

EXISTING FEATURES & PROPOSED DETENTION

PART OF SECTION 32 AND PART OF SECTION 29, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY

Storm Runoff Calculations Nordic Valley

9/10/2014 skt

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the Eden, UT area taken from data compiled by NOAA Atlas14, using a 100 year storm.

Runoff storm water has been calculated for two different sets of conditions, one being the existing undeveloped land and the other with land fully improved. The difference between the two quantities will be detained in a holding pond. All water that runs off and over the property at present will be diverted into the holding pond and released at a reduced rate into the existing drainage system.

The calculations are as follows:

1. Runoff from the undeveloped existing land.

Runoff Coefficient	C = 0.200
Rainfall Intensity	i = 4.55 IN./HR.
Runoff Quantity	Q = 0.1 cfs/acre
Acreage	A = 1.87 ACRES

Q(out) = 0.1cfs/Acre 0.19 CFS

2. Runoff from developed land

Runoff Coefficients		
Paved Area	74,691	C = 0.9
Landscaped Area	0	C = 0.2
Roof	6,840	C = 0.8

Weighted Runoff Coefficient C = 0.89

Rainfall Intensity i = varies with time

Runoff Quantity Q = CIA

3. Detention Basin

Volume in	Q * t
Volume out	0.19 * t

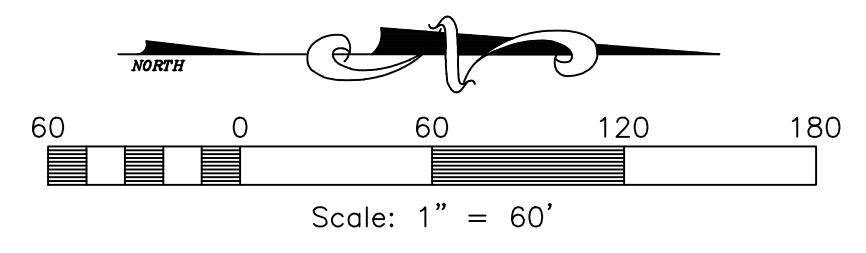
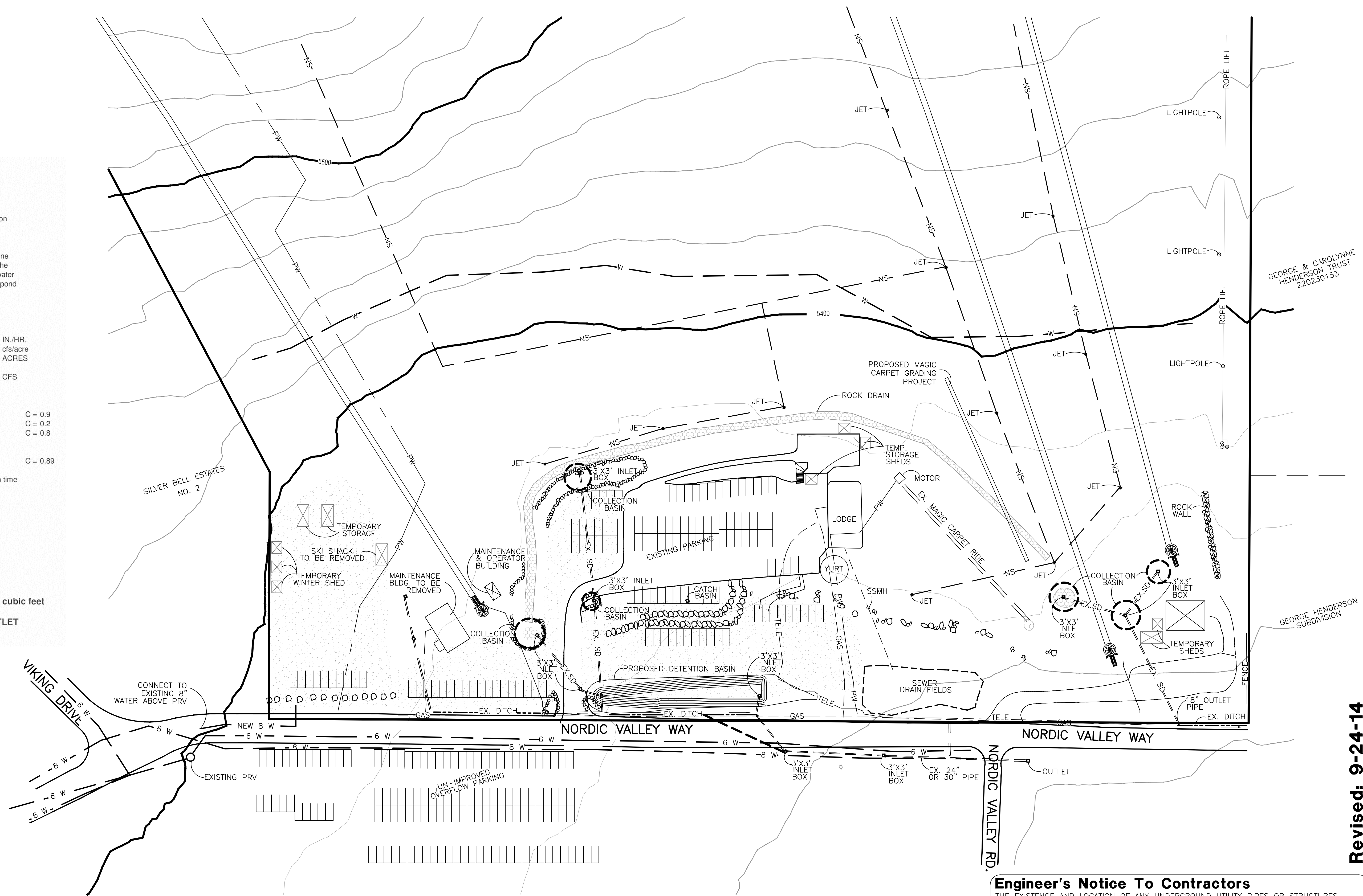
The capacity of the detention basin is calculated as the maximum difference between the volume flowing in and the volume flowing out.

The outflow from the detention basin is limited to outflow if undeveloped.

Use 0.19 cfs for Q outflow

The required volume of the detention basin is 11,990 cubic feet

USE A 2.0 INCH DIAMETER ORIFICE AT OUTLET

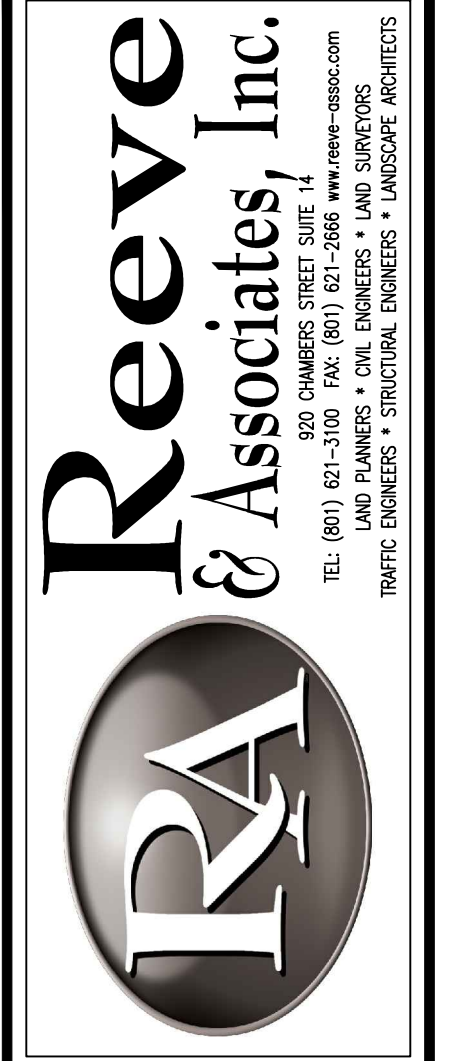


Engineer's Notice To Contractors

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM AVAILABLE INFORMATION PROVIDED BY OTHERS. THE LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO CONTACT THE UTILITY COMPANIES AND TAKE DUE PRECAUTIONARY MEASURE TO PROTECT ANY UTILITY LINES SHOWN, AND ANY OTHER LINES OBTAINED BY THE CONTRACTOR'S RESEARCH, AND OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

Developer/Property Owner
 Skyline Mountain Base LLC
 Joshua Richards
 P.O. Box 689
 Eden, Utah, 84310
 PH: (801) 368-9169

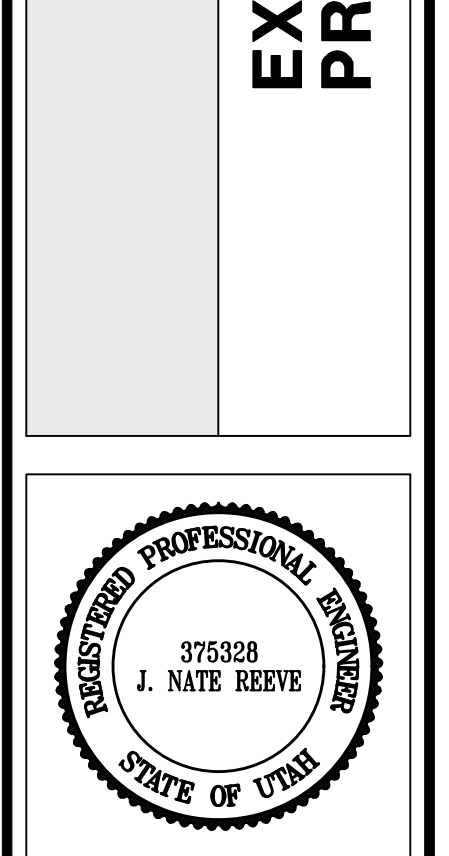
Blue Stakes Location Center
Call: Toll Free
1-800-662-4111
 Two Working Days Before You Dig



DATE	REVISIONS DESCRIPTION
8-13-14	ADD PHS. 2 RUN
8-19-14	ADD CREEK CROSSINGS
9-2-14	ADD PHS. 3 RUN
9-10-14	EXISTING WATERLINES

NORDIC VALLEY
 WEBER COUNTY, UTAH

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Project Info.
 Engineer: J. NATE REEVE
 Designer: E. ROCHE
 Begin Date: 08-14-14
 Name: NORDIC VALLEY
 Scale: 1"=60'
 Checked: _____
 Number: 6401-01

Sheet **2**
1 Sheets

