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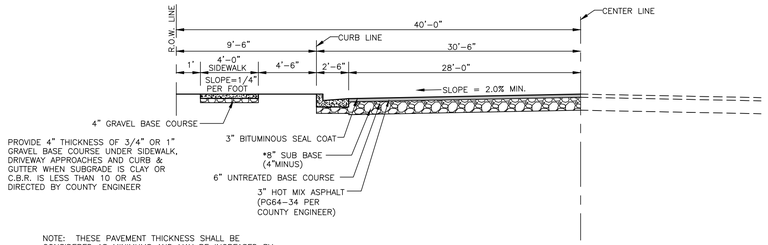


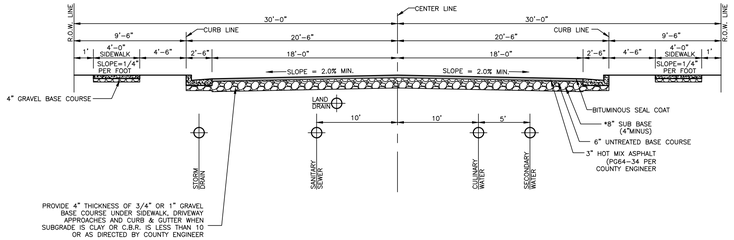
NOTE: THESE PAVEMENT THICKNESS SHALL BE CONSIDERED AS MINIMUMS AND MAY BE INCREASED BY THE COUNTY ENGINEER WHEN THE SUBGRADE C.B.R. IS LESS THAN 10 OR WHEN A GREATER DEPTH IS NECESSARY TO PROVIDE SUFFICIENT STABILITY. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN BASED ON A SOILS ANALYSIS FOR APPROVAL BY THE COUNTY ENGINEER. COMPACTION TESTS ON BOTH SUB-BASE AND BASE COURSES WILL BE REQUIRED.

1800 South Street
Street Section (80' R.O.W.)

SCALE: NONE

VICINITY MAP

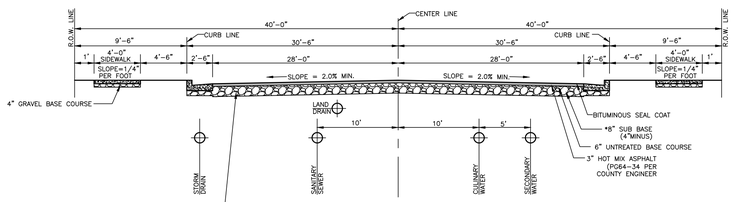
SCALE: NONE



Street Section 1700 South Street
Street Section (60' R.O.W.)

SCALE: NONE

*VERIFY LOCATION WITH PHONE, GAS AND POWER COMPANIES.



Street Section 'A'
Street Section (80' R.O.W.)

SCALE: NONE

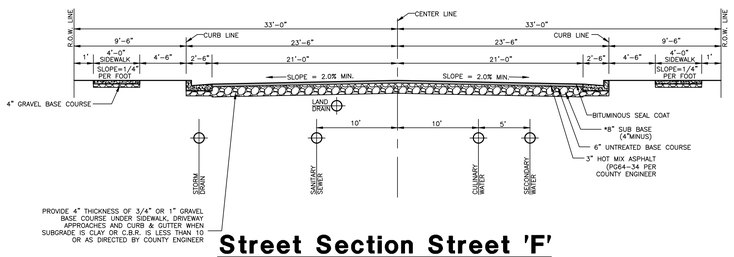
*VERIFY LOCATION WITH PHONE, GAS AND POWER COMPANIES.

BOUNDARY DESCRIPTION

PART OF THE SOUTHEAST QUARTER OF SECTION 21 TOWNSHIP 6 NORTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT, SAID POINT BEING 1321.79 FEET NORTH 89°15'11" WEST FROM THE SOUTHEAST CORNER OF SAID SECTION 21 (SAID SOUTHEAST CORNER BEING N00°42'33"E 2633.22 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 21); THENCE NORTH 89°15'11" WEST 1321.78 FEET; THENCE NORTH 00°42'18" EAST 1317.81 FEET ALONG THE EAST LINE OF DEGIORGIO SUBDIVISION & DEGIORGIO SUBDIVISION PHASE 2; THENCE SOUTH 89°13'37" EAST 1321.82 FEET; THENCE SOUTH 00°42'26" WEST 1317.21 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,741,488 SQUARE FEET OR 39.979 ACRES.



Street Section Street 'F'
Street Section (66' R.O.W.)

SCALE: NONE

*VERIFY LOCATION WITH PHONE, GAS AND POWER COMPANIES.

Storm Runoff Calculations
Stagecoach Estates Subdivision
6298-14 12/16/2022 PEB

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the Weber County area taken from the NOAA Atlas 14 database. Calculations have been completed for the 100-yr 24-hr storm event. Storm water runoff has been calculated for a fully developed site and limited to a release rate of 0.1 cfs/acre.

The calculations are as follows:

Drainage Area:

Total Area =	39.98 acre or	1,741,488 ft²	
Runoff Coefficients			
	Paved Area	417,838	C = 0.9
	Roof	280,000	C = 0.9
	Landscaped Area	1,043,650	C = 0.2
Weighted Runoff Coefficient			C = 0.48

LID Retention

80th Percentile Rainfall Event (d)	0.45 in
Is the site Feasible for LID?	Yes
Site Imperviousness (i)	0.40
NRCS Soil Group	C/D
Rv Equation	0.83/^1.122
R_v (Soil Group A: 0.84i^1.302; B: 0.84i^1.169; C/D: 0.83i^1.122)	0.30
V_{pod} = Rv x d x Total Site SF	19427 c.f.

Volume of Run-off for 100-year Storm Event:

C = 0.48
I = See Below in/hr
A = 1741488.00 ft²
Q(out) = 4.00 ft³/s (0.1 cfs per acre)

time (min)	time (sec)	i (in./hr.)	Q (cfs)	Vol. in (cf)	Vol. out (cf)	Difference (cf)
0	0	0.00	0.00	0	0	0
5	300	6.52	126.29	37888	1199	36688
10	600	4.96	96.08	57645	2399	55246
15	900	4.09	79.22	71301	3598	67703
30	1800	2.76	53.46	96230	7196	89034
60	3600	1.71	33.12	119242	14392	104849
120	7200	0.929	17.99	129562	28785	100777
180	10800	0.634	12.28	132630	43177	89453
360	21600	0.353	6.84	147692	86355	61338
720	43200	0.216	4.18	180745	172710	8036
1440	86400	0.12	2.32	200828	345419	-144591

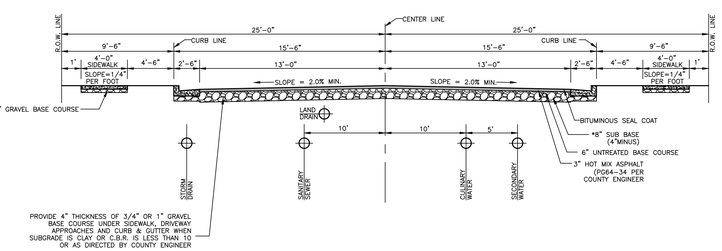
Orifice Sizing

Given:	Q =	4.00	cfs
	2g =	64.4	ft/s²
	H =	3.00	ft
	Cd =	0.62	for circular openings
	R =	SQRT(Q/pi/(0.7*(64.4*H)*0.5))	
	R =	0.38 feet	
		4.61 inches	
	D =	9.22 inches	
	A =	66.84 inches ^2	0.4641 ft ^2

SUMMARY:

The required 100-yr storage volume is	**104,849**	**cubic feet**
The required LID Retention volume is	**19,427**	**cubic feet**
Orifice size is	**9.2**	**inches**

Note: No LID Retention to be provided due to low infiltration rate (Soil Group D)



Street Section "B","C", 'D', 'E', 'G' & 'H'
Street Section (50' R.O.W.)

SCALE: NONE

*VERIFY LOCATION WITH PHONE, GAS AND POWER COMPANIES.

LINE TABLE

#	BEARING	DISTANCE
L1	S89°07'55"E	167.98'
L2	S89°13'37"E	137.91'
L3	S89°15'11"E	137.94'
L4	N89°15'11"W	60.46'
L5	N89°15'11"W	60.46'
L6	N89°15'11"W	60.46'
L7	N89°15'11"W	60.46'
L8	N89°15'11"W	60.46'
L9	N89°15'11"W	60.46'
L10	N89°15'11"W	60.46'
L11	N89°15'11"W	60.46'
L12	N89°15'11"W	60.46'
L13	N89°15'11"W	60.46'
L14	N89°15'11"W	60.46'
L15	N89°15'11"W	60.46'
L16	N89°15'11"W	60.46'
L17	N89°15'11"W	60.46'
L18	N89°15'11"W	60.46'
L19	N89°15'11"W	60.46'
L20	N00°41'20"E	198.00'
L21	N50°55'17"E	169.92'

CURVE TABLE

CURVE	RADIUS	ARC LTH	CHD LTH	CHD BEARING	DELTA
C1	283.00'	132.74'	131.52'	N77°24'44"E	26°52'26"
C2	283.00'	51.35'	51.28'	N58°46'36"E	10°23'49"
C3	217.00'	98.86'	98.00'	N66°37'44"E	26°06'05"
C4	250.00'	162.71'	159.85'	N72°13'23"E	37°17'24"
C5	250.00'	162.18'	159.35'	N72°09'45"E	37°10'08"
C6	250.00'	145.49'	143.44'	N70°14'59"E	33°20'34"
C7	250.00'	16.69'	16.69'	N88°50'03"E	3°49'33"
C8	283.00'	141.73'	140.26'	S67°55'32"W	28°41'42"
C9	217.00'	4.59'	4.59'	S54°11'01"W	1°12'40"
C10	217.00'	136.74'	134.49'	S72°50'27"W	36°06'12"
C11	30.00'	17.09'	16.86'	N15°36'41"W	32°38'13"
C12	65.00'	22.68'	22.56'	N21°56'03"W	19°59'29"
C13	65.00'	56.81'	55.02'	N13°05'54"E	50°04'27"
C14	65.00'	55.61'	53.93'	N62°38'49"E	49°01'22"
C15	65.00'	41.13'	40.44'	S74°42'57"E	36°15'06"
C16	30.00'	17.09'	16.86'	S72°54'30"E	32°38'13"
C17	20.00'	31.44'	28.30'	N45°44'24"E	90°03'58"
C18	30.00'	17.09'	16.86'	S17°01'32"W	32°38'13"
C19	65.00'	5.81'	5.80'	S30°47'05"W	5°07'07"
C20	65.00'	72.32'	68.65'	S03°39'03"E	63°45'09"
C21	65.00'	10.01'	10.00'	S39°56'22"E	8°49'28"
C22	65.00'	60.73'	58.55'	S71°07'06"E	53°32'
C23	65.00'	27.23'	27.03'	N70°06'46"E	24°00'18"
C24	30.00'	17.09'	16.86'	N74°25'43"E	32°38'13"
C25	20.00'	31.40'	28.27'	S44°16'23"E	89°57'36"
C26	30.00'	17.09'	16.86'	S72°56'04"E	32°38'13"
C27	65.00'	138.10'	113.55'	N62°31'07"E	121°43'49"
C28	65.00'	38.09'	37.55'	N15°08'09"W	33°34'43"
C29	30.00'	17.09'	16.86'	N15°36'24"W	32°38'13"
C30	20.00'	31.43'	28.29'	N45°43'46"E	90°02'07"

Developer:
Pat Burns
Lync Development
1407 N Mtn. Rd
Ogden, UT. 84404
(801) 710-2234

Stagecoach Estates Subdivision

Weber County, Utah

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 S. 1500 W., RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

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5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 FAX: (801) 621-2666 www.reeveassoc.com
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION

Stagecoach Estates Subdivision
PART OF THE SE 1/4 OF SECTION 21 T.6N. R.2W., S.L.B & M., U.S. SURVEY
WEBER COUNTY, UTAH

Preliminary Plan

Project Info.
Engineer: N. Reeve
Planner: C. Cave
Designer: E. Roche
Date: 8/01/2022
Name: STAGECOACH ESTATES SUBDIVISION
Number: 6298-14

Sheet 1 of 2 Sheets

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LEGEND

- = SECTION CORNER
- = BOUNDARY LINE
- = LOT LINE
- = ADJOINING PROPERTY
- = CENTERLINE
- = EASEMENTS
- = SECTION TIE LINE
- SS = PROPOSED SANITARY SEWER LINE
- EX.SS = EXISTING SANITARY SEWER LINE
- SW = PROPOSED SECONDARY WATER LINE
- EX.SW = PROPOSED SECONDARY WATER LINE
- W = PROPOSED CULINARY WATER LINE (SIZE VARIES)
- EX.W = EXISTING CULINARY WATER LINE
- SD = PROPOSED STORM DRAIN (SIZE VARIES)
- EX.SD = EXISTING STORM DRAIN
- LD = PROPOSED STORM DRAIN (SIZE VARIES)
- IRR = PROPOSED RE-ROUTED SLOUGH
- = EXISTING FENCE LINE
- = PROPOSED TRAIL
- = PROPOSED FIRE HYDRANT
- = EXISTING FIRE HYDRANT
- = PROPOSED SANITARY SEWER MANHOLE
- = EXISTING SANITARY SEWER/STORM DRAIN MANHOLE
- = PLUG W/ 2" BLOW-OFF
- = PROPOSED STORM DRAIN MANHOLE
- = PROPOSED SINGLE GRATE CATCH BASIN WITH BICYCLE-SAFE GRATE
- P.U.E. = PUBLIC UTILITY EASEMENT
- FH = FIRE HYDRANT
- = EXISTING PAVEMENT
- = PROPOSED PAVEMENT
- = PROPOSED CONCRETE

NOTES

1. PIPE EXISTING DITCH ON 1800 SOUTH STREET
2. CONTOURS ARE SHOWN WITH ONE FOOT INTERVALS
3. PROJECT IS IN ZONE X PER FEMA FLOOD PANEL 49057C0425E, EFFECTIVE 12/16/2005
4. DRAINAGE SLOUGH WILL BE RE-ROUTED

PHASE 1: 28 LOTS
PHASE 2: 37 LOTS
PHASE 3: 30 LOTS
PHASE 4: 25 LOTS

TOTAL LOTS: 120

Scale: 1" = 80'

Stagecoach Estates Subdivision

Weber County, Utah

Developer:
Pat Burns
Lync Development
1407 N Mtn. Rd
Ogden, UT. 84404
(801) 710-2234

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Sheet 2 of 2 Sheets