

Architectural Review Submittal

Tualatin Service Center

10699 SW Herman Road, Tualatin, OR 97062



November 18, 2019







Project Name and Contact Information Provided per TDC 33.020 (4)(a)

Project Name & Address: **Tualatin Service Center** 10699 SW Herman Road, Tualatin, OR 97062

Owner: City of Tualatin 10699 SW Herman Road Tualatin, OR 97062 (503) 691-3010 Sherilyn Lombos

Owner's Representative: Plan B Consultancy 696 McVey Avenue | Suite 202 Lake Oswego, OR 97034 (503) 785 9377 Ernesto Vasquez

Project Architect: Scott | Edwards Architecture LLP 2525 E. Burnside Portland, OR 97214 (503) 226-3617 Attn. Andrew Kraus

<u>Civil Engineer:</u> HHPR 530 Center Street NE | Suite 240 Salem, OR | 97301 (503) 221-1131 Beau Braman

Landscape Architect: HHPR 530 Center Street NE | Suite 240 Salem, OR | 97301 (503) 221-1131 Jeff Creel

	CITY OF 7 Communit	ΓUALATIN ty Development De	partment-Pla	nning Division
	Land U	se Application	n—Type II	
PROPOSAL NAM	<u>1E</u> Tualati	in Service Center		
PROPOSAL SUM	IMARY (Brief d	lescription)		
Expansion of the	e existing Hern	nan Road Operations Cente	r to consolidate a nun	nber of functional divisions
within the city, ir	ncluding public	works, operation, building,	planning and enginee	ring. Expansion includes
minor parking, w	alkway, storm	water, utility and landscape	modifications.	
PROPERTY INFO	RMATION			
Location (address	if available): 1	0699 SW Herman Road, Tu	alatin, OR 97062	
Tax Map & Lot #(s	s):N	/ap 2S 1 22AD Tax Lot 20	00 & 300	Planning District: <u>IN</u>
Total site size:	8	.72 Acres		Z Developed D Undeveloped
APPLICANT/COM	NTACT INFORM	<u>AATION</u>		
Applicant or Prim	ary Contact Na	me: Scott Edwards Architec	ture LLP Attn. And	Irew Kraus
Mailing Address:	2525 E. Burn	iside		
City/State:	Portland, OR			Zip: <u>97214</u>
Phone:	503-226-361	7 Email: andr	ew@seallp.com	
Applicant's Signat	ure:			Date:
I hereby acknowledg information provided of Tualatin Developm	e that I have read I is correct, that I a tent (TDC) and Mur	this application and understand the mean of the owner or authorized agent of nicipal (TMC) Codes.	e requirements for approvir the owner, and that plans s	ng and denying the application, that the ubmitted are in compliance with the City
PROPERTY OWN	<u>IER/DEED HOL</u>	L DER INFORMATION (Attach	list if more than one)	
Name:	City of Tuala	itin Attn. Sherilyn Lomb	OS	
Mailing Address:	10699 SW H	lerman Road		
City/State:	Tualatin, OR			_Zip: <u>97062</u>
Phone:	503-691-301	0 Email: slom	bos@tualatin.gov	
Property Owner S	ignature:			Date:
Power of attorney or	letter of authorization	tion required if application not signe	d by the property owner/de	eed holder.
LAND USE APPL	ICATION TYPE			FOR STAFF USE ONLY
Architectural	Review (AR)	Minor Variance (MVAR)	Case N	o.: eceived:
Historic Landr	mark (HIST)	□ Tree Removal (TCP)	By:	
Interpretation	ו (INT)	Other	Fee An	nount \$:
			Receiv	ea by:

СІЛ

GENERAL INFORMATION		
Site Address:	10699 SW Herman Road, Tualatin, OR 97062	
Assessor's Map and Tax Lot #:	Map 2S 1 22AD Tax Lot 200 & 300	
Planning District:	IN (Institutional)	
Parcel Size:	8.72 Acres	
Property Owner:	City of Tualatin	
Applicant:	Scott Edwards Architecture LLP Attn. Andrew Kraus	
Proposed Use:	Business w/ multi-purpose (assembly)	

ARCHITECTURAL REVIEW DETAILS		
Residential Commercial	Industrial	
Number of parking spaces:	x	
Square footage of building(s):	15,629	
Square footage of landscaping:	x	
Square footage of paving:	а	
Proposed density (for residential):	N/A	

For City Personnel to complete:

Staff contact person:

CITY OF TUALATIN FACT SHEET

General							
Proposed use:	Business w/ m	ulti-purpos	e (assembly)				
	(Service Cente	er: public w	vorks, operatio	on, building, planning	and engineering	a)	
	(, -	,			
Site area:	8.	72	acres	Building footprint:	(this permit) 15,	,629*	sq. ft.
Development are	ea: +/	- 0.5	acres	Paved area:	(total site) 154,4	493	sq. ft.
	+/	- 20,000	Sq. ft.	Development area	coverage:	17.4	%
	*Site als	o includes Wa	arehouse Bldg a	s indicated below			
Parking	Bldg. A	reas: Offi	ce 14,129 Ass	sembly 1,500 (100 seat	ts) Warehouse 17	7,052	
Spaces required	(see TDC 73.4	400)		Spaces provided:			
(example: warel	house @ 0.3/1	000 GFA)		Total parking pro	ovided: <mark>68</mark>	spaces	
Off <u>ice @ 2.7</u>	/1000 GFA =	38		Standard =	63		
Assembly @ 1/4	/seat GFA =	25		ADA accessible	= 2		
Wa <u>rehous@</u> 0.3	/1000 GFA =	<u>5</u> Total		Van pool =	3		
parking require	d:	68 spa	aces	Compact =	0		
ADA accessible	9 =	2		Loading berths =	1 (12 x 25	5 x 14' high)	
Van pool =		68/25 = 3					
Compact = (ma	ax. 35% allowe	ed) <mark>0</mark>					
= Loading berth	าร =	17,052sf =	1				
Bicycles							1
Covered spaces	required: 1/40) assembly s	seats = 2	Covered spaces pr	ovided: 9		
	0.5/	1,000 sf	<u> </u>				
Landscaping			9	-			
Landscaping req	uired: <u></u> %	of dvpt. are	a	Landscaping provid	led:% of a	dvpt. area	
		Square f	eet			Square feet	
Landscaped park	king island area	a required:	%	Landscaped parkin	g island area pro	vided:	%
Trash and recyc	cling facility						
Minimum standa	rd method:		square feet				
Other method:						_square fee	et
For commercial	/industrial pro	ojects only	,				
Total building are	ea:	- /	sq. ft.	2 nd floor:		sq. ft.	
Main floor:			sq. ft.	3 rd floor:		sq. ft.	
Mezzanine:			sq. ft.	4 th floor:		sq. ft.	
•			· · ·	•		•	

For residential projects only

Number of buildings:	Total sq. ft. of buildings:	sq. ft.
Building stories:		

AR19 Exhi	009 bit A3
	Clean Water Services File Number
Clean Wate	19-002587
	r W Services
Sensitive Area Pre-Scre	ening Site Assessment
1. Jurisdiction: <u>Tualatin</u>	Т
2. Property Information (example 1S234AB01400)	3. Owner Information
Tax lot ID(s): 2S122AD-200	Name: <u>City of Tualatin</u>
	Address: 10699 SW Herman Rd.
OR Site Address: 10699 SW Herman Rd.	City, State, Zip: Tualatin , Oregon, 97062
City, State, Zip: <u>Tualaun</u> , Oregon, 97002 Nearest Cross Street: 108th	Phone/Fax: <u>503-691-3099</u>
	E-Mall: Cleynous@tualatin.gov
4. Development Activity (check all that apply)	5. Applicant Information
Lot Line Adjustment	Name: <u>City of Tualatin (CO/ Clayton Reynolds)</u>
Residential Condominium	Company: Oily of Fualaun 1 10699 SW Herman Rd
Residential Subdivision	Address: 10099 Over Horman No.
Single Lot Commercial I Multi Lot Commercial	Disy, State, Zip: <u>1000000000000000000000000000000000000</u>
Other Please let me know if you have any questions	F_Mail· crevnolds@tualatin.gov
6. Will the project involve any off-site work? I Yes K INO I,	La Unknown
2 Additional comments or information that may be needed to	
This site, doesn't have any storm water that goes off site. It is	all contained by Water Quality facility or Dry wells.
This application does NOT replace Grading and Erosion Control Permits, DEQ 1200-C Permit or other permits as issued by the Department of Envi the Army COE. All required permits and approvals must be obtained and	Connection Permits, Building Permits, Site Development Permits, ronmental Quality, Department of State Lands and/or Department of completed under applicable local, state, and federal law.
By signing this form, the Owner or Owner's authorized agent or representative, acknow the project site at all reasonable times for the purpose of inspecting project site condi familiar with the information contained in this document, and to the best of my knowled	vledges and agrees that employees of Clean Water Services have authority to enter itions and gathering information related to the project site. I certify that I am Ige and belief, this information is true, complete, and accurate.
Print/Type Name City of Tualatin (CO/ Clayton Reynolds)	Print/Type Title Maintenance Services Manager
Signature	Date 8/5/2019
 Sensitive areas potentially exist on site or within 200' of the site. THE APPLICAN SERVICE PROVIDER LETTER. If Sensitive Areas exist on the site or within 2 by required. 	IT MUST PERFORM A SITE ASSESSMENT PRIOR TO ISSUANCE OF A 200 feet on adjacent properties, a Natural Resources Assessment Report may also
Based on review of the submitted materials and best available information Sensit Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate an document will serve as your Service Provider letter as required by Resolution and obtained and completed under applicable local, State, and federal law.	ive areas do not appear to exist on site or within 200' of the site. This Sensitive Id protect water quality sensitive areas if they are subsequently discovered. This d Order 19-05, Section 3.02.1. All required permits and approvals must be
 Based on review of the submitted materials and best available information the above sensitive area(s) found near the site. This Sensitive Area Pre-Screening Site Assessing sensitive areas if they are subsequently discovered. This document will serve as y 8.02.1. All required permits and approvals must be obtained and completed und 	e referenced project will not significantly impact the existing or potentially ment does NOT eliminate the need to evaluate and protect additional water quality your Service Provider letter as required by Resolution and Order 19-05, Section fer applicable local, state and federal law.
This Service Provider Letter is not valid unless CWS approve	ed site plan(s) are attached.
The proposed activity does not meet the definition of development or the lot was PROVIDER LETTER IS REQUIRED.	is platted after 9/9/95 ORS 92.040(2). NO SITE ASSESSMENT OR SERVICE
Reviewed by	Date 8 13 2019
Once complete, email to: SPLReview@cleanv OR mail to: SPL Review, Clean Water Services, 255	vaterservices.org • Fax: (503) 681-4439 0 SW Hillsboro Highway, Hillsboro, Oregon 97123



Edwards Architecture/ISEA-110 (Tuglatin Service Center/ISEA110-DWGS/EXHIBITS).Op



Water supply modeling is necessary for larger projects to determine the impact of the project's water demand on the water supply system. Water supply modeling will be performed by a consulting engineer based on the most recent version of the Tualatin Water System Master Plan.

Due to possible impacts to the water supply system, the following projects in Tualatin require hydraulic modeling based on the size and type of the project and projected water use for the finished project. The outcome of modeling could require offsite improvements to the water supply system in order to ensure that adequate water supply is available to serve the project and reduce impacts to the overall system.

Hydraulic modeling of the water su	upply system is required for the	e following project type/sizes/demand:
------------------------------------	----------------------------------	--

Project Type	Criteria	Permit Fee
Commercial or Industrial	Building floor area greater than 48,300 square feet	¢ 200
Building	<u>or</u> Anticipated daily water demand greater than 870 gallons per acre per day	per building
Residential development	More than 49 dwelling units	\$ 1,000
Multi-family development	More than 49 dwelling units <u>or</u> a combined building floor area greater than 48,300 square feet	\$ 300 per building

Please complete this form and submit the form <u>and</u> required fee (if applicable) with your land-use application (architectural review, subdivision, etc.).

Commercial or Industrial Development

- Building floor area <u>9,308</u> square feet
- Anticipated water demand (if known) ______ gallons per day
- Described planned building use <u>City of Tualatin Service Center</u>

Residential Development

Number of dwelling units or single family home lots ______

] Multi-Family Residential Development

- Number of dwelling units______
- Building floor area (sum of all building) ______
- Number of multi-family buildings______

Permit fee required based on the information provided above \$_____0

• If no fee is required, enter \$0.

NOTE: Water Supply Modeling does not replace the requirement for fire hydrant flow testing. Flow testing of fire hydrants will still be required to verify adequate fire flow of finished system



AFP Systems, Inc. Automatic Fire Protection 19435 SW 129th Avenue Tualatin, OR. 97062 (503) 692-9284 (503)692-1186 fax

<u>City Having Jurisdiction:</u>

Test Date:		
Business Name		
Building Name:		
Building Address:		
Contact Name:	Phone:	

Number of Fire Hydrants on this system? _____(if more than 3, use additional forms)

		#1		#2		#3
Location of Hydrant						
Access Unobstructed?	YES	NO	YES	NO	YES	NO
Faced Correctly?	YES	NO	YES	NO	YES	NO
Set Properly?	YES	NO	YES	NO	YES	NO
Location of Residual Pressure Gauge						
Static Pressure						
Residual Pressure						
Sizes of Outlets Flowed						
Number of Outlets Flowed						
Pitot Reading						
GPM Flowed						
Threads in good repair?	YES	NO	YES	NO	YES	NO
Lubricated?	YES	NO	YES	NO	YES	NO
Caps replaced?	YES	NO	YES	NO	YES	NO
Leakage in base, dome or sleeve when under						
pressure?	YES	NO	YES	NO	YES	NO
Hydrant Operates Properly?	YES	NO	YES	NO	YES	NO
Operating nut Lubricated?	YES	NO	YES	NO	YES	NO
Hydrant drains properly after test?	YES	NO	YES	NO	YES	NO

Required Corrections and Explanation of Problems:

1	
2	
3	
4	
5	
6	

Corrections Made:

1		
2		
3		
4		
5		
6		

Has the building owner / representative been notified of any deficiencies?	YES	NO
If YES, who was notified?		

IF NO.	Why wasn't the owner	representative notified?	
	~	L	-

Certified Personnel Conducting Test

(PLEASE PRINT NAME)

Certification # _____ Signature _____

Name of Company: _____ Phone: _____



MEMORANDUM CITY OF TUALATIN

AR19-0009 Exhibit A3

CR.

TO: City of Tualatin Planning Department

FROM: Clayton Reynolds, Maintenance Services Manager

DATE: November 14, 2019

SUBJECT: Tualatin Service Center – Trash Enclosure TDC

The following information will confirm the existing enclosure meets the TDC 73D.30 Location, Design, and Access standards. Included is a letter and access route from Republic Services.

The current trash enclosure on-site is 30ft. wide by 20ft. deep, it currently holds, one 3-yard cardboard recycle bin and two 5-yard trash receptacles. The area is paved, there is room to add recycle carts, etc. including food composting if we choose to in the future.

It is enclosed on two sides with a 6-foot high fence, the north side is naturally screened by the existing landscape, the east view is blocked with existing buildings. It's understood if there is a view change such as future parking expansion we would need to enclose the additional sides in future renovations. There is pedestrian access between the buildings and enclosure.

Included is the route the trucks use to access it now, note the letter indicates they can use the north gate as well.





10295 Southwest Ridder Road Wilsonville, OR 97070 o 503,570,0626 f 503,582,9307 republicservices.com

November 14, 2019

Clayton Reynolds City of Tualatin

Re: Public Works Department 10699 SW Herman Rd. Tualatin, OR 97062

Dear Clayton,

Thank you, for sending us the site plans for this proposed development in Tualatin.

Republic Services of Clackamas and Washington Counties has the franchise agreement to service this area with the City of Tualatin. We will provide complete commercial waste removal and recycling services as needed on a weekly basis for this location

The design plans sent 10/16/19, of the new facility construction located in the Southwest corner of the property will not impede our ability to access our trash and recycle equipment at this site. The trash and recycle enclosure for commercial front load service is adequate for the equipment that is currently present. The alteration of the primary site access to the Northwest gate, using SW108th Ave, as well as our vehicle traffic flow patterns on site is adequate to provide complete service.

Thanks Clayton, for your help and concerns for our services prior to this project being developed.

Sincerely,

Kelly Herrod Operations Supervisor Republic Services Inc.



Neighborhood Developer Meetings Community Development Department - Planning Division

AFFIDAVIT OF MAILING NOTICE

STATE OF OREGON)SS COUNTY OF WASHINGTON)

1, Clayrow Reynolds being first duly sworn, depose and say:

That on the <u>3014</u> day of <u>Octobere</u>, 2019, I served upon the persons shown on Exhibit "A" (Mailing Area List), attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer Meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true and correct copy of the original hereof. I further certify that the addresses shown on said Exhibit "A" are their regular addresses as determined from the books and records of the Washington County and/or Clackamas County Departments of Assessment and Taxation Tax Rolls, and that said envelopes were placed in the United States Mail with postage fully prepared thereon.

Mumile

NICOLE JANE MORRIS NOTARY PUBLIC-OREGON COMMISSION NO. 953577 MY COMMISSION EXPIRES AUGUST 24, 2020

SUBSCRIBED AND SWORN to before me this _____ day of _____ NOVEMBER 20_19_.

Notary Public for Oregon My commission expires:

RE: _

Neighborhood Developer Meetings Community Development Department - Planning Division

CERTIFICATION OF SIGN POSTING



In addition to the requirements of <u>TDC 31.064(2)</u>, the 18" x 24" sign must display the meeting date, time, and address as well as a contact phone number. The block around the word "NOTICE" must remain **orange** composed of the **RGB color values Red 254**, **Green 127**, **and Blue 0**. Staff has a Microsoft PowerPoint 2007 template of this sign design available through the Planning Division homepage at:

https://www.tualatinoregon.gov/planning/land-use-application-sign-templates

inlation Service Center As the applicant for the project, I hereby certify that on this day, 10/30/ 19 sign(s) was/were posted on the subject property in accordance with

the requirements of the Tualatin Development Code and the Community Development Division.

Applicant's Name:(CLAYTON Reynolds	
Applicant's Signature:	(Please Print)	
	Date: 10/30/19	

October, 30th, 2019

Property Owner Tualatin, OR 97062

RE: TUALATIN SERVICES CENTER - BUILDING/REMODEL/SITE IMPROVEMENTS

Dear Property Owner:

You are cordially invited to attend an additional neighborhood meeting on November 14, 2019, at 6:00 pm at the Tualatin Operations Facility. This meeting shall be held to discuss a proposed project located at 10699 SW Herman Road, Tualatin, OR 97062 (between SW Teton Avenue and SW 108th Avenue).

The meeting goal is to share the details of the project with interested neighbors. You will have the opportunity to review preliminary plans and identify topics of interest for consideration.

The scope of the project is to make minor improvements to the inside and outside of the existing building A, and adding approximately 9,000 Square feet to the east and north of the building. (See page two, conceptual plan for approximate on-site location) Feel free to contact me with any questions or commentary.

Regards,

Clay Reynolds

Clayton Reynolds City of Tualatin – Maintenance Services 503.691.3099 and <u>creynolds@tualatin.gov</u>



18355 SW TETON AVENUE TUALATIN O 17455 SW RIDGEVIEW LN LAKE OSWEGO,OR 97034-7694

CALMAX TECHNOLOGY INC 10850 SW LEVETON TUALATIN,OR 97062-8091

CJD HOLDINGS LLC 19200 SW TETON AVE TUALATIN,OR 97062-8836

FUJIMI CORPORATION 11200 SW LEVETON DR TUALATIN,OR 97062-8094

HR LLC 18280 SW 108TH AVE TUALATIN,OR 97062-8380

LAM RESEARCH CORPORATION 2025 GATEWAY PL #228 SAN JOSE,CA 95110-1000

MANHASSET BUSINESS CENTER OWNERS 1498 SE TECH CENTER PL #150 VANCOUVER,WA 98683-5518

METRO 600 NE GRAND AVE PORTLAND,OR 97232-2736

PARAMOUNT DEVELOPMENT LLC 5810 SW 88TH AVE PORTLAND,OR 97225-1306

ROSEDALE PROPERTIES LLC PO BOX 151 WEST LINN,OR 97068-0151 AAA OREGON/IDAHO 600 MARKET ST PORTLAND,OR 97201-5218

CEDAR LANDSCAPE MAINTENANCE LLC 15430 SW GARIBALDI CT BEAVERTON,OR 97007-6645

EVE LAND INVESTMENTS LLC PO BOX 19856 PORTLAND,OR 97280-0856

GARSKE TRAVIS W PO BOX 729 COLBERT,WA 99005-0729

JKLM INVESTMENT COMPANY LLC 18880 SW TETON AVE TUALATIN,OR 97062-8806

LEVETON LLC PO BOX 15523 SEATTLE,WA 98115-0523

MARKS 18200 LCC 18200 SW TETON AVE TUALATIN,OR 97062-8881

MORGAN WILLIAM RAY & JANICE ELL 4500 SW ADVANCE RD WILSONVILLE,OR 97070-7753

PARRISH-CHURCH LLC PO BOX 2687 TUALATIN,OR 97062-2687

TETON PROPERTY LLC PO BOX 40 CLACKAMAS,OR 97015-0040 ASCENTEC ENGINEERING LLC 18500 SW 108TH AVE TUALATIN,OR 97062-8017

CHAMBERLAIN HUSSA PROPERTIES 18755 SW TETON AVE TUALATIN,OR 97062-8848

FUENTE ROSE LLC 33120 NE LESLEY RD NEWBERG,OR 97132-7463

HELSER LIMITED PARTNERSHIP PO BOX 1569 TUALATIN,OR 97062-1569

KAI USA LTD 18600 SW TETON AVE TUALATIN,OR 97062-8841

LUMBER FAMILY CO LLC PO BOX 1404 TUALATIN,OR 97062-1404

MARSHALL ASSOCIATED LLC PO BOX 278 TUALATIN,OR 97062-0278

PACIFIC NW PROPERTIES LIMITED PA 6600 SW 105TH AVE STE 175 BEAVERTON,OR 97008-8834

PASCUZZI INVESTMENT LLC 10250 SW NORTH DAKOTA TIGARD,OR 97223-4328

TETON PARK LLC 19602 DERBY CT WEST LINN,OR 97068-2207

AR19-0009 Exhibit A3

TOTE 'N STOW INC PO BOX 1447 PORTLAND,OR 97207-1447

WALGRAEVE GARY & 11345 SW HERMAN RD TUALATIN,OR 97062-8033 TUALATIN TETON LLC 621 SW ALDER ST STE 800 PORTLAND,OR 97205-3623

WASHINGTON COUNTY FACILITIES MGM 169 N 1ST AVE #42 HILLSBORO,OR 97124-3001 UNITED STATES POSTAL SERVICE 160 INVERNESS DR W STE 400 ENGLEWOOD,CO 80112-5005

WETLANDS CONSERVANCY INC 4640 SW MACADAM AVE #50 PORTLAND,OR 97239-4283



Exhibit A3 MEMORANDUM CITY OF TUALATIN

AR19-0009

- **TO:** City of Tualatin Planning Department
- FROM: Clayton Reynolds, Maintenance Services Manager
- **DATE:** October 14, 2019

SUBJECT: Tualatin Service Center – Neighborhood Meeting Minutes

Signage and directional signs were placed for the meeting location at the Operations Site Building A by 5:30 pm staff was on site until 7:15 pm.

There was not anyone that attended the meeting.

ARCHITECTURAL REVIEW CERTIFICATION OF SIGN POSTING



24"

The applicant shall provide and post a sign pursuant to Tualatin Development Code (TDC) 31.064(2). Additionally, the 18" x 24" sign must contain the application number, and the block around the word "NOTICE" must remain **primary yellow** composed of the **RGB color values Red 255, Green 255, and Blue 0.** Additionally, the potential applicant must provide a flier (or flyer) box on or near the sign and fill the box with brochures reiterating the meeting info and summarizing info about the potential project, including mention of anticipated land use application(s). Staff has a Microsoft PowerPoint 2007 template of this sign design available through the Planning Division homepage at < www.tualatinoregon.gov/planning/land-use-application-sign-templates>.

NOTE: For larger projects, the Community Development Department may require the posting of additional signs in conspicuous locations.

As the applicant for the <u>Tualatin Service Center</u> project, I hereby certify that on this day, <u>11/22/19</u> sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division. Applicant's Name: <u>Clayton Reynolds</u> (PLEASE PRINT)

Applicant's Signature: *Clay Reynolds*

Date: <u>11/2</u>5/19

CESNW

TUALATIN OPERATIONS

> Developer/Applicant: City of Tualatin 10699 SW Herman Road Tualatin, OR 97062 503.691.3091



Engineer:

Anthony R. Weller, P.E., P.L.S. CESNW, Inc. 13190 SW 68th Parkway, Suite 150 Tigard, OR 97223 503.968.6655

Prepared: Jan. 3, 2019

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Infiltration Report 1	.1
Web Soil Survey report 1	.4



Vicinity Map

Project Description

The project site is located at 10699 SW Herman Road, tax lot 2S1W22AD 200 and 300 consists of approximately 8.7 Acres. The site is located at the northeast corner of Herman Road and 108th Aveune. The is zoned ML, and is occupied with the City's public works offices, fleet maintenance and warehouse buildings. The proposed project consists of removal of the older barn/warehouse building and the construction of a new approximately 7300 sf footprint, two story building with associated parking lot modifications.

Existing Conditions

The existing site is flat with slopes range from 0.5% to 3% and general drains from the north to the south. The site is surrounded by developed industrial buildings. The site is about 70 percent developed with the north and northeast corner being mostly undevleoped with fir trees. However some of this area is also being used for the storage of landscape materials.

The site does contain soils that allow inflitration, so it is not connected to any public storm drainage system. The existing site drainage is managed through existing shallow drywells or newer biocell/ponds with no offiste dischargel.

According to the US Natural Resources Conservation Services the site contains about 75% Hillsboro Loam and 25% Quatama Loam. The Hillsboro Loam is classified as hydrologic soil group 'B' and Quatama Loam as hydrologic soil group 'C'. Inflitration testing was performed on a prior project in the southeast corner fo the site (Quatama Loam area) which were over 20 inches per hour to over 100 inches per hour. The inflitration Report and NRCS soils reprots area attached to this report.

Developed Conditions

The proposed project consists of construction of a new approximately 7300 sf footprint new building and associated parking lot improvements. In oder to meet the Clean Water Services requirements for storm water quality treatment, a portion of the existing building is scheduled to be removed to allow construction of a raingarden to manage storm water from the roof of the new building. For the new parking lot pavement and other modified areas of impervious surfaces new stormwater filter catch basins will be installed to treat the storm water before it enters the drywells.

TUALATIN OPERATIONS CENTER									
	BASIN SUMMARY								
Basin	Basin A B C D OFFSITE TOTAL								
TOTAL AREA	21228	14014	14178	22626		72046			
PRO IMP	19779	12133	12399	11027					
PRO PRV	1449	1881	1779	11599					
MOD IMPRV	1337	1337	7380	6747	572	17373			
REMOVE IMPRV	291	140	564	4436		5431			
NEW IMPR	2302	2728	72	1207		6309			
CWS COMPLIANCE									
Treatment = New Imp + 3*(Mod Imp - Removed									
Imp)									
Treatment =	42135								

Onsite and Downstream Analysis

The existing drywells are reported to be about 6-feet deep each. Most existing catchbasins are tied to a series of about 6 of these shallow drywells. There is no information on how well these existing drywells function however there is also no reported flooding issues. Based on the prior inflitration tests (report is attached), we believe that each catch basin drainage area can be managed with 2 standard depth drywells (18-20 feet deep). The two drywells for Basin A may need to be tied to the drywells in Basin B. The attached spreadsheets reflect one half of the drainage area so that two drywells will be required for each drainage basin (A, B & C).

Since there hasn't been any reported drainage problems with the existing drywells, the City may elect to utilize the exsting drywells until there is a drainage problem and install the new deeper drywells at a later day.

Basin D is proposed to be served with a 38' by 14' biocell/rain garden (bottom with 3:1 side slopes). Both the drywells and pond are designed to fully contain the 100-year event onsite with no offsite discharge.

Water Quality Treatment

Clean Water Services requires storm water treatment for all new impervious area and treatment for any existing impervious area at 3 times the net modified existing impervious areas (Treatment area = New Imp Area + 3*(Mod Impr A – Removed Impr A). Since the exsiting drainage system is managed with drywells with no offsite discharge, we don't believe the Clean Water Services requirements apply to this project. However, DEQ does require treatment of storm water from paved areas that discharges into drywells.

Basins A through C will use drywells and mechanical treatment catch basins (Storm Water Management Cartridge type) to provide treatment. Basin D will utilize a storm water Biocell that inflitrates which will provide its storm water treatment prior to disposal.

	TUALATIN OPERATIONS SITE						
Date:	3-Jan-19						
Project No.	3418						
Storm Water 0	Cartridge Filte	er					
Capacity				15	gpm		
WQ Depth				0.36	inches		
WQ Duration				4	hours		
	Impv	WQ		No			
Basin ID	Area	Vol	WQ Flow	Cartridges			
А	19779	593.37	0.04120625	2			
В	12133	363.99	0.025277083	1			
С	12399	371.97	0.02583125	1			
D	11027	330.81	0.022972917	Pond			

Operations and Maintenance

Operations and Maintenance for each of these facility types will follow Clean Water Serivces LIDA handbook recommendations and manufacturer's recommendation for the storm water filter cartridges.



DRYWELL STORAGE ROUTING

Project:	Operations
Project Number:	3418
Date:	1/3/19
Basin:	Basin A (1/2)
Event:	100-yr

INFLOW HYDROGRAPH

Hydrograph Data:		Pervious	Pervious Area:		Impervious Area:	
Site Area =	9642 SF	Area =	0.00721 acres	Area =	0.2141414 acres	
Area =	0.22135 acres	CN =	79	CN =	98	
Pt =	4.5 inches	S =	2.66	S =	0.20	
dt =	10 min	0.2S =	0.53	0.2S =	0.04	
Tc =	5 min					
w =	0.5 routing constant					

Hydrograph Results:

Peak Runoff: 0.258 cfs Total Volume: 3369.6 CF

DRYWELL ROUTING

	Routing Results:			
3 FT	MAX STORAGE =	442.9 Cu Ft		
3 FT	MAX OUTLET =	0.097 cfs		
12 FT	DEPTH IN DRYWELL =	23.30 Ft		
2 FT				
4 FT				
6 IN				
1 FT				
1.5 FT				
35%				
2				
20 Feet				
	3 FT 3 FT 12 FT 2 FT 4 FT 6 IN 1 FT 1.5 FT 35% 2 20 Feet	Routing Res 3 FT MAX STORAGE = 3 FT MAX OUTLET = 12 FT DEPTH IN DRYWELL = 2 FT 4 FT 6 IN 1 FT 1.5 FT 35% 2 20 Feet		

Drywell Inflow/Outflow Hydrograph





DRYWELL STORAGE ROUTING

Project: Operations Project Number: 3418 Date: 1/3/19 Basin: Basin B (1/2) Event: 100-YR

INFLOW HYDROGRAPH

Hydrograph Data:		Pervious	Pervious Area:		us Area:
Site Area =	6662 SF	Area =	0.01641 acres	Area =	0.1365243 acres
Area =	0.15294 acres	CN =	79	CN =	98
Pt =	4.5 inches	S =	2.66	S =	0.20
dt =	10 min	0.2S =	0.53	0.2S =	0.04
Tc =	5 min				
w =	0.5 routing constant				

Hydrograph Results:

Peak Runoff: 0.172 cfs Total Volume: 2249.9 CF

DRYWELL ROUTING

Drywell Data:		Routing Results:
Eccentric Cone:	3 FT	MAX STORAGE = 254.3 Cu Ft
Solid MH Section:	3 FT	MAX OUTLET = 0.085 cfs
Perforated MH Section:	12 FT	DEPTH IN DRYWELL = 13.50 Ft
Sump (no storage)	2 FT	
DW Dia	4 FT	
DW Wall Thickness	6 IN	
Drain Rock Wall Thickness	1 FT	
Drain Rock Base Thickness	1.5 FT	
Drain Rock Voids	35%	
Infli Safety Factor	2	
Total Drywell Depth:	20 Feet	

Drywell Inflow/Outflow Hydrograph





DRYWELL STORAGE ROUTING

Project: Operations Project Number: 3418 Date: 1/3/19 Basin: Basin C (1/2) Event: 100-YR

INFLOW HYDROGRAPH

Hydrograph Data:		Pervious .	Pervious Area:		us Area:
Site Area =	8597 SF	Area =	0.0207 acres	Area =	0.1766644 acres
Area =	0.19736 acres	CN =	79	CN =	98
Pt =	4.5 inches	S =	2.66	S =	0.20
dt =	10 min	0.2S =	0.53	0.2S =	0.04
Tc =	5 min				١
w =	0.5 routing constant				

Hydrograph Results:

Peak Runoff: 0.222 cfs Total Volume: 2906.7 CF

DRYWELL ROUTING

Drywell Data:		Routing Results:
Eccentric Cone:	3 FT	MAX STORAGE = 349.8 Cu Ft
Solid MH Section:	3 FT	MAX OUTLET = 0.097 cfs
Perforated MH Section:	12 FT	DEPTH IN DRYWELL = 18.50 Ft
Sump (no storage)	2 FT	
DW Dia	4 FT	
DW Wall Thickness	6 IN	
Drain Rock Wall Thickness	1 FT	
Drain Rock Base Thickness	1.5 FT	
Drain Rock Voids	35%	
Infli Safety Factor	2	
Total Drywell Depth:	20 Feet	

Drywell Inflow/Outflow Hydrograph





PLANTER/BIO-CELL STORAGE ROUTING

Project:Operations CenterProject Number:3418Date:1/3/19Basin:Basin DEvent:100 Year

INFLOW HYDROGRAPH

	_								
Hydrograph Data:	Pre-	Post-		PRE-DEV	ELOPED		Imperviol	us Area:	
Site Area =	22626	22626	SF	Pervious	Area:		Area =	14828 SF	
Area =	0.52	0.52	acres	Area =	0.1790	acres	Area =	0.3404 acr	es
Pt =	4.5	4.5	inches	CN =	79		CN =	98	
dt =	2	2	min	S =	2.66		S =	0.20	
Tc =	5	5	min	0.2S =	0.53		0.2S =	0.04	
w =	0.16667	0.167	Rout. Co	on.					
				POST-DE	VELOPE	D	Imperviou	us Area:	
Hydrograph Results:				Pervious	Area:		Area =	11599 SF	
Pre-Developed Peak Runoff:	0.592 cfs	5		Area =	0.2531	acres	Area =	0.2663 acr	es
Pre Developed Total Volume:	6797.2 CF			CN =	79		CN =	98	
				S =	2.66		S =	0.20	
Post-Developed Peak Runoff:	0.545 cfs	5		0.2S =	0.53		0.2S =	0.04	
Post Developed Total Volume:	6289.7 CF								

Bio-	Cell	Data:

Bottom Length	38.0	FT
Bottom Width	14.0	FT
Side Slope	3	Horizontal: 1 Vertical
Bottom Area	532	SF
Depth of Effective Side Perc	0	FT
Soil Media Depth	1.5	FT
Gravel Layer Depth	2.5	FT
Soil Media porosity	25%	
Gravel Layer porosity	40%	
Infiltration Rate	20	in/hr
Infli Safety Factor	2	

Overflow	Dat	ta:		
Diameter		0	IN	
Elevation		0	FT	
Circ.		0.00	FT	
Grate SF		0		
	-		-	

Routing Res	sults:
MAX STORAGE =	1441.2 Cu Ft
MAX OUTLET =	0.123 cfs
MAX Infiltration =	0.123 cfs
MAX Bypass =	0.000 cfs
MAX Depth =	1.000 ft

BioCell Inflow/Outflow Hydrograph



AR19-0009







9120 SW Pioneer Court, Suite B • Wilsonville, Oregon 97070 503/682-1880 FAX: 503 / 682-2753

June 25, 2007 Project No. 1872.1.1

CES NW, Inc. 15573 SW Bangy Road, Suite 300 Lake Oswego, Oregon 97035

Attention: Mr. Tony Weller

Subject: Infiltration Testing City of Tualatin Operations Center Tualatin, Oregon

Dear Mr. Weller:

As requested, Northwest Geotech, Inc., (NGI) has completed field infiltration testing for use in the design of stormwater facilities at the site. The infiltration test locations are shown on the Site Plan, Figure 1.

The infiltration testing was conducted at depths of 4.5 to 5 feet in test pits excavated using a combination of a backhoe and hand equipment. The test pits were excavated, cased, and water was introduced into the casing and allowed to soak overnight (in test pits 2 and 3) prior to conducting the infiltration tests. The infiltration testing was completed in general accordance with the City of Portland Falling Head Infiltration Test Procedure. The soils encountered in the test pits generally consisted of silty sand to slightly silty sand and groundwater was encountered at a depth of 9.1 feet in test pit TP-2. The infiltration test results are summarized below.

Location	<u>Depth</u> (feet)	Measured Infiltration Rate (inches/hour)
TP-1	5	292
TP-2	4.5	21
TP-3	4.5	24
TP-3	5	148

As noted above the measured infiltration rates at the site are quite variable. NGI recommends that the design infiltration rate be selected based on the proposed system layout. NGI normally recommends that a minimum factor of safety of 2.0 be applied to account for loss of efficiency over time due to siltation and biologic growth. However, a higher factor of safety may be desired due to the high variability of the measured infiltration rates.

This opportunity to be of service is sincerely appreciated. Please call if you have any questions.

Respectfully submitted,

NORTHWEST GEOTECH, INC.



Wayne R. Olsen, P.E. Project Engineer

Copies: (1) Addressee (E-mail and U.S. mail)







United States Department of Agriculture



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Washington County, Oregon



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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MAP LI	EGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest (AOI)	Spoil AreaStony Spot	The soil surveys that comprise your AOI were mapped at 1:20,000.
Soils Soil Map Unit Polygons	 Very Stony Spot Wet Spot 	Warning: Soil Map may not be valid at this scale.
Soil Map Unit Lines Soil Map Unit Points	Other Special Line Features	Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of
Special Point Features Blowout	Water Features Streams and Canals	contrasting soils that could have been shown at a more detailed scale.
Clay Spot	Transportation +++ Rails	Please rely on the bar scale on each map sheet for map measurements.
Closed Depression Gravel Pit Gravelly Spot	Interstate Highways US Routes	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
tandfill ∧ Lava Flow	Local Roads	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the
Image: Marsh or swampImage: Marsh or swampImage: Marsh or Quarry	Aerial Photography	Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.
Miscellaneous WaterPerennial Water		This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
✓ Rock Outcrop+ Saline Spot		Soil Survey Area: Washington County, Oregon Survey Area Data: Version 16, Sep 18, 2018
Sandy Spot		Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
SinkholeSlide or Slip		Date(s) aerial images were photographed: Aug 3, 2014—Aug 23, 2014
ø Sodic Spot		The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21B	Hillsboro loam, 3 to 7 percent slopes	6.6	75.4%
37A	Quatama loam, 0 to 3 percent slopes	2.1	24.6%
Totals for Area of Interest		8.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Washington County, Oregon

21B—Hillsboro loam, 3 to 7 percent slopes

Map Unit Setting

National map unit symbol: 21y6 Elevation: 160 to 240 feet Mean annual precipitation: 40 to 50 inches Mean annual air temperature: 52 to 54 degrees F Frost-free period: 165 to 210 days Farmland classification: All areas are prime farmland

Map Unit Composition

Hillsboro and similar soils: 90 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Hillsboro

Setting

Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Parent material: Silty and loamy old alluvium

Typical profile

H1 - 0 to 15 inches: loam *H2 - 15 to 48 inches:* loam *H3 - 48 to 57 inches:* fine sandy loam *H4 - 57 to 81 inches:* fine sand

Properties and qualities

Slope: 3 to 7 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 2e Hydrologic Soil Group: B Hydric soil rating: No

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37A—Quatama loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 21zl Elevation: 140 to 250 feet Mean annual precipitation: 40 to 50 inches Mean annual air temperature: 52 to 54 degrees F Frost-free period: 165 to 210 days Farmland classification: All areas are prime farmland

Map Unit Composition

Quatama and similar soils: 85 percent *Minor components:* 4 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Quatama

Setting

Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Parent material: Loamy alluvium

Typical profile

H1 - 0 to 15 inches: loam *H2 - 15 to 30 inches:* clay loam *H3 - 30 to 62 inches:* loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w Land capability classification (nonirrigated): 2w Hydrologic Soil Group: C Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR) Hydric soil rating: No

Minor Components

Huberly

Percent of map unit: 4 percent Landform: Terraces

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Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: Yes

References

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AR19-0009 Exhibit A3 Custom Soil Resource Report

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Exhibit A3 City of Tualatin COMMUNITY DEVELOPMENT PLANNING DIVISION Pre-Application Meeting Request

AR19-0009

The purpose of the Scoping and Pre-Application meetings is to offer early assistance in the land use and permitting process. This includes thoughtful feedback on preliminary design direction and visioning, outlining expectations, and to assist the applicant in attaining a complete application at first submittal.

PROJECT DESCRIPTION

Project name/title: ______Tualatin Service Center

What is the primary purpose of this pre-application meeting (What would you like to accomplish)? (Attach additional sheets if needed.) Confirm planning and zoning requirements of the property, review proposed building configuration, review parking criteria as related to service vehicles within a private yard.

PROPERTY INFORMATION

Property address/location(s):

10699 SW Herman Rd. Tualatin, OR 97062

Tax map and tax lot no.(s): 2S122AD00200 R530134 Zoning: B

PROPERTY OWNER/HOLDER INFORMATION

Name(s): City of Tualatin

Address: _____ Phone: _____ City/state: _____ Zip: _____

APPLICANT INFORMATION

Name:	Scott Edwards Architecture LLP		
Address:	2525 E Burnside	Phone:	503 226-3617
City/state: Portland OR 97214		Zip:	97214
Contact p	erson: Andrew Kraus / Allyson O	ar I	
Phone:	503 226-3617 Email: aoar@sea	allp.com	

Pre-application Conference Information

All of the information identified on this form is required and must be submitted to the Planning Division with this application. Conferences are scheduled subject to availability and a minimum of two weeks after receiving this application and all materials. Pre-application conferences are one (1) hour long and are typically held on Wednesdays between 2-4 p.m.

REQUIRED SUBMITTAL ELEMENTS

(Note: Requests will not be accepted without the required submittal elements)

A complete application form and accompanying fee.

1 hard copy and an electronic set of the following:

Preliminary site and building plans, drawn to scale, showing existing and proposed features. (Plans do not need to be professionaly prepared; just accurate and reliable.)

A detailed narrative description of the proposal that clearly identifies the location, existing and proposed uses, and any proposed construction.

A list of all questions or issues the applicant would like the City to address.

FOR STAFF USE ONLY

Case No.:
Related Case No.(s):
Application fee:
Application accepted:
By: Date:
Date of pre-app:
Time of pre-app:
Planner assigned to pre-app:

If more than four (4) people are expected to attend the pre-application conference in your group, please inform the City in advance so that alternate room arrangements can be made to accommodate the group.

What type of development are you proposing? (Check all that apply)

[] Industrial / Commercial [] Residential / Institutional [] Mixed-use

Please provide a brief description of your project: (Attach additional sheets if needed.) Please include description of existing uses and structures in addition to what is proposed.

This project will expand the existing administration building of the Tualatin Service Center to allow city staff currently located off-site to be relocated to this facility. Expansion is primarily office space, adding Planning and Development, Engineering Services and Traffic Court to current Operations function. Increased public visits are expected, with a resulting increase in associated lobby, waiting area, toilet room and parking areas.

Are you familiar with the development process in Washington or Clackamas County or Tualatin?

Yes [] No

If yes, please identify an example project: Washington County 911 Center

[]No

Are you familiar with the sections of the Tualatin Development Code (TDC) that pertain to your proposed development?

Yes

Is the property under enforcement action? If yes, please attached a notice of the violation. No

Please provide the names of City, TVF&R, CWS, and County staff with whom you have already discussed this proposal:

Clay Reynolds Facilities Maintenance Manager	Sherilyn Lombos City Manager
Aquilla Hurd-Ravich Community Development Director	Tanya Williams Deputy City Manager
Don Hudson Finance Director	Jeff Fuchs Public Works Director
Bates Russell Information and Maintenance Services Director	Ross Hoover Parks and Recreation



Job: 19072 Tualatin Services Center

Date: 09.19.19

Prepared By: Andrew Kraus

Pre-Application Narrative

Tualatin Services Center 10699 SW Herman Rd. Tualatin, OR 97062

The City of Tualatin wishes to expand the Administration building on their current service center property. The expansion is intended to unite staff members currently located off-site, thereby increasing efficiency and allowing for better staff interaction.

The proposed floor plan represents a compromise of a wide range of design parameters, including the decision to expand, rather than replace the existing building.

The new construction is envisioned to be of Type V construction, sprinkled. Pending a detailed cost analysis, a three-hour rated fire barrier will separate new from existing construction; or the new fire sprinkler system will be extended through the entire building.

The large multi-purpose space is untended to also serve as traffic court. This space, in addition to the central lobby area, will be classified as an 'Assembly' space. All other areas of the building will be classified 'Business' occupancy.

We understand improvements were completed at the existing parking area fronting SW Herman Road in conjunction with recent construction of the warehouse building. Similar improvements appear to have been completed to a portion of the parking area fronting 108th.

As illustrated on the attached site diagram, we believe these parking areas meet the required parking stall requirements for the expanded facility, as well as complying with zoning and landscape requirements. This does, however, seem to raise a question regarding the remaining parking stalls - intended to provide service vehicle parking...

Questions to be discussed

- 1. How can we best identify service vehicle parking, to prevent confusion with 'optional' parking stalls that fall between minimum and maximum allowed stalls?
- 2. We intend to maintain all stormwater on-site via drywells. Can these drywells be located within building setbacks?
- 3. Are there any plans for expanding transit and/or providing a transit stop near this facility?

-- END OF DOCUMENT --