Town of Peterborough
Wastewater Treatment Facility Upgrade
USDA
2010/06/30

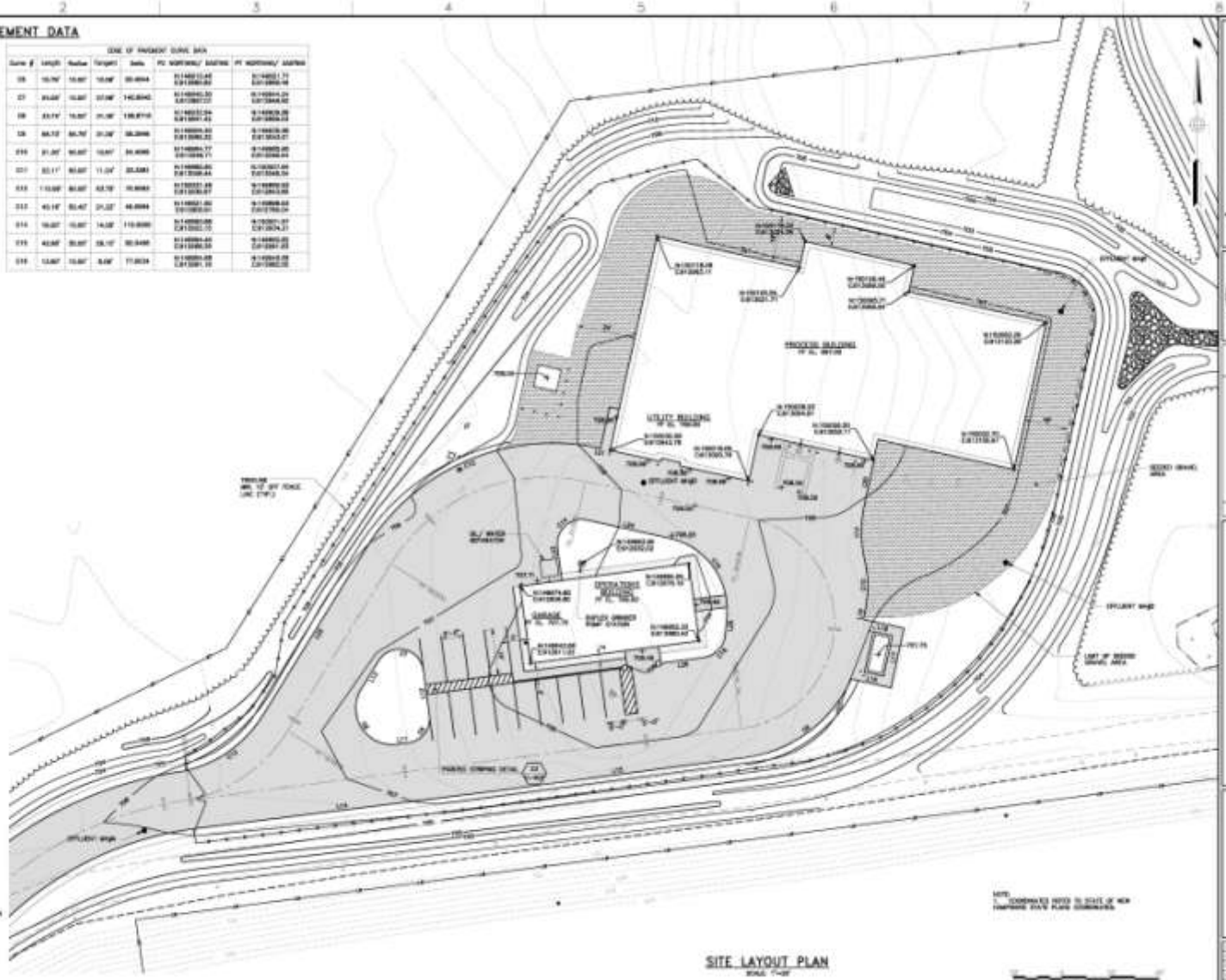
EDGE OF PAVEMENT DATA

EDGE OF PAVEMENT LINE DATA

Line #	Length	Direction	Start Point	End Point
L11	4.82'	N82° 52' 41.53"E	N 149858.88 E 618869.03	N 149859.49 E 618873.82
L12	15.39'	N7° 35' 33.40"W	N 149843.75 E 618868.48	N 149843.09 E 618857.12
L13	13.84'	S31° 44' 26.84"W	N 149844.24 E 618848.63	N 149833.84 E 618861.42
L14	123.28'	N82° 52' 44.23"E	N 149878.20 E 618772.81	N 149880.91 E 618897.04
L15	105.10'	N86° 34' 43.08"E	N 149882.51 E 618673.24	N 149884.43 E 618668.33
L16	15.10'	S17° 40' 04.68"E	N 149878.58 E 618673.31	N 149863.08 E 618658.39
L17	65.84'	N10° 19' 53.10"E	N 149873.39 E 618678.33	N 149937.52 E 618664.80
L18	17.07'	N77° 48' 06.80"W	N 149897.33 E 618614.98	N 149901.19 E 618597.89
L19	0.86'	N11° 08' 19.13"E	N 149881.19 E 618597.68	N 149882.77 E 618598.21
L20	19.89'	N12° 24' 39.80"E	N 150007.04 E 618598.59	N 150009.44 E 618580.44
L21	5.21'	N77° 35' 53.10"W	N 150030.44 E 618538.68	N 150031.48 E 618533.81
L22	45.32'	S75° 44' 26.84"W	N 149898.82 E 618613.80	N 149883.80 E 618635.01
L23	13.61'	N7° 35' 33.40"W	N 149911.08 E 618625.08	N 149883.68 E 618602.70
L24	24.87'	S77° 35' 33.40"E	N 150027.27 E 618654.31	N 150091.83 E 618680.28
L25	5.11'	S4° 27' 13.41"W	N 149904.82 E 618647.83	N 149884.69 E 618641.76
L26	15.51'	S82° 24' 51.84"W	N 149845.05 E 618602.70	N 149843.17 E 618584.70

EDGE OF PAVEMENT CURVE DATA

Curve #	Length	Radius	Tangent	Delta	PC NORTHING/ EASTING	PT NORTHING/ EASTING
C6	15.76'	10.00'	10.08'	90.49°44	N 149872.54 E 618880.82	N 149851.71 E 618892.58
C7	31.59'	10.00'	22.08'	142.80'40	N 149843.30 E 618867.07	N 149854.24 E 618848.82
C8	23.71'	15.00'	21.38'	135.8°10	N 149872.04 E 618851.43	N 149838.08 E 618854.03
C9	66.13'	66.76'	31.28'	56.3946	N 149899.82 E 618886.83	N 149878.08 E 618843.07
C10	91.26'	90.00'	13.61'	34.4086	N 149884.77 E 618846.71	N 149895.45 E 618846.64
C11	82.11'	80.00'	11.24'	23.3383	N 149880.80 E 618838.84	N 150007.04 E 618844.04
C12	113.08'	80.00'	62.78'	70.9983	N 150031.44 E 618813.87	N 149892.52 E 618813.80
C13	43.16'	53.42'	21.22'	46.8984	N 149902.80 E 618788.04	N 149898.68 E 618760.24
C14	19.00'	15.00'	14.08'	110.8080	N 149883.08 E 618822.70	N 149901.97 E 618874.21
C15	42.66'	30.00'	28.10'	80.3488	N 149884.44 E 618880.58	N 149883.45 E 618841.03
C16	13.66'	15.00'	8.08'	77.8034	N 149884.08 E 618881.10	N 149918.78 E 618882.00



SITE LAYOUT PLAN

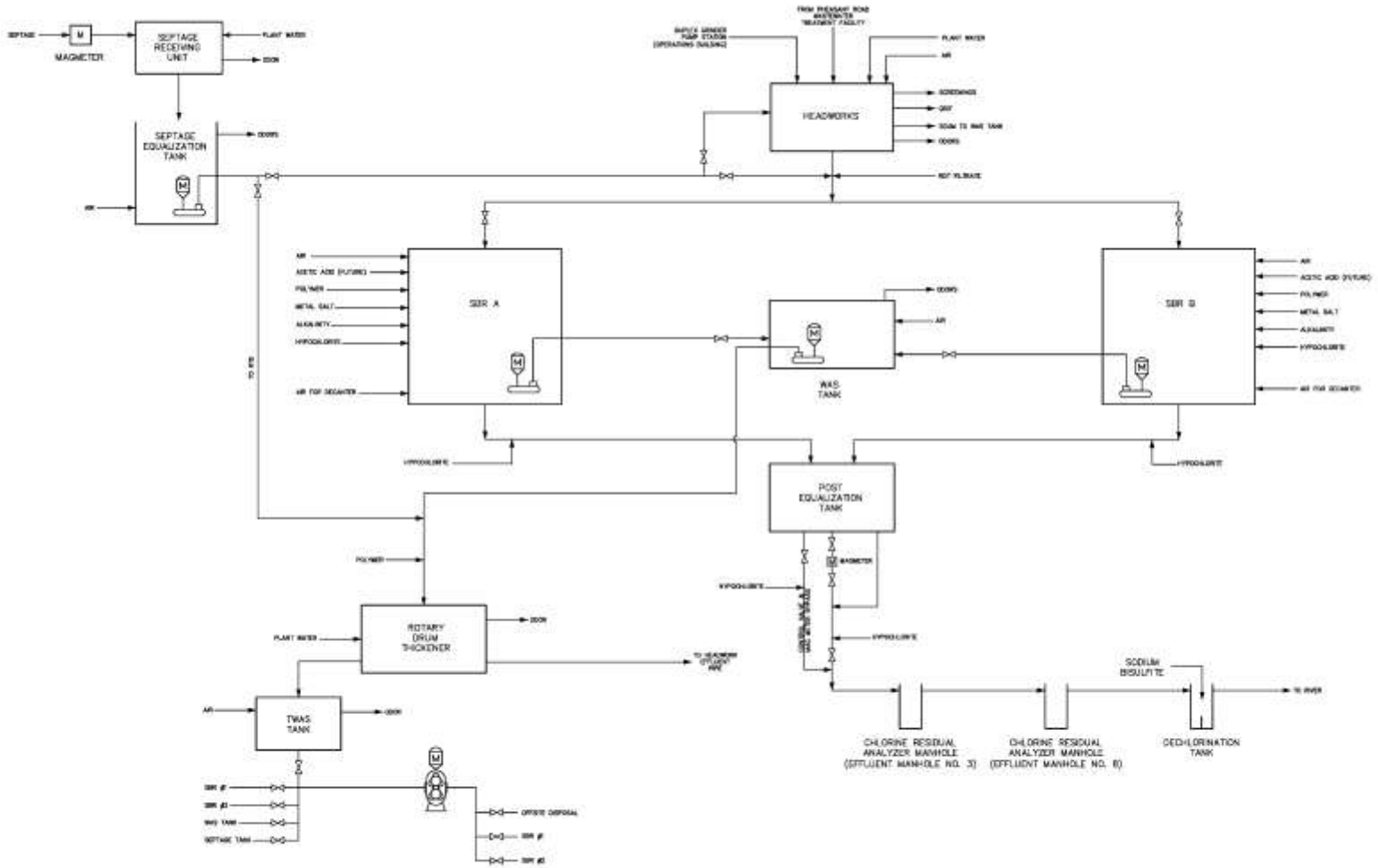
SCALE: 1"=30'

SITE LAYOUT & GRADING PLAN

TOWN OF PETERSBOROUGH
PETERSBOROUGH, NEW HAMPSHIRE

WASTEWATER TREATMENT
FACILITY UPGRADE

C-202



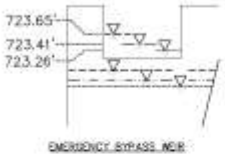
WOODARD & CURRAN

PROCESS FLOW DIAGRAM

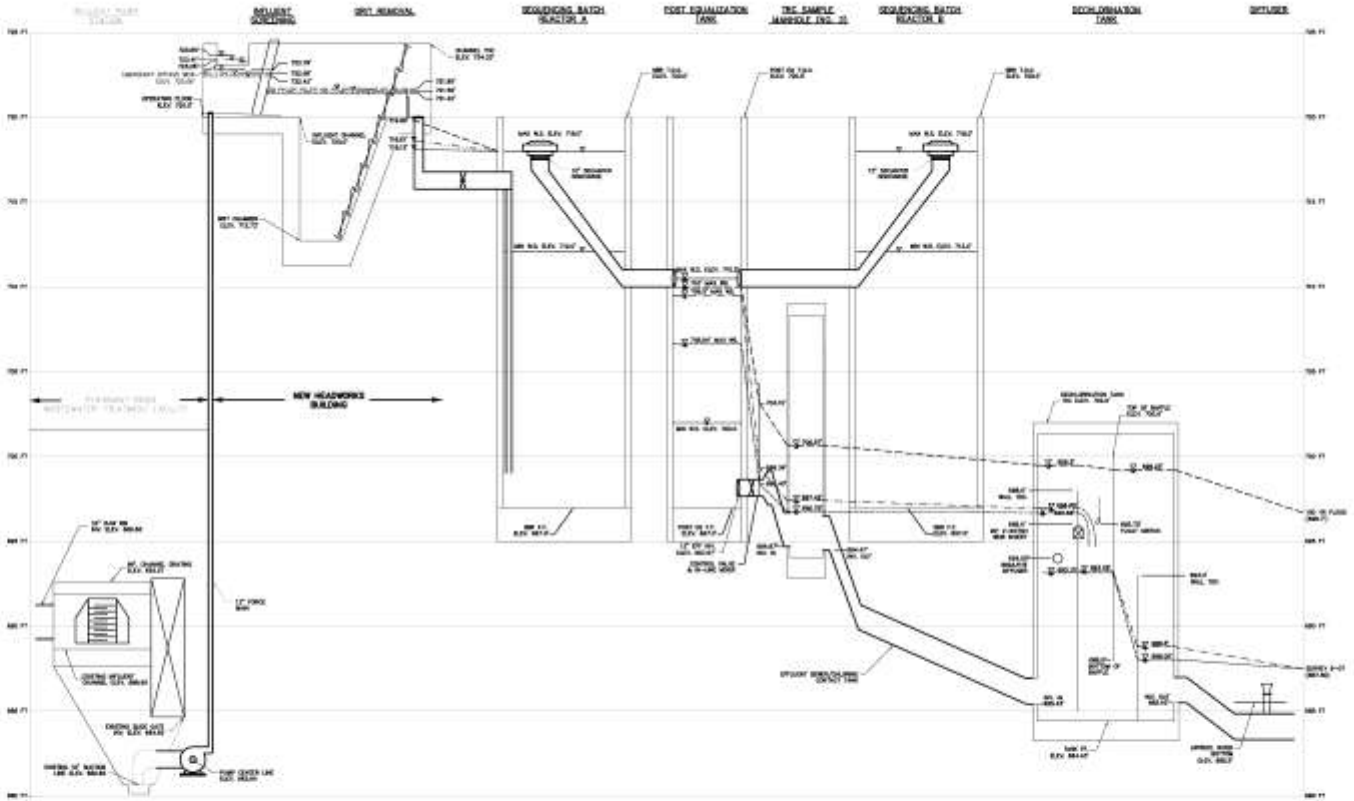
TOWN OF PETERBOROUGH PETERBOROUGH, NEW HAMPSHIRE

WASTEWATER TREATMENT FACILITY UPGRADE

P-002



EMERGENCY BYPASS WEIR



DESIGN FLOW SCHEDULE	
DESIGN FLOWS	FLOW (MGD)
AVERAGE DAY	0.62
MAXIMUM MONTH	0.89
MAXIMUM DAY	1.43
PEAK HOUR	2.48

DESIGN FLOW & LOAD SCHEDULE					
INITIAL YEAR	FLOW (MGD)	BOD (LBS/DAY)	TSS (LBS/DAY)	TKN (LBS/DAY)	P (LBS/DAY)
AVERAGE DAY	0.35	685	1,339	194	31
MAXIMUM MONTH	0.48	1,105	1,682	200	38
MAXIMUM DAY	0.77	1,525	2,252	288	52
DESIGN YEAR	FLOW (MGD)	BOD (LBS/DAY)	TSS (LBS/DAY)	TKN (LBS/DAY)	P (LBS/DAY)
AVERAGE DAY	0.62	1,331	2,463	257	60
MAXIMUM MONTH	0.89	1,960	3,515	347	78
MAXIMUM DAY	1.43	2,210	3,371	388	86

DESIGN CONCENTRATION SCHEDULE		
PARAMETER	INFLUENT	EFFLUENT
BOD	260 mg/L	10 mg/L
TSS	475 mg/L	10 mg/L
TKN	47 mg/L	-
PHOSPHOROUS	10.5 mg/L	0.75 mg/L
TOTAL NITROGEN	-	10 mg/L

SCHEDULE FOR HYDRAULIC GRADE LINE *		
FLOW	RIVER CONDITION	LINE TYPE
0.62 MGD – AVERAGE DAILY FLOW	SURVEY 9-2007 (687.90')	
1.43 MGD – MAXIMUM DAY FLOW	SURVEY 9-2007 (687.90')	
2.48 MGD – PEAK HOUR FLOW	100 YR FLOOD (686.70')	

* ALL CALCULATIONS ASSUME FULL PIPE FLOW TO DETERMINE WORST CASE SCENARIO

411 HUTCHINS DRIVE
PORTLAND, MAINE 04102
(207) 774-2221 | www.woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS
WOODARD & CURRAN

HYDRAULIC PROFILE

TOWN OF PETERBOROUGH
PETERBOROUGH, NEW HAMPSHIRE

WASTEWATER TREATMENT FACILITY UPGRADE

P-003

Wastewater Treatment Facility Upgrade
Town of Peterborough, New Hampshire
1 Grove Street, Peterborough, NH 03458
Engineer:
Woodard & Curran
Contractor:
The MacMillin Company, Inc.
USDA
Rural Development
Committed to the future of rural communities.
NEW HAMPSHIRE DEPARTMENT OF
Environmental Services
Financed by United States Department of Agriculture (USDA) Rural Development
This institution is an equal opportunity provider.
Barack Obama, President of the United States
Tom Vilsack, Secretary of Agriculture
And the New Hampshire Department of Environmental Services
2010/07/29

2010/06/30

2010/06/30

2010/07/13

CAT
2010/08/04

2010/08/18

2010/08/27

2010/09/01

2010/09/25

2010/10/09

2010/10/09

2010/10/20

AMORE
2010/10/27

2010/11/04

2010/11/24

2010/11/25

2010/12/17

2011/01/10

2011/01/10

2011/03/15

2011/04/07

2011/04/26

2011/04/26

2011/05/03

2011/05/31

VOLVO
2011/05/31

2011/05/31

2011/05/31

2011/05/31

2011/05/31

2011/06/07

2011/06/16

2011/06/16

2011/08/02

2011/08/02

2011/08/02

2011/08/18

2011/09/14

LONGCHAMPS
2011/09/14

2011/09/28

2011/09/28

2011/09/28

2011/10/04

2011/10/04

WOODARD &CURRAN

PLEASE DON'T TOUCH
TOPS 2-8-12
2012/02/08

WARNING
2012/02/14

HEAT KING
2012/02/14

PROCESS AIR
AERZEN
Delta Blower
2012/05/17

AutoPellet
AutoPellet
ÖkoFEN
ÖkoFEN
2012/05/17

T-901A
OVERFLOW
T-901A
2012/05/17

THICKENED SLUDGE
2012/05/17

EXIT
2012/05/17

2012/05/17

EXIT
2012/05/17

2012/05/17

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