MORETRENCH

DATE: 12/21/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Clear, Cold
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-1
GS (EL)	187.82
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	187.82	EL
Bottom of ISS:	150.94	EL
Nozzle:	139.59	EL
TOR:	139.60	EL
Time Start:	11:10	14:40
Time Finish:	11:53	14:44
Drilling Duration:	0:47	h:mm

Grouting Parameters:

Bottom of JGC:	139.60	EL
6 in/min Pull Rate to:	148.63	EL
8 in/min Pull Rate to:	154.28	EL
12 in/min Pull Rate to:	NA	EL
Top of JGC:	154.28	EL
Time Start:	12:00	15:11
Time Finish:	12:12	15:27
Grouting Duration:	0:28	h:mm

Constructed JG Height: 14.68 ft

Depth	Notes
0 ft	Auger Column 8-A-2
10 ft	
20 ft	
30 ft	
	36.88' Sand (11:37am)
40 ft	39.26' Till
	48.22' TOR
50 ft	
60 ft	

Notes:

Whie grouting WI-1, grout began to bubble up and surface ~10 from drill rig near sidewalk. Overflowed and ran onto sidewalk. 12:12pm @ 41.99' bgs. MTA crew on standby until decision made on how to proceed.

Decision made to attempt to complete hole at 2:20pm. Set back up on hole and redrilled from 2:40 - 2:44pm

Grouted from 3:11 - 3:27pm

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 3/19/10
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	WARM, CLEAR
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.47	

Element ID No.	WI-1R
GS (EL)	187.97
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	153.32	EL
Depth to Bottom:	151.82	EL
Time Start:	8:53	
Time Finish:	9:09	
Drilling Duration:	0:16	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	153.32	EL
6 in/min Pull Rate to:	NA	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	181.93	EL
Depth to Top of JGC:	181.93	EL
Time Start:	9:10	
Time Finish:	9:48	
Grouting Duration:	0:38	h:mm

Summary:

Constructed JG Height:	28.61	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
60 ft	

Notes:

THIS JETTING WAS IN ALL ISS IN AN ATTEMPT TO REMOVE SOME LOW STRENGTH MATERIAL

Technican Signature: Steve Hawkins

MORETRENCH

DATE: 12/17/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Clear, Cold
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-2
GS (EL)	188.02
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	140.12	EL
TOR:	140.14	EL
Time Start:	15:17	
Time Finish:	15:47	
Drilling Duration:	0:30	h:mm

Grouting Parameters:

Bottom of JGC:	140.14	EL
6 in/min Pull Rate to:	144.52	EL
8 in/min Pull Rate to:	163.06	EL
12 in/min Pull Rate to:	185.04	EL
Top of JGC:	185.04	EL
Time Start:	15:52	
Time Finish:	16:56	
Grouting Duration:	1:04	h:mm

Constructed JG Height: 44.90 ft

Depth	Notes
0 ft	0' Sand/Soil
10 ft	
20 ft	
30 ft	
	36.09' Obstruction??
40 ft	
	43.90' Till
	47.88' TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/17/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Clear, Cold
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-3
GS (EL)	187.95
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	139.36	EL
TOR:	139.37	EL
Time Start:	13:21	
Time Finish:	13:46	
Drilling Duration:	0:25	h:mm

Grouting Parameters:

Bottom of JGC:	139.37	EL
6 in/min Pull Rate to:	144.35	EL
8 in/min Pull Rate to:	162.92	EL
12 in/min Pull Rate to:	184.96	EL
Top of JGC:	184.96	EL
Time Start:	13:47	
Time Finish:	14:53	
Grouting Duration:	1:06	h:mm

Constructed JG Height: 45.59 ft

Depth	Notes
0 ft	Cementitious Material
	5' Sand/Soil
10 ft	
20 ft	
30 ft	
	36'-37' Very Hard Layer
40 ft	
	43.67' Till
50 ft	48.58' TOR
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/17/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Clear, Cold
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-4
GS (EL)	188.07
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	188.07	EL
Bottom of ISS:	165.88	EL
Nozzle:	141.94	EL
TOR:	141.94	EL
Time Start:	11:44	
Time Finish:	12:10	
Drilling Duration:	0:26	h:mm

Grouting Parameters:

Bottom of JGC:	141.94	EL
6 in/min Pull Rate to:	145.42	EL
8 in/min Pull Rate to:	163.14	EL
12 in/min Pull Rate to:	170.35	EL
Top of JGC:	170.35	EL
Time Start:	12:11	
Time Finish:	12:57	
Grouting Duration:	0:46	h:mm

Constructed JG Height: 28.41 ft

Depth	Notes
0 ft	Auger Column 8-C-2
10 ft	
20 ft	
	22.19' Sand/Soil (11:59am)
30 ft	
	36' - 37' Obstruction
40 ft	
	43.49' Till (12:02pm)
	46.13' TOR
50 ft	
60 ft	

Notes:

Partial thru ISS Auger Column 8-C-2, Bot EL 165.93
MTA Bot EL 165.88
Grout to EL 168.93

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 3/18/10
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	WARM,CLEAR
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-4R
GS (EL)	187.69
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	164.99	EL
Depth to Bottom:	163.49	EL
Time Start:	1:28	
Time Finish:	1:40	
Drilling Duration:	0:12	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	164.99	EL
6 in/min Pull Rate to:	NA	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	174.07	EL
Depth to Top of JGC:	174.07	EL
Time Start:	1:40	
Time Finish:	1:52	
Grouting Duration:	0:12	h:mm

Summary:

Constructed JG Height:	9.08	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
60 ft	

Notes:

THIS IS A REMEDIAL JETTING IN THE COMPLETED ISS

Technican Signature: Steve Hawkins

MORETRENCH

DATE: 12/17/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Clear, Cold
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-5
GS (EL)	187.07
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	187.07	EL
Bottom of ISS:	159.32	EL
Nozzle:	136.35	EL
TOR:	136.38	EL
Time Start:	8:48	
Time Finish:	9:13	
Drilling Duration:	0:25	h:mm

Grouting Parameters:

Bottom of JGC:	136.38	EL
6 in/min Pull Rate to:	148.03	EL
8 in/min Pull Rate to:	162.86	EL
12 in/min Pull Rate to:	NA	EL
Top of JGC:	162.86	EL
Time Start:	9:19	
Time Finish:	10:26	
Grouting Duration:	0:50	h:mm

Constructed JG Height: 26.48 ft

Depth	Notes
0 ft	Auger Column 8-D-1
10 ft	
20 ft	
	27.75' Sand (9:04pm)
30 ft	
40 ft	39.96' Till
50 ft	50.69' TOR
60 ft	

Notes:

Partial thru ISS Auger Column 8-D-1, Bot EL 159.81
MTA Bot EL 159.32
Grout to EL 162.81

Sampled at 30' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/16/09
SHEET: 1 OF 1
SHIFT: 1st | 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Clear, Cold
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-6
GS (EL)	187.64
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	187.64	EL
Bottom of ISS:	159.14	EL
Nozzle:	141.45	EL
TOR:	141.45	EL
Time Start:	20:02	
Time Finish:	20:42	
Drilling Duration:	0:40	h:mm

Grouting Parameters:

Bottom of JGC:	141.45	EL
6 in/min Pull Rate to:	153.88	EL
8 in/min Pull Rate to:	163.67	EL
12 in/min Pull Rate to:	NA	EL
Top of JGC:	163.67	EL
Time Start:	20:44	
Time Finish:	21:27	
Grouting Duration:	0:43	h:mm
Constructed JG Height:	22.22	ft

Depth	Notes
0 ft	Auger Column 8-E-1/8-D-1
10 ft	8:09pm
20 ft	8:20pm
30 ft	28.5' Sand/Soil (8:28pm)
	35.33' Till
40 ft	8:34pm
	46.19' TOR
50 ft	
60 ft	

Notes:

Partial thru ISS Auger Column 8-E-1/8-D-1, Bot EL 158.55/159.81
MTA Bot EL 159.14
Grout to EL 162.81

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/16/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Clear, Cold
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.46	

Element ID No.	WI-7
GS (EL)	187.62
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	187.62	EL
Bottom of ISS:	179.62	EL
Nozzle:	141.36	EL
TOR:	141.37	EL
Time Start:	17:05	
Time Finish:	17:31	
Drilling Duration:	0:26	h:mm

Grouting Parameters:

Bottom of JGC:	141.37	EL
6 in/min Pull Rate to:	152.62	EL
8 in/min Pull Rate to:	162.62	EL
12 in/min Pull Rate to:	184.16	EL
Top of JGC:	184.16	EL
Time Start:	17:54	
Time Finish:	19:00	
Grouting Duration:	1:06	h:mm
Constructed JG Height:	42.79	ft

Depth	Notes	
0 ft	Auger Column 8-E-1	
	8' Sand/Soil	
10 ft		5:09pm
20 ft		5:11pm
30 ft		5:14pm
	35.46' Till (5:15pm)	
40 ft		
	46.25' TOR	
50 ft		
60 ft		

Notes:

Partial thru ISS Auger Column 8-E-1, Bot EL 158.55.

Encountered cementitious material to a depth of 8' bgs. Based on drilling rates, decision made to grout entire column to a depth of 3' bgs. Notified WRSC of this decision.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/4/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI-8
GS (EL)	186.13
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	186.13	EL
Bottom of ISS:	151.43	EL
Depth of Nozzle:	139.08	EL
Top of Rock:	139.13	EL
Time Start:	13:37	
Time Finish:	14:08	
Drilling Duration:	0:31	hh:mm

Grouting Parameters:

Bottom of JGC:	139.08	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	155.29	EL
Time Start:	14:30	
Time Finish:	14:56	
Grouting Duration:	0:26	hh:mm

Summary:

Constructed JG Height:	16.21	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	34.70' Hard Layer (Till?) (1:57pm)
	36' Sand
	37.5' Hard Layer (Till?)
40 ft	
	47' TOR (2:08pm)
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/4/09 - 9/5/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Sunny
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.48	

Element ID No.	WI-9
GS (EL)	186.13
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	186.13	EL
Bottom of ISS:	178.63	EL
Depth of Nozzle:	186.13	EL
Top of Rock:	139.29	EL
Time Start:	16:18	
Time Finish:	16:36	
Drilling Duration:	0:18	hh:mm

Grouting Parameters:

Bottom of JGC:	139.28	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	183.24	EL
Time Start:	11:03	
Time Finish:	11:57	
Grouting Duration:	0:54	hh:mm

Summary:

Constructed JG Height:	43.96	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	0' Cementatious Material
	7.5' Soil
10 ft	
	11' Sands
20 ft	
30 ft	
	33.65' Hard Layer (Till?) (4:24pm)
	Encountered 1-2' layers on sand within hard layer
40 ft	
	46.84' TOR (4:36pm)
50 ft	
60 ft	

Notes:

Drilled on 9/4/09
Grouted on 9/5/09
Redrilled hole back to depth from 10:45 - 11:00am
6 in/min 46.85' - 42.72'
8 in/min 42.72' - 32.22'
12 in/min 32.22' - 2.89'

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/1/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WI10
GS (EL)	184.64
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	184.64	EL
Bottom of ISS:	172.14	EL
Depth of Nozzle:	141.73	EL
Top of Rock:	141.77	EL
Time Start:	11:41	
Time Finish:	11:59	
Drilling Duration:	0:18	hh:mm

Grouting Parameters:

Bottom of JGC:	141.73	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	181.75	EL
Time Start:	12:01	
Time Finish:	12:52	
Grouting Duration:	0:51	hh:mm

Summary:

Constructed JG Height:	40.02	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' Edge of ISS column & Sands
10 ft	12.5' Silty Sands
20 ft	
30 ft	35.30' Till (11:46am)
	36.12' Cobble?? 1in/min
	37.92' Sands
40 ft	42.87' TOR (11:59am)
50 ft	
60 ft	

Notes:

6 in/min 42.87' - 38.68'
8 in/min 38.68' - 33.56'
12 in/min 33.56' - 2.89'

Parson's sampled grout at 30' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/1/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WI11
GS (EL)	185.06
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.06	EL
Bottom of ISS:	150.82	EL
Depth of Nozzle:	143.16	EL
Top of Rock:	143.21	EL
Time Start:	13:40	
Time Finish:	14:14	
Drilling Duration:	0:34	hh:mm

Grouting Parameters:

Bottom of JGC:	143.16	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	155.53	EL
Time Start:	14:15	
Time Finish:	14:58	
Grouting Duration:	0:21	hh:mm

Summary:

Constructed JG Height:	12.37	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' ISS column/Sand in layers
10 ft	10' ISS column
20 ft	
30 ft	34.24' Till/Gravel & Sand lenses of ~1-2 ft in thickness
40 ft	41.85' TOR
50 ft	
60 ft	

Notes:

6 in/min 41.85' - 37.76'

8 in/min 37.76' - 29.53'

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/1/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WI12
GS (EL)	185.25
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.25	EL
Bottom of ISS:	150.29	EL
Depth of Nozzle:	143.09	EL
Top of Rock:	143.75	EL
Time Start:	15:34	
Time Finish:	16:08	
Drilling Duration:	0:34	hh:mm

Grouting Parameters:

Bottom of JGC:	143.09	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	154.15	EL
Time Start:	16:15	
Time Finish:	16:38	
Grouting Duration:	0:18	hh:mm

Summary:

Constructed JG Height:	11.06	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	
	34.96' Sands
	35.73' Till/Gravel
40 ft	
	41.5' TOR (4:05pm)
	Drilled to 42.16' while waiting for WRSCompass and
50 ft	Parson to confirm rock elevation (8 mins)
60 ft	

Notes:

6 in/min 42.16' - 37.40'

8 in/min 37.40' - 31.10'

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 4/8/10
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WI-12R
GS (EL)	189.57
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	147.57	EL
Depth to Bottom:	146.07	EL
Time Start:	10:55	
Time Finish:	11:24	
Drilling Duration:	0:29	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	189.57	EL
6 in/min Pull Rate to:	NA	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	NA	EL
Depth to Top of JGC:	189.57	EL
Time Start:		
Time Finish:		
Grouting Duration:	0:00	h:mm

Summary:

Constructed JG Height:	0.00	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
60 ft	

Notes:

No jetting on this column due to penetration rates
Hole backfilled via tremie grout

Technican Signature: John Stanbury

MORETRENCH

DATE: 9/2/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WI13
GS (EL)	185.48
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.48	EL
Bottom of ISS:	149.88	EL
Depth of Nozzle:	143.68	EL
Top of Rock:	143.98	EL
Time Start:	10:08	
Time Finish:	11:10	
Drilling Duration:	0:56	hh:mm

Grouting Parameters:

Bottom of JGC:	143.68	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	154.48	EL
Time Start:	11:40	
Time Finish:	12:11	
Grouting Duration:	0:19	hh:mm

Summary:

Constructed JG Height:	10.80	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' ISS column
10 ft	
20 ft	
30 ft	
	35.6' Silty Sands (10:35)
40 ft	39.02' Hard Layer (Till) (10:39)
	44.9' TOR (10:45)
	47.15' Total drill depth (11:10)
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/2/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WI14
GS (EL)	185.54
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.54	EL
Bottom of ISS:	165.43	EL
Depth of Nozzle:	141.94	EL
Top of Rock:	142.05	EL
Time Start:	12:43	
Time Finish:	13:06	
Drilling Duration:	0:23	hh:mm

Grouting Parameters:

Bottom of JGC:	141.94	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	168.58	EL
Time Start:	13:14	
Time Finish:	13:52	
Grouting Duration:	0:38	hh:mm

Summary:

Constructed JG Height:	26.64	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' ISS
	Strong odor, oily return
10 ft	
20 ft	20.11' Silty Sand (12:51)
30 ft	30.8' Hard Layer (Till?) (12:55)
	34.05' Sand
40 ft	40.49' Hard Layer (Till?)
	43.49' TOR (1:06pm)
50 ft	
60 ft	

Notes:

No return during grouting from approx 43.2' to 41.9'

Parsons sampled hole at 30' bgs.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/10/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Cloudy
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.49	

Element ID No.	WI-14A
GS (EL)	186.1
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	145.91	EL
Depth to Bottom:	144.41	EL
Time Start:	8:14	
Time Finish:	9:15	
Drilling Duration:	0:36	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	145.91	EL
Pull Rate (to 32.12'):	6	in/min
Pull Rate (to 2.95'):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	183.15	EL
Time Start:	9:38	
Time Finish:	10:40	
Grouting Duration:	0:54	hh:mm

Summary:

Constructed JG Height:	37.24	ft
Number of Overlaps:		

Depth	Notes
0 ft	0' Cementitious Material
	9.67' Soil
10 ft	
	16.5' Cementitious Material
20 ft	
30 ft	
	35.65' Hard Layer (Till?) (9:05)
40 ft	41.69' Bottom of hole (9:15)
50 ft	
60 ft	

DRAFT - OVERLAPS & QUANTITIES STILL UNDETERMINED

Notes:

Target Depth (7-M-1, EL 146.17) - 39.93' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/2/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WI15
GS (EL)	185.48
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.48	EL
Bottom of ISS:	147.98	EL
Depth of Nozzle:	137.88	EL
Top of Rock:	137.95	EL
Time Start:	14:55	
Time Finish:	15:25	
Drilling Duration:	0:30	hh:mm

Grouting Parameters:

Bottom of JGC:	137.88	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	151.20	EL
Time Start:	15:27	
Time Finish:	15:48	
Grouting Duration:	0:21	hh:mm

Summary:

Constructed JG Height:	13.32	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	
	37.5' Sand (3:10)
40 ft	40.8' Hard Layer with small lenses of sand (Till?)
	47.53' TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/2/09 - 9/3/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI16
GS (EL)	185.67
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Depth of Nozzle:	136.65	EL
Top of Rock:	136.70	EL
Time Start:	16:05	
Time Finish:	16:36	
Drilling Duration:	0:31	hh:mm

Grouting Parameters:

Bottom of JGC:	136.65	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	182.75	EL
Time Start:	8:09	
Time Finish:	9:12	
Grouting Duration:	1:03	hh:mm

Summary:

Constructed JG Height:	46.10	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' Sands
	Strong Odor, readings spiking at 40-60 ppm
10 ft	
20 ft	
30 ft	
40 ft	
	45.66' Hard Layer (Till?) (4:27)
	48.97' TOR (4:32)
50 ft	
60 ft	

Notes:

Hole drilled on 9/2/09

Hole grouted on 9/3/09

6 in/min --> 49.02' - 44.46' ; 8 in/min --> 44.46' - 39.83' ; 12 in/min --> 39.83' - 2.92'

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/3/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Cloudy	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI17
GS (EL)	186.10
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	186.10	EL
Bottom of ISS:	159.60	EL
Depth of Nozzle:	134.62	EL
Top of Rock:	134.70	EL
Time Start:	10:15	
Time Finish:	10:38	
Drilling Duration:	0:23	hh:mm

Grouting Parameters:

Bottom of JGC:	134.62	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	162.97	EL
Time Start:	10:40	
Time Finish:	11:41	
Grouting Duration:	0:37	hh:mm

Summary:

Constructed JG Height:	28.35	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	26.5' Sand (10:30)
40 ft	200 in/min
50 ft	42.5' Hard Layer (Till?)
60 ft	51.4' TOR (10:34am)

Notes:

6 in/min --> 51.48' - 46.52' ; 8 in/min --> 46.52' - 41.01' ; 12 in/min --> 41.01' - 23.13'

Spoils Density - 1.96

Parsons sampled grout @ 35' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 4/8/10
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WI-17R
GS (EL)	189.3
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	143.47	EL
Depth to Bottom:	141.97	EL
Time Start:	10:05	
Time Finish:	10:37	
Drilling Duration:	0:32	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	189.30	EL
6 in/min Pull Rate to:	NA	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	NA	EL
Depth to Top of JGC:	189.30	EL
Time Start:		
Time Finish:		
Grouting Duration:	0:00	h:mm

Summary:

Constructed JG Height:	0.00	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
60 ft	

Notes:

No jetting on this column due to penetration rates
Hole backfilled via tremie grout

Technican Signature: John Stanbury

MORETRENCH

DATE: 9/3/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI18
GS (EL)	186.27
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	186.27	EL
Bottom of ISS:	143.04	EL
Depth of Nozzle:	134.89	EL
Top of Rock:	134.92	EL
Time Start:	12:14	
Time Finish:	12:47	
Drilling Duration:	0:33	hh:mm

Grouting Parameters:

Bottom of JGC:	134.89	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	146.44	EL
Time Start:	12:54	
Time Finish:	13:13	
Grouting Duration:	0:19	hh:mm

Summary:

Constructed JG Height:	11.55	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' ISS
	6.88' Cobbles/Building debris (bricks/masonry) within ISS column
10 ft	
	16.10' Cobbles/building debris (bricks/masonry) within ISS column
20 ft	
30 ft	
	37.4' Hard layer within ISS
40 ft	41.59' Hard layer within ISS
	43.23' Sand (12:38)
	45.36' Hard layer (Till?)
50 ft	51.35' TOR (12:44)
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/3/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI-19
GS (EL)	186.54
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	186.54	EL
Bottom of ISS:	141.22	EL
Depth of Nozzle:	132.60	EL
Top of Rock:	133.17	EL
Time Start:	13:55	
Time Finish:	14:31	
Drilling Duration:	0:36	hh:mm

Grouting Parameters:

Bottom of JGC:	132.60	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	145.17	EL
Time Start:	14:34	
Time Finish:	14:54	
Grouting Duration:	0:20	hh:mm

Summary:

Constructed JG Height:	12.57	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
	45.32' Hard layer (Till?) (2:20pm)
50 ft	53.94' TOR (2:27pm)
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 4/8/10
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WI-19R
GS (EL)	189.97
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	140.66	EL
Depth to Bottom:	139.16	EL
Time Start:	8:53	
Time Finish:	9:42	
Drilling Duration:	0:49	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	189.97	EL
6 in/min Pull Rate to:	NA	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	NA	EL
Depth to Top of JGC:	189.97	EL
Time Start:		
Time Finish:		
Grouting Duration:	0:00	h:mm

Summary:

Constructed JG Height:	0.00	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
60 ft	

Notes:

No jetting on this column due to penetration rates
Hole backfilled via tremie grout

Technican Signature: John Stanbury

MORETRENCH

DATE: 9/15/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-20
GS (EL)	188.46
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	134.26	EL
Depth to TOR:	134.27	EL
Time Start:	9:56	
Time Finish:	10:26	
Drilling Duration:	0:30	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	134.26	EL
6 in/min Pull Rate to:	45.54	ft
8 in/min Pull Rate to:	2.95	ft
12 in/min Pull Rate to:	NA	ft
Depth to Top of JGC:	185.51	EL
Time Start:	10:27	
Time Finish:	12:11	
Grouting Duration:	1:44	hh:mm

Summary:

Constructed JG Height:	51.25	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Soil
	Very Strong Odor
	Very Oily Return
10 ft	
20 ft	
30 ft	
40 ft	
	47.69' Hard Layer (Till?) (10:08)
50 ft	
	54.19' TOR (10:26)
60 ft	

Notes:

Parson's sampled at 40' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/23/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Partly Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-21
GS (EL)	189.64
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	189.64	EL
Depth to Bottom of ISS:	139.41	EL
Depth of Nozzle:	132.30	EL
Depth to TOR:	132.30	EL
Time Start:	7:59	
Time Finish:	8:45	
Drilling Duration:	0:46	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	132.30	EL
6 in/min Pull Rate to:	142.86	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	NA	EL
Depth to Top of JGC:	142.86	EL
Time Start:	8:51	
Time Finish:	9:14	
Grouting Duration:	0:23	hh:mm

Summary:

Constructed JG Height:	10.56	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	50.23' Sands (8:33)
	51.57' Till
	57.34' TOR
60 ft	

Notes:

Partial thu N5, ISS Bot EL 139.7
MTA ISS Bot EL 139.41
Grout to EL 142.7

Parson's sampled at 50' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/15/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-22
GS (EL)	189.81
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	131.48	EL
Depth to TOR:	131.52	EL
Time Start:	16:02	
Time Finish:	16:21	
Drilling Duration:	0:19	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	131.48	EL
6 in/min Pull Rate to:	51.64	ft
8 in/min Pull Rate to:	2.89	ft
12 in/min Pull Rate to:	NA	ft
Depth to Top of JGC:	186.92	EL
Time Start:	16:22	
Time Finish:	17:40	
Grouting Duration:	1:18	hh:mm

Summary:

Constructed JG Height:	55.44	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	54.30' Hard Layer (Till?)
	58.29' TOR
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/18/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-23
GS (EL)	190.17
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	128.88	EL
Depth to TOR:	128.89	EL
Time Start:	13:09	
Time Finish:	13:26	
Drilling Duration:	0:17	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	128.88	EL
6 in/min Pull Rate to:	137.22	EL
8 in/min Pull Rate to:	151.69	EL
12 in/min Pull Rate to:	187.25	EL
Depth to Top of JGC:	187.25	EL
Time Start:	13:27	
Time Finish:	14:52	
Grouting Duration:	1:25	hh:mm

Summary:

Constructed JG Height:	58.37	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	54.78' Hard Layer (Till)
60 ft	61.28' TOR

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/17/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-24
GS (EL)	190.6
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:	**9/17/09**	
Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	129.64	EL
Depth to TOR:	129.64	EL
Time Start:	14:52	
Time Finish:	15:14	
Drilling Duration:	0:22	hh:mm

Grouting Parameters:	**9/18/09**	
Depth to Bottom of JGC:	129.58	EL
6 in/min Pull Rate to:	136.63	EL
8 in/min Pull Rate to:	155	EL
12 in/min Pull Rate to:	187.61	EL
Depth to Top of JGC:	187.61	EL
Time Start:	8:14	
Time Finish:	9:37	
Grouting Duration:	1:23	hh:mm

Summary:

Constructed JG Height:	58.03	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	1.5' Concrete/Cobble/Debris
	2' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	55.50' Hard Layer (Till?)
60 ft	60.96' TOR (3:14)

Notes:

Drilled hole with grout. Unable to jet grout hole on 9/17/09

9/18/09 - Redrilled hole from 8:00 - 8:14am. Grouted from 8:14 - 9:37am.

Parsons sampled at 40' bgs

Technican Signature: Andrew Buttitta

Field Boring Log

Boring # WI (23,24) r=2.46

PROJECT ID:	ConEd White Plains former MGP OU-2 Site	Moretrench Project No:	**81-4527**
LOCATION:	White Plains NY		
DRILLER:	ADT		
DRILLING METHOD:		ELEVATION: 190.6	
SOIL SAMPLING METHOD:	NQ Single Barrel Core		
DATE BORING INSTALLED	9/30/2009		
TOTAL DEPTH: 63.5'			

DEPTH BELOW GROUND SURFACE (FEET)	CASING (blows/ft) CORING (min/ft)	SAMPLE	SOIL (Blows/6 in.) 0/6	6/12	12/18	18/24	REC.	SOIL DESCRIPTION	NOTES
			CORING RUN (in)	REC (in)	REC %	L>4"	RQD%		
		Cased Hole						Destructive Drilling to 5.5ft. No Samples Taken.	
5									
5.5		Run 1	36	24	67%			Run 1: 5.5~8.5 Jet grout	Core recovered at the top of the run recovered in small pieces. Quality of the core improved by depth.
8.5									
10		Run 2	60	55	92%			Run 2: 8.5~13.5 Jet grout	
13.5									
15		Run 3	60	60	100%			Run 3: 13.5~18.5 Jet grout	
18.5									
20		Run 4	60	58	97%			Run 4: 18.5~23.5 Jet grout	
23.5									
		Run 5	60	60	100%			Run 5: 23.5~28.5 Jet grout	
28.5									
30		Run 6	60	60	100%			Run 6: 28.5~33.5 Jet grout	
33.5									
		Run 7	60	60	100%			Run 7: 33.5~38.5 Jet grout	
38.5									
40		Run 8	60	60	100%			Run 8: 38.5~43.5 Jet grout	
43.5									
		Run 9	60	60	100%			Run 9: 43.5~48.5 Jet grout	
48.5									
50		Run 10	60	60	100%			Run 10: 48.5~53.5 Jet grout	
53.5									
		Run 11	60	23	38%			Run 11: 53.5~58.5 Jet grout	55 ~ 58.5 bgs minor drops in rods observed minor drilling fluid loss and feed pressure decrease from 55 ~ 58.4 No noteable change in drilling fluid return colo Presence of granular material in the last few inches of recoved JG core
58.5									
60		Run 12	60	48	80%			Run 12: 58.5~63.5 Fractured rock, cobbles and bed rock	58.5~60 fractured rock and cobbles Drilling fluid loss TOR @60
63.5									

MORETRENCH

Prepared BY:

Moretrench American Corporation

100 Stickle Avenue
Rockaway, New Jersey 07866

MORETRENCH

DATE: 9/22/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Partly Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WI-25
GS (EL)	190.66
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.39	EL
Depth to TOR:	130.39	EL
Time Start:	7:48	
Time Finish:	8:09	
Drilling Duration:	0:21	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.39	EL
6 in/min Pull Rate to:	138.53	EL
8 in/min Pull Rate to:	158.21	EL
12 in/min Pull Rate to:	187.74	EL
Depth to Top of JGC:	187.74	EL
Time Start:	8:11	
Time Finish:	10:53	
Grouting Duration:	1:20	hh:mm

Summary:

Constructed JG Height:	57.35	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	55.91' Till
60 ft	60.27' TOR

Notes:

Parson's sampled at 40' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/19/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-26
GS (EL)	190.77
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.37	EL
Depth to TOR:	130.38	EL
Time Start:	12:55	
Time Finish:	13:17	
Drilling Duration:	0:22	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.37	EL
6 in/min Pull Rate to:	136.96	EL
8 in/min Pull Rate to:	156.85	EL
12 in/min Pull Rate to:	187.88	EL
Depth to Top of JGC:	187.88	EL
Time Start:	13:19	
Time Finish:	15:04	
Grouting Duration:	1:24	hh:mm

Summary:

Constructed JG Height:	57.51	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	55.72' Hard Layer (Till)
60 ft	60.39' TOR

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/19/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WI-27
GS (EL)	190.87
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.11	EL
Depth to TOR:	130.11	EL
Time Start:	9:40	
Time Finish:	9:54	
Drilling Duration:	0:14	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.11	EL
6 in/min Pull Rate to:	136.87	EL
8 in/min Pull Rate to:	157.64	EL
12 in/min Pull Rate to:	187.98	EL
Depth to Top of JGC:	187.98	EL
Time Start:	10:01	
Time Finish:	11:32	
Grouting Duration:	1:27	hh:mm

Summary:

Constructed JG Height:	57.87	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56.59' Hard Layer (Till?)
60 ft	60.76 TOR

Notes:

Parson's sampled at 40' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/16/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Cloudy	
Client: WRS Compass		Engineer: AHB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI-28
GS (EL)	191.24
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Depth of Nozzle:	130.14	EL
Top of Rock:	130.14	EL
Time Start:	12:04	
Time Finish:	12:27	
Drilling Duration:	0:23	hh:mm

Grouting Parameters:

Bottom of JGC:	130.14	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	188.29	EL
Time Start:	12:28	
Time Finish:	13:53	
Grouting Duration:	1:25	hh:mm

Summary:

Constructed JG Height:	58.15	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	Soil
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	54.9' Hard layer (Till?) (12:18pm)
60 ft	61.1' TOR (12:27pm)

Notes:

Parsons took a sample from depth 35'

Technican Signature: Amir Haddad

MORETRENCH

DATE: 9/17/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI-29
GS (EL)	191.24
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.54	EL
Depth to TOR:	130.56	EL
Time Start:	11:33	
Time Finish:	12:00	
Drilling Duration:	0:27	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.54	EL
6 in/min Pull Rate to:	53.28	ft
8 in/min Pull Rate to:	38.22	ft
12 in/min Pull Rate to:	3.2	ft
Depth to Top of JGC:	188.04	EL
Time Start:	12:03	
Time Finish:	13:25	
Grouting Duration:	1:22	hh:mm

Summary:

Constructed JG Height:	57.50	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' Sand
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56.14' Hard Layer (Till?)
60 ft	60.68' TOR

Notes:

Parsons sampled at 40' bgs.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 10/6/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI-30
GS (EL)	189.85
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	127.45	EL
Depth to TOR:	127.49	EL
Time Start:	11:10	
Time Finish:	11:29	
Drilling Duration:	0:19	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	127.49	EL
6 in/min Pull Rate to:	134.37	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	186.90	EL
Depth to Top of JGC:	186.90	EL
Time Start:	11:30	
Time Finish:	13:04	
Grouting Duration:	1:20	h:mm

Summary:

Constructed JG Height:	59.41	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' Sand/Soil
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	55.93' Till
60 ft	
	62.36' TOR
70 ft	
80 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 10/10/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WI-31
GS (EL)	190.15
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	126.24	EL
Depth to TOR:	126.28	EL
Time Start:	11:48	
Time Finish:	12:10	
Drilling Duration:	0:22	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	126.24	EL
6 in/min Pull Rate to:	136.50	EL
8 in/min Pull Rate to:	165.15	EL
12 in/min Pull Rate to:	187.20	EL
Depth to Top of JGC:	187.20	EL
Time Start:	12:15	
Time Finish:	13:55	
Grouting Duration:	1:40	h:mm

Summary:

Constructed JG Height:	60.96	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	0' Sand
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56.15' Till
60 ft	
	63.87' TOR
70 ft	
80 ft	

Notes:

Technican Signature: Joel Holden

MORETRENCH

DATE: 12/16/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Clear
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.47	

Element ID No.	WO-1
GS (EL)	188.2
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	141.05	EL
TOR:	141.09	EL
Time Start:	13:00	
Time Finish:	13:15	
Drilling Duration:	0:15	h:mm

Grouting Parameters:

Bottom of JGC:	141.09	EL
6 in/min Pull Rate to:	149.74	EL
8 in/min Pull Rate to:	163.23	EL
12 in/min Pull Rate to:	185.35	EL
Top of JGC:	185.35	EL
Time Start:	13:18	
Time Finish:	14:22	
Grouting Duration:	1:04	h:mm

Summary:

Constructed JG Height:	44.26	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' Sand/Soil
	2.33' Obstruction
10 ft	
20 ft	
30 ft	
	38.44' Till
40 ft	
	47.10' TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/16/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Clear
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.46	

Element ID No.	WO-2
GS (EL)	188.02
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	141.86	EL
TOR:	141.91	EL
Time Start:	11:22	
Time Finish:	11:34	
Drilling Duration:	0:12	h:mm

Grouting Parameters:

Bottom of JGC:	141.91	EL
6 in/min Pull Rate to:	151.83	EL
8 in/min Pull Rate to:	163.05	EL
12 in/min Pull Rate to:	185.07	EL
Top of JGC:	185.07	EL
Time Start:	11:35	
Time Finish:	12:38	
Grouting Duration:	1:03	h:mm

Summary:

Constructed JG Height:	43.16	ft
Number of Overlaps:		

Depth	Notes
0 ft	0' Sand/Soil
10 ft	
20 ft	
30 ft	
	37.73' Till
40 ft	
	46.11' TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/16/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Clear
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.46	

Element ID No.	WO-3
GS (EL)	187.77
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	140.92	EL
TOR:	140.96	EL
Time Start:	8:09	
Time Finish:	8:28	
Drilling Duration:	0:19	h:mm

Grouting Parameters:

Bottom of JGC:	140.96	EL
6 in/min Pull Rate to:	152.50	EL
8 in/min Pull Rate to:	162.77	EL
12 in/min Pull Rate to:	184.78	EL
Top of JGC:	184.78	EL
Time Start:	8:35	
Time Finish:	9:48	
Grouting Duration:	1:13	h:mm

Summary:

Constructed JG Height:	43.82	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' Sand/Soil
10 ft	
20 ft	
30 ft	36.77' Till
40 ft	
50 ft	46.81' TOR
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/15/09
SHEET: 1 OF 1
SHIFT: 1st | 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Cloudy
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.47	

Element ID No.	WO-4
GS (EL)	187.97
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	139.62	EL
TOR:	139.62	EL
Time Start:	19:14	
Time Finish:	19:55	
Drilling Duration:	0:41	h:mm

Grouting Parameters:

Bottom of JGC:	139.62	EL
6 in/min Pull Rate to:	149.51	EL
8 in/min Pull Rate to:	163.02	EL
12 in/min Pull Rate to:	185.03	EL
Top of JGC:	185.03	EL
Time Start:	20:10	
Time Finish:	21:17	
Grouting Duration:	1:07	h:mm

Summary:

Constructed JG Height:	45.41	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0' Sand/Soil
10 ft	
20 ft	
30 ft	
40 ft	38.5' Till (7:31pm)
50 ft	48.35' TOR
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/15/09
SHEET: 1 OF 1
SHIFT: 1st | 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WO-5
GS (EL)	187.59
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	139.26	EL
TOR:	139.27	EL
Time Start:	16:20	
Time Finish:	16:51	
Drilling Duration:	0:31	h:mm

Grouting Parameters:

Bottom of JGC:	139.27	EL
6 in/min Pull Rate to:	148.65	EL
8 in/min Pull Rate to:	162.59	EL
12 in/min Pull Rate to:	184.67	EL
Top of JGC:	184.67	EL
Time Start:	16:54	
Time Finish:	18:02	
Grouting Duration:	1:08	h:mm

Summary:

Constructed JG Height:	45.40	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	Cementitious Material??
10 ft	
20 ft	
30 ft	30.00' Sand/Soil (4:40pm)
	38.62' Till
40 ft	
	48.32' TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/15/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WO-6
GS (EL)	187.6
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	138.49	EL
TOR:	138.50	EL
Time Start:	9:47	
Time Finish:	10:09	
Drilling Duration:	0:22	h:mm

Grouting Parameters:

Bottom of JGC:	138.50	EL
6 in/min Pull Rate to:	150.13	EL
8 in/min Pull Rate to:	162.60	EL
12 in/min Pull Rate to:	184.60	EL
Top of JGC:	184.60	EL
Time Start:	10:10	16:00
Time Finish:	11:17	16:07
Grouting Duration:	1:14	h:mm

Summary:

Constructed JG Height:	46.10	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	Sand/Soil
10 ft	11.28' Hard spot (~4in)
20 ft	
30 ft	
	37.62' Till
40 ft	
50 ft	49.10' TOR
60 ft	

Notes:

Grout surfacing approx 20' away (North) from borehole at a depth of 40' bgs.

11:19am - 5.84' bgs - Stopped grouting. Grout surfacing approx 25' away (North) around manhole and flowing onto the sidewalk and into a sewer drain.

3:55pm - Given OK to complete hole by WRSC. Drilled back down to 10' bgs. Grouted from 4:00 - 4:07pm.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/15/09
SHEET: 1 OF 1
SHIFT: 1st 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.46		

Element ID No.	WO-7
GS (EL)	187.22
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Nozzle:	139.42	EL
TOR:	139.43	EL
Time Start:	7:49	
Time Finish:	8:10	
Drilling Duration:	0:21	h:mm

Grouting Parameters:

Bottom of JGC:	139.43	EL
6 in/min Pull Rate to:	150.29	EL
8 in/min Pull Rate to:	162.25	EL
12 in/min Pull Rate to:	184.27	EL
Top of JGC:	184.27	EL
Time Start:	8:11	
Time Finish:	9:21	
Grouting Duration:	1:10	h:mm

Summary:

Constructed JG Height:	44.84	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	Cementitious Material
10 ft	9' Sand/Soil
20 ft	
30 ft	
	37.13' Till (7:59)
40 ft	
	47.79' TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 12/14/09
SHEET: 1 OF 1
SHIFT: 1st | 2nd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Overcast
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.46	

Element ID No.	WO-8A
GS (EL)	187.32
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	187.32	EL
Bottom of ISS:	151.82	EL
Nozzle:	139.42	EL
TOR:	139.43	EL
Time Start:	19:46	
Time Finish:	20:59	
Drilling Duration:	1:13	h:mm

Grouting Parameters:

Bottom of JGC:	139.43	EL
6 in/min Pull Rate to:	150.39	EL
8 in/min Pull Rate to:	155.35	EL
12 in/min Pull Rate to:	NA	EL
Top of JGC:	155.35	EL
Time Start:	21:00	
Time Finish:	21:34	
Grouting Duration:	0:34	h:mm

Summary:

Constructed JG Height:	15.92	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	Auger Column 8' Test 3
10 ft	
20 ft	
30 ft	
	35.50' Sand (8:25pm)
	37.15' Till
40 ft	
	47.89' TOR
50 ft	
60 ft	

Notes:

Partial thru ISS Auger Column 8' Test 3, Bot EL 151.58
MTA Bot EL 151.82
Grout to EL 154.82

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/3/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WO9
GS (EL)	185.34
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.34	EL
Bottom of ISS:	151.75	EL
Depth of Nozzle:	138.03	EL
Top of Rock:	138.04	EL
Time Start:	15:59	
Time Finish:	16:45	
Drilling Duration:	0:38	hh:mm

Grouting Parameters:

Bottom of JGC:	138.03	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	155.29	EL
Time Start:	16:46	
Time Finish:	17:12	
Grouting Duration:	0:26	hh:mm

Summary:

Constructed JG Height:	17.26	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	33.59' Sand (4:29)
	35.29' Hard Layer (Till?) (4:29)
40 ft	
	47.30' TOR (4:39)
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/10/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Partly Sunny
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.49	

Element ID No.	WO-9A
GS (EL)	185.83
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	151.77	EL
Depth to Bottom:	150.30	EL
Time Start:	14:25	
Time Finish:	14:30	
Drilling Duration:	0:05	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	151.77	EL
Pull Rate (to 29.00'):	6	in/min
Pull Rate (to 2.89'):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	182.94	EL
Time Start:	14:37	
Time Finish:	15:17	
Grouting Duration:	0:40	hh:mm

Summary:

Constructed JG Height:	31.17	ft
Number of Overlaps:		

Depth	Notes
0 ft	0' Sand
10 ft	
20 ft	
30 ft	30.53' Hard layer (Till?)
	35.53' Bottom of hole
40 ft	
50 ft	
60 ft	

DRAFT - OVERLAPS & QUANTITIES STILL UNDER REVIEW

Notes:

Target Depth (4-o-2, EL 152.53) - 33.30' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/4/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WO-10
GS (EL)	185.36
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	185.36	EL
Bottom of ISS:	151.77	EL
Depth of Nozzle:	152.82	EL
Top of Rock:	138.86	EL
Time Start:	8:33	
Time Finish:	12:18	
Drilling Duration:	0:58	hh:mm

Grouting Parameters:

Bottom of JGC:	138.80	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	156.39	EL
Time Start:	12:20	
Time Finish:	12:47	
Grouting Duration:	0:27	hh:mm

Summary:

Constructed JG Height:	17.59	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' ISS
10 ft	
20 ft	
30 ft	32.54' Hard Layer (11:58am)
40 ft	36' Sand 38' Layers of Sand/Gravel and Cobbles
50 ft	46.5' TOR (12:18pm)
60 ft	

Notes:

Parson's sampled grout at 35' bgs.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/10/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WO-10A
GS (EL)	186.05
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	151.91	EL
Depth to Bottom:	150.41	EL
Time Start:	15:27	
Time Finish:	15:56	
Drilling Duration:	0:29	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	151.91	EL
Pull Rate (to 27.46'):	6	in/min
Pull Rate (to 2.89'):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	183.16	EL
Time Start:	15:58	
Time Finish:	16:41	
Grouting Duration:	0:43	hh:mm

Summary:

Constructed JG Height:	31.25	ft
Number of Overlaps:		

Depth	Notes
0 ft	0' Cementitious Material
10 ft	
	Drilling @ 9-12 in/min
20 ft	
	29.5' Hard Layer (Till?)
30 ft	Drilling @ 8 in/min
	34.44' Bottom of hole (3:56)
40 ft	
50 ft	
60 ft	

DRAFT - OVERLAPS & QUANTITIES STILL UNDER REVIEW

Notes:

Target Depth (4-o-2, EL 152.53) - 33.72' bgs

Drilled with grout

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/20/09 - 8/21/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: White Plains		Weather	Hot, Sunny
Client: WRS Compass		Engineer	AEB

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity			

Element ID No.	WO11
GS (EL)	185.36
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	ft
Depth to Bottom of ISS:	NA	ft
Depth of Nozzle:	45.46	ft
Depth to TOR:	45.46	ft
Time Start:	12:55	
Time Finish:	14:07	
Drilling Duration:	1:12	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	45.46	ft
Pull Rate (to TOR-4'):	6.00	in/min
Pull Rate (to TOJGC):	12.00	in/min
Depth to Top of JGC:	8.17	ft
Time Start:	11:50	
Time Finish:	12:50	
Grouting Duration:	1:00	hh:mm

Summary:

Constructed JG Height:	37.29	ft
Number of Overlaps:	0	

Depth	Drilling Notes
0 ft	Misc Fill and construction debris to ~4.5m
10 ft	
3.05 m	
20 ft	4.5m-11m Silty Sands
6.10 m	
30 ft	
9.15 m	
	11m-13.86m Gravel, Till
40 ft	
12.20 m	
	13.86m Rock
50 ft	
15.24 m	
60 ft	

Notes:

Hole was drilled on 8/20/09 and grouted on 8/21/09

Problems encountered with Jean Lutz system on drill rig, mixer/agitator tanks and high pressure pump caused jetting to cease at 2.49m below GS. Remaining 1.5m will be completed at a later time.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/20/09 - 8/21/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: White Plains		Weather	Hot, Sunny
Client: WRS Compass		Engineer	AEB

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity			

Element ID No.	WO11
GS (EL)	185.36
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	ft
Depth to Bottom of ISS:	NA	ft
Depth of Nozzle:	45.46	ft
Depth to TOR:	45.46	ft
Time Start:	12:55	
Time Finish:	14:07	
Drilling Duration:	1:12	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	45.46	ft
Pull Rate (to TOR-4'):	6.00	in/min
Pull Rate (to TOJGC):	12.00	in/min
Depth to Top of JGC:	2.95	ft
Time Start:	11:50	
Time Finish:	12:50	
Grouting Duration:	0:49	hh:mm

Summary:

Constructed JG Height:	42.51	ft
Number of Overlaps:	0	

Depth	Drilling Notes
0 ft	Misc Fill and construction debris to ~4.5m
10 ft	
3.05 m	
20 ft	4.5m-11m Silty Sands
6.10 m	
30 ft	
9.15 m	
	11m-13.86m Gravel, Till
40 ft	
12.20 m	
	13.86m Rock
50 ft	
15.24 m	
60 ft	

Notes:

Hole was drilled on 8/20/09 and grouted on 8/21/09

Problems encountered with Jean Lutz system on drill rig, mixer/agitator tanks and high pressure pump caused jetting to cease at 2.49m below GS. Remaining 1.5m will be completed at a later time.

9/1/2009 Re-drilled hole to depth of 8.43' from new GS EL of 185.02. (8:55am - 8:57am)

Jetted from 8:59 to 9:06am. 8.43' to 2.95'

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/1/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: Parson	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WO12
GS (EL)	185.35
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	182.35	EL
Bottom of ISS:	145.87	EL
Depth of Nozzle:	143.06	EL
Top of Rock:	143.10	EL
Time Start:	9:50	
Time Finish:	10:27	
Drilling Duration:	0:37	hh:mm

Grouting Parameters:

Bottom of JGC:	143.06	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	149.00	EL
Time Start:	10:29	
Time Finish:	10:42	
Grouting Duration:	0:13	hh:mm

Summary:

Constructed JG Height:	5.94	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Sands
	3' ISS column/Sand in layers
10 ft	
	14.73' ISS column
20 ft	Drilling ISS @ ~14in/min
30 ft	
	39.48' Till/Gravel? (10:21am)
40 ft	
	42.25' TOR (10:27am)
50 ft	
60 ft	

Notes:

Communication with WO11

During drilling and grouting, seepage was observed on west side of trench slope in vicinity of WO8 - WO10

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/24/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: White Plains, NY 10601		Weather:	Partly Cloudy
Client: WRS Compass		Engineer:	AEB

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity		

Element ID No.	WO13
GS (EL)	185.76
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	ft
Depth to Bottom of ISS:	NA	ft
Depth of Nozzle:	48.94	ft
Depth to TOR:	48.94	ft
Time Start:	9:12	
Time Finish:	9:53	
Drilling Duration:	0:41	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	48.94	ft
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	6	in/min
Depth to Top of JGC:	2.92	ft
Time Start:	14:08	
Time Finish:	15:57	
Grouting Duration:	1:49	hh:mm

Summary:

Constructed JG Height:	46.02	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	0m - 11.57m Silty Sands with pieces of wood,
	brick, concrete and masonry. Strong odors in
	top few feet.
10 ft	
3.05 m	
20 ft	
6.10 m	
30 ft	
9.15 m	
	11.57m - 14.92m Gravel/Till. Pieces of wood, brick
	and masonry in drill cuttings.
40 ft	
12.20 m	
	14.92m Rock
50 ft	
15.24 m	
60 ft	

Notes: Main swivel had to be replaced prior to beginning jetting because of small water leak. Began grouting at 2:08pm. No return during grouting from approx 12m - 13m in depth (Gravel/Till area). Lots of wood fragments surfacing in grout return in top 3-4m. Completed grouting at 3:57pm.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/25/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Sunny	
Client: WRS Compass		Engineer: AEB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity			

Element ID No.	WO14
GS (EL)	186.19
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	ft
Depth to Bottom of ISS:	NA	ft
Depth of Nozzle:	44.87	ft
Depth to TOR:	44.87	ft
Time Start:	9:52	
Time Finish:	10:18	
Drilling Duration:	0:26	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	44.87	ft
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Depth to Top of JGC:	2.89	ft
Time Start:	10:31	
Time Finish:	12:31	
Grouting Duration:	2:00	min

Summary:

Constructed JG Height:	41.98	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0 - 37.53ft Silty Sand with pieces of brick, wood and concrete. Strong Odor
10 ft / *3.05 m*	
20 ft / *6.10 m*	
30 ft / *9.15 m*	Hit Till layer at 37.53ft at 10am 37.53 - 44.87ft Till with pieces of brick wood and concrete
40 ft / *12.20 m*	44.87ft Rock
50 ft / *15.24 m*	
60 ft	

Notes:

Started jetting at 10:31. Silo ran out of slag at 10:35am. Refilling from truck. On hold until 10:57am.

Jetting completed at 12:31pm

Parson sampled grout from column at ~20 ft bgs.

****Not enough slag onsite to drill and grout another hole. Two portland trucks arrive on site at 2:25pm.**

Slag trucks are not expected until 5pm.**

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/26/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: 85	
Client: WRS Compass		Engineer: AHB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.52		

Element ID No.	WO15
GS (EL)	186.07
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	0.00	ft
Depth to Bottom of ISS:	35.00	ft
Depth of Nozzle:	47.93	ft
Depth to TOR:	47.93	ft
Time Start:	9:09	
Time Finish:	9:51	
Drilling Duration:	0:42	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	47.93	ft
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Depth to Top of JGC:	35.00	ft
Time Start:	10:23	
Time Finish:	10:47	
Grouting Duration:	0:24	hh:mm

Summary:

Constructed JG Height:	12.93	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
	37' bottom of ISS @ 9:40
40 ft	39' Hard Layer (Till?)
	47.93 TOR
50 ft	
60 ft	

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/26/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: 85	
Client: WRS Compass		Engineer: AHB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.52		

Element ID No.	WO16
GS (EL)	186.18
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	0.00	ft
Depth to Bottom of ISS:	42.01	ft
Depth of Nozzle:	50.30	ft
Depth to TOR:	50.30	ft
Time Start:	12:00	
Time Finish:	12:39	
Drilling Duration:	0:39	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	50.30	ft
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Depth to Top of JGC:	40.50	ft
Time Start:	12:48	
Time Finish:	13:05	
Grouting Duration:	0:17	hh:mm

Summary:

Constructed JG Height:	9.80	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	
	Bottom of ISS 42.01'@ 12:27
	43' Hard Layer (Till?)
50 ft	
	50.3' TOR
60 ft	

Notes:

Communication with hole WO15 during jet grouting especially at first 5' of grouting

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/26/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: 85	
Client: WRS Compass		Engineer: AHB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.52		

Element ID No.	WO17
GS (EL)	186.32
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	0.00	ft
Depth to Bottom of ISS:	41.14	ft
Depth of Nozzle:	51.44	ft
Depth to TOR:	51.44	ft
Time Start:	13:41	
Time Finish:	14:22	
Drilling Duration:	0:41	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	51.44	ft
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Depth to Top of JGC:	39.64	ft
Time Start:	14:32	
Time Finish:	15:08	
Grouting Duration:	0:25	hh:mm

Summary:

Constructed JG Height:	11.80	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	
10 ft	
20 ft	
30 ft	
40 ft	Bottom of ISS 41.14'@ 14:12
	43' Hard Layer (Till?)
	Comunication with WO17 during drilling
50 ft	
	51.44' TOR
60 ft	

Notes:

Communication with hole WO15 during jet grouting

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/26/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: 85	
Client: WRS Compass		Engineer: AHB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.52		

Element ID No.	WO18
GS (EL)	186.95
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	0.00	ft
Depth to Bottom of ISS:	9.00	ft
Depth of Nozzle:	53.51	ft
Depth to TOR:	53.51	ft
Time Start:	15:23	
Time Finish:	15:51	
Drilling Duration:	0:28	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	53.51	ft
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Depth to Top of JGC:	3.00	ft
Time Start:	15:59	
Time Finish:	11:36	1
Grouting Duration:	1:50	hh:mm

Summary:

Constructed JG Height:	50.51	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	
10 ft	9' bottom of ISS @ 3:28
20 ft	
30 ft	
40 ft	
50 ft	48' Hard Layer (Till?)
60 ft	53.51 TOR

Notes:

grouting stopped at depth 29.69 (to be completed next day)

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/9/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Cloudy
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.48	

Element ID No.	WO-18A
GS (EL)	186.46
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	NA	EL
Bottom of ISS:	NA	EL
Depth of Nozzle:	155.42	EL
Bottom:	153.92	EL
Time Start:	8:03	
Time Finish:	8:22	
Drilling Duration:	0:19	hh:mm

Grouting Parameters:

Bottom of JGC:	155.42	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	183.47	EL
Time Start:	8:28	
Time Finish:	8:58	
Grouting Duration:	0:30	hh:mm

Summary:

Constructed JG Height:	28.05	ft
Number of Overlaps:		

Depth	Notes
0 ft	0' Cementatious Material
	Drilling at 12 in/min
10 ft	
20 ft	20' Sands (8:18)
30 ft	30' JGC
	32.54' Total Depth (8:22)
40 ft	
50 ft	
60 ft	

DRAFT - OVERLAPS & QUANTITIES STILL UNDETERMINED

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/27/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: 80's	
Client: WRS Compass		Engineer: AHB	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WO19
GS (EL)	186.91
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	134.61	EL
Depth to TOR:	134.61	EL
Time Start:	13:23	
Time Finish:	13:50	
Drilling Duration:	0:27	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	134.61	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Depth to Top of JGC:	183.91	EL
Time Start:	13:59	
Time Finish:	15:48	
Grouting Duration:	1:15	hh:mm

Summary:

Constructed JG Height:	49.30	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	
	Drilling return was fresh grout from WO18 to a depth of 30'bgs
10 ft	
	Commiunication with WO18 during drilling and jetting along the whole length WO19
20 ft	
30 ft	
40 ft	
	AT 13:41 Hard Layer (Till?) @ 47.05'
50 ft	
	AT 13:50 TOR @ 52.30'
60 ft	

Notes:

Technican Signature: Amir Haddad

MORETRENCH

DATE: 9/11/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy, Raining
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Element ID No.	WO-19A		
GS (EL)	187.27		
Rotation Speed (rpm)	12		
Grout Pressure (Bar)	400		
Grout Flow (gal/min)	98		
Air Pressure (Bar)	7		

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.48	

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	138.78	EL
Depth to Bottom:	137.28	EL
Time Start:	8:29	
Time Finish:	9:03	
Drilling Duration:	0:34	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	138.78	EL
Pull Rate (to 40.98'):	6	in/min
Pull Rate (to 2.92'):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	184.35	EL
Time Start:	9:18	
Time Finish:	10:30	
Grouting Duration:	1:14	hh:mm

Summary:

Constructed JG Height:	45.57	ft
Number of Overlaps:		

Depth	Notes
0 ft	0' Cementitious Material
10 ft	Drilling at 40-50 in/min
	Drilling at 20 in/min
20 ft	
30 ft	
40 ft	42.84' Hard Layer within Cementitious Material (8:52)
50 ft	49.99' Bottom of hole (9:03)
60 ft	

DRAFT - OVERLAPS & QUANTITIES STILL UNDER REVIEW

Notes:

Target Depth (4xz1, EL 138.85) - 48.42' bgs

Seepage from trench side slope during grouting. Started at 47' bgs

Parsons sampled at 40' bgs.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 8/31/09 - 9/1/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 814527	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather: Cloudy	
Client: WRS Compass		Engineer: Parsons	

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WO20
GS (EL)	187.20
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Top of ISS:	179.44	EL
Bottom of ISS:	139.04	EL
Depth of Nozzle:	187.20	EL
Top of Rock:	133.14	EL
Time Start:	10:33	
Time Finish:	11:12	
Drilling Duration:	0:34	hh:mm

Grouting Parameters:

Bottom of JGC:	133.14	EL
Pull Rate (to TOR-4'):	6	in/min
Pull Rate (to TOJGC):	8	in/min
Top of JGC:	142.19	EL
Time Start:	7:54	
Time Finish:	8:17	
Grouting Duration:	0:23	hh:mm

Summary:

Constructed JG Height:	9.05	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	0 ft Silty Sands
10 ft	7.76 ft ISS column
20 ft	
30 ft	
40 ft	
50 ft	48.16 ft Silty Sands 50.16 ft Till?
60 ft	54.06 ft TOR (10:58am)

Notes: Drilled with water hammer. Bit tip to nozzle distance - 65.5" or 5.46'

Drilled initial hole on 8/31/09

Switched back to roller bit.

Redrilled hole on 9/1/09 from 7:34am - 7:49am

Jetted hole on 9/1/09

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/15/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Sunny
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.47	

Element ID No.	WO-21
GS (EL)	188.42
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	133.54	EL
Depth to TOR:	133.57	EL
Time Start:	12:38	
Time Finish:	13:31	
Drilling Duration:	0:53	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	133.54	EL
6 in/min Pull Rate up to:	48.98	ft
8 in/min Pull Rate up to:	3	ft
12 in/min Pull Rate up to:	NA	ft
Depth to Top of JGC:	185.42	EL
Time Start:	13:57	
Time Finish:	15:11	
Grouting Duration:	1:14	hh:mm

Summary:

Constructed JG Height:	51.88	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	Drilled @ 20 in/min
	4' Sands?
10 ft	Drilled @ 100-150 in/min
	15' Drilled @ 12-16 in/min
20 ft	
	Drilled @ 10 in/min
30 ft	
40 ft	
50 ft	50.75' Hard Layer (Till?)
	54.85' TOR (1:25)
60 ft	

Notes:

Drilled hole with grout.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/14/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Sunny
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WO-22
GS (EL)	189.16
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	129.35	EL
Depth to TOR:	129.36	EL
Time Start:	8:04	
Time Finish:	12:35	
Drilling Duration:	0:22	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	129.35	EL
6 in/min Pull Rate up to:	52.2	ft
8 in/min Pull Rate up to:	2.92	ft
12 in/min Pull Rate up to:	NA	ft
Depth to Top of JGC:	186.24	EL
Time Start:	12:36	
Time Finish:	13:59	
Grouting Duration:	1:23	hh:mm

Summary:

Constructed JG Height:	56.89	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	0' Cementitious Material
	5' Soil
	Very strong odor and black oily return
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56.06' Hard Layer (Till?)
	59.80' TOR (12:35)
60 ft	

Notes:

8:18am - Stopped drilling at 57' bgs due to the strong odor coming from the hole. Air monitoring performed and VOC count reached up to 60ppm. Informed by Compass at 9:15am to not continue drilling until industrial fan was on site to ventilate work area. Started drilling again at 12:08pm.

Parsons sampled at 40' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/18/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WO-23
GS (EL)	188.94
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	128.44	EL
Depth to TOR:	128.45	EL
Time Start:	10:33	
Time Finish:	10:53	
Drilling Duration:	0:20	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	128.44	EL
6 in/min Pull Rate to:	137.59	EL
8 in/min Pull Rate to:	152.85	EL
12 in/min Pull Rate to:	185.99	EL
Depth to Top of JGC:	185.99	EL
Time Start:	10:56	
Time Finish:	12:31	
Grouting Duration:	1:27	h:mm

Summary:

Constructed JG Height:	57.55	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	53.48' Hard Layer (Till)
60 ft	60.49' TOR

Notes:

Drilling with grout.

Lost return at 39.38' bgs. Appears to have opened up cavern between WO-23 and WI-24.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/12/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WO-24
GS (EL)	189.8
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.38	EL
Depth to TOR:	130.43	EL
Time Start:	14:19	
Time Finish:	14:35	
Drilling Duration:	0:16	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.38	EL
Pull Rate (to):	6	in/min
Pull Rate (to):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	186.88	EL
Time Start:	14:37	
Time Finish:	16:42	
Grouting Duration:	1:18	hh:mm

Summary:

Constructed JG Height:	56.50	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	0' Soil
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	55.54' Hard Layer (Till?)
	59.37' TOR (2:35)
60 ft	

Notes:

High pressure from jetting knocked rocks loose in Till layer which locked up drill steel. Spent from 2:38 - 3:10 getting drill steel out of hole. Re-drilled hole from 3:14 - 3:24 and started jetting again at 3:25.

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/16/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Cloudy, Raining
Client: WRS Compass	Engineer: AHB

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity		

Element ID No.	WO-25
GS (EL)	190.06
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.15	EL
Depth to TOR:	130.15	EL
Time Start:	8:25	
Time Finish:	9:00	
Drilling Duration:	0:35	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.15	EL
Pull Rate (to 54):	6	in/min
Pull Rate (to 2.9):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	187.16	EL
Time Start:	9:02	
Time Finish:	10:24	
Grouting Duration:	1:22	hh:mm

Summary:

Constructed JG Height:	57.01	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Soil
	1.5' Concrete/cobble?
	3' Soil
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	54:00' Hard layer (Till?) (8:47)
60 ft	59.94' TOR (9:00)

Notes:

Drilling was performed with grout along the hole length

Technican Signature: Amir Haddad

MORETRENCH

DATE: 9/16/09
SHEET: 2 OF 2
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP
Location: 12 Water Street, White Plains NY 10601	Weather: Sunny
Client: WRS Compass	Engineer: Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
	Water	380	lit
	Cement	95	kg
	Slag	285	kg
	Specific Gravity	1.48	

Element ID No.	WO-26
GS (EL)	190.07
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	132.03	EL
Depth to TOR:	132.04	EL
Time Start:	15:10	
Time Finish:	15:25	
Drilling Duration:	0:19	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	132.03	EL
6 in/min Pull Rate up to:	51.87	ft
8 in/min Pull Rate up to:	2.92	ft
12 in/min Pull Rate up to:	NA	ft
Depth to Top of JGC:	187.15	EL
Time Start:	15:26	
Time Finish:	16:40	
Grouting Duration:	1:27	hh:mm

Summary:

Constructed JG Height:	55.12	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	0' Soil
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	55.01' Hard Layer (Till?)
	58.03' TOR (3:25)
60 ft	

Notes:

Drilled hole with grout.

While jetting, lost all return at 7.53' bgs. Attempted to regain by lowering pressure and redrilling hole but still had nothing. Informed Compass and decided not to continue grouting until it was determined where the grout was going.

On 09/16/2009 the location was redrilled to a depth of 11' bgs and jet grouting performed from there to 2.92' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/21/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WO-27
GS (EL)	190.38
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	129.62	EL
Depth to TOR:	129.63	EL
Time Start:	8:39	
Time Finish:	9:03	
Drilling Duration:	0:24	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	129.62	EL
6 in/min Pull Rate to:	136.38	EL
8 in/min Pull Rate to:	150.58	EL
12 in/min Pull Rate to:	187.46	EL
Depth to Top of JGC:	187.46	EL
Time Start:	9:13	
Time Finish:	10:54	
Grouting Duration:	1:23	h:mm

Summary:

Constructed JG Height:	57.84	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	0' Sands
10 ft	80 in/min
20 ft	100 in/min
30 ft	
40 ft	
50 ft	55 in/min
60 ft	55.82' Hard Layer (Till) 60.75' TOR

Notes:

Parson's sampled at 40' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/21/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WO-28
GS (EL)	190.9
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.83	EL
Depth to TOR:	130.90	EL
Time Start:	11:45	
Time Finish:	11:57	
Drilling Duration:	0:12	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.83	EL
6 in/min Pull Rate to:	137.09	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	188.01	EL
Depth to Top of JGC:	188.01	EL
Time Start:	11:58	
Time Finish:	13:10	
Grouting Duration:	1:07	h:mm

Summary:

Constructed JG Height:	57.18	ft
Number of Overlaps:	3	

Depth	Notes
0 ft	Drilling through column cut by WO-27
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56.84' Hard Layer (Till)
60 ft	60.00' TOR

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/12/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Cloudy, Raining
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.49		

Element ID No.	WO-29
GS (EL)	190.64
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	130.70	EL
Depth to TOR:	130.70	EL
Time Start:	9:39	
Time Finish:	10:05	
Drilling Duration:	0:26	hh:mm

Grouting Parameters:

Depth to Bottom of JGC:	130.70	EL
Pull Rate (to):	6	in/min
Pull Rate (to):	8	in/min
Pull Rate (to):	12	in/min
Depth to Top of JGC:	187.72	EL
Time Start:	11:39	
Time Finish:	13:00	
Grouting Duration:	1:21	hh:mm

Summary:

Constructed JG Height:	57.02	ft
Number of Overlaps:	0	

Depth	Notes
0 ft	0' Soil
	2' Concrete/cobble?
	4' Soil
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	55.50' Hard layer (Till?) (9:48)
60 ft	59.94' TOR (10:06)

Notes:

Parsons sampled at 40' bgs

Surface material sloughed in on top 3' of hole to a diameter of approx 5'

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 9/21/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.48		

Element ID No.	WO-30
GS (EL)	191.08
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	129.93	EL
Depth to TOR:	129.93	EL
Time Start:	13:19	
Time Finish:	13:43	
Drilling Duration:	0:24	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	129.93	EL
6 in/min Pull Rate to:	136.19	EL
8 in/min Pull Rate to:	151.12	EL
12 in/min Pull Rate to:	188.23	EL
Depth to Top of JGC:	188.23	EL
Time Start:	13:47	
Time Finish:	15:47	
Grouting Duration:	1:19	h:mm

Summary:

Constructed JG Height:	58.30	ft
Number of Overlaps:	4	

Depth	Notes
0 ft	0' Sands
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56.63' Till and Grout
60 ft	62.65' TOR

Notes:

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 10/2/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Partly Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WO-31
GS (EL)	189.71
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	127.37	EL
Depth to TOR:	127.42	EL
Time Start:	10:24	
Time Finish:	10:40	
Drilling Duration:	0:16	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	127.42	EL
6 in/min Pull Rate to:	133.71	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	186.79	EL
Depth to Top of JGC:	186.79	EL
Time Start:	10:41	
Time Finish:	12:02	
Grouting Duration:	1:11	h:mm

Summary:

Constructed JG Height:	59.37	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Soil/Sand
10 ft	
20 ft	
30 ft	
40 ft	
50 ft	
	56' Till
60 ft	
	62.29' TOR
70 ft	
80 ft	

Notes:

Directed to stop drilling because VOC levels were sustained above 10 ppm. (11:22 - 11:32)

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 10/5/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.53		

Element ID No.	WO-32
GS (EL)	189.24
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	126.18	EL
Depth to TOR:	126.19	EL
Time Start:	10:03	
Time Finish:	10:51	
Drilling Duration:	0:34	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	126.19	EL
6 in/min Pull Rate to:	140.85	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	184.91	EL
Depth to Top of JGC:	184.91	EL
Time Start:	10:54	
Time Finish:	12:15	
Grouting Duration:	1:15	h:mm

Summary:

Constructed JG Height:	58.72	ft
Number of Overlaps:	1	

Depth	Notes
0 ft	
	Appears to be drilling through cementitious material
10 ft	30-40 in/min
20 ft	25-30 in/min
30 ft	50 in/min
40 ft	
50 ft	20-25 in/min
	52.75' Till
60 ft	
	63.05' TOR
70 ft	
80 ft	

Notes:

Stopped grouting at 4.33' bgs because it appeared as if we entered into the bottom of a footing.

Sampled at 40' bgs

Technican Signature: Andrew Buttitta

MORETRENCH

DATE: 10/6/09
SHEET: 1 OF 1
SHIFT: 1st 2nd 3rd

Drilling and Grout Log

Job No.: 83-4545	Project Name: White Plains Former MGP		
Location: 12 Water Street, White Plains NY 10601		Weather:	Sunny
Client: WRS Compass		Engineer:	Parsons

Working Parameters **Element Type: Col** **Nozzle Dia:** 6mm

Grout Mix:			
Water	380	lit	
Cement	95	kg	
Slag	285	kg	
Specific Gravity	1.47		

Element ID No.	WO-33
GS (EL)	189.27
Rotation Speed (rpm)	12
Grout Pressure (Bar)	400
Grout Flow (gal/min)	98
Air Pressure (Bar)	7

Drilling Parameters:

Depth to Top of ISS:	NA	EL
Depth to Bottom of ISS:	NA	EL
Depth of Nozzle:	126.02	EL
Depth to TOR:	126.04	EL
Time Start:	8:17	
Time Finish:	8:46	
Drilling Duration:	0:29	h:mm

Grouting Parameters:

Depth to Bottom of JGC:	126.04	EL
6 in/min Pull Rate to:	130.51	EL
8 in/min Pull Rate to:	NA	EL
12 in/min Pull Rate to:	186.38	EL
Depth to Top of JGC:	186.38	EL
Time Start:	8:47	
Time Finish:	9:58	
Grouting Duration:	1:11	h:mm

Summary:

Constructed JG Height:	60.34	ft
Number of Overlaps:	2	

Depth	Notes
0 ft	0' Cementitious Material
	15-20 in/min
10 ft	
20 ft	
	25' Sand
30 ft	
	32' Cementitious Material
40 ft	
	15-20 in/min
50 ft	
60 ft	59.65' Till
	63.23' TOR
70 ft	
80 ft	

Notes:

Close proximity to SO-1, drilled on 10/2/09.

Sampled at 40' bgs

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