and

February 5, 2018

Village Plans Area", also consistent with the planned development for this site. The amendment area is also within the Village's Extraterritorial Jurisdiction.

1.2. Applicable Neighborhood Plan or Studies

No holistic neighborhood plan or study has been done for the proposed amendment area.

However, the concept plan for the site, which includes primarily small lot single family residential of varying scales and characters, with some multi-family residential in the form of townhomes, generally comports with the Planned Neighborhood land use category described in Section 1.1. Extensive emphasis is placed in the plan on pedestrian trail connections throughout the site. The planned design also includes an extension of North Bergamont Boulevard, which currently stubs on the eastern boundary of the amendment area, through the site connecting to Netherwood Road. Further south, Oregon Parks Ave also stubs into the amendment area's eastern border and would be extended into the planned development.

A detailed review of the concept plans, conducted by the Village Planner for the Village Board in a memorandum for the Board's October 23, 2017 meeting, is included as <u>Attachment D</u>.

1.3. Need for the Addition to the USA

According to CARPC, in 2016 their most recent projections indicated 614 additional acres of development would be required to meet the Village's growth by 2040, while as of 2010 only 204 additional undeveloped acres existed in the Village.

A separate analysis conducted in 2017 by Vandewalle & Associates estimated there were 291.5 undeveloped acres within the Village's Urban Service Area. (see Attachment E).

By even a conservative estimate, these figures would indicate over 300 acres would need to be added by 2040 to meet the Village's population growth demand.

Intergovernmental Cooperation

2.1. Document Notification of Adjacent Local Governmental Units

A Town of Oregon Supervisor, Phil Van Kampen, was present at a Village staff meeting on 3/8/2017 where the proposed amendment, development, and eventual Village annexation was discussed with CARPC staff.

2.2. Adjacent Local Governmental Unit(s) Objections or Support

Village Administrator Michael Gracz again met with SupervisorVan Kampen in January 2018 to discuss the Town signing a letter documenting support for this Application. The Town Board added discussion and potential approval of such a letter to their agenda for their 2/6/2018 meeting. Any documented letter of support, neutrality, or opposition from this meeting will be provided to CARPC.

Land Use

3.1. Proposed USAA Boundary and Existing Rights-of-Way Map

See Map 1. The proposed addition to the USA is comprised of four parcels and two partial road rights-of-way.

Three parcels totaling 73.7 acres are currently being farmed. 1.9 of these acres are in the Village and owned by the Village of Oregon. The remaining 71.9 acres are split between two parcels currently owned by the Missouri Synod Lutheran Church Extension Fund, but expected to soon be purchased by the intended developer Forward Development Group, LLC. A 5.0-acre parcel in the southeast corner is currently an unsewered single family home. Two partial road rights-of-way – Netherwood Road on the North and County Highway CC on the South, constitute the rest of the proposed amendment area. Both are significant collector roads.

The 73.7 acres currently being farmed constitute the currently planned portion of the "Highlands at Netherwood" subdivision, which would include a Village Well. A land-swap may occur with between the Village and the developer based on the finalized location of planned Village Well #6. The Tarkenton parcel may redevelop in time as part of the Planned Neighborhood.

3.2. USA Amendment Area Data

	Acres			Projected Housing Units
Proposed Land Use	Total Acres	Existing Development on Site	Environmental Corridor	
Single Family Residential	41.8			124
Single Family - Detached Townhome*	8.2	5 .0		44
Multi-Family Residential - Townhome	1.8			13
Residential Total	51.8	5.0		181
Park or Open Space	9.3		9.3	
Street Right-of-Way*	13.3	4.3		
Stormwater Management	7.5		4.1	
Other Open Space	1.2			
Total**	83.0	9.3	13.3	181

1.9 Acres in Village of Oregon, 81.1 Acres in Town of Oregon

*The 5.0 Acres of existing Development are Unsewered Single Family Residential, and will likely be redeveloped. The 19 homes projected for this site represent a median residential density from the Planned Neighborhood land use category, though land uses of other densities, including non-residential are also possibilities.

**Cells may not sum exactly to Totals due to rounding.

3.3. Existing and Planned Land Use Map

Map 2 depicts Existing Land Use for the amendment area, overlaid with conceptual parcels for planned development.

See Introduction and Section 3.1 for more.

Map 3 depicts Planned Land Use.

Over half of the site is planned for single family homes on lots averaging 0.34 acres in size.

The southwestern corner of the amendment area is planned for smaller single family detached townhomes, called Bay Homes in the Development Plan, on 4.4 acres of land. 3.7 Acres of the 5.0 acre Tarkenton parcel are tentatively shown as detached townhomes as well in a map (<u>Attachment Q</u>) presented by the developer to the Village Board on 10/23/17, though this parcel is not included in the detailed Development Plans or initial annexation petition.

1.8 Acres in the northeastern corner of the site are planned for Multi-Family Residential Townhomes, containing 3-6 units per building.

Three stormwater retention areas, totaling 7.5 acres, are planned for the northern, southwestern, and southeastern portions of the amendment area. More detail is provided in Section 5.9.

A 9.3-acre park is planned for the northern end of the area along Netherwood Road. As described in Section 1.1, the Village's Future Well #6 may be located within the park.

1.3 Acres of out-lots or easements are dedicated to off-road recreational trails that will link into the Village's trail network. They would connect the park at the north end and extend through the residential areas to County Highway CC/Jefferson Street at the south end. They would also connect to the planned "Hermsen Conservation Area" immediately to the west of the amendment area, anticipated to be annexed into the Village in the future.

Finally, an additional 9 acres of right-of-way are anticipated, primarily to serve the planned residential homes. The right-of-way along Netherwood Road on the north edge and County Highway CC/Jefferson Street along the south edge is planned to widen from 70 feet to 110 feet, meaning an additional 20 feet of right-of-way would be required along the frontage abutting the Lutheran Church and Tarkenton parcels.

The developer has submitted an annexation petition (<u>Attachment F</u>) for the two Lutheran Church parcels and a simultaneous rezoning petition (<u>Attachment G</u>) to bring the parcels into Village zoning. The larger single-family homes are petitioned to rezone as single family residential district SR-5, the detached townhomes a single family residential district SR-6, and the multi-family townhomes as mixed residential district MR-8.

The rezoning petition also includes the Village owned parcel, which is shown as developing as part of the multi-family townhomes in the Development Plan.

3.4 Proposed Quantity and Type of Housing Units

The 41.8 acres proposed for large Single Family Residential are planned to include 124 housing units.

The 8.2 acres proposed for detached townhomes are projected to include 44 total housing units.

The 1.8 acres proposed for attached multi-family townhomes, ranging from 3 to 6 units per building, are planned to include 13 housing units.

Altogether 181 housing units are planned composed of 168 single family units and 13 multifamily units.

3.5 Land Use Phasing

Although the requested amendment is under 100 developable acres, and thus does not require a 10-year staging map for this application, a preliminary four part phasing plan and map corresponding map

(Attachment H) have been devised by the developer and are included here. The plan was summarized as such in a letter to the Village Administrator:

"Phase 1 will involve development in the north and south portion of the site to include grading, construction of public utilities and roadways, and construction of two stormwater management facilities. Phase 2 will involve development in the southeast section including site grading and construction of public utilities and public roadways including the connection to Oregon Parks Avenue, and construction of one stormwater management facility. Phase 3 will involve development in the southern section of the project and will include site grading and construction of public utilities and roadways. Phase 4 will involve development on the west section of the property and involve site grading and construction of public utilities and roadways."

Natural Resources:

4.1. Natural Features

See Map 4. There are no wetlands, floodplains, Hydric Soils, woodlands, karsts, unique flora or fauna, or surface water on the site. There are minimal areas of steep slopes above 12% in the southwest corner. There are 32.4 Acres of "Highly Erodible Soils" as defined by the USDA on the site.

There is a small pond on the parcel immediately adjacent to the northwest of the site, approximately 75 feet from the proposed amendment area boundary.

Geologically, the majority of the site is located in a pitted outwash plain, which is more likely to contain kettles and depressions, but specific features on site are limited to a kettle in the northwest corner that forms a portion of the drainage area for the adjacent pond. It is also designated as a groundwater recharge area and is currently approximately 2.6 acres.

The planned developer submitted the site to the DNR's Bureau of Natural Heritage Conservation for an Endangered Resources Review. In January 2018, the DNR replied to the developer that they had determined the proposed project would, "have no impact or a minimal impact to endangered and threatened species in the state. Due to this coverage under the No/Low BITP/A, a formal review letter is not needed and there are no actions that need to be taken to comply with state and/or federal endangered species laws." The official ER Review Verification form is included as <u>Attachment I</u>.

Map 4a depicts the proposed amendment area overlaid on the Natural Features Map from the Village's Comprehensive Plan. The only environmental constraints depicted within the amendment area on this map are the groundwater recharge area and a small amount of 12% to 20% slopes (using a more generalized data source for slope data than used in Map 4).

4.2. Parks and Stormwater Management Facilities Map

See Map 3. A 9-acre Neighborhood Park is planned for the northern edge of the amendment area. Within the same parcel, and extending into the planned adjacent residential areas to the south, are planned a number of small stormwater management areas. The largest of these (3.7 acres) is expected to contain, and after grading expand, the current kettle/groundwater recharge area in the northwest corner.

Two additional smaller stormwater retention areas are planned for the southwestern and southeastern corners of the site.

All planned stormwater areas total 7.5 acres. The stormwater areas are described in greater depth in Section 5.9.

4.3. Environmental Corridors

13.35 contiguous acres are proposed as Environmental Corridor, comprising 9.25 acres of planned Village Park and 4.1 acres of Stormwater Management land. This would include both the Village Park and expanded 3.7-acre groundwater recharge area at the northern edge of the site along Netherwood Road, described in Section 4.2. A smaller stormwater retention area within the same parcel would also be included in the corridor. Future Village Well #6 would also likely be sited within the Park and thus this corridor.

The proposed corridor contains approximately 16% of the amendment area.

4.4. Proposed Environmental Corridors Map

See Map 4.

4.5. Environmental Corridors Requirements

The proposed corridor contains the entire planned Village Park and major stormwater retention/groundwater recharge areas. Exact locations of stormwater areas and park land may be refined closer to time of development and the corridor should be updated accordingly in these areas.

The proposed corridor achieves the intended goals outlined for Environmental Corridors in the *Water Quality Plan for Dane County*. It protects water quality and public health by including the groundwater recharge area as part of the corridor, as well as an additional planned stormwater retention area. It also provides and encourages outdoor recreation options by including a planned neighborhood park.

Utilities and Stormwater Management

5.1. Proposed Sanitary Sewer Map

Describe and provide a map of the proposed sanitary sewer extension for the USAA.

See <u>map Attachment J</u> from the developer's Development Plan, depicting detailed planned routing of water, sanitary sewer, and storm sewer lines in the development.

The current 15-inch Sewer interceptor running along County Highway CC/Jefferson Street would be extended to the Western edge of the amendment area after annexation, according to the Village engineer. This would connect to a new 8-inch main at Cypress Street/Street A to serve planned development in the amendment area.

In addition, two other connection points would be made to the subdivision from the existing system: at the existing manhole at the west end of Oregon Parks Avenue, and the existing manhole at the current end of North Bergamont Avenue.

The developer would pay for a pro-rated share of the cost of extending sanitary services.

5.2. USAA Average Daily and Peak Wastewater Flow

Provide an estimate of the average daily and peak wastewater flow for the USAA.

Each housing unit in the proposed development is expected to contribute an additional 350 gallons per day, amounting to approximately 63,350 gallons total per day for the 181 homes planned or existing in the amendment. Peak flow is estimated 253,400 gallons per day.

These values assume 3.5 persons per home and 100 gallons per person per day,— as outlined in an updated version of the developer's Development Impact Analysis using more liberal assumptions (Attachment K), (though the totals calculated here differ as the Impact Analysis doesn't include the estimated 19 housing units from the Tarkenton parcel). A peaking factor of 4 was provided by the Village engineer.

5.3. Average Wastewater Treatment Plant Daily Flow

Provide current average daily flow for the interceptor sewer and wastewater treatment plant.

Currently the Village's treatment plant receives an average of about 1.37 MGD per day.

The Village Engineer noted daily flow rates for the interceptor sewer were unavailable.

February 5, 2018

5.4. Wastewater Treatment Plant Capacity

Describe the wastewater treatment plant / interceptor sewer capacity to serve the USAA.

The Village's treatment plant has a rated capacity of 1.80 MGD, average daily flow. The present reserve capacity is 0.43 MGD that could support an estimated additional 8,600 people at 50 gpd, or 4,300 people using the more liberal estimate of 100 gpd assumed by the developer. The rated capacity was adjusted to these levels as the result of Wisconsin Department of Natural Resources concurrence with a Capacity Study completed by the Village Engineer in June 2000.

As described in section 5.2, the average daily flow expected at build-out for the amendment area is approximately 0.063 MGD, with a peak load of approximately 0.253 MGD, indicating the Village's treatment plant has ample capacity to support the planned development.

As noted in Section 5.3, daily flow rates for the interceptor sewer were unavailable, however, the Village also noted that the interceptor was designed with the development of the amendment area in mind at approximately the densities planned as described in this application, and the interceptor would have sufficient capacity to provide for full development on the site.

5.5. Proposed USAA Public Water Supply Map

Describe and provide **a map** of the proposed public water supply / distribution system extension for the USAA.

See again <u>map Attachment J</u>, depicting detailed planned routing of water, sanitary sewer, and storm sewer lines in the development. See also <u>map Attachment L</u>, provided by the Village's engineering consultant, depicting the current Village of Oregon public water system.

The existing 12-inch main along County Highway CC/Jefferson Street would be extended West along the road to the amendment area.

As described in the Developer's <u>Development Impact Analysis</u> (p. 6):

"Water will be supplied by the Village of Oregon Water Utility. A new watermain will be looped throughout the project site and will connect with the existing mains at N Bergamont Boulevard and Oregon Parks Avenue. The mains will be stubbed at Netherwood Road, CTH CC, and Street C for future expansion/connections."

In Fall 2017, the Village's engineering consultant completed a report on existing and potential water supply for the western half of the Village called the "West Side Water System Study" (<u>Attachment M</u>). This report indicates that portions of the amendment area above 1000 feet are within an anticipated future high pressure zone for the Village's Water Utility. According to the developer's Impact Analysis, after grading these would include lots 49-51, 64-73, 79-80, and 108-115 (see Phasing Maps from Section 3.5 for lot #'s).

A booster pump would be required to serve these lots and is tentatively planned to be located in cul-de-sac Street F in the southwestern corner of the amendment area.

Schematics for such a booster station were provided by the Village's engineering consultant in Attachment N.

5.6. Estimated USAA Daily and Peak Hourly Water Demand

Provide an estimate of the average daily and peak hourly water demand for the USAA.

At build-out for the amendment area the 181 anticipated housing units would be expected to use an average water total of 72,853 gpd, with a peak daily demand of 291,410 gallons. Peak hourly demand is estimated at 202 gpm.

These totals assume 100 gallons per person per day, 3.5 persons per housing unit, 15% water loss, and a peaking factor of 4, as outlined in the updated <u>Development Impact Analysis</u>.

According to the Village engineer, in addition to the peak hourly demand for residential use, a fire flow demand of 2,000 gpm would have to be considered in sizing a water tower.

5.7. Average Daily and Peak Hourly Water Demand

Provide current average daily and peak hourly water demand.

The current average daily water demand is approximately 775,000 gallons with an average demand of 540 gpm. The current average peak hourly water demand is 1,900 gpm.

5.8. Water Supply System Capacity

Describe the current capacity of the water supply system.

The village currently operates three groundwater wells (3, 4, and 5) for water supply. Each well yields between 800 and 1000 gallons per minute (gpm). The current well pumping capacity with all three wells operating simultaneously is 2,500 gpm.

This translates to a capacity of 3,600,000 gallons per day with an estimated unused capacity of 2,825,000 gpd. The additional estimated demand of 72,853 gpd, with peak demand of 291,410 gpd, for the amendment area is well within the Water System's capacity.

5.9. Proposed Stormwater Management Standards Map

Describe and provide **a map** of the proposed stormwater management standards and best management practices.

The Village of Oregon has taken a proactive approach to addressing stormwater management needs. The Village recognizes the necessity for properly managing stormwater runoff from existing and new development because of its location along the Oregon Branch of the Badfish Creek.

In 1998-99 the Village conducted a comprehensive stormwater management study. The study divided the Village in sub-watersheds, and modeled stormwater runoff, and conveyance capacities for each system. Also, where capacity problems were identified, the study analyzed alternative management approaches, and recommendations were developed. An implementation plan prioritized the recommendations and established a schedule. At this point in time, the Village has expended over \$1,000,000 in stormwater management projects.

The Village enforces a policy of stormwater management on all new development and redevelopment. The requirements of the policy addressed both stormwater quantity and quality. In 2016, the Village updated this policy, as well as other Dane County storm water and erosion control requirements, into Chapter 22 of the Oregon Municipal Code of Ordinances.

In August of 2007 the Village of Oregon experienced a significant rain event, which produced flooding and other drainage related issues in areas throughout the Village. As a result, the Village embarked on a comprehensive study of these areas, known as the "West Side Drainage Area." This area is tributary to the upstream end of the 72-inch diameter storm sewer that conveys the Oregon Branch of the Badfish Creek through Downtown Oregon. The study showed that although the recent development within the West Side Drainage Area did not contribute to the flooding, it was clear that additional storm water storage is necessary to reduce flooding limits in the area. The Village has implemented the recommendations of this study and since 2000 the Village has acquired and removed all homes that were located in the Florida Avenue floodplain area. The Village also replaced the 72-inch culvert including through the downtown area in 2008-2009.

As this pertains to the proposed amendment area, the Development Impact Analysis provided to the Village by the proposed developer describes it as such:

"Three stormwater management facilities will be provided to manage and treat stormwater runoff."

Located in the northwest corner of the project site, the largest stormwater facility, roughly 5.9 acres within the platted area, is centered around an existing kettle that is located partially on the project site and the adjacent property to the west. This facility has been designed to not result in adverse impacts to the kettle or surrounding properties. Overall, this facility will provide an additional 60 percent more storage volume within its basins.

Given the location of this facility, it's overall design is intended to serve not only as a stormwater management facility, but also as an amenity. The basins will be enhanced with landscaping and walking trails that provide access around the perimeter of the basins and that connect to the larger Village trail system.

The other two facilities are located on the south side of the project site; one in the southeast corner and the other adjacent to the County Highway CC. These ponds are each approximately 0.7 acres in size.

In surveying the existing site conditions, a ponding condition was noticed along the northeast property line adjacent to the Oregon Parks Neighborhood. Currently, approximately 9.6 acres of land drains through the side yards of these established residential lots. To better manage this stormwater runoff, the combination of a swale and storm sewer pipes are proposed to reroute the runoff to the northwest stormwater facility.

The stormwater management facilities are intended to be dedicated to the Village for ownership and maintenance."

The Developer also provided a detailed Preliminary Stormwater Management Plan for the amendment area (excluding the Tarkenton parcel). The Existing and Proposed Drainage Areas are depicted in map Attachment O, and map Attachment P, respectively.

5.10. Stormwater Management Plan

Explain who will be responsible for the management and long term maintenance of the stormwater facilities.

The Village ultimately assumes ownership and maintenance of Stormwater Detention Ponds and Collection Systems. Prior to taking over of the facilities, the developer must demonstrate that the systems are clean, built as designed, operating satisfactorily, and have full capacity for sediment retention. This typically does not occur until 80+% of homes are built in the development.

5.11. Engineering Reports

Provide a copy of any pertinent engineering reports.

See Attachment M: 2017 Oregon West Side Water System Study

February 5, 2018











