BASIN INFORMATION

SUB-BASIN 1

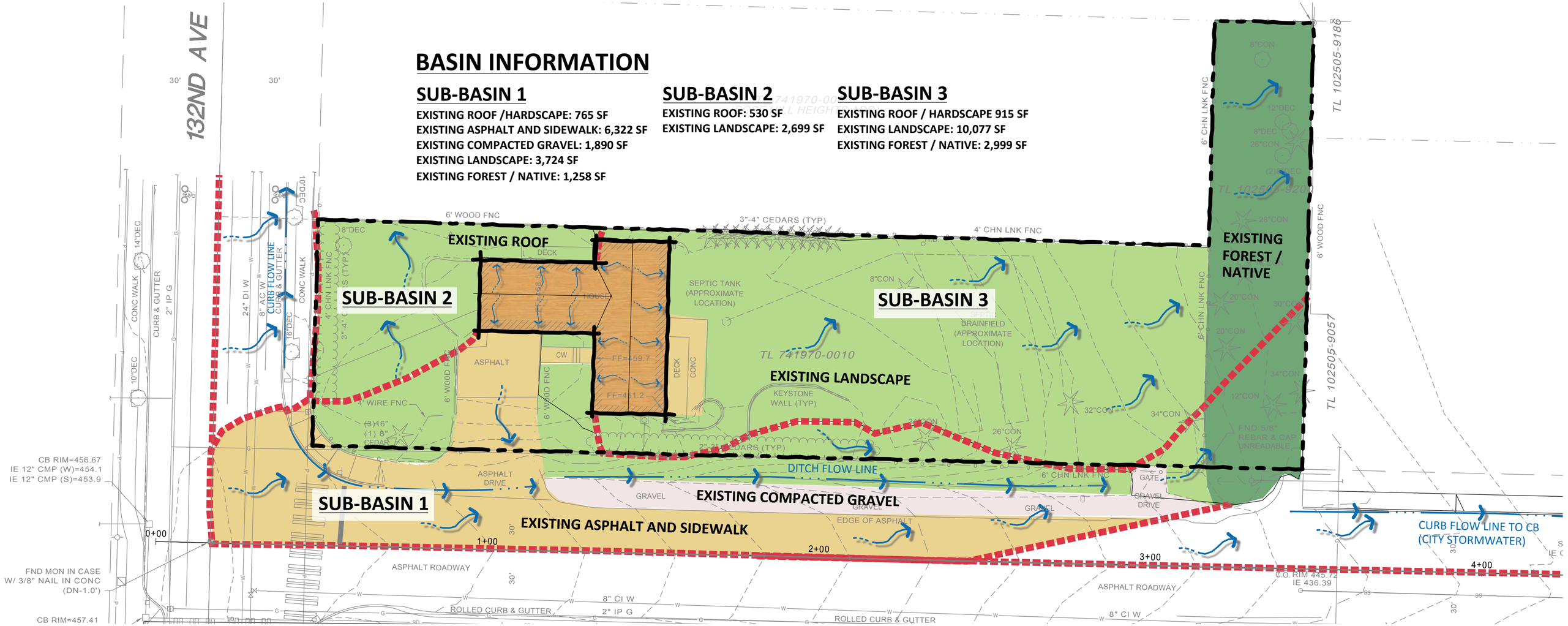
EXISTING ROOF /HARDSCAPE: 765 SF
EXISTING ASPHALT AND SIDEWALK: 6,322 SF
EXISTING COMPACTED GRAVEL: 1,890 SF
EXISTING LANDSCAPE: 3,724 SF
EXISTING FOREST / NATIVE: 1,258 SF

SUB-BASIN 2

EXISTING ROOF: 530 SF
EXISTING LANDSCAPE: 2,699 SF

SUB-BASIN 3

EXISTING ROOF / HARDSCAPE 915 SF
EXISTING LANDSCAPE: 10,077 SF
EXISTING FOREST / NATIVE: 2,999 SF



RATIONAL METHOD Nouri Short Plat City of Redmond

Basin ID	Area SF	Area Acres	Forested C=0.15	Pervious C=0.25	Gravel C=0.80	Impervious C=0.90	C Ave	Tc Min	I 2yr in/hr	Q2 CFS	I 25yr in/hr	Q25 CFS	I 100 yr in/hr	Q100 CFS
Pre-Dev 1	13959.00	0.32	1258	3724	1890	7087	0.65	10	1.1	0.23	2.03	0.42	2.72	0.56
Pre-Dev 2	3229.00	0.07	0	2699	0	530	0.36	10	1.1	0.03	2.03	0.05	2.72	0.07
Pre-Dev 3	13991.00	0.32	2999	10077	0	915	0.27	10	1.1	0.10	2.03	0.18	2.72	0.24
Post Dev 1	14214.00	0.33	0	3790	0	10424	0.73	10	1.1	0.26	2.03	0.48	2.72	0.64
Post Dev 2	1528.00	0.04	0	1528	0	0	0.25	10	1.1	0.01	2.03	0.02	2.72	0.02
Post Dev 3	8465.00	0.19	3676	4789	0	0	0.21	10	1.1	0.04	2.03	0.08	2.72	0.11

Q = C*I*A C = (Runoff Coefficient for the Rational Method) A = acres (contributing area) I = in/hr (Rainfall Intensity for the Design Storm Duration)

EXHIBIT DESCRIPTION

STORMWATER RUNOFF QUANTITIES PROVIDED USING THE RATIONAL METHOD TO DEMONSTRATE THE INTENSITY OF FLOW AND DIRECTION OF THE STORMWATER DURING THE EXISTING PRE-DEVELOPED CONDITION AND THE PROPOSED DEVELOPED CONDITION. THE RATIONAL METHOD WAS USED AS A TOOL FOR COMPARISON ONLY. THE DRAINAGE REPORT REQUIRED FOR THIS PROJECT HAS BEEN PREPARED TO CONFORM TO THE CITY OF REDMOND REQUIREMENTS.

THIS EXHIBIT SHOWS THAT THE MAJORITY OF THE SURFACE STORMWATER RUNOFF FLOWS TO THE NORTHEAST (SUB-BASIN 1 AND 3) WITH A SMALL AREA FLOWING TO THE NORTH AT THE WEST END OF THE PROJECT (SUB-BASIN 2).

PACE An Engineering Services Company

EXHIBIT 1a PRE-DEVELOPED SITE DRAINAGE MAP 10-9-2015

N

HORIZ. 0 10 20 40 Scale In Feet