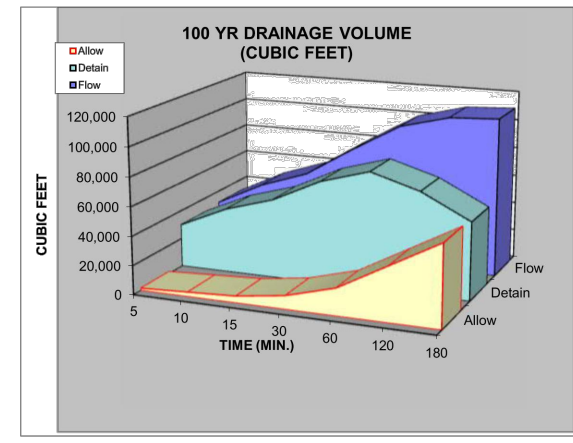


Suncrest Meadow (All Phases)
Harrisville, Weber County, Utah

Area	Sq. Ft.	Acres	C
Hard Surface	510,000	11.8262	0.85
Landscape	1,742,100	39.8930	0.15
Total Weighted	2,262,000	51.8292	0.31

100yr	Runoff Vol (cf)	Inch/Hr	Total Vol (cf)	Detain Vol (cf)
MIN	1,550	6.52	31,577	30,020
5	3,116	4.95	47,947	44,832
15	4,674	4.02	56,426	54,752
30	9,347	2.76	80,203	70,856
60	18,694	1.71	99,352	80,688
120	37,388	0.93	108,099	70,711
180	56,082	0.63	109,843	53,761
300	112,165	0.35	122,048	9,863
720	153,431	0.22	153,431	0
1440	167,388	0.15	167,388	0



Orifice Calculation

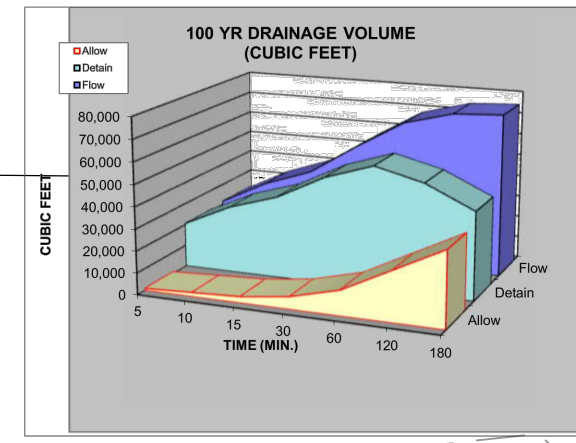
H = 3 Maximum water height (ft)
 Q = 5.19 Flowrate out of orifice (cfs)
 C_d = 0.62 Coefficient of Discharge
 C_v = 0.98 Coefficient of Velocity
 Area = 0.615 Orifice Area (ft²)
 H = 3.14
 g = 32.17 Gravitational Constant
 d = 10.62 Orifice Diameter (in)

100 YEAR STORM RECOMMENDED MIN. VOLUME DETAINED	CUBIC FEET	CUBIC YARDS
	80,688	2,988

Suncrest Meadow (Phases 1-3)
Harrisville, Weber County, Utah

Area	Sq. Ft.	Acres	C
Hard Surface	387,750	8.9015	0.85
Landscape	1,006,365	23.1029	0.15
Total Weighted	1,394,115	32.0043	0.34

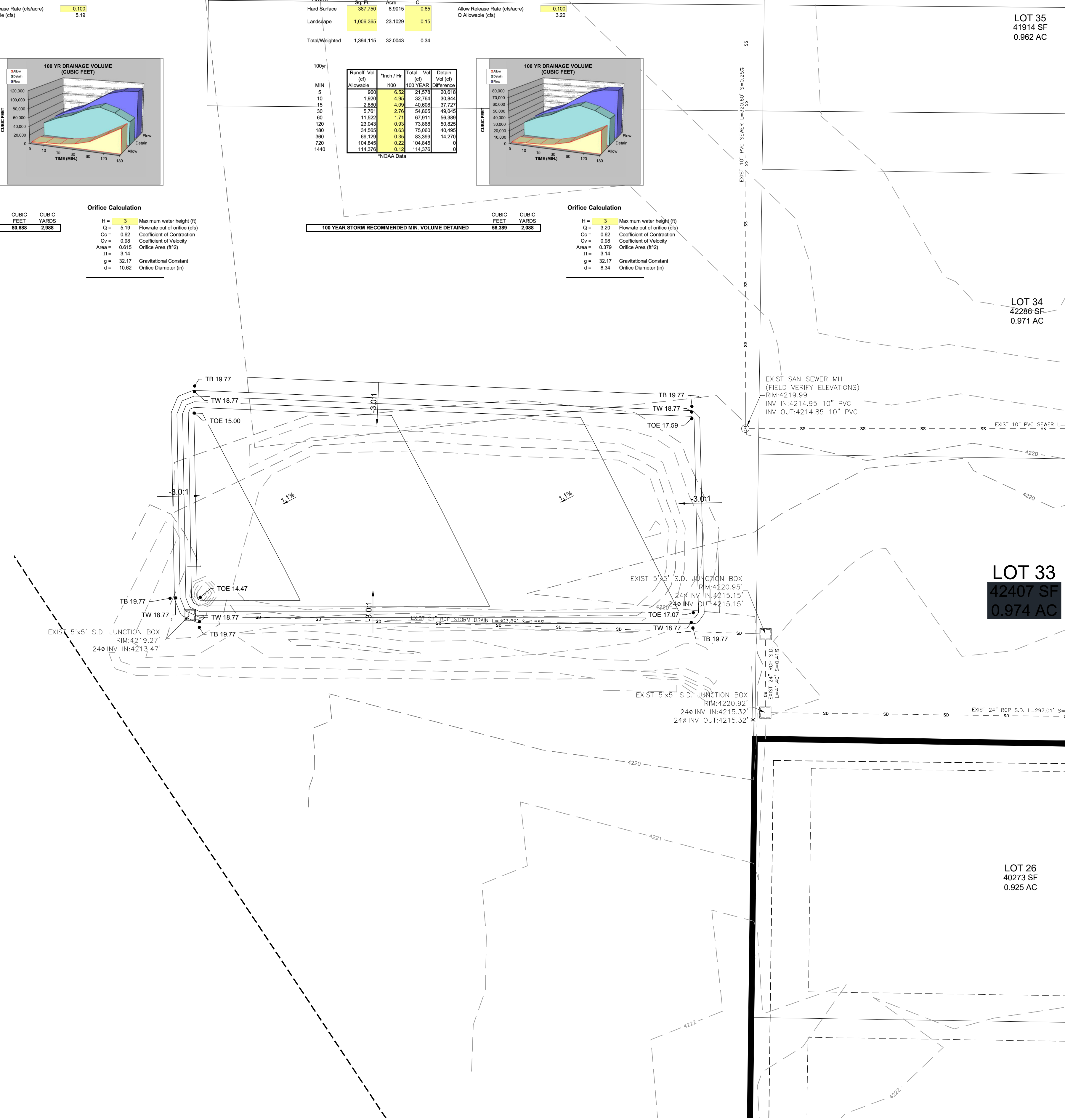
100yr	Runoff Vol (cf)	Inch/Hr	Total Vol (cf)	Detain Vol (cf)
MIN	960	6.52	21,579	20,619
5	1,920	4.95	32,764	30,944
15	2,880	4.02	40,958	37,727
30	5,761	2.76	54,852	49,045
60	11,522	1.71	67,911	56,389
120	23,043	0.93	73,868	50,825
180	34,565	0.63	75,000	40,496
300	69,129	0.35	83,366	14,070
720	104,843	0.22	104,843	0
1440	114,376	0.15	114,376	0



Orifice Calculation

H = 3 Maximum water height (ft)
 Q = 3.20 Flowrate out of orifice (cfs)
 C_d = 0.62 Coefficient of Discharge
 C_v = 0.98 Coefficient of Velocity
 Area = 0.379 Orifice Area (ft²)
 H = 3.14
 g = 32.17 Gravitational Constant
 d = 8.34 Orifice Diameter (in)

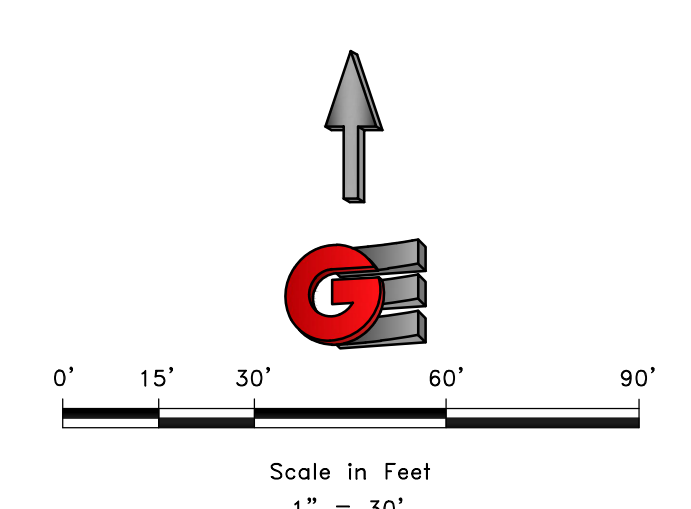
100 YEAR STORM RECOMMENDED MIN. VOLUME DETAINED	CUBIC FEET	CUBIC YARDS
	56,389	2,088



LEGEND

- SUBDIVISION BOUNDARY
- ROAD CENTERLINE
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- FINISH GRADE 1' CONTOUR
- EXISTING SANITARY SEWER
- NEW SANITARY SEWER
- NEW SANITARY SEWER CLEAN-OUT
- NEW PRESSURE SEWER LATERAL
- EXISTING STORM DRAIN
- NEW STORM DRAIN
- EXISTING CULINARY WATER
- NEW CULINARY WATER
- NEW CULINARY WATER LATERAL
- NEW CULINARY WATER METER
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT
- NEW STREET LIGHT
- EXISTING SECONDARY WATER
- NEW SECONDARY WATER
- NEW DUAL SECONDARY WATER LATERAL
- NEW SINGLE SECONDARY WATER LATERAL
- EXISTING EDGE OF ASPHALT
- SAWCUT LINE
- NEW ASPHALT PAVING

DEVELOPER:
BLACKBURN JONES
CARSON JONES
905 24TH ST
OGDEN
801-914-2018



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DAVID REED
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dreed@weberfd.com

GENERAL NOTES:

1. THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES SHOWN OR NOT SHOWN ON THE PLANS.
2. FOR TYPICAL STREET IMPROVEMENTS REFER TO STREET SECTIONS AND DETAILS ON SHEET PP1.
3. ALL CULINARY WATER IMPROVEMENTS AS TAYLOR - WEST WEBER WATER IMPROVEMENT DISTRICT STANDARDS. SERVICE TO BE 1" LATERAL AND 5/8" METERS PROVIDED BY TAYLOR - WEST WEBER WATER. REFER TO CULINARY WATER DETAILS ON SHEET DT-1.
4. ALL SANITARY SEWER IMPROVEMENTS TO CONFORM TO CENTRAL WEBER SEWER DISTRICT STANDARDS. REFER TO DETAILS ON SHEET DT-2.
5. ALL STORM SEWER IMPROVEMENTS TO CONFORM TO WEBER COUNTY STANDARDS. REFER TO DETAILS ON SHEET WEBER COUNTY PUBLIC WORKS STANDARDS SHEET 16.
6. ALL INLET GRATES SHALL BE BICYCLE SAFE TYPE COVERS. REFER TO DETAILS ON SHEET DT2.

SCALE: T-307
DATE: 9/24/2020
DESIGN: BSD
DRAWN: BSD
CHECKED: TUN
DWG:

REVISIONS

DATE	DESCRIPTION

DETENTION POND
SUNCREST MEADOWS SUBDIVISION - PH3
2550 SOUTH 4950 WEST
WEBER COUNTY, UTAH

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CIVIL-LAND PLANNING
MUNICIPAL-LAND SURVEYING
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C3