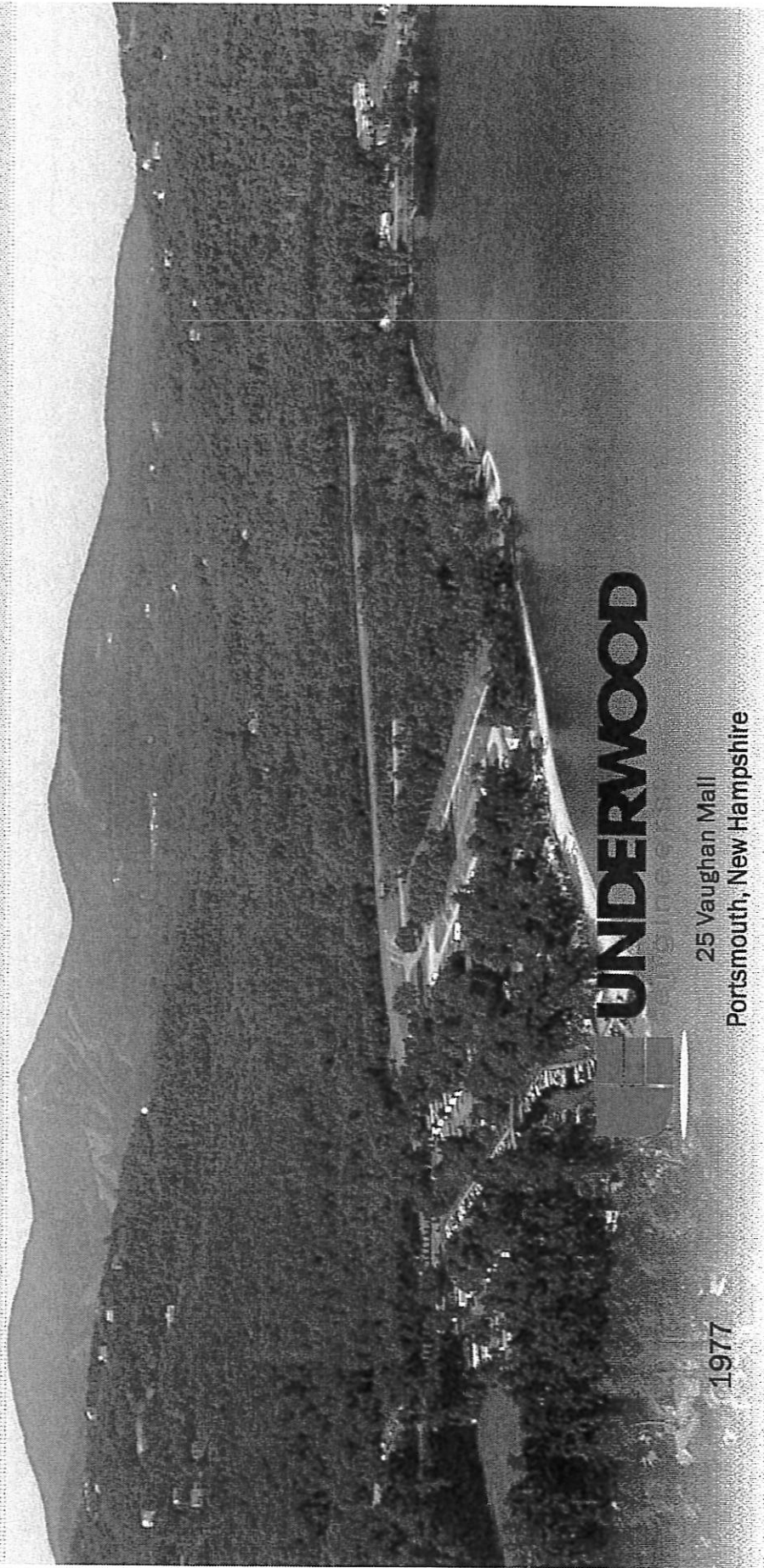


# *Town of Gilford, New Hampshire Board of Selectmen's Meeting*

*Varney Point Road Pumping Stations - Update*

*March 9, 2016*



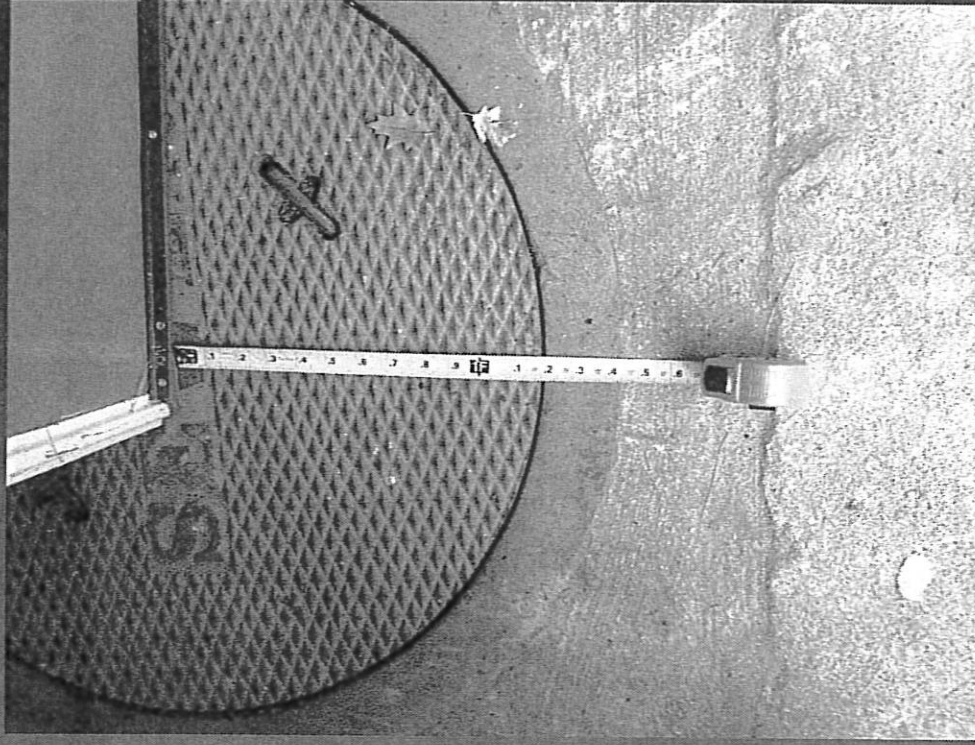
**UNDERWOOD**

25 Vaughan Mall  
Portsmouth, New Hampshire

1977

# VARNEY POINT ROAD – LEFT

## Existing Conditions





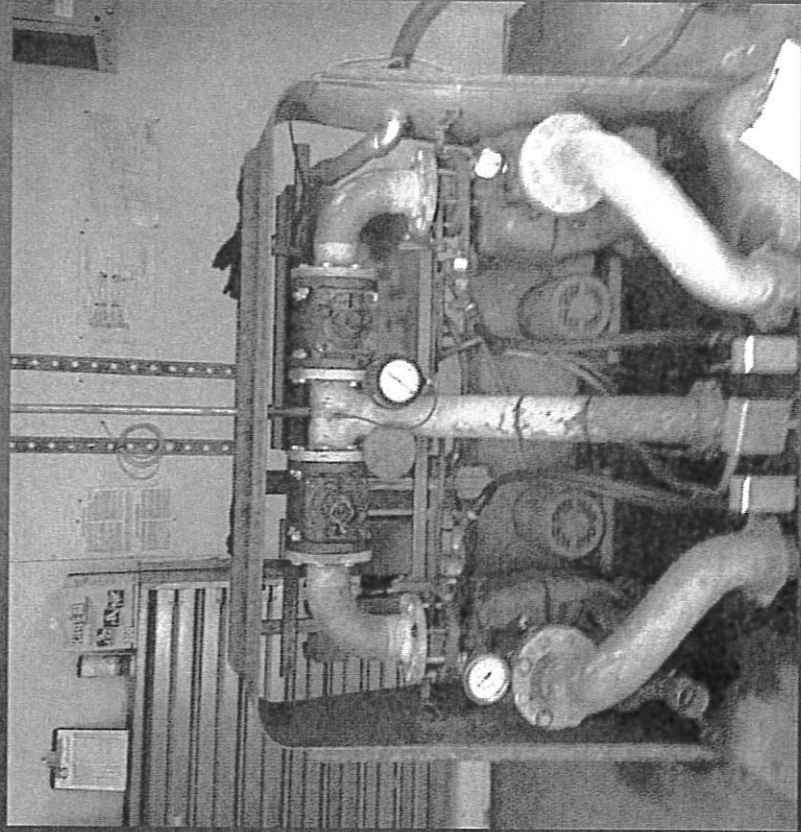
# VARNEY POINT ROAD – LEFT

## Existing Conditions



# VARNEY POINT ROAD – LEFT

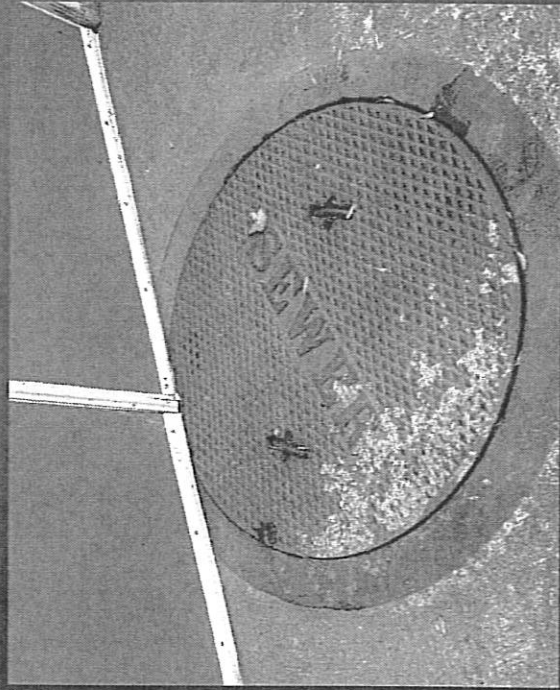
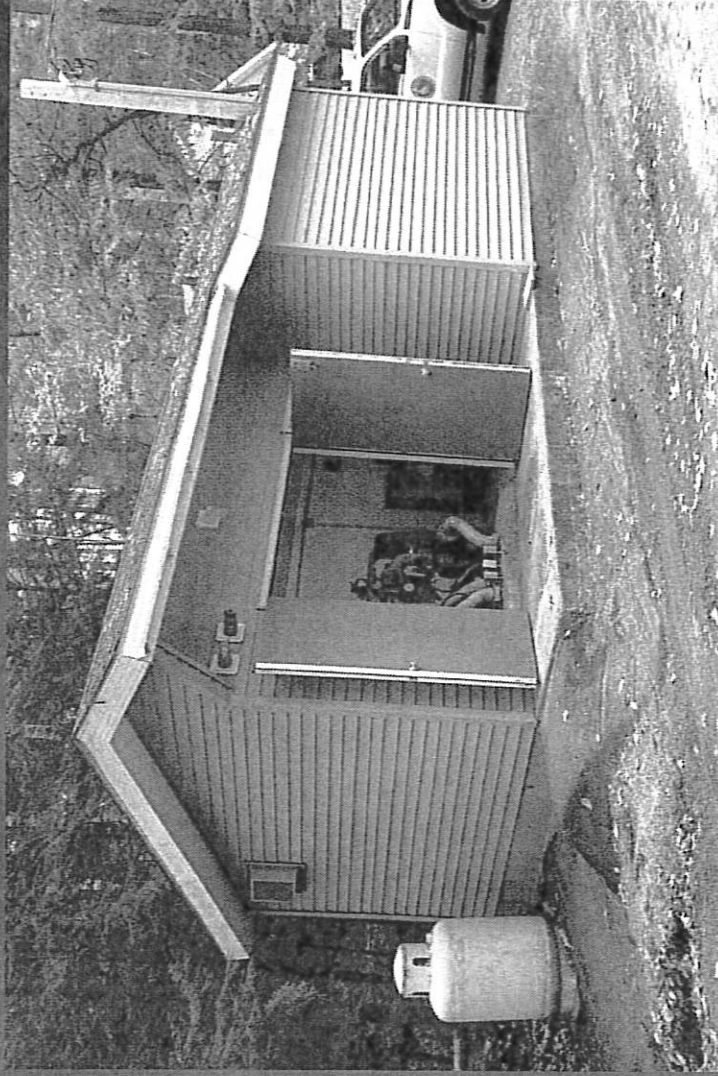
## Existing Conditions





# VARNEY POINT ROAD – RIGHT

## Existing Conditions



# VARNEY POINT ROAD – RIGHT

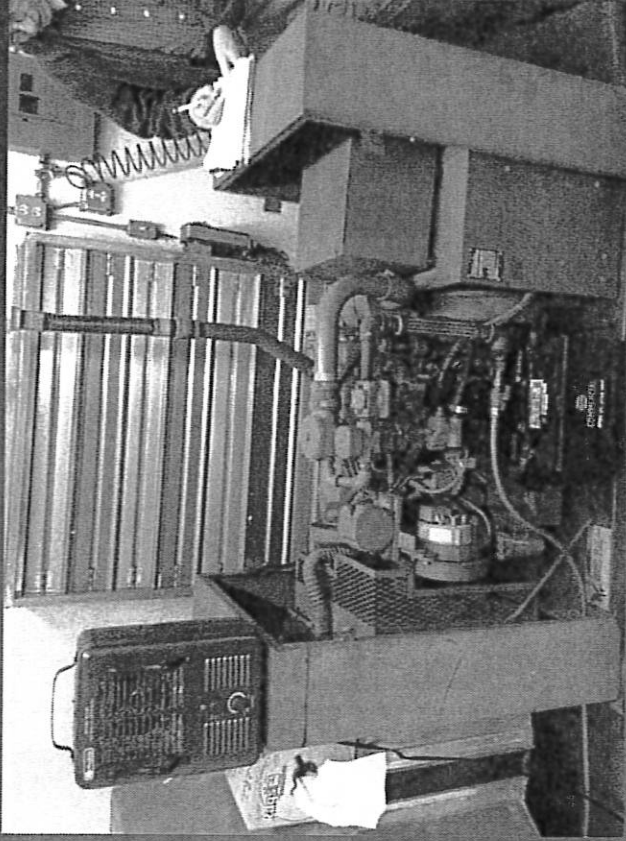
## Existing Conditions





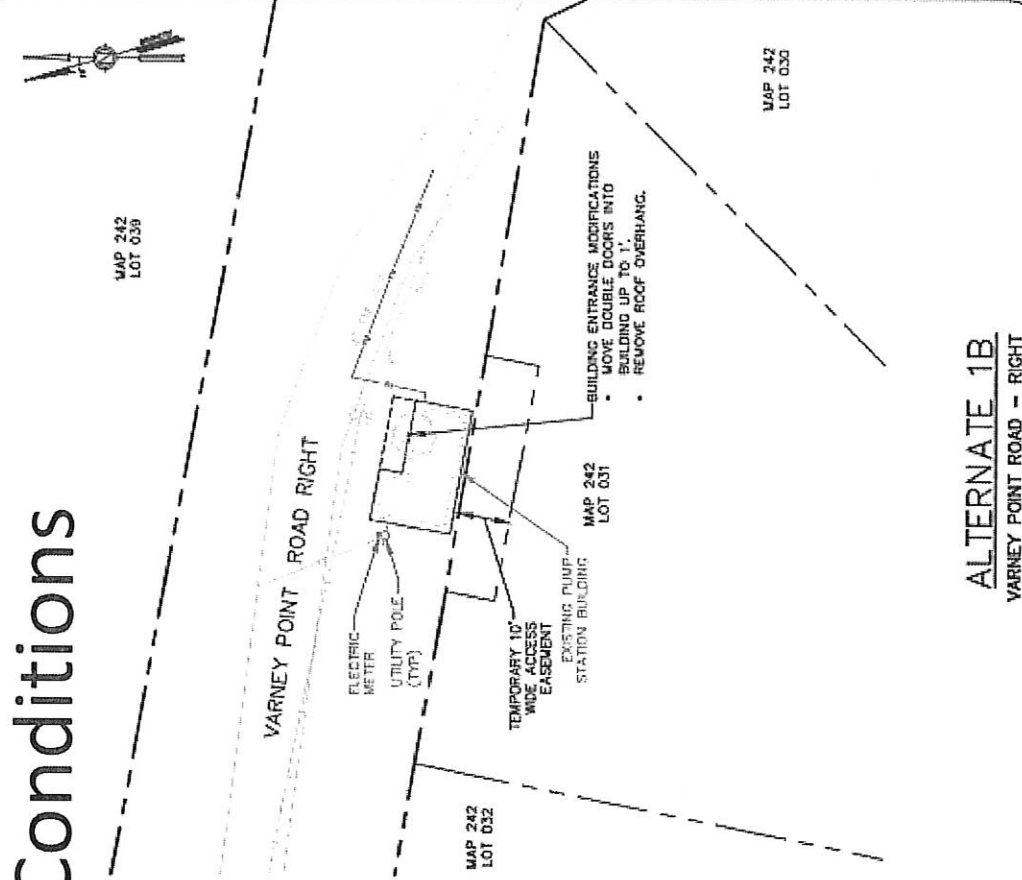
# VARNEY POINT ROAD – RIGHT

## Existing Conditions

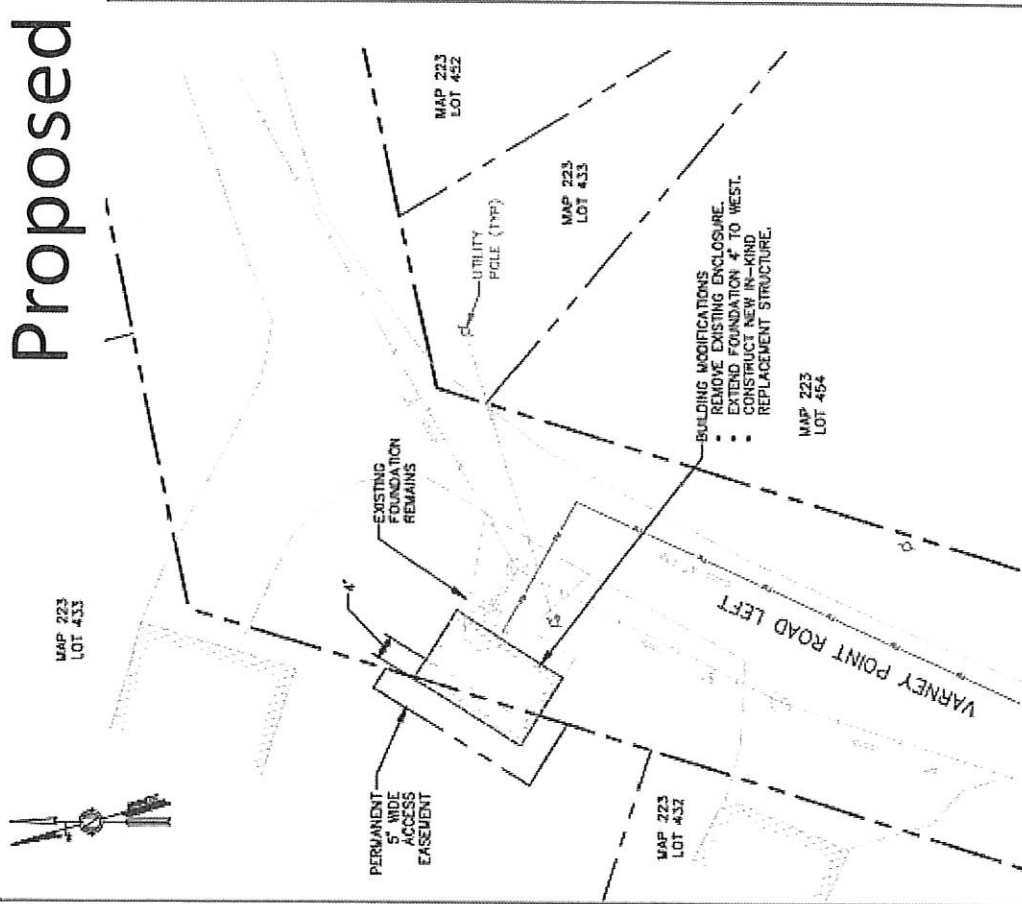


# VARNEY POINT ROAD

## Proposed Conditions



**ALTERNATE 1A**  
VARNEY POINT ROAD - LEFT



**ALTERNATE 1B**  
VARNEY POINT ROAD - RIGHT

ALT 1 - EXISTING PUMPING STATION REHABILITATION CONCEPTUAL SITE PLAN  
TOWN OF CLIFORD  
CLIFORD, NEW HAMPSHIRE

FIG. 3

DATE	12/16/15
PROJECT	1977-01
25 Vaughan St., Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733	



**PRELIMINARY (30%) DESIGN - VPR PUMPING STATION REPLACEMENT LEFT  
OPINION OF PROBABLE CONSTRUCTION COST  
VARNEY POINT ROAD WASTEWATER PUMPING STATION IMPROVEMENTS**

September 13, 2016

ITEM	QUANTITY	UNIT	UNIT PRICE	PROBABLE COST
General Requirements (15%)	1	LS	\$ 40,000	\$40,000
Site preparation	1	LS	\$ 5,000	\$5,000
Demo and abandon existing pumps and generator	1	LS	\$ 8,000	\$8,000
Utility Allowance	1	ALL	\$ 5,000	\$5,000
New wood frame construction building	300	SF	\$ 100	\$30,000
Building slab extension	1	LS	\$ 10,000	\$10,000
Building slab frost protection	1	LS	\$ 15,000	\$15,000
Pumps & Controls, skid mounted (Gorman Rupp budget quote)	1	LS	\$ 55,000	\$55,000
<b>VFD Phase Converter</b>	<b>1</b>	<b>LS</b>	<b>\$ 10,000</b>	<b>\$10,000</b>
Installation of Pumps	1	LS	\$ 10,000	\$10,000
Clean wetwell	15	VF	\$ 100	\$1,500
Bypass Pumping	1	LS	\$ 10,000	\$10,000
Interior Piping and Valves	1	LS	\$ 5,000	\$5,000
Reconfigure existing wetwell piping	1	LS	\$ 5,000	\$5,000
Sitework, paving and landscaping	1	LS	\$ 5,000	\$5,000
Generator, ATS, controls, misc. electrical	1	LS	\$ 60,000	\$60,000
HV Equipment	1	LS	\$ 17,000	\$17,000
Instrumentation Allowance (Flowmeter, intrusion alarm, etc.)	1	ALL	\$ 15,000	\$15,000
<b>SUBTOTAL</b>				<b>\$307,000</b>
Contingency - 20%				\$61,400
Design, Engineering and Construction Services (25%)				\$76,800
Easements (Allow)				\$20,000
<b>TOTAL PROJECT COSTS</b>				<b>\$465,000</b>

**Notes:**

Items and/or unit costs in bold text represent updated cost for the 30% design. The remaining items and costs remain from the report phase (UE February 2016)

NOT included in project Bond

\$369,000

**PRELIMINARY (30%) DESIGN - VPR PUMPING STATION REPLACEMENT RIGHT  
 OPINION OF PROBABLE CONSTRUCTION COST  
 VARNEY POINT ROAD WASTEWATER PUMPING STATION IMPROVEMENTS**

September 13, 2016

ITEM	QUANTITY	UNIT	UNIT PRICE	PROBABLE COST
General Requirements (15%)	1	LS	\$ 39,000	\$39,000
Site preparation	1	LS	\$ 5,000	\$5,000
Demo and abandon existing pumps and generator	1	LS	\$ 8,000	\$8,000
Utility Allowance	1	ALL	\$ 5,000	\$5,000
Building Modifications for wetwell separation (door modification)	1	LS	\$ 5,000	\$5,000
Building slab frost protection	1	LS	\$ 15,000	\$15,000
<b>Building Slab Repairs</b>	<b>1</b>	<b>LS</b>	<b>\$ 10,000</b>	<b>\$10,000</b>
Building maintenance/repair (siding, roof, etc.)	1	LS	\$ 5,000	\$5,000
Pumps & Controls, skid mounted (Gorman Rupp budget quote)	1	LS	\$ 55,000	\$55,000
<b>VFD Phase Converter</b>	<b>1</b>	<b>LS</b>	<b>\$ 10,000</b>	<b>\$10,000</b>
Installation of Pumps	1	LS	\$ 10,000	\$10,000
Clean wetwell	15	VF	\$ 100	\$1,500
Bypass Pumping	1	LS	\$ 10,000	\$10,000
Interior Piping and Valves	1	LS	\$ 5,000	\$5,000
Reconfigure existing wetwell piping	1	LS	\$ 5,000	\$5,000
Sitework, paving and landscaping	1	LS	\$ 5,000	\$5,000
Generator, ATS, controls, misc. electrical	1	LS	\$ 71,000	\$71,000
HV Equipment	1	LS	\$ 17,000	\$17,000
Instrumentation Allowance (Flowmeter, intrusion alarm, etc.)	1	ALL	\$ 15,000	\$15,000
<b>SUBTOTAL</b>				<b>\$297,000</b>
Contingency - 20%				\$59,400
Design, Engineering and Construction Services (25%)				\$74,300
Easements (Allow)				\$5,000
<b>TOTAL PROJECT COSTS</b>				<b>\$435,500</b>

NOT INCLUDED IN PROJECT BOND

\$356,000

**Notes:**

Items and/or unit costs in bold text represent updated cost for the 30% design. The remaining items and costs remain from the report phase (UE February 2016)



**NH Municipal Bond Bank  
25 Triangle Park Drive  
Concord, NH 03301**

LEVEL PRINCIPAL  
20 YEAR ESTIMATED DEBT SCHEDULE FOR  
TOWN OF GILFORD

2016 ASSESSED VALUATION: \$1,659,559,422  
 EASTIMATED YEARLY INCREASE 0%  
 DATE PREPARED: 12/21/16  
 BONDS DATED: JUNE 2017 08/15/17  
 INTEREST START DATE: 211 Days 07/14/17  
 FIRST INTEREST PAYMENT: 02/15/18  
 NET INTEREST COST: 3.2500% \*

DEBT YEAR	PERIOD ENDING	PRINCIPAL OUTSTANDING	PRINCIPAL	RATE	INTEREST	TOTAL PAYMENT	CALENDAR YEAR TOTAL PAYMENT	ASSESSED VALUATION	CY-EST. TAX RATE INC.
	02/15/18				\$13,810.24	\$13,810.24			
1	08/15/18	\$725,000.00	\$40,000.00	3.250%	11,781.25	51,781.25	\$65,591.49	1,659,559,422	0.04
	02/15/19				11,131.25	11,131.25			
2	08/15/19	685,000.00	40,000.00	3.250%	11,131.25	51,131.25	62,262.50	1,659,559,422	0.04
	02/15/20				10,481.25	10,481.25			
3	08/15/20	645,000.00	40,000.00	3.250%	10,481.25	50,481.25	60,962.50	1,659,559,422	0.04
	02/15/21				9,831.25	9,831.25			
4	08/15/21	605,000.00	40,000.00	3.250%	9,831.25	49,831.25	59,662.50	1,659,559,422	0.04
	02/15/22				9,181.25	9,181.25			
5	08/15/22	565,000.00	40,000.00	3.250%	9,181.25	49,181.25	58,362.50	1,659,559,422	0.04
	02/15/23				8,531.25	8,531.25			
6	08/15/23	525,000.00	35,000.00	3.250%	8,531.25	43,531.25	52,062.50	1,659,559,422	0.03
	02/15/24				7,962.50	7,962.50			
7	08/15/24	490,000.00	35,000.00	3.250%	7,962.50	42,962.50	50,925.00	1,659,559,422	0.03
	02/15/25				7,393.75	7,393.75			
8	08/15/25	455,000.00	35,000.00	3.250%	7,393.75	42,393.75	49,787.50	1,659,559,422	0.03
	02/15/26				6,825.00	6,825.00			
9	08/15/26	420,000.00	35,000.00	3.250%	6,825.00	41,825.00	48,650.00	1,659,559,422	0.03
	02/15/27				6,256.25	6,256.25			
10	08/15/27	385,000.00	35,000.00	3.250%	6,256.25	41,256.25	47,512.50	1,659,559,422	0.03
	02/15/28				5,687.50	5,687.50			
11	08/15/28	350,000.00	35,000.00	3.250%	5,687.50	40,687.50	46,375.00	1,659,559,422	0.03
	02/15/29				5,118.75	5,118.75			
12	08/15/29	315,000.00	35,000.00	3.250%	5,118.75	40,118.75	45,237.50	1,659,559,422	0.03
	02/15/30				4,550.00	4,550.00			
13	08/15/30	280,000.00	35,000.00	3.250%	4,550.00	39,550.00	44,100.00	1,659,559,422	0.03
	02/15/31				3,981.25	3,981.25			
14	08/15/31	245,000.00	35,000.00	3.250%	3,981.25	38,981.25	42,962.50	1,659,559,422	0.03
	02/15/32				3,412.50	3,412.50			
15	08/15/32	210,000.00	35,000.00	3.250%	3,412.50	38,412.50	41,825.00	1,659,559,422	0.03
	02/15/33				2,843.75	2,843.75			
16	08/15/33	175,000.00	35,000.00	3.250%	2,843.75	37,843.75	40,687.50	1,659,559,422	0.02
	02/15/34				2,275.00	2,275.00			
17	08/15/34	140,000.00	35,000.00	3.250%	2,275.00	37,275.00	39,550.00	1,659,559,422	0.02
	02/15/35				1,706.25	1,706.25			
18	08/15/35	105,000.00	35,000.00	3.250%	1,706.25	36,706.25	38,412.50	1,659,559,422	0.02
	02/15/36				1,137.50	1,137.50			
19	08/15/36	70,000.00	35,000.00	3.250%	1,137.50	36,137.50	37,275.00	1,659,559,422	0.02
	02/15/37				568.75	568.75			
20	08/15/37	35,000.00	35,000.00	3.250%	568.75	35,568.75	36,137.50	1,659,559,422	0.02
TOTALS			\$725,000.00		\$243,341.49	\$968,341.49	\$968,341.49		

\*These interest rates are based on the current market as of 11/14/16.  
 The market is very volatile. Please check with us periodically for current rates

**NH Municipal Bond Bank**  
**25 Triangle Park Drive**  
**Concord, NH 03301**

LEVEL DEBT  
20 YEAR ESTIMATED DEBT SCHEDULE FOR  
TOWN OF GILFORD

2016 ASSESSED VALUATION: \$1,659,559,422  
ESTIMATED YEARLY INCREASE: 0%  
DATE PREPARED: 12/21/16  
BONDS DATED: June 2017 08/15/17  
INTEREST START DATE: 211 Days 07/14/17  
FIRST INTEREST PAYMENT: 02/15/18  
NET INTEREST COST: 3.2500% \*

DEBT YEAR	PERIOD ENDING	PRINCIPAL OUTSTANDING	PRINCIPAL	RATE	INTEREST	TOTAL PAYMENT	CALENDAR YEAR TOTAL PAYMENT	ASSESSED VALUATION	CY-EST. TAX RATE INC.
	02/15/18				\$13,810.24	\$13,810.24			
1	08/15/18	\$725,000.00	\$35,000.00	3.250%	11,781.25	46,781.25	\$60,591.49	1,659,559,422	0.04
	02/15/19				11,212.50	11,212.50			
2	08/15/19	690,000.00	25,000.00	3.250%	11,212.50	36,212.50	47,425.00	1,659,559,422	0.03
	02/15/20				10,806.25	10,806.25			
3	08/15/20	665,000.00	30,000.00	3.250%	10,806.25	40,806.25	51,612.50	1,659,559,422	0.03
	02/15/21				10,318.75	10,318.75			
4	08/15/21	635,000.00	30,000.00	3.250%	10,318.75	40,318.75	50,637.50	1,659,559,422	0.03
	02/15/22				9,831.25	9,831.25			
5	08/15/22	605,000.00	30,000.00	3.250%	9,831.25	39,831.25	49,662.50	1,659,559,422	0.03
	02/15/23				9,343.75	9,343.75			
6	08/15/23	575,000.00	30,000.00	3.250%	9,343.75	39,343.75	48,687.50	1,659,559,422	0.03
	02/15/24				8,856.25	8,856.25			
7	08/15/24	545,000.00	30,000.00	3.250%	8,856.25	38,856.25	47,712.50	1,659,559,422	0.03
	02/15/25				8,368.75	8,368.75			
8	08/15/25	515,000.00	30,000.00	3.250%	8,368.75	38,368.75	46,737.50	1,659,559,422	0.03
	02/15/26				7,881.25	7,881.25			
9	08/15/26	485,000.00	35,000.00	3.250%	7,881.25	42,881.25	50,762.50	1,659,559,422	0.03
	02/15/27				7,312.50	7,312.50			
10	08/15/27	450,000.00	35,000.00	3.250%	7,312.50	42,312.50	49,625.00	1,659,559,422	0.03
	02/15/28				6,743.75	6,743.75			
11	08/15/28	415,000.00	35,000.00	3.250%	6,743.75	41,743.75	48,487.50	1,659,559,422	0.03
	02/15/29				6,175.00	6,175.00			
12	08/15/29	380,000.00	35,000.00	3.250%	6,175.00	41,175.00	47,350.00	1,659,559,422	0.03
	02/15/30				5,606.25	5,606.25			
13	08/15/30	345,000.00	40,000.00	3.250%	5,606.25	45,606.25	51,212.50	1,659,559,422	0.03
	02/15/31				4,956.25	4,956.25			
14	08/15/31	305,000.00	40,000.00	3.250%	4,956.25	44,956.25	49,912.50	1,659,559,422	0.03
	02/15/32				4,306.25	4,306.25			
15	08/15/32	265,000.00	40,000.00	3.250%	4,306.25	44,306.25	48,612.50	1,659,559,422	0.03
	02/15/33				3,656.25	3,656.25			
16	08/15/33	225,000.00	40,000.00	3.250%	3,656.25	43,656.25	47,312.50	1,659,559,422	0.03
	02/15/34				3,006.25	3,006.25			
17	08/15/34	185,000.00	45,000.00	3.250%	3,006.25	48,006.25	51,012.50	1,659,559,422	0.03
	02/15/35				2,275.00	2,275.00			
18	08/15/35	140,000.00	45,000.00	3.250%	2,275.00	47,275.00	49,550.00	1,659,559,422	0.03
	02/15/36				1,543.75	1,543.75			
19	08/15/36	95,000.00	45,000.00	3.250%	1,543.75	46,543.75	48,087.50	1,659,559,422	0.03
	02/15/37				812.50	812.50			
20	08/15/37	50,000.00	50,000.00	3.250%	812.50	50,812.50	51,625.00	1,659,559,422	0.03
TOTALS			\$725,000.00		\$271,616.49	\$996,616.49	\$996,616.49		

\*These interest rates are based on the current market as of 11/14/16.  
The market is very volatile. Please check with us periodically for current rates



**NH Municipal Bond Bank  
25 Triangle Park Drive  
Concord, NH 03301**

LEVEL PRINCIPAL

10 YEAR ESTIMATED DEBT SCHEDULE FOR  
TOWN OF GILFORD

2016 ASSESSED VALUATION: \$1,659,559,422  
 ESTIMATED YEARLY INCREASE: 0%  
 DATE PREPARED: 12/21/16  
 BONDS DATED: JUNE 2017 08/15/17  
 INTEREST START DATE: 211 Days 07/14/17  
 FIRST INTEREST PAYMENT: 02/15/18  
 NET INTEREST COST: 2.4990% \*

DEBT YEAR	PERIOD ENDING	PRINCIPAL OUTSTANDING	PRINCIPAL	RATE	INTEREST	TOTAL PAYMENT	CALENDAR YEAR TOTAL PAYMENT	ASSESSED VALUATION	CY-EST. TAX RATE INC.
	02/15/18				\$10,623.26	\$10,623.26			
1	08/15/18	\$725,000.00	\$75,000.00	2.500%	9,062.50	84,062.50	\$94,685.76	\$1,659,559,422	0.05
	02/15/19				8,125.00	8,125.00			
2	08/15/19	650,000.00	75,000.00	2.500%	8,125.00	83,125.00	91,250.00	1,659,559,422	0.05
	02/15/20				7,187.50	7,187.50			
3	08/15/20	575,000.00	75,000.00	2.500%	7,187.50	82,187.50	89,375.00	1,659,559,422	0.05
	02/15/21				6,250.00	6,250.00			
4	08/15/21	500,000.00	75,000.00	2.500%	6,250.00	81,250.00	87,500.00	1,659,559,422	0.05
	02/15/22				5,312.50	5,312.50			
5	08/15/22	425,000.00	75,000.00	2.500%	5,312.50	80,312.50	85,625.00	1,659,559,422	0.05
	02/15/23				4,375.00	4,375.00			
6	08/15/23	350,000.00	70,000.00	2.500%	4,375.00	74,375.00	78,750.00	1,659,559,422	0.05
	02/15/24				3,500.00	3,500.00			
7	08/15/24	280,000.00	70,000.00	2.500%	3,500.00	73,500.00	77,000.00	1,659,559,422	0.05
	02/15/25				2,625.00	2,625.00			
8	08/15/25	210,000.00	70,000.00	2.500%	2,625.00	72,625.00	75,250.00	1,659,559,422	0.05
	02/15/26				1,750.00	1,750.00			
9	08/15/26	140,000.00	70,000.00	2.500%	1,750.00	71,750.00	73,500.00	1,659,559,422	0.04
	02/15/27				875.00	875.00			
10	08/15/27	70,000.00	70,000.00	2.500%	875.00	70,875.00	71,750.00	1,659,559,422	0.04
TOTALS			\$725,000.00		\$99,685.76	\$824,685.76	\$824,685.76		

\*These interest rates are based on the current market as of 11/14/16.  
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**NH Municipal Bond Bank  
25 Triangle Park Drive  
Concord, NH 03301**

LEVEL DEBT  
10 YEAR ESTIMATED DEBT SCHEDULE FOR  
TOWN OF GILFORD

2016 ASSESSED VALUATION: \$1,659,559,422  
 ESTIMATED YEARLY INCREASE: 0%  
 DATE PREPARED: 12/21/16  
 BONDS DATED: JUNE 2017 08/15/17  
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DEBT YEAR	PERIOD ENDING	PRINCIPAL OUTSTANDING	PRINCIPAL	RATE	INTEREST	TOTAL PAYMENT	CALENDAR YEAR TOTAL PAYMENT	ASSESSED VALUATION	CY-EST. TAX RATE INC.
	02/15/18				\$10,623.26	\$10,623.26			
1	08/15/18	\$725,000.00	\$65,000.00	2.500%	9,062.50	74,062.50	\$84,685.76	\$1,659,559,422	0.05
	02/15/19				8,250.00	8,250.00			
2	08/15/19	660,000.00	65,000.00	2.500%	8,250.00	73,250.00	81,500.00	1,659,559,422	0.05
	02/15/20				7,437.50	7,437.50			
3	08/15/20	595,000.00	70,000.00	2.500%	7,437.50	77,437.50	84,875.00	1,659,559,422	0.05
	02/15/21				6,562.50	6,562.50			
4	08/15/21	525,000.00	70,000.00	2.500%	6,562.50	76,562.50	83,125.00	1,659,559,422	0.05
	02/15/22				5,687.50	5,687.50			
5	08/15/22	455,000.00	70,000.00	2.500%	5,687.50	75,687.50	81,375.00	1,659,559,422	0.05
	02/15/23				4,812.50	4,812.50			
6	08/15/23	385,000.00	75,000.00	2.500%	4,812.50	79,812.50	84,625.00	1,659,559,422	0.05
	02/15/24				3,875.00	3,875.00			
7	08/15/24	310,000.00	75,000.00	2.500%	3,875.00	78,875.00	82,750.00	1,659,559,422	0.05
	02/15/25				2,937.50	2,937.50			
8	08/15/25	235,000.00	75,000.00	2.500%	2,937.50	77,937.50	80,875.00	1,659,559,422	0.05
	02/15/26				2,000.00	2,000.00			
9	08/15/26	160,000.00	80,000.00	2.500%	2,000.00	82,000.00	84,000.00	1,659,559,422	0.05
	02/15/27				1,000.00	1,000.00			
10	08/15/27	80,000.00	80,000.00	2.500%	1,000.00	81,000.00	82,000.00	1,659,559,422	0.05
TOTALS			\$725,000.00		\$104,810.76	\$829,810.76	\$829,810.76		

\*These interest rates are based on the current market as of 11/14/16.  
 The market is very volatile. Please check with us periodically for current rates