

May 13, 2024

RE: Dollar General – Stayton, OR – Drainage Memo

The following memo describes the drainage mitigation design on site for the proposed Dollar General project in Stayton, Or. The site is approximately 1.49 acres of Map Number 09W03DB Tax Lot 400. The site is bordered by Whitney Street to South, vacant land to the East, a highway parking lot to the North, and Cascade Highway to the West. The existing site drains generally to the North and East. The proposed site also drains to the North and East while all proposed runoff is mitigated and released less than the existing condition. The project’s access drive is located at the Southeast end of the site via a proposed driveway to Whitney Street. See Exhibit 1 for a vicinity map.

The site is currently undeveloped. In the current condition the majority of site runoff drains to the North and East see Exhibit 2 for the existing drainage area map. The proposed improvements will drain into the proposed detention basins on the East and West. The proposed condition site impervious area is ±32,746 S.F. The storm water will be mitigated on site by the two detention basins, see Exhibit 3 for the proposed drainage area map. See Table 1 below for each drainage area pre and post development 100-yr flows. The required water quality volume and provided water quality volume for the site has been provided in Table 2.

**Table 1:**

	Basin 1	Basin 2	Basin 3	Total Site
Pre-Development	0.75 CFS	1.03 CFS	0.41 CFS	2.15 CFS
Post-Development	0.02 CFS	0.55 CFS	0.41 CFS	0.98 CFS
Change in Outfall	-0.73 CFS	-0.48 CFS	0 CFS	-1.17 CFS
Area (Acres)	0.53	0.73	0.23	1.49

**Table 2:**

Water Quality Volume Required (CF)	Water Quality Volume Provided (CF)
928	1,084

Please contact me with any questions.

Sincerely,



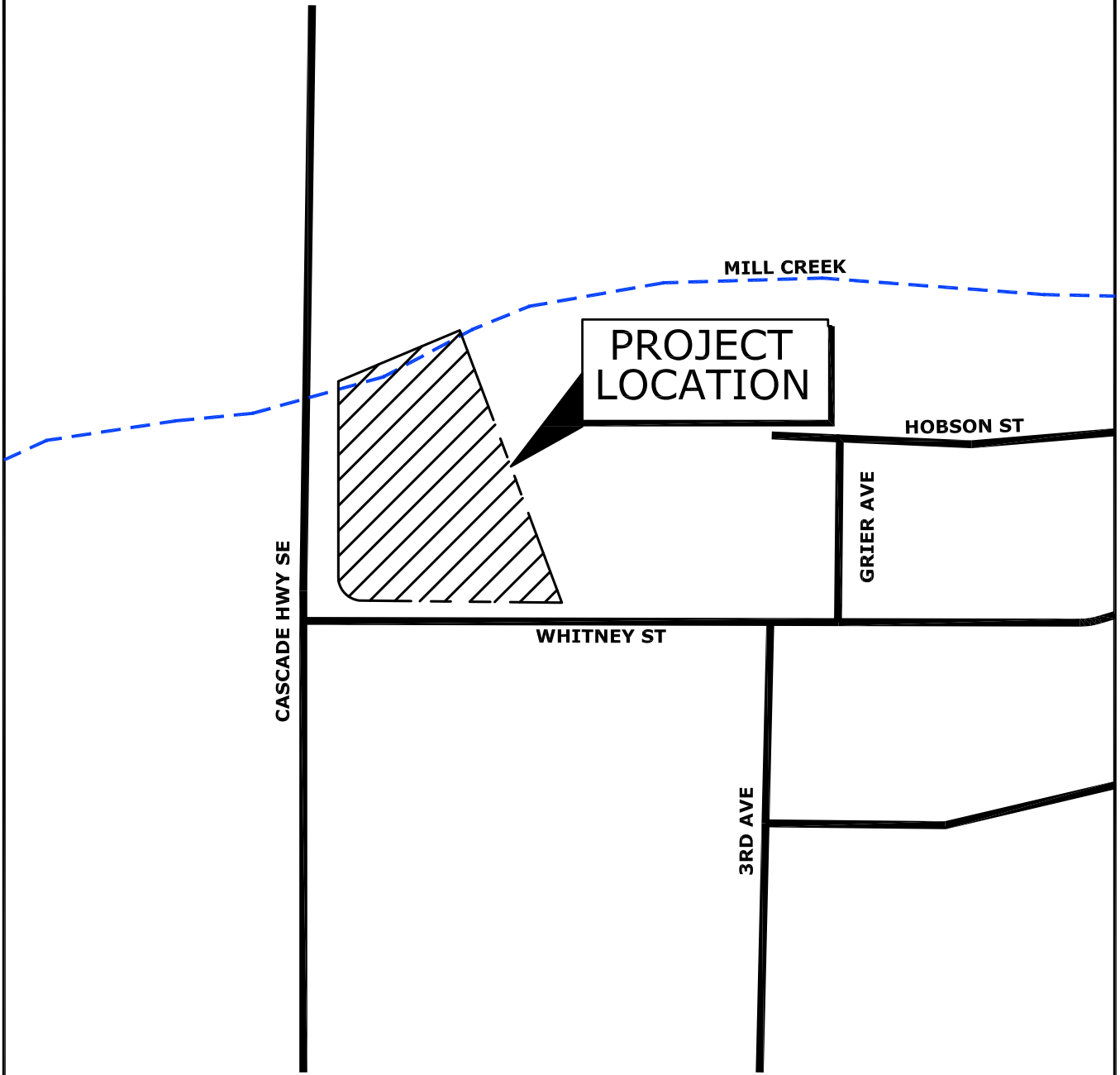
Matt K. Rasmussen, P.E.

DRAWN: J.W.R.

DATE: 05/13/24

DESCRIPTION: VICINITY MAP: 101 WHITNEY STREET, STAYTON, OR

SUBMITTAL: EX-1



VICINITY MAP

SCALE: N.T.S.



PROJECT/CLIENT:

JOB #: 23155

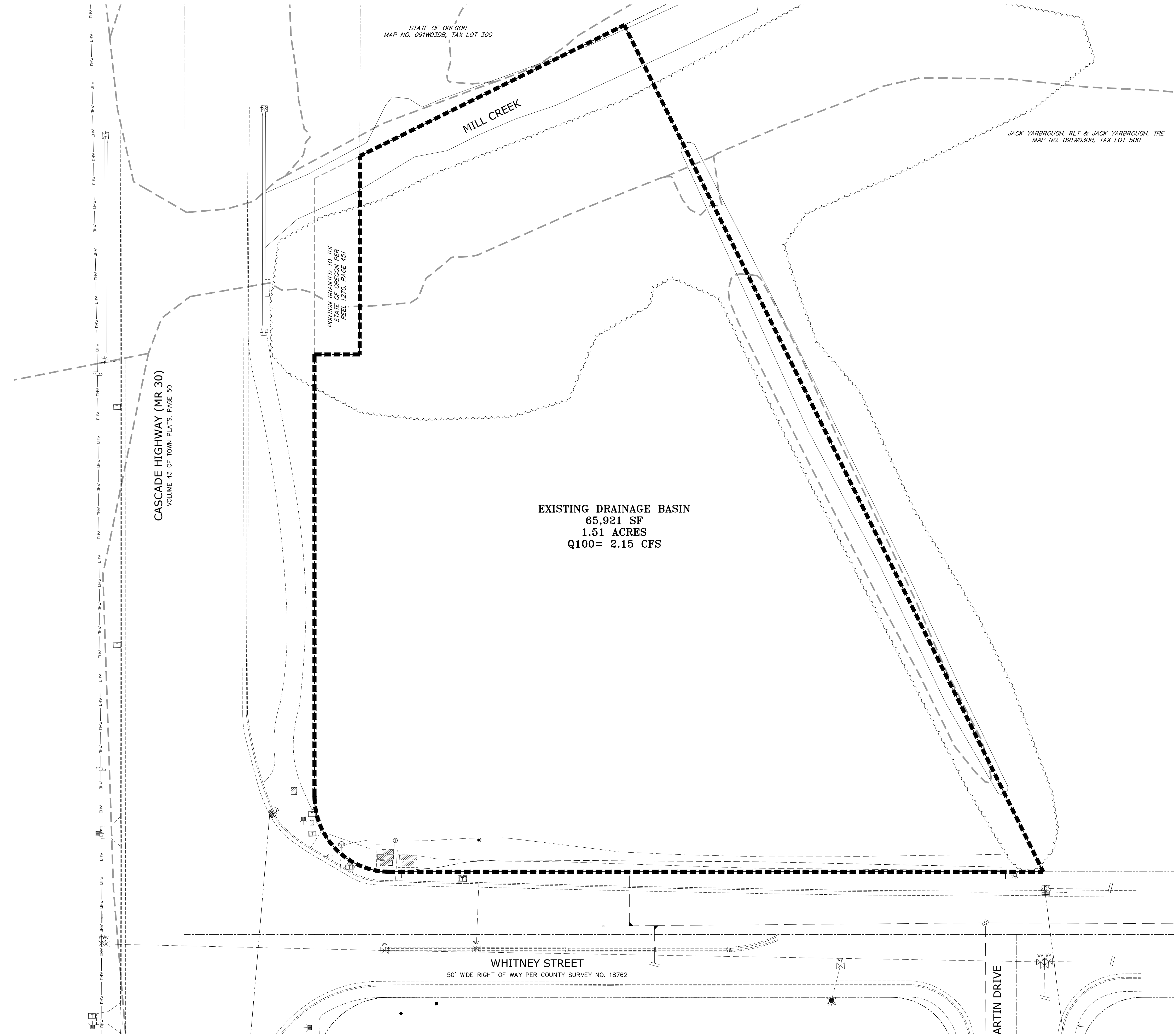
DOLLAR GENERAL  
STAYTON, OREGON

6S DEVELOPMENT  
1833 COLUMBUS RD, DALLAS, TX 75252

**TECTONICS**  
**DESIGN GROUP**

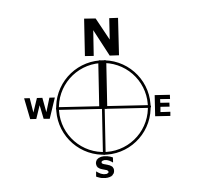
730 Sandhill Road, Suite 250, Reno, NV 89521  
www.tectonicsdesigngroup.com

tel 775-824-9988  
fax 775-824-9986

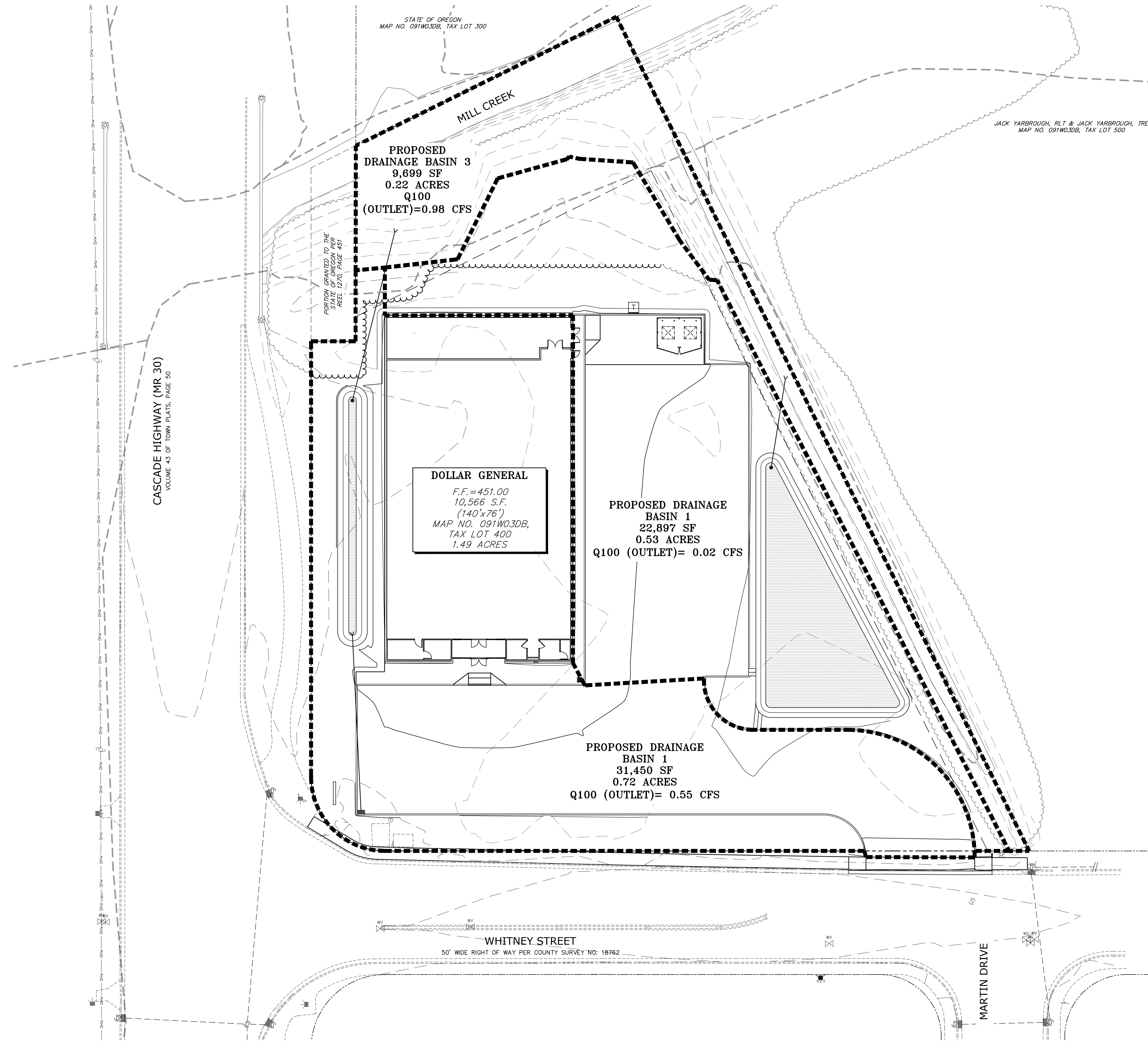


PROJECT QUANTITIES	
DRAINAGE AREA 1	
BUILDING AREA (C=0.90):	0 S.F.
LANDSCAPE AREA (C=0.55):	65,821 S.F.
IMPERVIOUS AREA (C=0.90):	100 S.F.
TOTAL (C VALUE=0.55)	65,921 S.F.

EXISTING DRAINAGE MAP  
SCALE: NTS

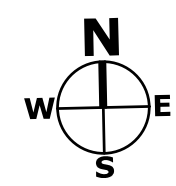


SHEET:	EXISTING BASIN MAP	SHEET TITLE:	EX2
	CITY APPROVAL		
SUBMITTAL RECORD:	DATE:	01/30/24	SCHEMATIC ENG.
	DATE:	05/13/24	SITE PLAN REVIEW
PROJECT/CIENT:	# : 23155	PROJECT/CIENT:	Dollar General 101 Whitney Street, Stayton, OR 6S Development 18333 Preston Road, Suite 500 Dallas, Texas, 75252
DESIGNER:	 730 Sandhill Rd., #250, Reno, Nevada 89521 tel 775-854-9888 fax 775-854-9986 www.tectonicsdesigngroup.com		
STAMP:	DRAWN: G.A.S. DESIGNED: J.P.B. / D.J.M. CHECKED/STAMPED:		
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PROJECT QUANTITIES	
<b>DRAINAGE AREA 1</b>	
BUILDING AREA (C=0.90):	0 S.F.
LANDSCAPE AREA (C=0.55):	13,221 S.F.
IMPERVIOUS AREA (C=0.90):	9,676 S.F.
TOTAL (C VALUE=0.55)	22,897 S.F.
<b>DRAINAGE AREA 2</b>	
BUILDING AREA (C=0.90):	10,640 S.F.
LANDSCAPE AREA (C=0.55):	8,380 S.F.
IMPERVIOUS AREA (C=0.90):	12,430 S.F.
TOTAL (C VALUE=0.55)	31,450 S.F.
<b>DRAINAGE AREA 3</b>	
BUILDING AREA (C=0.90):	0 S.F.
LANDSCAPE AREA (C=0.55):	9,699 S.F.
IMPERVIOUS AREA (C=0.90):	0 S.F.
TOTAL (C VALUE=0.55)	9,699 S.F.

DEVELOPED BASIN MAP  
SCALE: NTS




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DRAWN: G.A.S.  
DESIGNED: J.P.B. / D.J.M.  
CHECKED/STAMPED:

SITE PLAN REVIEW

**TECTONICS DESIGN GROUP**  
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**Dollar General**  
101 Whitney Street, Stayton, OR  
6S Development  
18333 Preston Road, Suite 500  
Dallas, Texas, 75252



PROJECT/CLIENT:  
#: 23155

DATE: 01/30/24 SUBMITTAL  
05/13/24 SCHEMATIC ENG.  
SITE PLAN REVIEW

SUBMITTAL RECORD:

CITY APPROVAL:

DEVELOPED BASIN MAP

SHEET TITLE:  
SHEET:  
EX3