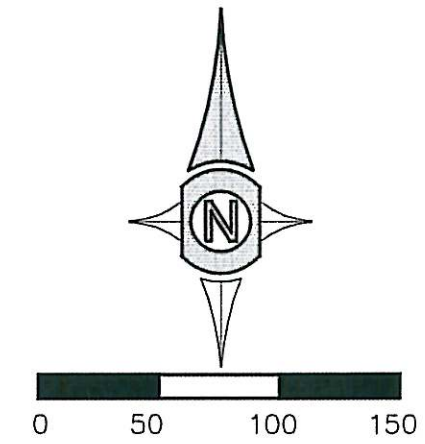


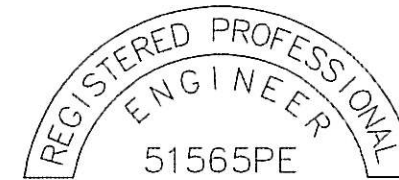
STAFF GAUGES, SEDIMENT SAMPLE, AND SOIL SAMPLE SURVEY DOANE CREEK, 7100 NW FRONT AVE. PORTLAND, OREGON

AUGUST 2010
REVISED: OCTOBER 2010

2010 SAMPLE LOCATIONS		
WEST BANK	EAST BANK	SEDIMENT
039	046	087
035	038	085
051	050	082
055	056	077
029	028	075
033	032	072
017	020	070
013	014	068
001	004	065
005	010	063



HORIZONTAL DATUM NAD83 (91)
VERTICAL DATUM CITY OF PORTLAND
PER KIRBY & CRAWFORD, INC.



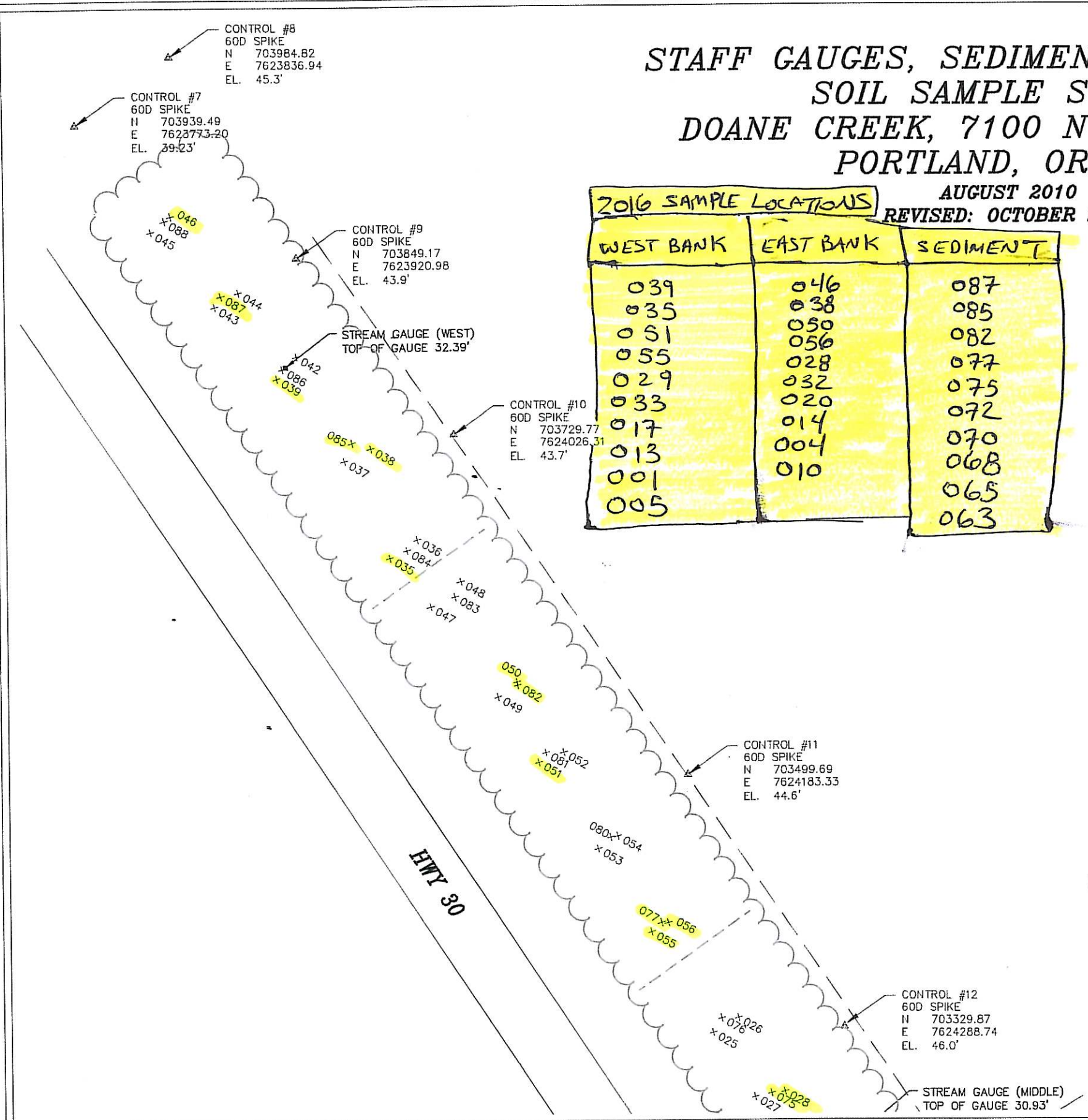
EXPIRATION DATE: 6-30-2011



ENGINEERING AND LAND SURVEYING

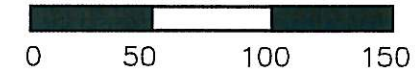
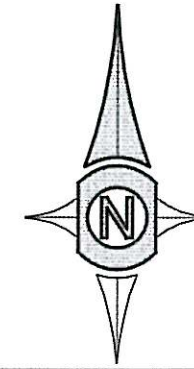
1055 AIRWAY ROAD, SUITE C102
PO BOX 2385, LEBANON, OREGON 97355
PH: (541) 258-8833 FAX: (541) 258-8834

PAGE 1 OF 2 JOB: 10-01-001-1

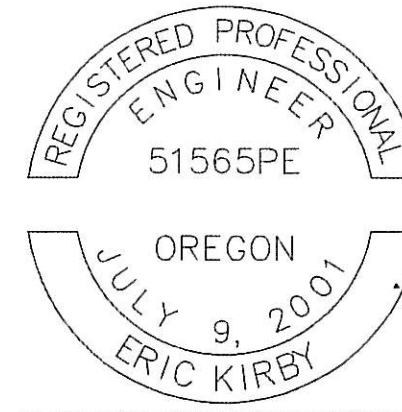


**STAFF GAUGES, SEDIMENT SAMPLE, AND
SOIL SAMPLE SURVEY
DOANE CREEK, 7100 NW FRONT AVE.
PORTLAND, OREGON**

**AUGUST 2010
REVISED: OCTOBER 2010**



**HORIZONTAL DATUM NAD83 (91)
VERTICAL DATUM CITY OF PORTLAND
PER KIRBY & CRAWFORD, INC.**



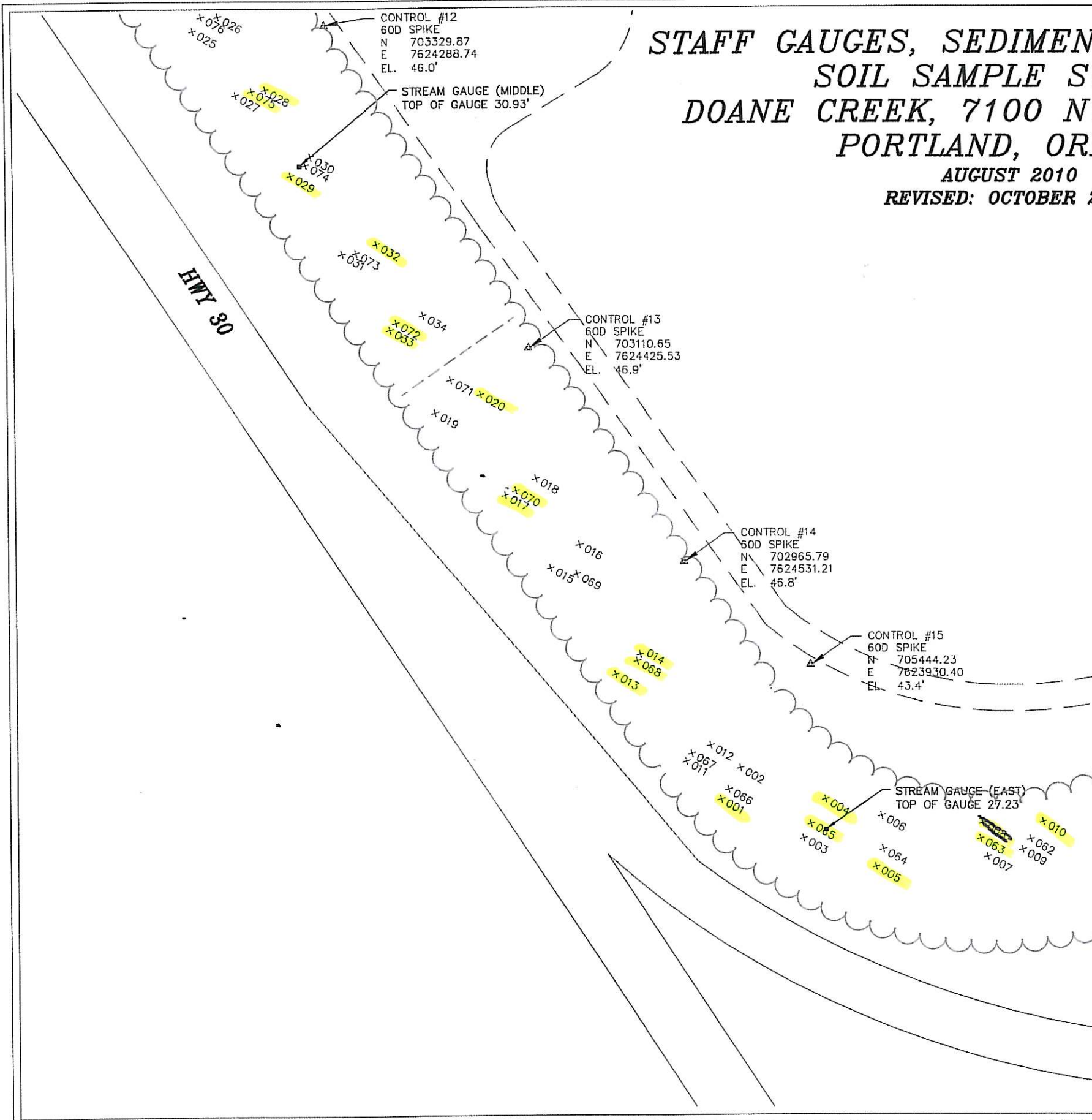
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ENGINEERING AND LAND SURVEYING

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PAGE 2 OF 2 JOB: 10-05-024



Kirby & Crawford, Inc.
ENGINEERING AND LAND SURVEYING

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Soil Sample Survey
Doane Creek
7100 NW Front Street
Portland, Oregon

7/29/2010
Revised: 10/28/2010

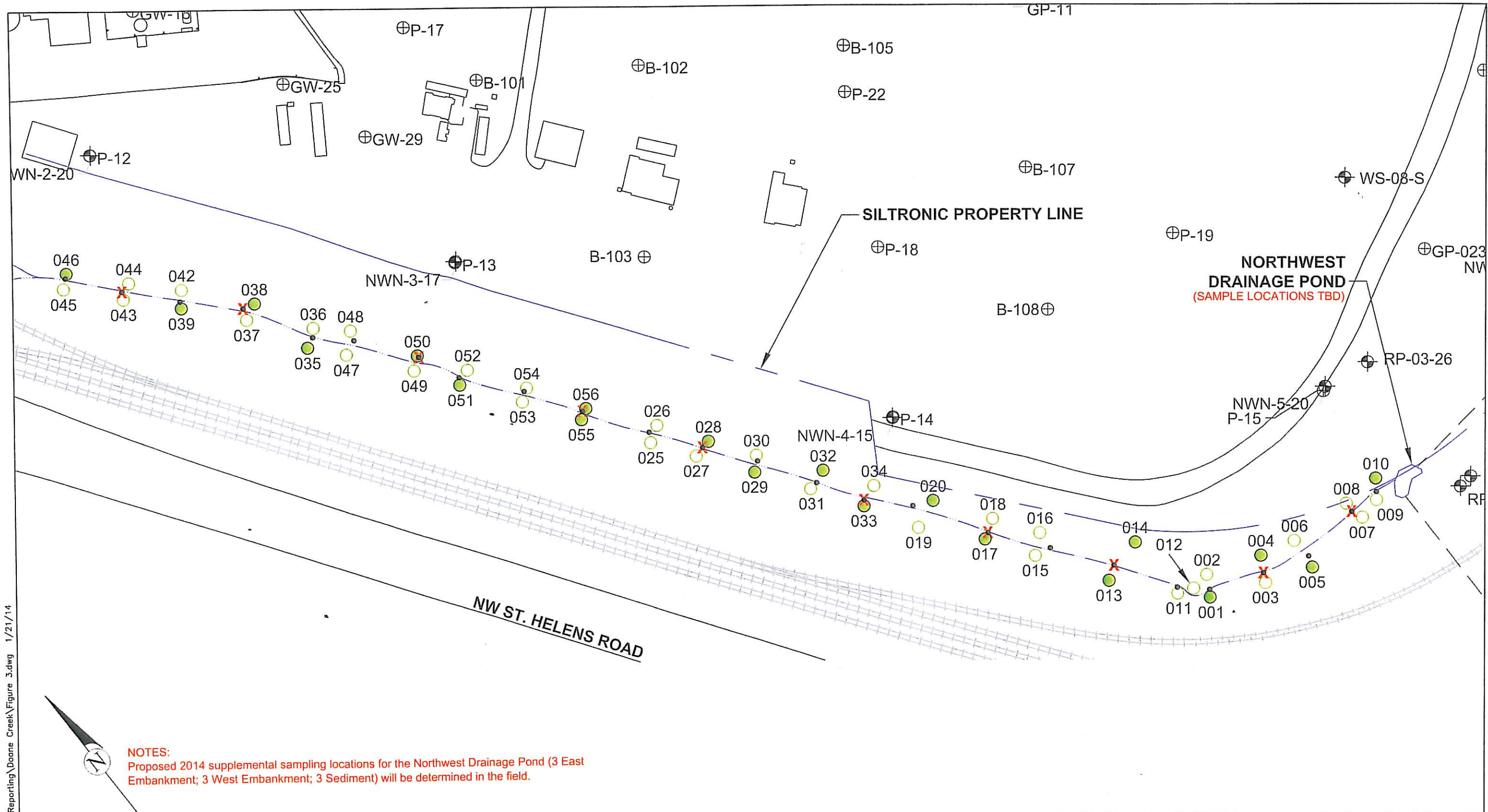
DATE	STATION	DESCRIPTION	NORTHING (FEET)	EASTING (FEET)	Portland Datum (FEET)
Sediment and Soil Samples					
7/29/2010	045	Soil Sample	703866.98	7623823.27	32.25
	088	Sediment Sample	703874.39	7623832.36	29.3
	046	Soil Sample	703877.62	7623836.46	32.1
	043	Soil Sample	703816.27	7623865.66	32.2
	087	Sediment Sample	703823.60	7623869.88	29.0
	044	Soil Sample	703825.75	7623881.57	31.6
	039	Soil Sample	703767.93	7623907.05	31.5
	086	Sediment Sample	703774.23	7623910.83	28.2
	042	Soil Sample	703782.84	7623920.39	31.4
	037	Soil Sample	703712.39	7623952.37	34.3
	085	Sediment Sample	703724.41	7623957.39	28.3
	038	Soil Sample	703720.53	7623970.13	35.8
	035	Soil Sample	703646.74	7623982.72	35.1
	084	Sediment Sample	703651.76	7623994.31	31.6
	036	Soil Sample	703658.94	7624001.30	35.0
	047	Soil Sample	703613.63	7624010.11	34.3
	083	Sediment Sample	703620.22	7624026.42	30.7
	048	Soil Sample	703630.62	7624030.36	34.5
	049	Soil Sample	703552.71	7624055.00	31.4
	082	Sediment Sample	703560.56	7624068.20	30.5
	050	Soil Sample	703562.81	7624068.01	33.2
	051	Soil Sample	703508.51	7624082.45	33.4
	081	Sediment Sample	703515.04	7624087.17	29.4
	052	Soil Sample	703515.35	7624099.28	33.7
	053	Soil Sample	703450.37	7624122.27	32.3
	080	Sediment Sample	703458.01	7624130.75	29.1
	054	Soil Sample	703458.94	7624135.45	32.2
	055	Soil Sample	703394.24	7624158.17	32.2
	077	Sediment Sample	703400.47	7624165.05	28.8
	056	Soil Sample	703400.38	7624169.56	32.1
	025	Soil Sample	703326.33	7624199.92	34.3
	076	Sediment Sample	703335.96	7624205.71	28.3

DATE	STATION	DESCRIPTION	NORTHING (FEET)	EASTING (FEET)	Portland Datum (FEET)
	026	Soil Sample	703336.13	7624217.11	34.3
	027	Soil Sample	703282.79	7624228.46	34.8
	075	Sediment Sample	703285.41	7624239.49	28.4
	028	Soil Sample	703286.39	7624248.51	32.6
	029	Soil Sample	703228.19	7624265.30	33.4
	074	Sediment Sample	703235.45	7624275.49	27.6
	030	Soil Sample	703241.00	7624278.68	32.0
	031	Soil Sample	703174.99	7624299.90	33.5
	073	Sediment Sample	703175.71	7624309.17	27.6
	032	Soil Sample	703181.59	7624322.94	33.9
	034	Soil Sample	703133.15	7624354.53	31.1
	072	Sediment Sample	703128.18	7624336.26	27.2
	033	Soil Sample	703123.32	7624331.97	32.1
	019	Soil Sample	703067.04	7624362.59	31.5
	071	Sediment Sample	703089.07	7624372.91	25.7
	020	Soil Sample	703079.34	7624393.27	34.0
	017	Soil Sample	703011.03	7624409.66	31.3
	070	Sediment Sample	703014.15	7624416.74	26.6
	018	Soil Sample	703022.29	7624430.36	32.2
	015	Soil Sample	702961.63	7624440.28	31.6
	069	Sediment Sample	702957.52	7624457.97	24.4
	016	Soil Sample	702977.48	7624459.83	32.4
	013	Soil Sample	702889.35	7624484.06	32.4
	068	Sediment Sample	702898.61	7624498.87	25.9
	014	Soil Sample	702903.07	7624532.47	28.9
	011	Soil Sample	702830.55	7624532.47	27.0
	067	Sediment Sample	702835.95	7624536.14	25.4
	012	Soil Sample	702823.50	7624549.16	29.4
	001	Soil Sample	702804.72	7624556.38	32.0
	066	Sediment Sample	702811.43	7624561.39	24.7
	002	Soil Sample	702825.86	7624569.40	29.9
	003	Soil Sample	702778.22	7624612.45	32.2
	065	Sediment Sample	702787.89	7624617.46	24.5
	004	Soil Sample	702804.32	7624627.40	30.6
	005	Soil Sample	702758.68	7624661.66	29.3
	064	Sediment Sample	702770.50	7624666.38	24.3
	006	Soil Sample	702793.27	7624665.32	29.3
	007	Soil Sample	702765.37	7624737.59	27.3
	063	Sediment Sample	702777.69	7624732.74	23.7
	008	Soil Sample	702788.11	7624733.92	27.7
	009	Soil Sample	702770.14	7624761.60	26.7
	062	Sediment Sample	702777.18	7624767.06	23.5
	010	Soil Sample	702788.87	7624775.73	26.8

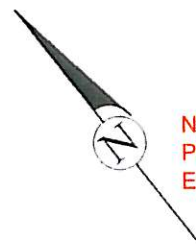
DATE	STATION	DESCRIPTION	NORTHING (FEET)	EASTING (FEET)	Portland Datum (FEET)
Control					
7/29/2010	7	Control	703939.49	7623773.20	39.45
Monitoring Wells					
7/29/2010	MW 13-60	Monitoring Well	705392.85	7623510.28	
		TOC			35.77
		RIM			36.23
		GS			36.22
7/29/2010	MW 98871	Monitoring Well	705436.81	7623935.84	
		TOC			34.65
		RIM			34.86
		GS			31.93
Staff Gauges					
7/29/2010	444	Staff Gauge (West)	703775.65	7623913.07	32.39
7/29/2010	477	Staff Gauge (Middle)	703234.89	7624271.49	31.14
7/29/2010	507	Staff Gauge (East)	702783.83	7624627.84	27.44

TOC = Top of casing GS = Ground shot RIM = Well lid

X:\Hahn\Gasco Site 2014\Siltronic Reporting\Doane Creek\Figure 3.dwg 1/21/14



NOTES:
 Proposed 2014 supplemental sampling locations for the Northwest Drainage Pond (3 East Embankment; 3 West Embankment; 3 Sediment) will be determined in the field.



LEGEND	
\oplus	Soil Boring
\oplus	Monitoring Well
—	Buried 84" Concrete Pipe
- - -	Property Line (Approximate)
\bullet	2010 Doane Creek homogenized sediment sample (0-0.5' bgs)
\times	Proposed 2014 homogenized sediment sample (0-0.5' bgs)
\circ	2010 Doane Creek homogenized embankment sample (0-2' bgs)
\bullet	Proposed 2014 homogenized bank sample (0-3.5' bgs)
—	Doane Creek channel

HAHN AND ASSOCIATES, INC.
 ENVIRONMENTAL CONSULTANTS
 434 NW 6th AVENUE, SUITE 203
 PORTLAND, OREGON 97209
 503-796-0717

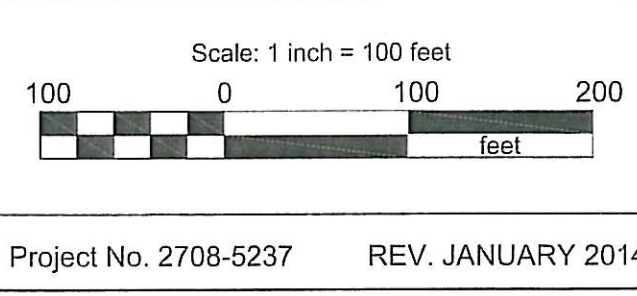


FIGURE 3
 Proposed Doane Creek
 Soil and Sediment Sample
 Locations

Siltronic Corporation Property
 7200 NW Front Avenue
 Portland, Oregon