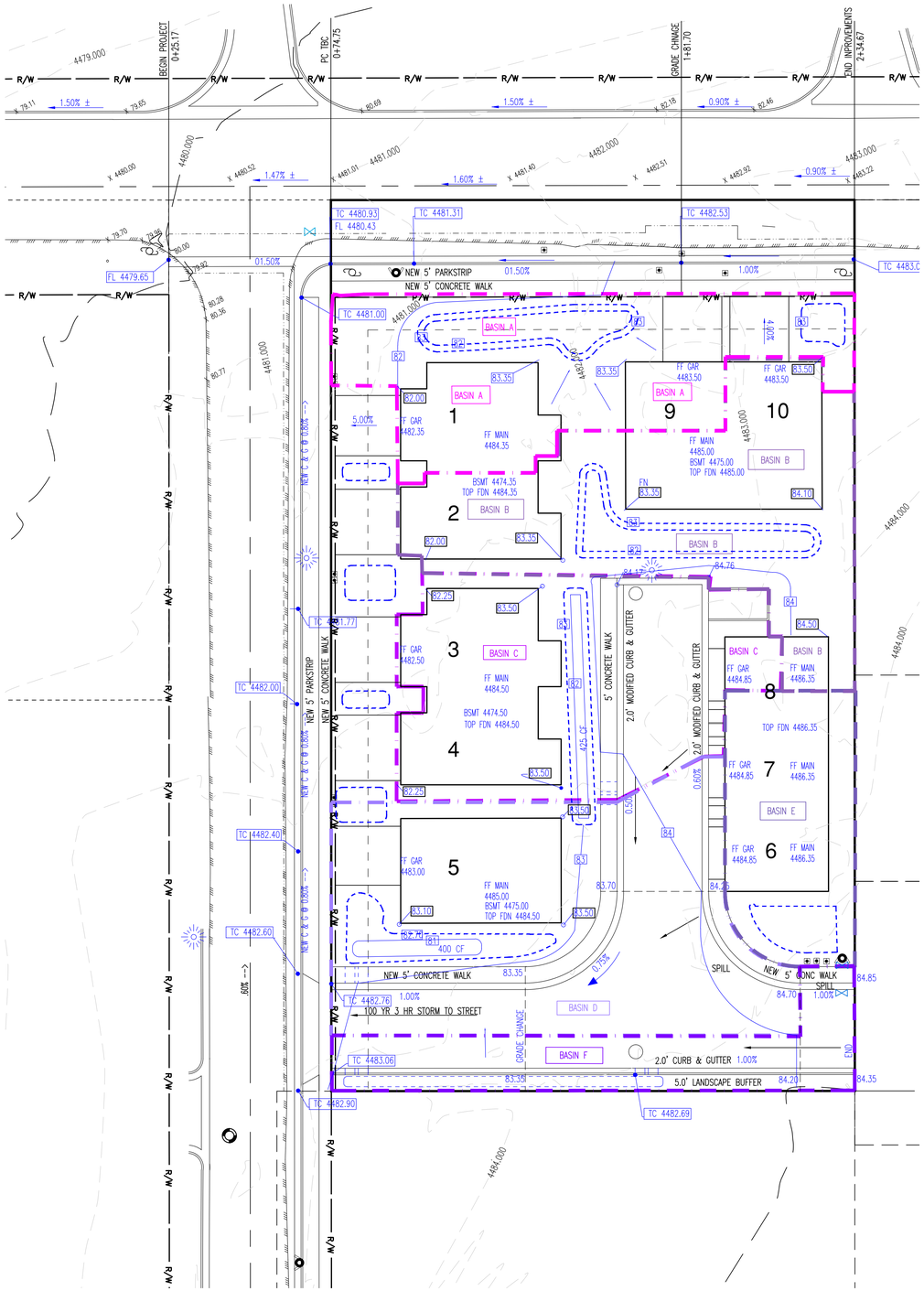
CALL BLUESTAKES
@ 1-800-662-4111
AT LEAST 48 HOURS
PRIOR TO THE
COMMENCEMENT OF
ANY CONSTRUCTION.



BASIN A
TOTAL BASIN AREA: 6238.0 SF
BUILDING AREA: 2126.28 SF
LANDSCAPE AREA: 4112.0 SF
HARD SURFACE AREA: 0 SF

BASIN B
TOTAL BASIN AREA: 7201.20 SF
BUILDING AREA: 4808.18 SF
LANDSCAPE AREA: 2393.02 SF
HARD SURFACE AREA: 0 SF

BASIN C
TOTAL BASIN AREA: 6922.52 SF
BUILDING AREA: 2869.41 SF
LANDSCAPE AREA: 1571.24 SF
HARD SURFACE AREA: 2481.87 SF

BASIN D
TOTAL BASIN AREA: 9437.65 SF
BUILDING AREA: 1566.80 SF
LANDSCAPE AREA: 2506.41 SF
HARD SURFACE AREA: 5364.44 SF

BASIN E
TOTAL BASIN AREA: 3242.07 SF
BUILDING AREA: 1939.17 SF
LANDSCAPE AREA: 1295.61 SF
HARD SURFACE AREA: 0 SF

BASIN F
TOTAL BASIN AREA: 3020.21 SF
BUILDING AREA: 0 SF
LANDSCAPE AREA: 1900.71 SF
HARD SURFACE AREA: 1119.50 SF

GRADING NOTES:

PROVIDE SLOPE AWAY FROM BUILDINGS THAT COMPLIES WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (2% MINIMUM / 12% MAXIMUM ON HARD SURFACES; 5% MINIMUM / 2:1 MAXIMUM IN LANDSCAPE AREAS - FOR A MINIMUM 10 FEET IN ANY CASE). CONTRACTOR TO OBTAIN APPROVAL FROM THE BUILDING DIVISION (801)-568-7251 FOR GRADING ADJACING TO BUILDINGS.

FLOOD NOTE:

By graphic plotting only, this property is in Zone "X" of the Flood Insurance Rate Map, Community Panel No. 49035C 0432G, which bears an effective date of 09/25/2009 and is not in a Special Flood Hazard Area. No field surveying was performed to determine this zone and an elevation certificate may be needed to verify this determination or apply for a variance from the Federal Emergency Management Agency.

HYDROLOGY:

SANDY 80 TOWNHOMES
1/2/2019 **CALCULATIONS FOR STORM RUNOFF DETENTION VOLUME REQUIREMENTS**
10-Year,3-Hour Storm
SANDY CITY UTAH

Calculate CA and allowable discharge:	Acres	Runoff Coefficient	CA		"h" S.F.	"h" Acres	
Pavement	0.22	0.90	0.20		9,450	0.22	24 %
Roof	0.27	0.85	0.23		11,580	0.27	30 %
Landscaped	0.41	0.15	0.06		17941	0.41	46 %
	0.00	0.00	0.00		0	0.00	0 %
Total	0.90	0.54	0.487	Total	38971	0.89	100 %
CA			0.487				
Allowable discharge at 0.2 cfs/acre		0.18		Discharge to Use:		0.20 (input cfs)	

60.0000 (input) minutes/ inch of permeability		0.0167 (output) inches/minute of permeability	
1.0000 (output) hours/inch of permeability		1.0000 (output) inches/hour of permeability	
(Input) Permeability Ra	1 in/hr	17941 (input) sf (perc. surf. area	0.415 (output) cfs (perc. outfall)

Notes:
Miscellaneous flow inputs:
Inflow from other areas: (cfs) Outflow to other areas: 0 (cfs)

Calculate detention volume required:

Time (minutes)	CA	Average Intensity (in./hr.)	Time (sec.)	Cum. Runnoff (cu.ft.)	Inflow from other areas (cu.ft.)	Total all contributing areas (cu.ft.)	Orifice Discharge (cu.ft.)	Outflow to other areas (cu.ft.)	Percolation outfall (cu. ft.)	Storage (cu. ft.)
5	0.49	3.72	300	543	0	543	60	0	125	359
15	0.49	2.28	900	999	0	999	180	0	374	445
30	0.49	1.44	1800	1262	0	1262	360	0	748	155
60	0.49	0.93	3600	1630	0	1630	720	0	1495	-585
120	0.49	0.55	7200	1928	0	1928	1440	0	2990	-2502
180	0.49	0.40	10800	2104	0	2104	2160	0	4485	-4542
360	0.49	0.25	21600	2630	0	2630	4320	0	8971	-10661
720	0.49	0.15	43200	3155	0	3155	8640	0	17941	-23426
1440	0.49	0.09	86400	3787	0	3787	17280	0	35882	-49375

Summary: Bonding for 1500 cu. ft. required.

LEGEND

- Power Pole
- Comm. Man Hole
- Electric Meter
- Cable Box
- Water Meter
- Indicates Handicapped Parking
- Sight Light
- Schedule B Exception
- Water Valve
- Fire Hydrant
- Water Manhole
- Water Meter Pit
- Gas Meter
- Section Corner
- Irrigation Box
- Distance to Nearest Intersection
- Storm Manhole
- Storm Inlet
- Curb Storm Inlet
- Sanitary Sewer
- Gas Manhole
- Parking Row Count
- Monument

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PETERSON ENGINEERING, P.C.
CONSULTING ENGINEERS & LAND SURVEYORS
7107 SOUTH 400 WEST #1 MIDVALE UTAH 84047 801-255-3503

Date: December 21, 2019
Job No.: F-18-121
Drawn: D. PETERSON
Drawn: K. OGILVIE
SHT: K. OGILVIE
Checked: D. PETERSON

COTTAGES ON 80TH
615 E 8000 S, SANDY UTAH

GRADING & DRAINAGE

SHEET
C 3.0