Drainage Area	Area (sf)	Area (Acres)	Area (Sq. Mi.)	Impervious Cover Concrete (%)	Impervious Cover Asphalt (%)	Impervious Cover Composite C Value 25-year	Impervious Cover Composite C Value 100-year	Percent Impervious	Pervious Classification	Pervious C Value 25-year	Pervious C Value 100-year	Composite C Value 25-year	Composite C Value 100-year
1	21780	0.500	0.000781	0.00	100.00	0.86	0.95	70%	Good condition, Slopes 2-7%	0.39	0.46	0.72	0.80
2	74052	1.700	0.002656	0.00	100.00	0.86	0.95	56%	Good condition, Slopes 2-7%	0.39	0.46	0.65	0.73

TIME OF CONCENTRATION CALCULATIONS

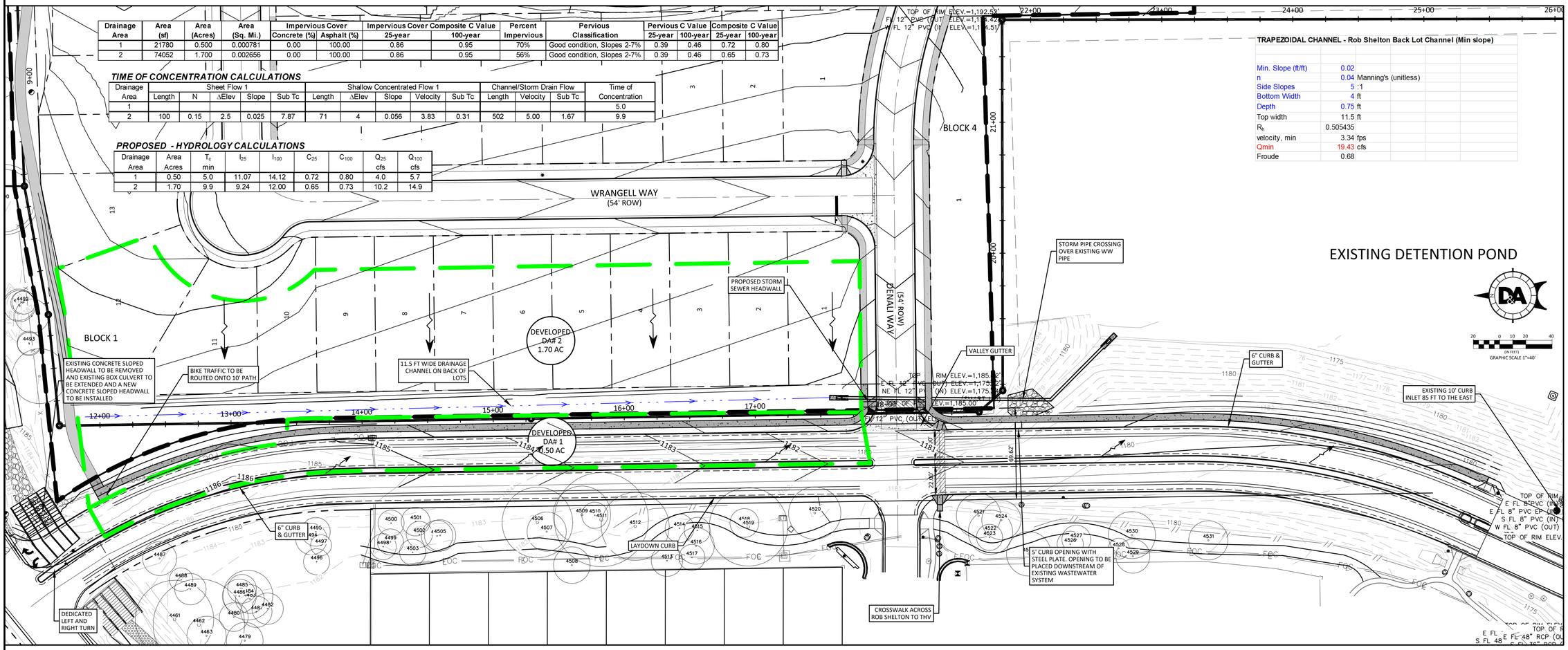
Drainage Area	Sheet Flow 1 Length	N	ΔElev	Slope	Sub Tc	Shallow Concentrated Flow 1 Length	ΔElev	Slope	Velocity	Sub Tc	Channel/Storm Drain Flow Length	Velocity	Sub Tc	Time of Concentration
1														5.0
2	100	0.15	2.5	0.025	7.87	71	4	0.056	3.83	0.31	502	5.00	1.67	9.9

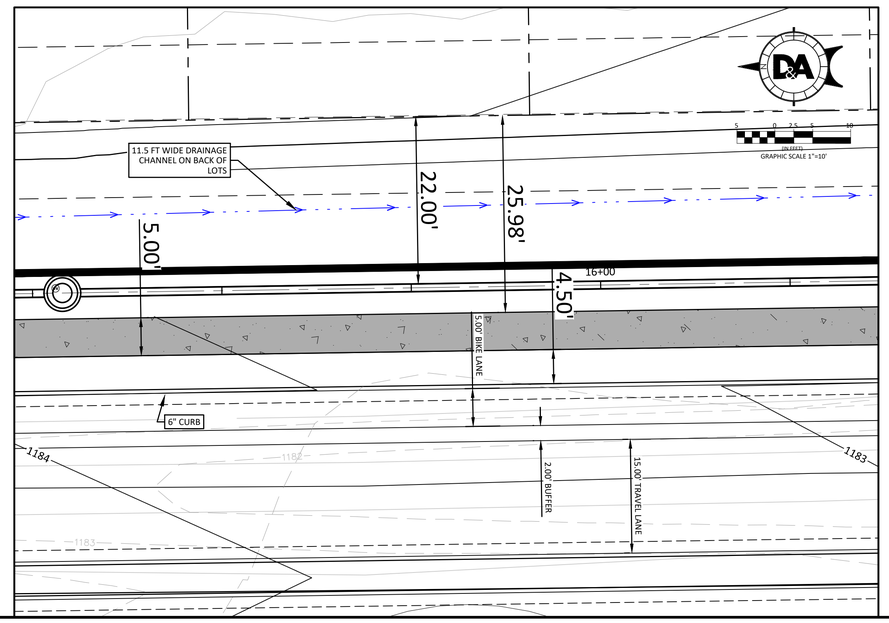
PROPOSED - HYDROLOGY CALCULATIONS

Drainage Area	Area Acres	T_c min	I_{25}	I_{100}	C_{25}	C_{100}	Q_{25} cfs	Q_{100} cfs
1	0.50	5.0	11.07	14.12	0.72	0.80	4.0	5.7
2	1.70	9.9	9.24	12.00	0.65	0.73	10.2	14.9

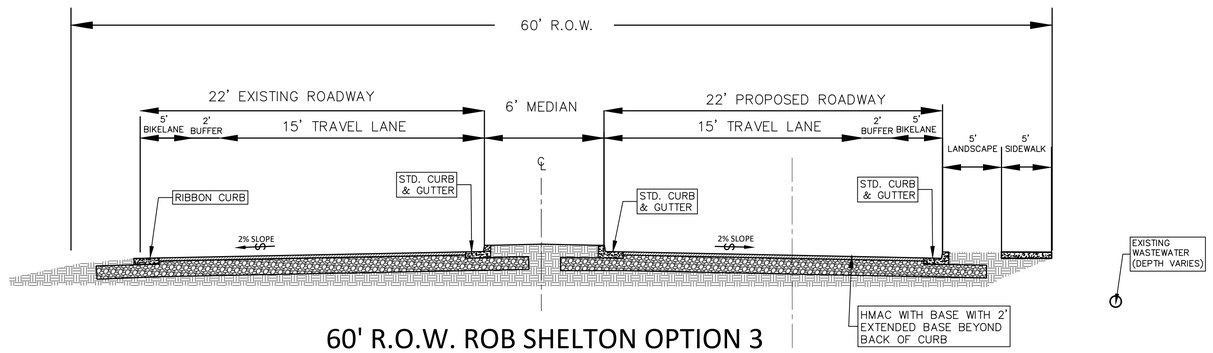
TRAPEZOIDAL CHANNEL - Rob Shelton Back Lot Channel (Min slope)

Min. Slope (ft/ft)	0.02	
n	0.04	Manning's (unitless)
Side Slopes	5	:1
Bottom Width	4	ft
Depth	0.75	ft
Top width	11.5	ft
R_h	0.505435	
velocity, min	3.34	fps
Qmin	19.43	cfs
Froude	0.68	





NOTE:
60' R.O.W. MAJOR COLLECTOR IS PROPOSED TO MATCH EXISTING SECTION THAT WAS BUILT WITH TEXAS HERITAGE VILLAGE



60' R.O.W. ROB SHELTON OPTION 3
TYPICAL SECTION
N.T.S.

D&A & DOUCET & ASSOCIATES
Civil Engineering - Entitlements - Surveying/Mapping
7401 B. Highway 71 W, Suite 160
Austin, Texas 78735, Phone: (512)-583-2600
www.doucetengineers.com
Firm Registration Number: 3937

CANNON RANCH
DRIPPINGS SPRINGS, TX

ROB SHELTON
FULL BUILD EXHIBIT - OPTION 3

Scale:	As Noted
Designed:	JH
Drawn:	JBB
Reviewed:	JH
Date:	2/7/2022

SHEET 1 OF 1

Project No: 1298-003

Drawing: C:\pw_working\jonathon.banister\d0108826\1298-003 Rob Shelton Full Build Exhibit_1-28-2022.dwg
User: JBANISTER
Last Modified: Feb. 07, 22 - 09:33
Plot Date/Time: Feb. 07, 22 - 09:54:24