

Prepared By:
mr Surveying Inc.
433 Washington Street
P.O. Box 5104
Norwell, MA 02061
Phone: (781) 659-0401

Site Engineering:
Barbara J. Thissell, P.E., Inc.
352 Nahatan Street
Norwood, MA 02062
Phone (781) 492-5107

Subsurface Disposal
System Design:
Philip Spath P.E.
9 Rocky Lane
Cohasset, MA 02025
Phone (781) 383-1234

MULTIFAMILY DEVELOPMENT ZONING ANALYSIS TABLE		
ZONING CRITERIA	REQUIRED	PROPOSED
MINIMUM LOT AREA	10 AC.	21.75± AC.
MINIMUM FRONTAGE	75'	1,003.33'
MAX. BLDG. HEIGHT	2.5 STY.	2.5 STY.
MIN. BLDG. SEPARATION	100'	10'±*
MIN. FRONT SETBACK	75'	50'*
MIN. REAR SETBACK	100'	100'
MIN. SIDE BUFFER	30'	NONE*
PARKING CRITERIA		
2 SPACES PER UNIT	48 SPACES	89 SPACES

* VARIANCE REQUESTED

ZONING VARIANCE REQUESTS

- SECT. 167-12.A.5
TO ALLOW A 50' FRONT YARD SETBACK
IN LIEU OF 75' FRONT YARD SETBACK REQUIRED.
- SECT. 167-12.A.5
TO ALLOW A 10'± SEPARATION BETWEEN BUILDINGS
IN LIEU OF 100' BUILDING SEPARATION REQUIRED.
- SECT. 167-12.A.5
TO ALLOW NO SEPARATION FROM IMPERVIOUS TO
SIDE LOT LINE IN LIEU OF 30' SETBACK REQUIRED.

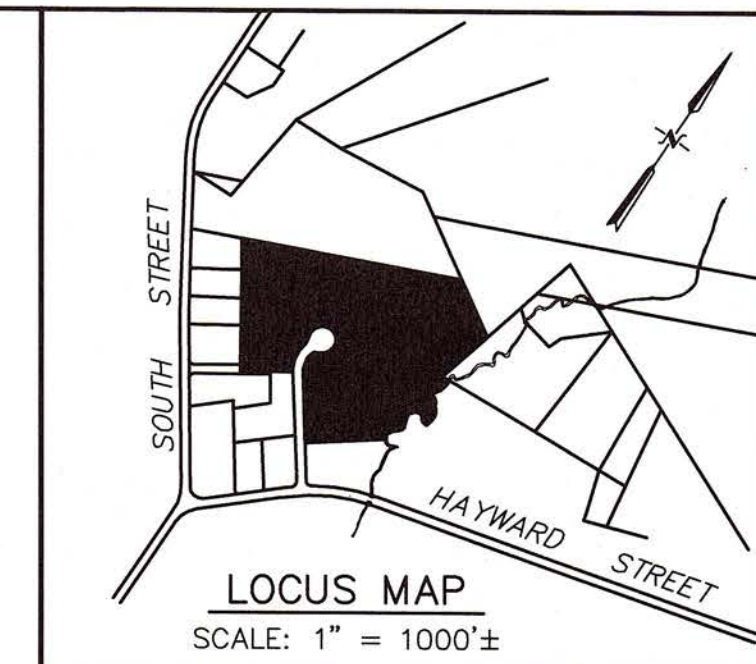
I hereby Certify That The Property Lines Shown on This Plan Are The Lines Dividing
Existing Ownerships, And The Lines of The Streets and Ways Shown are Those of Public
or Private Streets or Ways Already Established, And That No New Lines For Division of
Existing Ownership or For New Ways Are Shown.

Professional Land Surveyor

Date

SITE PLAN At Brookside Farm Hilda Drive in Halifax, MA

PLAN NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3 - 5	SEWER LAYOUT PLANS
6	SEWER PROFILE PLAN
7 - 9	SEWER DETAIL PLANS
10 - 12	LAYOUT & MATERIALS PLANS
13 - 15	CONSERVATION GRADING AND DRAINAGE PLANS
16	LAYOUT, MATERIALS AND CONSERVATION DETAIL PLAN



FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN CONFORMS
WITH THE RULES AND REGULATIONS OF
THE REGISTERS OF DEEDS.

RALPH H. COLE P.L.S. DATE

REVISIONS:

No.	DESCRIPTION	DATE

12/17/09
2007 Rescinded Subdiv
2010 withdrew The Rescinded
3/4/10 No work done

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:
mr SURVEYING, INC.

P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:

**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

COVER SHEET

PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050

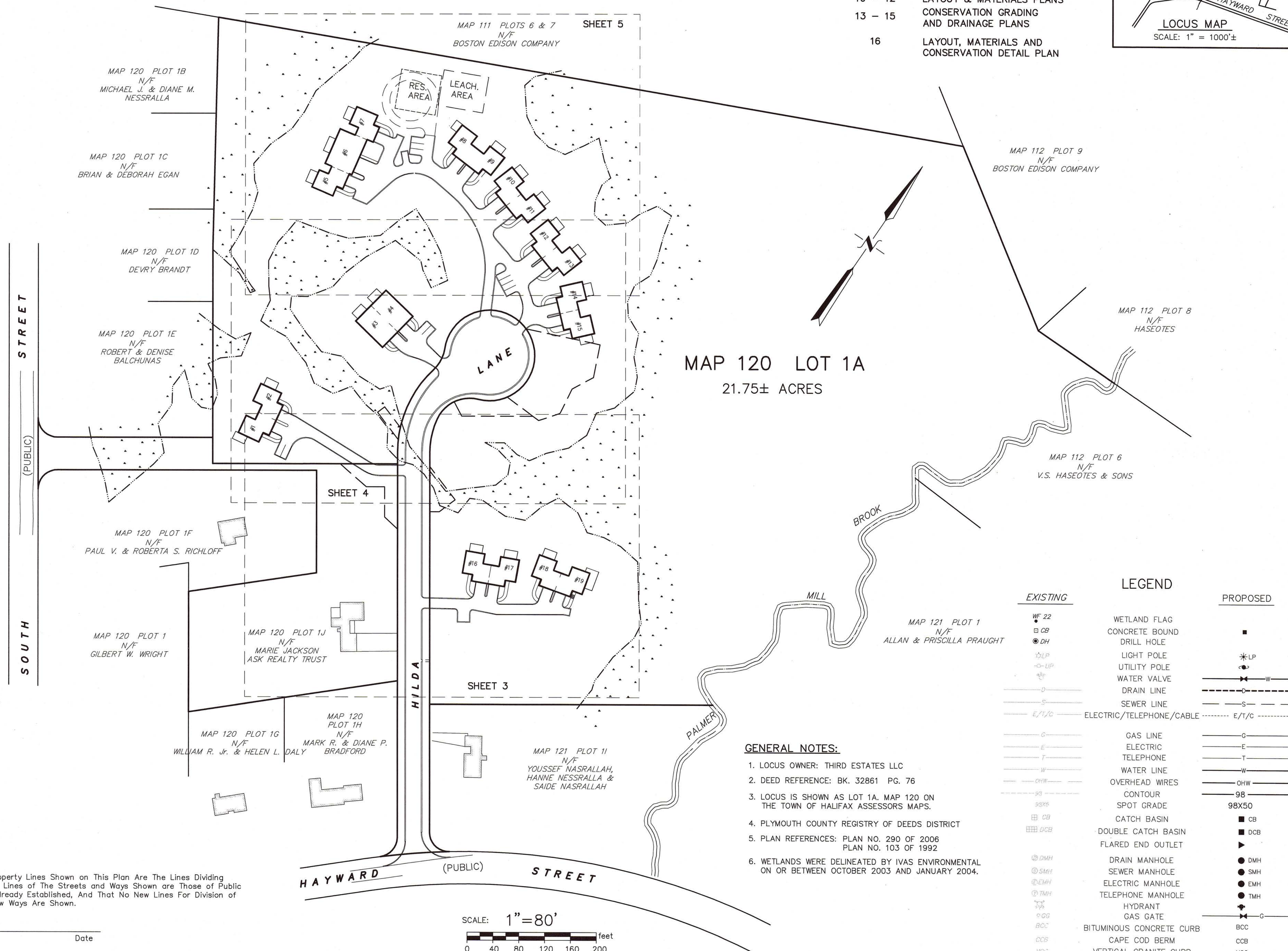
DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
DRAWN: G.R.R.

FIELD: M.W.C.

ENG.: B.J.T.

mr JOB # mr-409

SHEET
1 OF 16



GENERAL NOTES:

- LOCUS OWNER: THIRD ESTATES LLC
- DEED REFERENCE: BK. 32861 PG. 76
- LOCUS IS SHOWN AS LOT 1A. MAP 120 ON
THE TOWN OF HALIFAX ASSESSORS MAPS.
- PLYMOUTH COUNTY REGISTRY OF DEEDS DISTRICT
- PLAN REFERENCES: PLAN NO. 290 OF 2006
PLAN NO. 103 OF 1992
- WETLANDS WERE DELINEATED BY IVAS ENVIRONMENTAL
ON OR BETWEEN OCTOBER 2003 AND JANUARY 2004.

LEGEND

- UTILITY POLE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- WATER SERVICE / LINE
- GAS SERVICE / LINE
- BORDERING VEGETATED WETLANDS
- STONE WALL
- LEDGE
- OVERHEAD UTILITY LINE
- TREES OR SHRUBS (TYP)

SHEET 5

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PHILLIP SPATH P.E. DATE

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**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

EXISTING CONDITIONS PLAN

PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050

DATE: SEPT. 12, 2007
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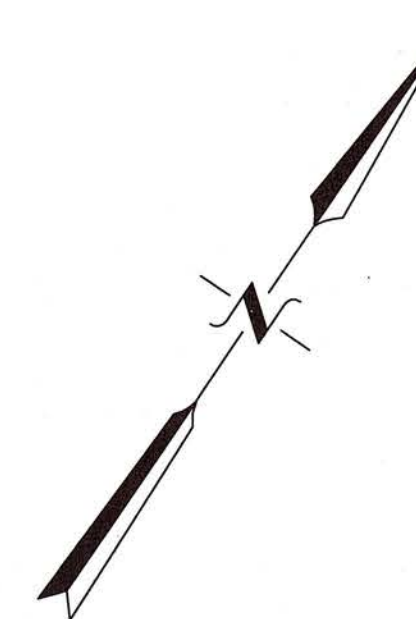
mr JOB # mr-409

SHEET
OF 16

SOUTH STREET

SOUTH STREET

MAP 120 LOT 1A
LOT AREA
21.75± ACRES



SCALE: 1"=50'
0 25 50 75 100 125 feet

BROOK

MILL

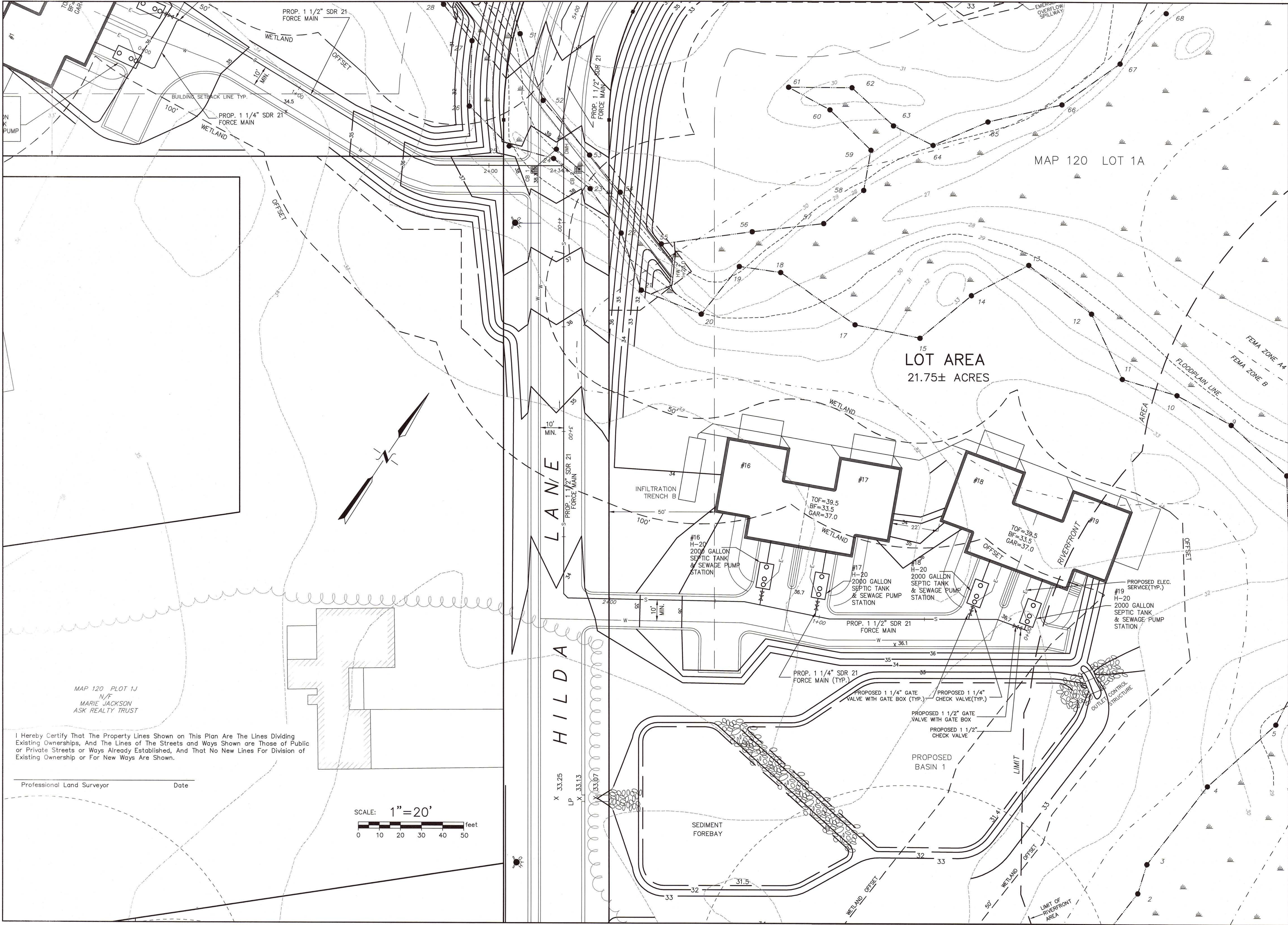
PALMER

LANE

SHEET 4

SHEET 3

HILDA



MAP 120 PLOT 1J
N/F
MARIE JACKSON
ASK REALTY TRUST

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SCALE: 1"=20'
0 10 20 30 40 50 feet

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BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

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mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:
**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

SEWER LAYOUT PLAN

PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050

DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
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FIELD: M.W.C.
ENG.: B.J.T.
mr JOB # mr-409

3 SHEET
OF 16

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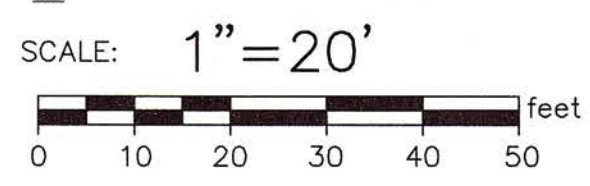
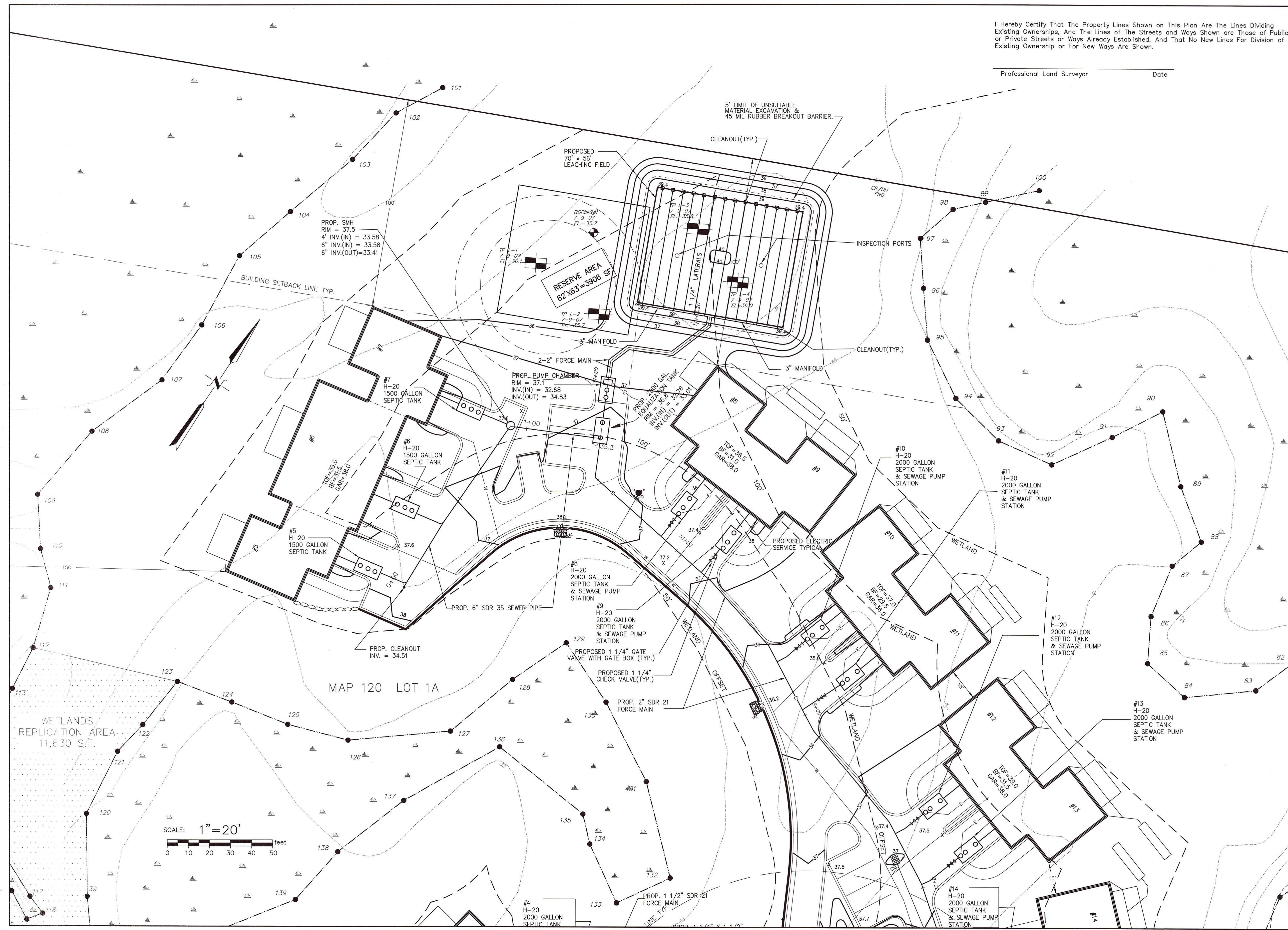
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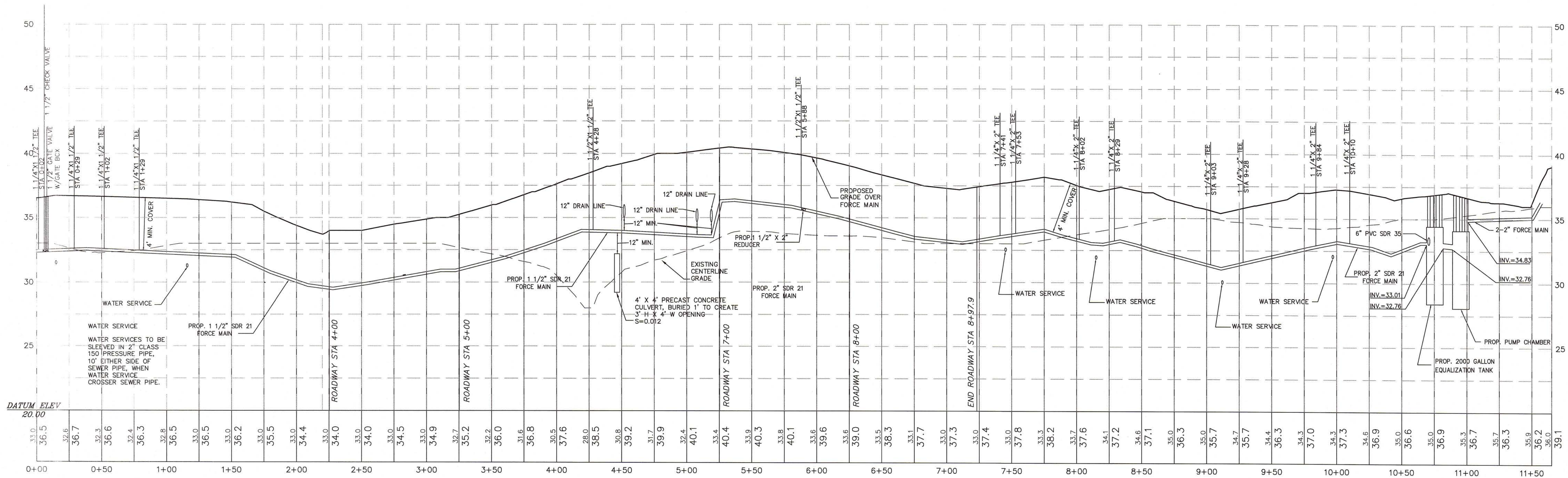
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**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

SEWER LAYOUT PLAN

PREPARED FOR: WALTER GREANEY 95 OLD BARN PATHE MARSHFIELD, MA 02050	
DATE: SEPT. 12, 2007	
COMP./DESIGN: P.H.SPATH	
CHECK: P.H.SPATH / R.H.COLE	
DRAWN: G.R.R.	
FIELD: M.W.C.	5 SHEET OF 16
ENG.: B.J.T.	
mr JOB # mr-409	



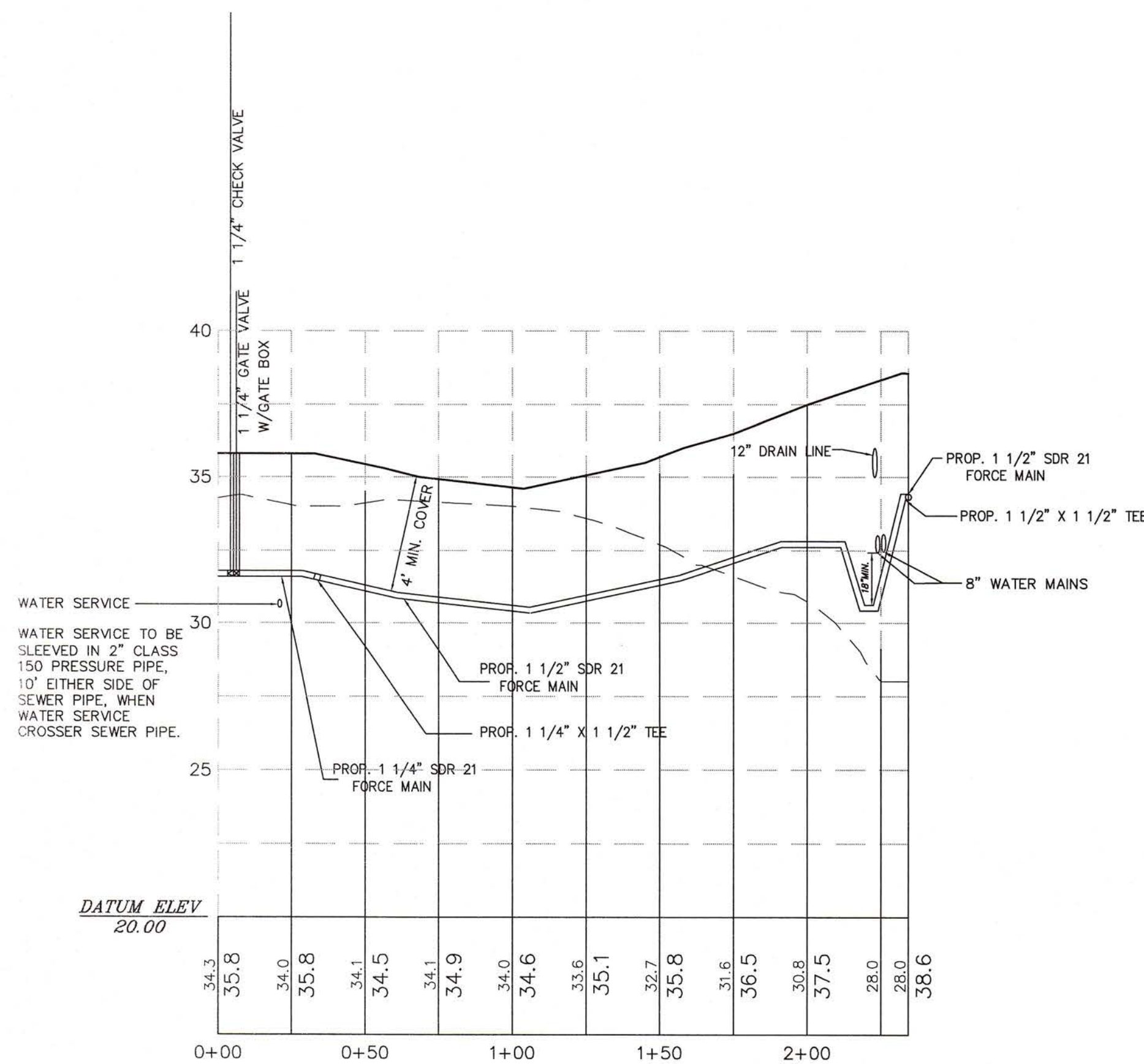
MAP 120 LOT 1A



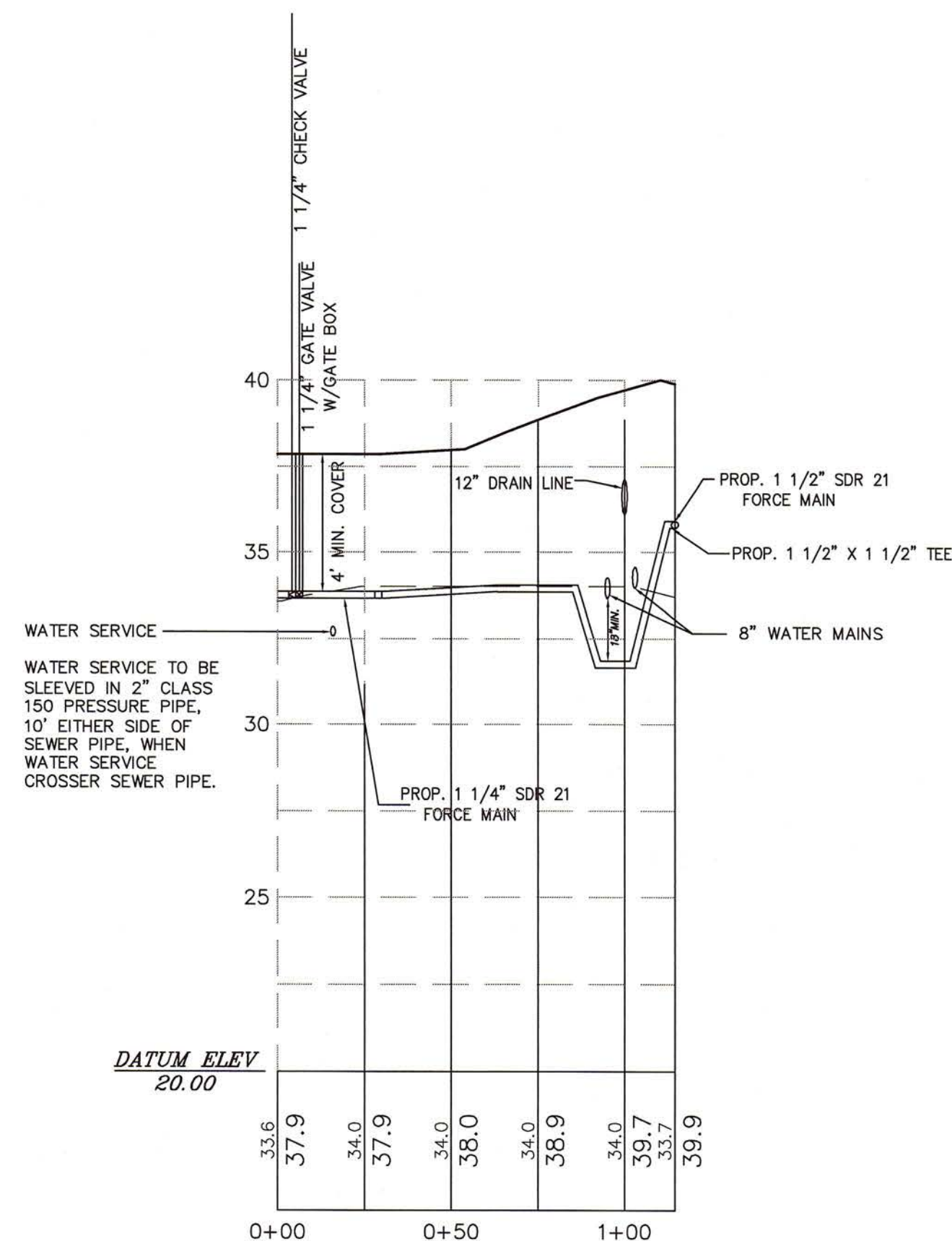
PROFILE VIEW - MAIN SEWER FORCE MAIN
 SCALE: 1" = 40' HZ. ; 1" = 4' VERT.

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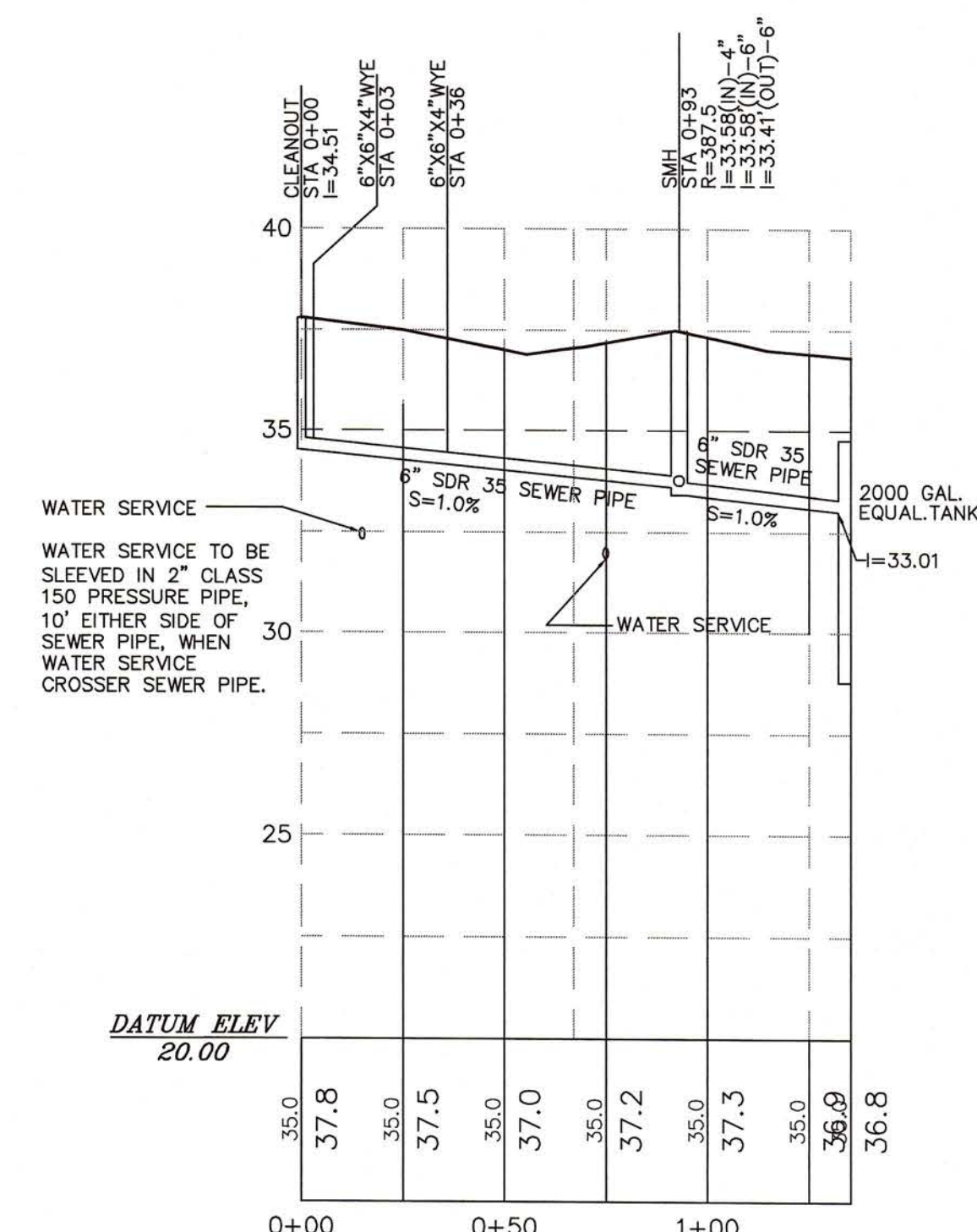
Professional Land Surveyor _____ Date _____



**PROFILE VIEW - SEWER FORCE MAIN
 HOUSES 1 & 2 TO MAIN LINE**
 SCALE: 1" = 40' HZ. ; 1" = 4' VERT.



**PROFILE VIEW - SEWER FORCE MAIN
 HOUSES 3 & 4 TO MAIN LINE**
 SCALE: 1" = 40' HZ. ; 1" = 4' VERT.



**PROFILE VIEW - GRAVITY SEWER
 HOUSES 5-7 TO MAIN LINE**
 SCALE: 1" = 40' HZ. ; 1" = 4' VERT.

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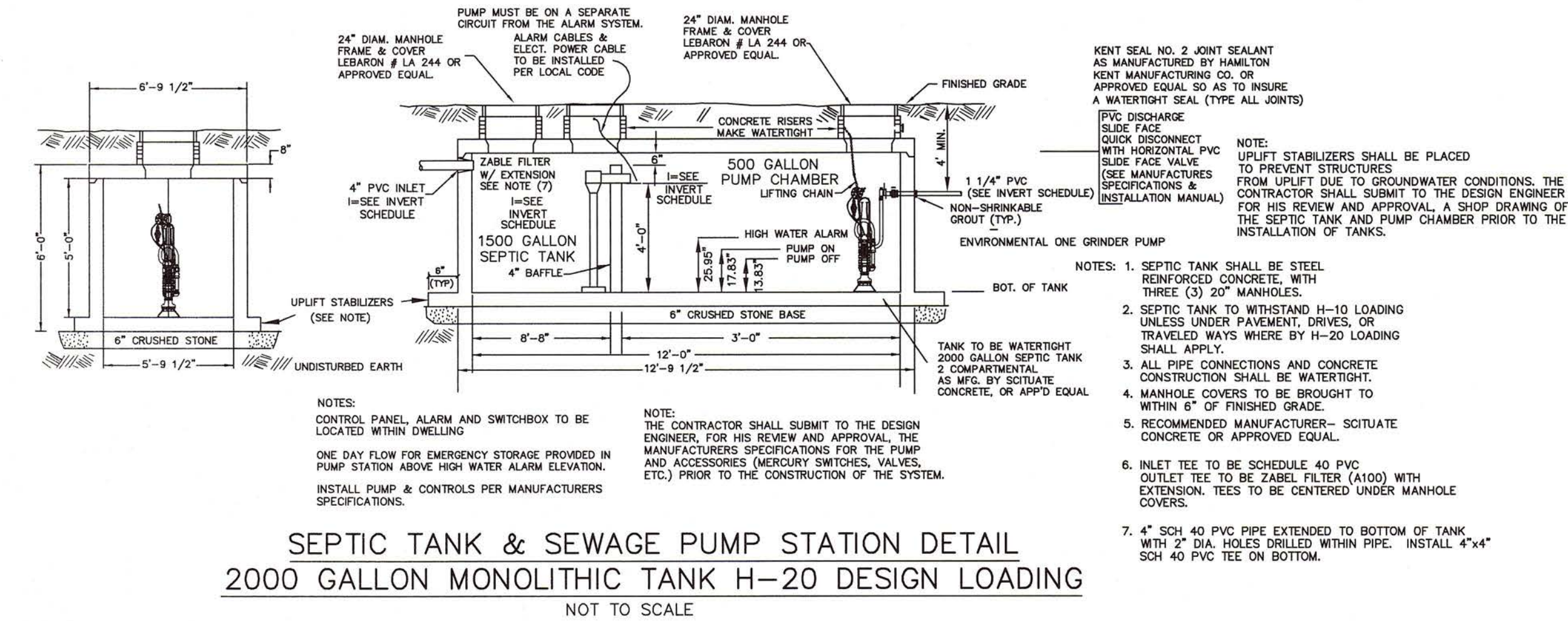
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 HILDA LANE
 IN HALIFAX, MA**

SEWER PROFILE PLAN

PREPARED FOR:
WALTER GREANEY
 95 OLD BARN PATHE
 MARSHFIELD, MA 02050

DATE: SEPT. 12, 2007
 COMP./DESIGN: P.H.SPATH
 CHECK: P.H.SPATH / R.H.COLE
 DRAWN: G.R.R.
 FIELD: M.W.C.
 ENG.: B.J.T.
 mr JOB # mr-409

INVERT SCHEDULE FOR
2000 GALLON SEPTIC TANK & PUMP CHAMBER



NOTE: ALL TANKS, INCLUDING SEPTIC TANKS AND PUMP CHAMBERS, SHALL BE EITHER: (A) WATERTIGHT THROUGH MANUFACTURE'S SPECIFICATION AND WARRANTY; OR (B) MADE WATERTIGHT BY THE MANUFACTURER, EQUIPMENT SUPPLIER OR INSTALLER USING ASPHALT OR SYNTHETIC POLYMER SEALER SPECIFIED BY THE CONCRETE OR SYNTHETIC MATERIAL MANUFACTURE, AS SPECIED IN 310 CMR 15.221(1).

UNIT#	INVERT @ FND.	INVERT IN S.T.	INVERT OUT S.T.	INVERT IN P.C.	INSIDE BOTTOM OF P.C.	1 1/4" INVERT OUT P.C.
1	34.10	33.90	33.65	33.65	29.65	32.00
2	34.10	33.90	33.65	33.65	29.65	32.00
3	35.90	35.70	35.45	35.45	31.45	34.00
4	35.90	35.70	35.45	35.45	31.45	34.00
8	35.40	35.20	34.95	34.95	30.95	33.40
9	35.40	35.20	34.95	34.95	30.95	33.40
10	33.60	33.40	33.15	33.15	29.15	31.60
11	33.60	33.40	33.15	33.15	29.15	31.60
12	35.50	35.30	35.05	35.05	31.05	33.50
13	35.50	35.30	35.05	35.05	31.05	33.50
14	36.00	35.80	35.55	35.55	31.55	33.90
15	36.00	35.80	35.55	35.55	31.55	33.90
16	34.70	34.50	34.25	34.25	30.25	32.70
17	34.70	34.50	34.25	34.25	30.25	32.70
18	34.60	34.40	34.15	34.15	30.15	32.70
19	34.60	34.40	34.15	34.15	30.15	32.70

INVERT SCHEDULE FOR
1500 GALLON SEPTIC TANK

UNIT#	INVERT @ FND.	INVERT IN S.T.	INVERT OUT S.T.
5	35.70	35.50	35.25
6	35.70	35.50	35.25
7	35.70	35.50	35.25

REMOVE & REPLACE NOTES

WITHIN THE AREA SHOWN, ALL UNSUITABLE MATERIAL (A & B HORIZONS SEE PLAN) TO BE REMOVED AND REPLACED WITH SOIL CONSISTING OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT CLASS SOILS SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. A SIEVE ANALYSIS, USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED BY THE #4 SIEVE. SIEVE ANALYSIS ALSO SHALL BE PERFORMED ON THE FRACTION OF THE FILL SAMPLE PASSING THE #4 SIEVE, SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 MM	100%
# 50	0.30 MM	10%-100%
# 100	0.15 MM	0%-20%
# 200	0.075 MM	0%-5%

NOTE: MAGNETIC TAPE TO BE INSTALLED OVER ALL BURIED COMPONENTS TO ALLOW FOR FUTURE LOCATIONS.

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CONSTRUCTION NOTES:

- ALL UNDERGROUND UTILITIES SHOWN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS AND ARE APPROXIMATE ONLY. WE ASSUME NO RESPONSIBILITY FOR DAMAGES AS A RESULT OF INACURATELY SHOWN OR OMITTED UTILITIES. SEE CHAPTER 370, ACTS OF 1984 MASSACHUSETTS GENERAL LAWS. THE APPROPRIATE PUBLIC ENGINEERING DEPARTMENT SHALL BE CONTACTED AS WELL AS DIG-SAFE (PH. NUMBER 1-800-320-4864) PRIOR TO THE START OF CONSTRUCTION.
- THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.
- THIS SYSTEM SHALL BE INSPECTED AS REQUIRED BY TITLE 5 AND HALIFAX BOARD OF HEALTH REGULATIONS.
- AT ALL POINTS OF INTERSECTION OF WATER LINES AND SEWER LINES, BOTH PIPES SHALL BE CONSTRUCTED OF CLASS 150 PRESSURE PIPE AND ARE TO BE PRESSURE TESTED TO ASSURE WATER-TIGHTNESS.
- PRECAST CONCRETE TANK, PUMP CHAMBER ETC. TO WITHSTAND H-10 LOADING UNLESS UNDER PAVEMENT, DRIVES OR TRAVELED WAYS WHEREIN H-20 LOADING SHALL APPLY.
- SEPTIC TANK, PUMP CHAMBER, ETC. SHALL BE MANUFACTURED BY SOUTIATE CONCRETE OR AN EQUIVALENT MANUFACTURER.
- ALL PIPES IN THE SYSTEM SHALL BE PVC, SDR35, SCHEDULE 40 OR PVC SDR 21 PRESSURE PIPE, SEE PLAN.
- GROUT TO BE USED AT ALL POINTS WHERE PIPES ENTER OR LEAVE ALL CONCRETE STRUCTURES IN ORDER TO PROVIDE A WATERTIGHT SEAL.
- ALL SHIPLAP JOINTS IN THE SEPTIC TANK SHALL BE SEALED WITH NEOPRENE GASKETS OR ASPHALT CEMENT TO PROVIDE A WATERTIGHT SEAL.
- WASHED CRUSHED STONE USED SHALL BE FREE OF ALL DIRT, DUST AND FINES.
- UNLESS OTHERWISE NOTED, ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND TOWN OF HALIFAX RULES AND REGULATIONS.
- EXCAVATE ALL UNSUITABLE MATERIAL IN THE LEACHING AREA AND BACKFILL WITH MATERIAL AS DESCRIBED ON PLAN.
- HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO OPERATE OVER THE LIMITS OF THE SEWAGE DISPOSAL SYSTEM DURING THE COURSE OF CONSTRUCTION OF THE SYSTEM.
- NO MODIFICATION TO THE SEWAGE DISPOSAL SYSTEM SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE DESIGN ENGINEER AND THE LOCAL BOARD OF HEALTH.

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RALPH H. COLE P.L.S. DATE

REVISIONS:

No.	DESCRIPTION	DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

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AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA

SEWER DETAIL PLAN

PREPARED FOR:
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95 OLD BARN PATHE
MARSHFIELD, MA 02050
DATE: SEPT. 12, 2007
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DRAWN: G.R.R.
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ENG.: B.J.T.
mr JOB # mr-409

7 SHEET OF 16

INVERT ELEVATIONS:

4" INVERT AT UNITS	SEE INVERT SCHEDULE
2" & 6" INVERT AT EQUAL. TANK (IN)	33.01
4" INV. AT EQUALIZATION TANK(OUT)	32.76
4" INVERT AT PUMP CHAMBER (IN)	32.68
2" INVERT AT PUMP CHAMBER(OUT)	34.83

INVERTS AT LEACHING FACILITY:

1 1/4" INVERT AT BEGINNING OF LEACHING FIELD	38.10
1 1/4" INVERT AT END OF LEACHING FIELD	38.10
ELEVATION AT BOTTOM OF FIELD	37.60
SOIL MOTTLES OBSERVED ELEVATION	31.9
T.P. # 3	

DESIGN CRITERIA:

DESIGN FLOW:
19 HOUSING FOR OVER 55 UNITS
19 UNITS X 150 GAL./UNIT= 2850 GALS.
REQUIRED SEPTIC TANK:
150 GALS/UNIT X 200% = 300 GALLONS
SEPTIC TANK PROVIDED:
EACH UNIT WILL HAVE 1500 GAL. TANK MIN.
SIZE OF LEACHING FACILITY REQUIRED:
DESIGN PERC. RATE: <2 MIN./ INCH
CLASS I ELR = .74 G.P.D./S.F.
2850 G.P.D. / .74 GAL/S.F. = 3852 S.F.
SIZE OF LEACHING FACILITY PROVIDED:
70' LONG X 56' WIDE LEACHING FIELD
70' X 56' = 3920 S.F. X .74 GAL/SF = 2900 GAL/DAY
TOTAL LEACHING = 3920 S.F.
TOTAL CAPACITY = 2900 GALLONS PER DAY

NOTES

- 1) SUITABLE FOR USE IN OFF STREET LOCATION WHERE NOT SUBJECT TO HIGH DENSITY TRAFFIC.
- 2) PROVIDE A FULL BED OF CLASS "A" CONCRETE UNDER FRAME AND SUPPORT ANCHORS.

SPECIFICATIONS

THE HIR SERIES (SINGLE LEAF) ACCESS FRAMES AND COVERS AS MANUFACTURED BY HALLIDAY PRODUCTS, INC. OF ORLANDO, FLORIDA SHALL HAVE A 1/4" THICK, ONE-PIECE, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING A CONTINUOUS CONCRETE ANCHOR. THE INSIDE OF THE FRAME SHALL HAVE A DOOR-SUPPORT LEDGE ON TWO (2) SIDES. BOTH FRAME AND LEDGE MUST BE SUPPORTED BY A FULL BED OF CLASS "A" CONCRETE. THE DOOR PANEL SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO WITHSTAND A LIVE LOAD OF THE H-20 DESIGNATION. DOOR SHALL OPEN TO 90° AND AUTOMATICALLY LOCK WITH A STAINLESS STEEL HOLD OPEN ARM WITH ALUMINUM RELEASE HANDLE FOR EASE OF OPERATION. DOOR SHALL INCORPORATE ENCLOSED STAINLESS STEEL COMPRESSION SPRING ASSISTERS. DOOR SHALL CLOSE FLUSH WITH THE FRAME. HINGES AND ALL FASTENING HARDWARE SHALL BE STAINLESS STEEL. UNIT SHALL LOCK WITH STAINLESS STEEL SLAM LOCK WITH REMOVABLE KEY AND HAVE A NON-CORROSIVE HANDLE. UNIT SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL AND/OR WORKMANSHIP FOR A PERIOD OF 10 YEARS.

NOTES:

CONTROL PANEL, ALARM AND SWITCHBOX TO BE LOCATED WITHIN DWELLING.

ONE DAY FLOW FOR EMERGENCY STORAGE PROVIDED IN PUMP STATION ABOVE HIGH WATER. ALARM ELEVATION FOR THE 3 GRAVITY UNITS.

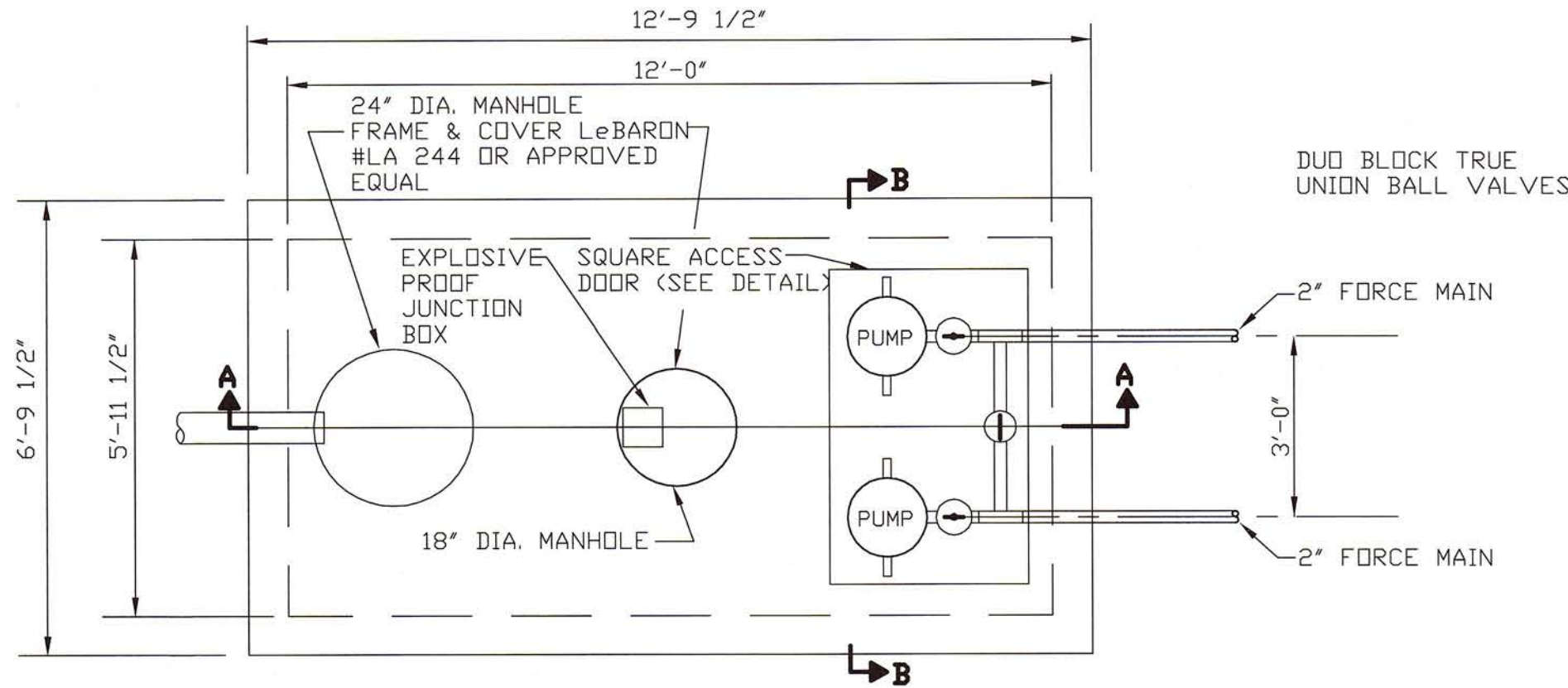
INSTALL PUMPS & CONTROLS PER MANUFACTURERS SPECIFICATION

NOTE:

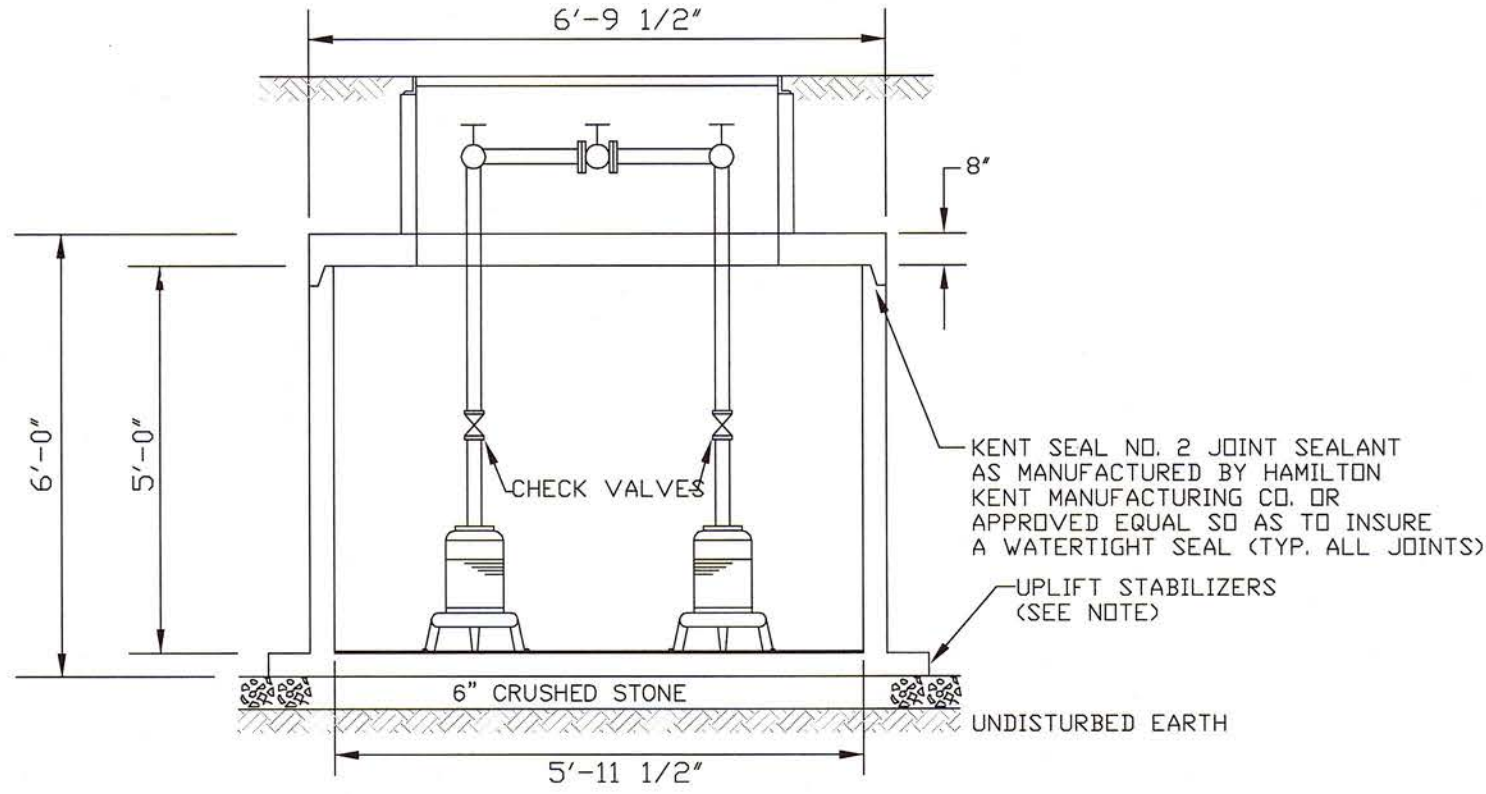
THE CONTRACTOR SHALL SUBMIT TO THE DESIGN ENGINEER, FOR HIS REVIEW AND APPROVAL, A SHOP DRAWING OF THE SEPTIC TANK AND PUMP CHAMBER PRIOR TO THE CONSTRUCTION OF THE SYSTEM.

NOTE:

UPLIFT STABILIZERS SHALL BE PLACED ON THE EQUALIZATION TANK, SEPTI TANKS AND PUMP CHAMBER TO PREVENT STRUCTURES FROM UPLIFT DUE TO GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL SUBMIT TO THE DESIGN ENGINEER, FOR HIS REVIEW AND APPROVAL, A SHOP DRAWING OF THE SEPTIC TANK AND PUMP CHAMBER PRIOR TO THE INSTALLATION OF TANKS.



PLAN

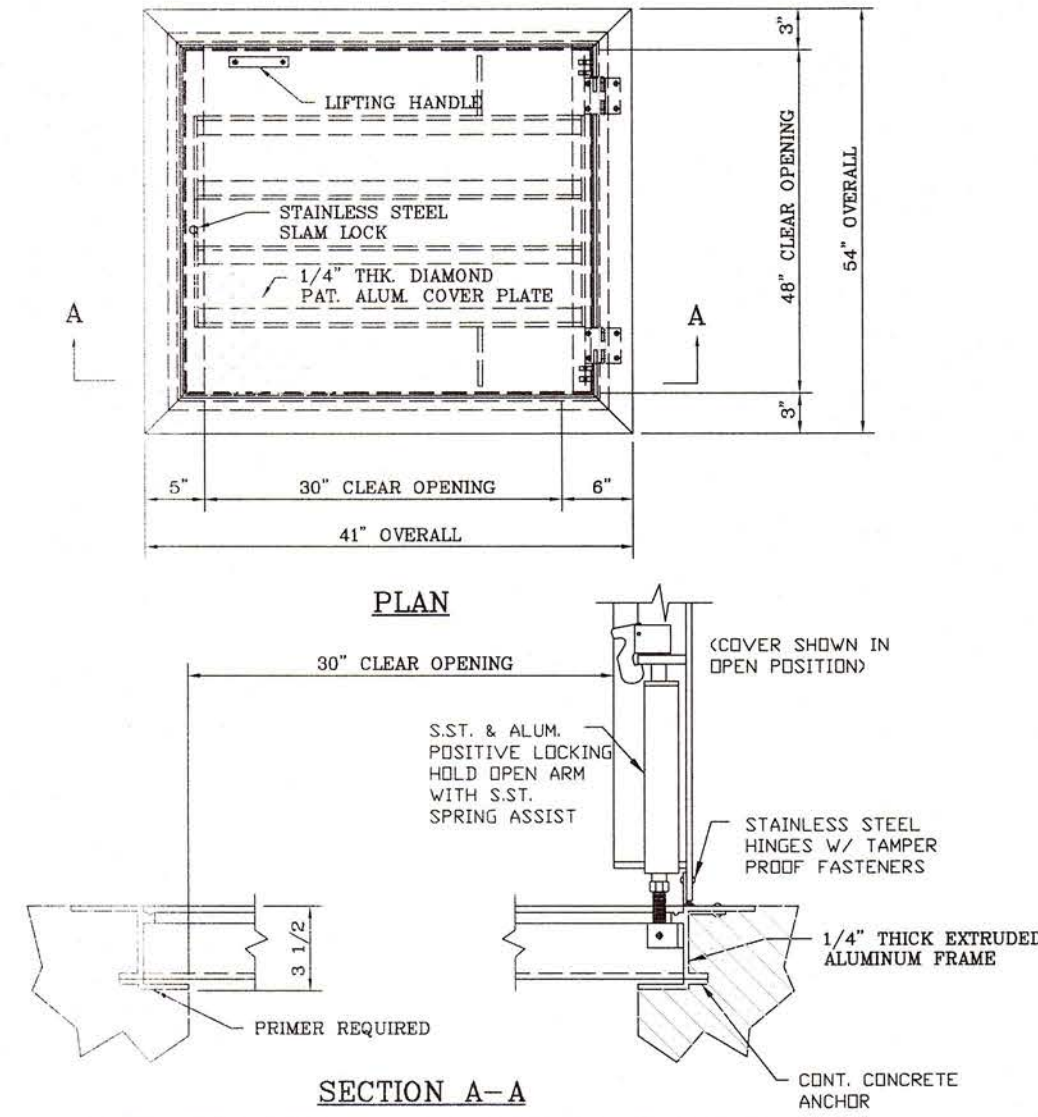


SECTION B-B

PUMP SPECIFICATIONS

54 GPM AT 25TDH
DISCHARGE 2"
NIN CLDG IMPELLERS
SINGLE PHASE SUBMERSIBLE ALTERNATING PUMPS

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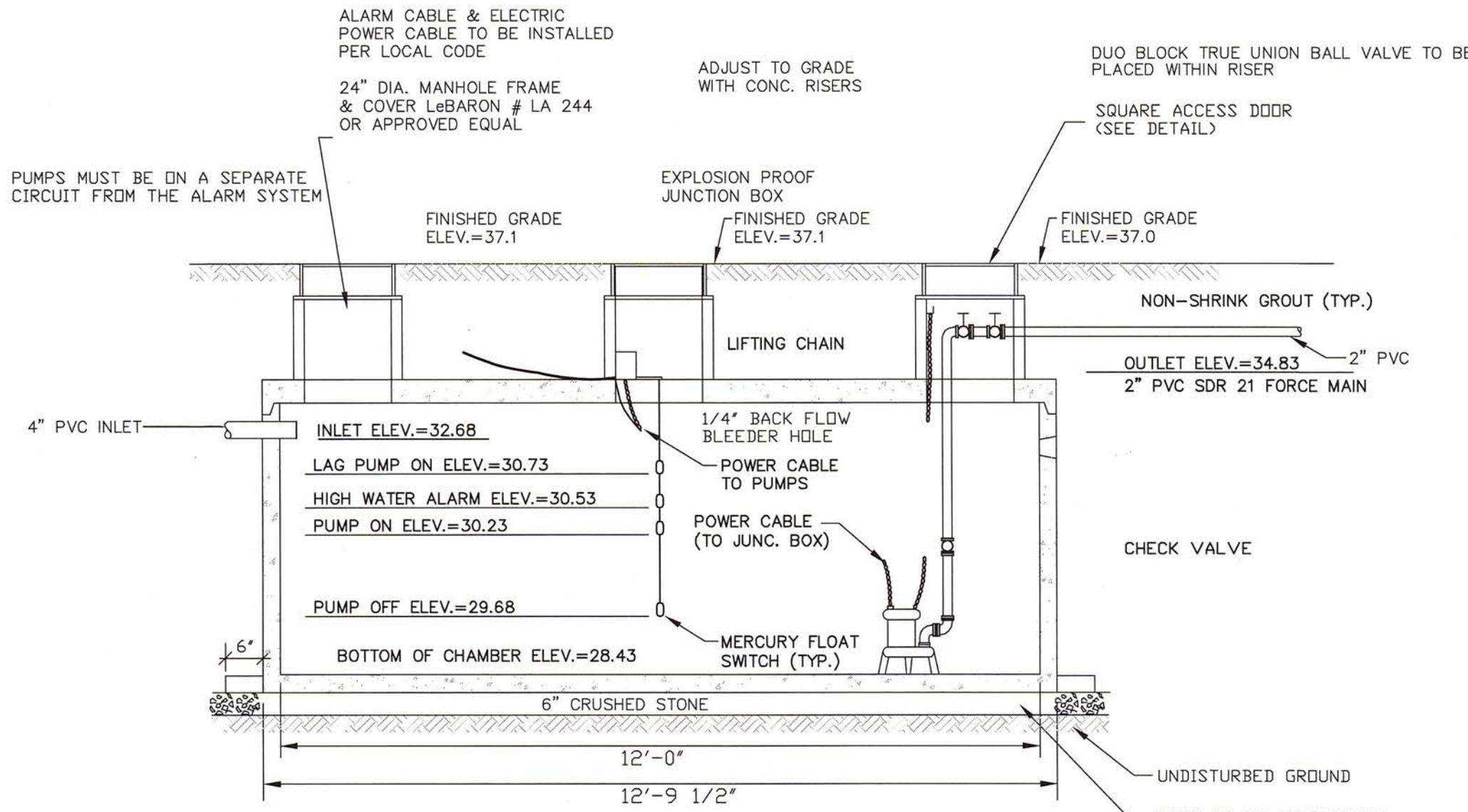
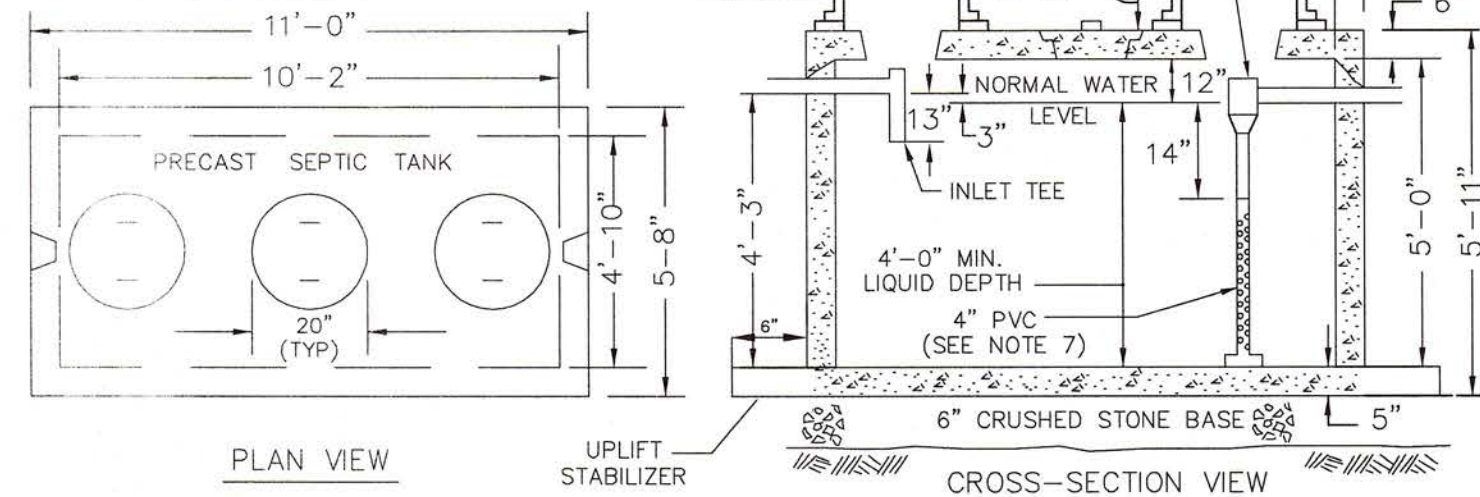
SECTION A-A
SERIES H1R ACCESS DOOR
(HEAVY DUTY REGULAR - H20)
HALLIDAY PRODUCTS - MODEL NO. HIR3048

SEPTIC TANK DETAIL: 1500 GALLON H 20 DESIGN LOADING

NOTE: TANK TO BE MONOLITHIC TANK
NOT TO SCALE

NOT TO SCALE

1. SEPTIC TANK SHALL BE STEEL REINFORCED CONCRETE, WITH THREE (3) 20" MANHOLES.
2. SEPTIC TANK TO WITHSTAND H-10 LOADING UNLESS UNDER PAVEMENT, DRIVES, OR TRAVELED WAYS WHERE BY H-20 LOADING SHALL APPLY.
3. ALL PIPE CONNECTIONS AND CONCRETE CONSTRUCTION SHALL BE WATERTIGHT.
4. MANHOLE COVERS TO BE BROUGHT TO OF FINISHED GRADE.



SECTION A-A

PUMP CHAMBER DETAIL H-20 DESIGN LOADING

NOT TO SCALE

NOTE: TANK TO BE MONOLITHIC TANK

NOTE:

PUMPS ARE TO ALTERNATE IN ACCORDANCE WITH THE FOLLOWING SEQUENCE

- A - PUMPS OFF
- B - PRIMARY PUMP ON
- C - ALARM
- D - LAG PUMP ON
- E - PUMPS MUST ALTERNATE

OBSERVATION HOLE DATA

OBSERVATION

HOLE # L-1

DATE: 7/9/07

GRND ELEV.= 36.1

GW ELEV.= 29.1

MOTTILING ELEV.= 29.9

TESTED BY: RALPH H. COLE P.L.S.

WITNESSED BY: KATHY DRINAN

CERTIFIED BY: RALPH H. COLE P.L.S.

ELEV.	SURFACE DEPTH	SOIL HORIZON	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
36.1	0"-7"	A	SANDY LOAM	10YR 3/3	N	FINE-FRIABLE MANY ROOTS
35.5	7"-29"	B	LOAMY SAND	10YR 5/6	N	FINE-VERY FRIABLE, ROOTS
33.7	29"-116"	C1	SAND	2.5Y 6/6	Y 75" 7.5YR 6/6	MED. SAND, LOOSE
26.4	116"-123"	C2	SAND	10YR 6/3		FINE SAND

SOIL MOTTLES OBSERVED @75" (ELEV.=29.9)

TOP OF PERC 42" HOLE @ ELEV. 32.6

PERC RATE <2 MIN./INCH

OBSERVATION HOLE DATA

OBSERVATION

HOLE # L-2

DATE: 7/9/07

GRND ELEV.= 36.7

GW ELEV.= 27.7

MOTTILING ELEV.= 30.3

TESTED BY: RALPH H. COLE P.L.S.

WITNESSED BY: KATHY DRINAN

CERTIFIED BY: RALPH H. COLE P.L.S.

ELEV.	SURFACE DEPTH	SOIL HORIZON	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
35.7	0"-6"	A	SANDY LOAM	10YR 3/3	N	FINE-FRIABLE ROOTS
35.2	6"-22"	B	LOAMY SAND	10YR 5/6	N	FINE-FRIABLE, ROOTS
33.9	22"-96"	C1	SAND	2.5Y 6/6	Y 65" 7.5YR 6/6	MED. SAND, LOOSE
27.7	96"-120"	C2	SAND	10YR 6/3		FINE SAND

SOIL MOTTLES OBSERVED @75" (ELEV.=29.9)

TOP OF PERC 36" HOLE @ ELEV. 32.8

PERC RATE <2 MIN./INCH

OBSERVATION HOLE DATA

OBSERVATION

HOLE # L-3

DATE: 7/9/07

GRND ELEV.= 35.8

GW ELEV.= 28.0

MOTTILING ELEV.= 31.9

TESTED BY: RALPH H. COLE P.L.S.

WITNESSED BY: KATHY DRINAN

CERTIFIED BY: RALPH H. COLE P.L.S.

ELEV.	SURFACE DEPTH	SOIL HORIZON	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
35.8	0"-6"	A	SANDY LOAM	10YR 3/3	N	FINE-FRIABLE ROOTS
35.3	6"-38"	B	LOAMY SAND	10YR 5/6	N	FINE-FRIABLE, ROOTS
32.6	38"-88"	C1	SAND	2.5Y 6/6	Y 47" 7.5YR 6/6	MED. SAND, LOOSE
28.5	88"-120"	C2	SAND	10YR 6/3		FINE SAND

SOIL MOTTLES OBSERVED @ 47" (ELEV.=31.9)

TOP OF PERC 35" HOLE @ ELEV. 32.9

PERC RATE <2 MIN./INCH

OBSERVATION HOLE DATA

OBSERVATION

HOLE # L-4

DATE: 7/9/07

GRND ELEV.= 36.0

GW ELEV.= 28.0

MOTTILING ELEV.= 31.3

TESTED BY: RALPH H. COLE P.L.S.

WITNESSED BY: KATHY DRINAN

CERTIFIED BY: RALPH H. COLE P.L.S.

ELEV.	SURFACE DEPTH	SOIL HORIZON	SOIL TEXTURE	SOIL COLOR	SOIL MOTTILING	OTHER
36.0	0"-7"	A	SANDY LOAM	10YR 3/3	N	FINE-FRIABLE ROOTS
35.4	7"-38"	B	LOAMY SAND	10YR 5/6	N	FINE-FRIABLE, ROOTS
32.9	38"-94"	C1	SAND	2.5Y 6/6	Y 52" 7.5YR 6/6	MED. SAND, LOOSE
28.2	94"-120"	C2	SAND	10YR 6/3		FINE SAND

SOIL MOTTLES OBSERVED @ 52" (ELEV.=31.3)

TOP OF PERC 36" HOLE @ ELEV. 33.0

PERC RATE <2 MIN./INCH

I Hereby Certify That The Property Lines Shown on This Plan Are The Lines Dividing Existing Ownerships, And The Lines of The Streets and Ways Shown are Those of Public or Private Streets or Ways Already Established, And That No New Lines For Division of Existing Ownership or For New Ways Are Shown.

Professional Land Surveyor Date

FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

RALPH H. COLE P.L.S. DATE

REVISIONS:

No. DESCRIPTION DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:

mr SURVEYING, INC.

P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:

SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA

SEWER DETAIL PLAN

PREPARED FOR:

WALTER GREANEY
95 OLD BARN PATH
MARSHFIELD, MA 02050

DATE: SEPT. 12, 2007

COMP./DESIGN: P.H.SPATH

CHECK: P.H.SPATH / R.H.COLE

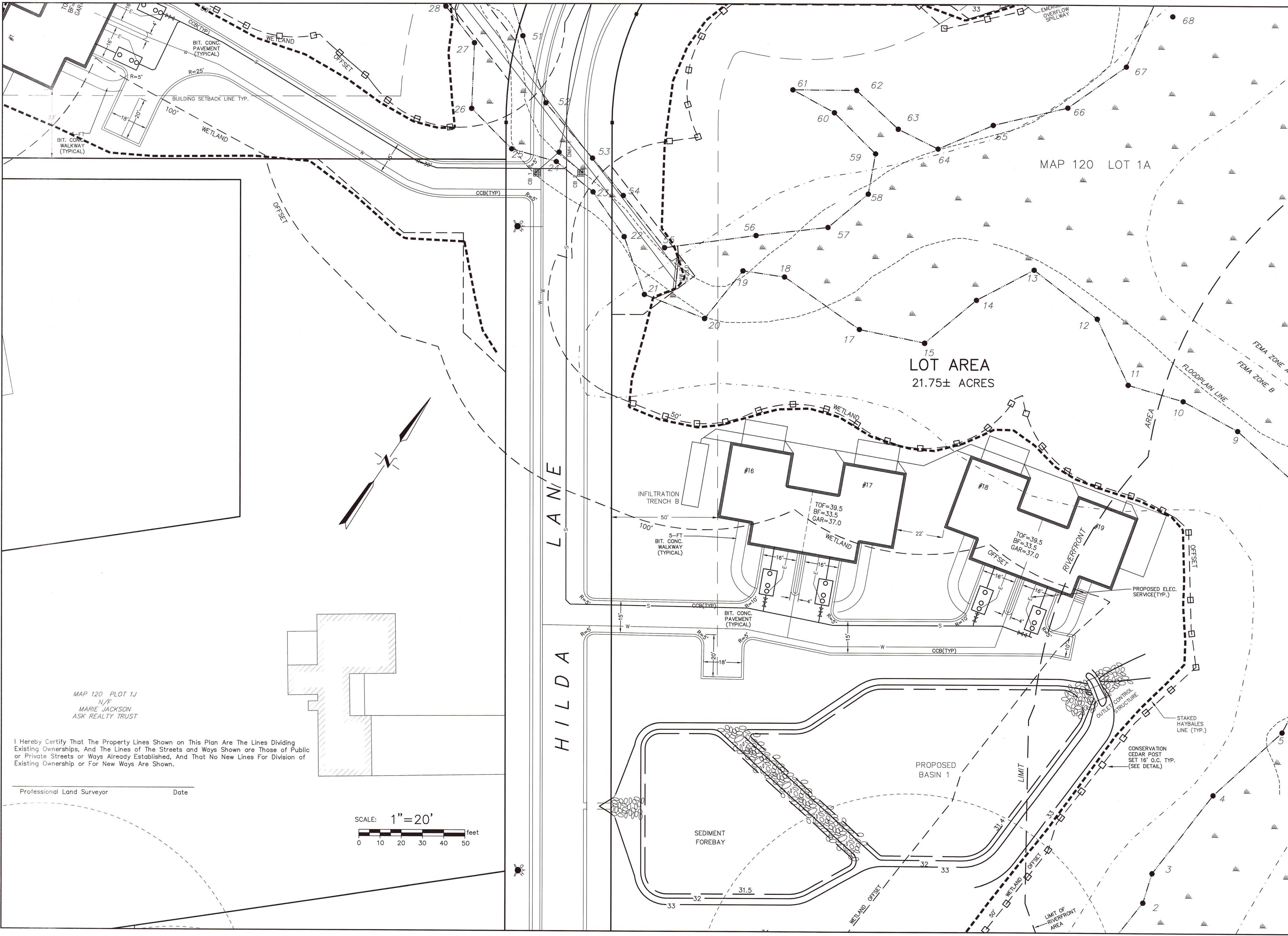
DRAWN: G.R.R.

FIELD: M.W.C.

ENG.: B.J.T.

mr JOB # mr-409

SHEET 16



FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

RALPH H. COLE P.L.S. DATE

REVISIONS:

No.	DESCRIPTION	DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:
mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:
**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

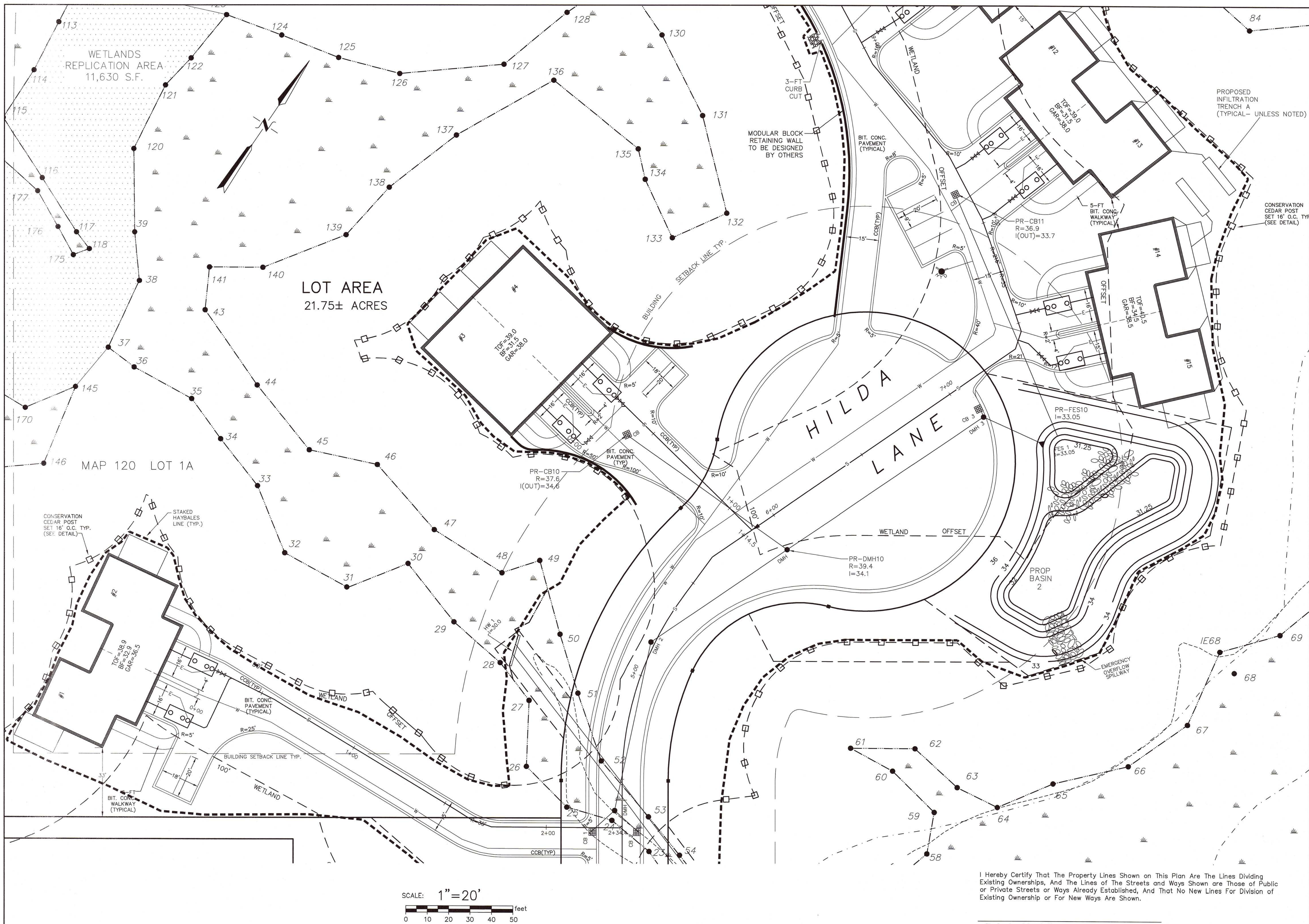
LAYOUT & MATERIALS

PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050

DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
DRAWN: G.R.R.

FIELD: M.W.C.
ENG.: B.J.T.
mr JOB # mr-409

10 SHEET OF 16



FOR REGISTRY USE ONLY

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RALPH H. COLE P.L.S. DATE

REVISIONS:

No.	DESCRIPTION	DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:
mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:
**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

LAYOUT & MATERIALS

PREPARED FOR:
**WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050**

DATE: SEPT. 12, 2007

COMP./DESIGN: P.H.SPATH

CHECK: P.H.SPATH / R.H.COLE

DRAWN: G.R.R.

FIELD: M.W.C.

ENG.: B.J.T.

mr JOB # mr-409

SHEET
11 OF 16

I hereby certify that the property lines shown on this plan are the lines dividing existing ownerships, and the lines of the streets and ways shown are those of public or private streets or ways already established, and that no new lines for division of existing ownership or for new ways are shown.

Professional Land Surveyor

Date

I Hereby Certify That The Property Lines Shown on This Plan Are The Lines Dividing Existing Ownerships, And The Lines of The Streets and Ways Shown are Those of Public or Private Streets or Ways Already Established, And That No New Lines For Division of Existing Ownership or For New Ways Are Shown.

Professional Land Surveyor Date

FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

RALPH H. COLE P.L.S. DATE

REVISIONS:

No.	DESCRIPTION	DATE

BARBARA THISSELL P.E. DATE

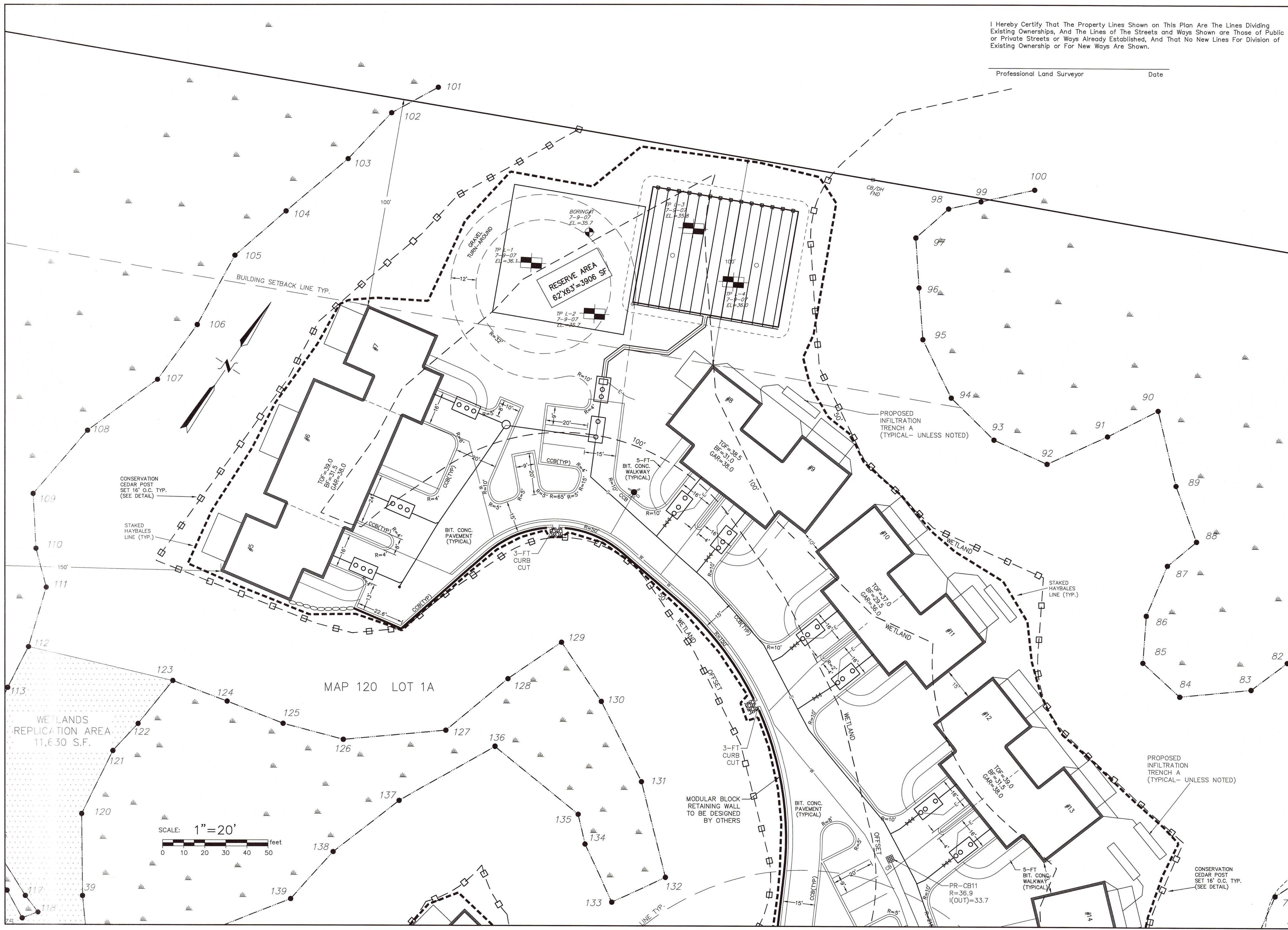
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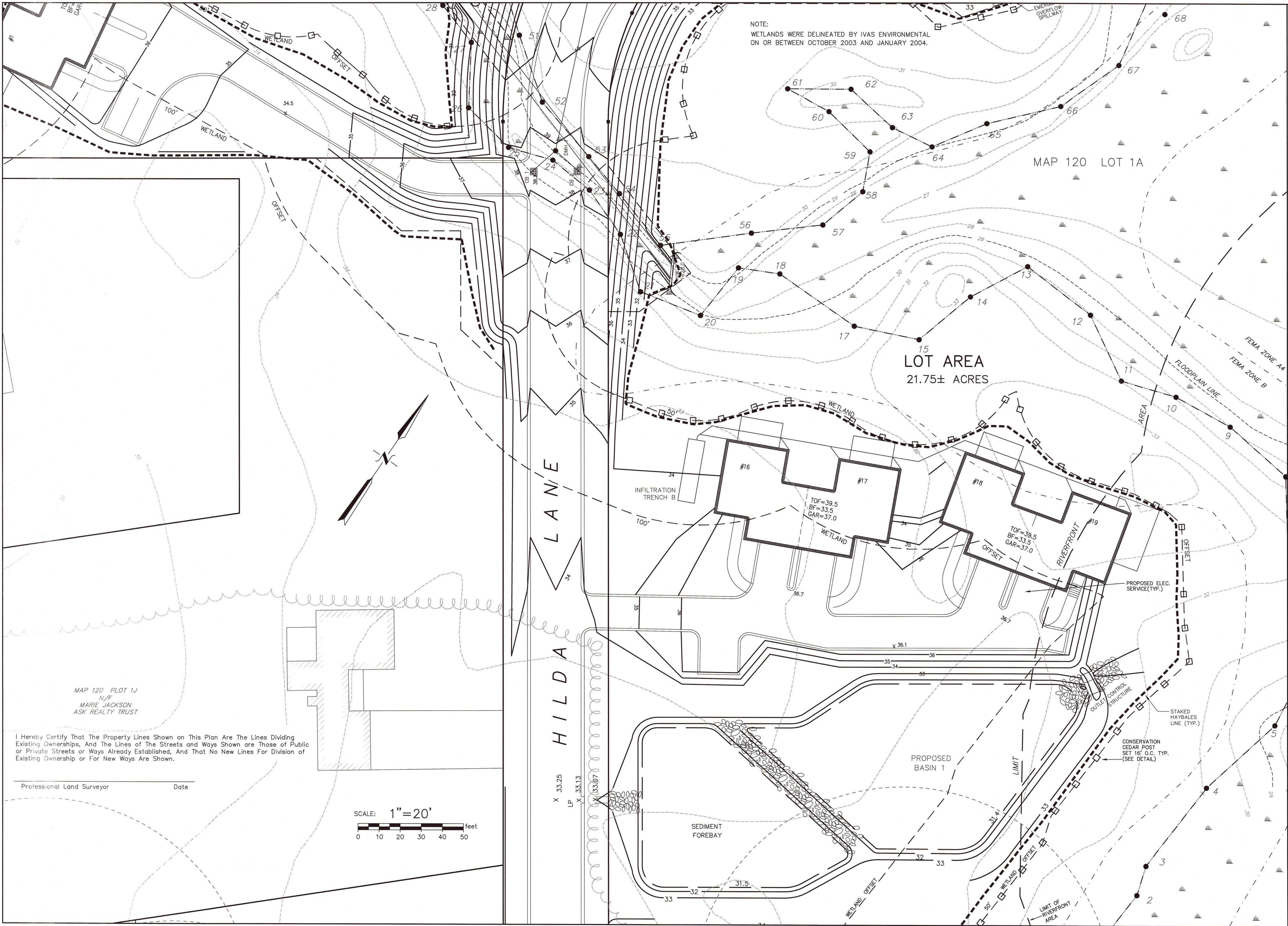
PREPARED BY:
mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:
**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

LAYOUT & MATERIALS

PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050
DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
DRAWN: G.R.R.
FIELD: M.W.C.
ENG.: B.J.T.
mr JOB # mr-409





NOTE:
WETLANDS WERE DELINEATED BY IVAS ENVIRONMENTAL
ON OR BETWEEN OCTOBER 2003 AND JANUARY 2004.

MAP 120 LOT 1A

LOT AREA
21.75± ACRES

HILDA LANE

MAP 120 PLOT 1J
N/F
MARIE JACKSON
ASK REALTY TRUST

I Hereby Certify That The Property Lines Shown on This Plan Are The Lines Dividing Existing Ownerships, And The Lines of The Streets and Ways Shown are Those of Public or Private Streets or Ways Already Established, And That No New Lines For Division of Existing Ownership or For New Ways Are Shown.

Professional Land Surveyor Date

SCALE: 1"=20'
0 10 20 30 40 50 feet

FOR REGISTRY USE ONLY

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RALPH H. COLE P.L.S. DATE

No.	DESCRIPTION	DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:
mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061

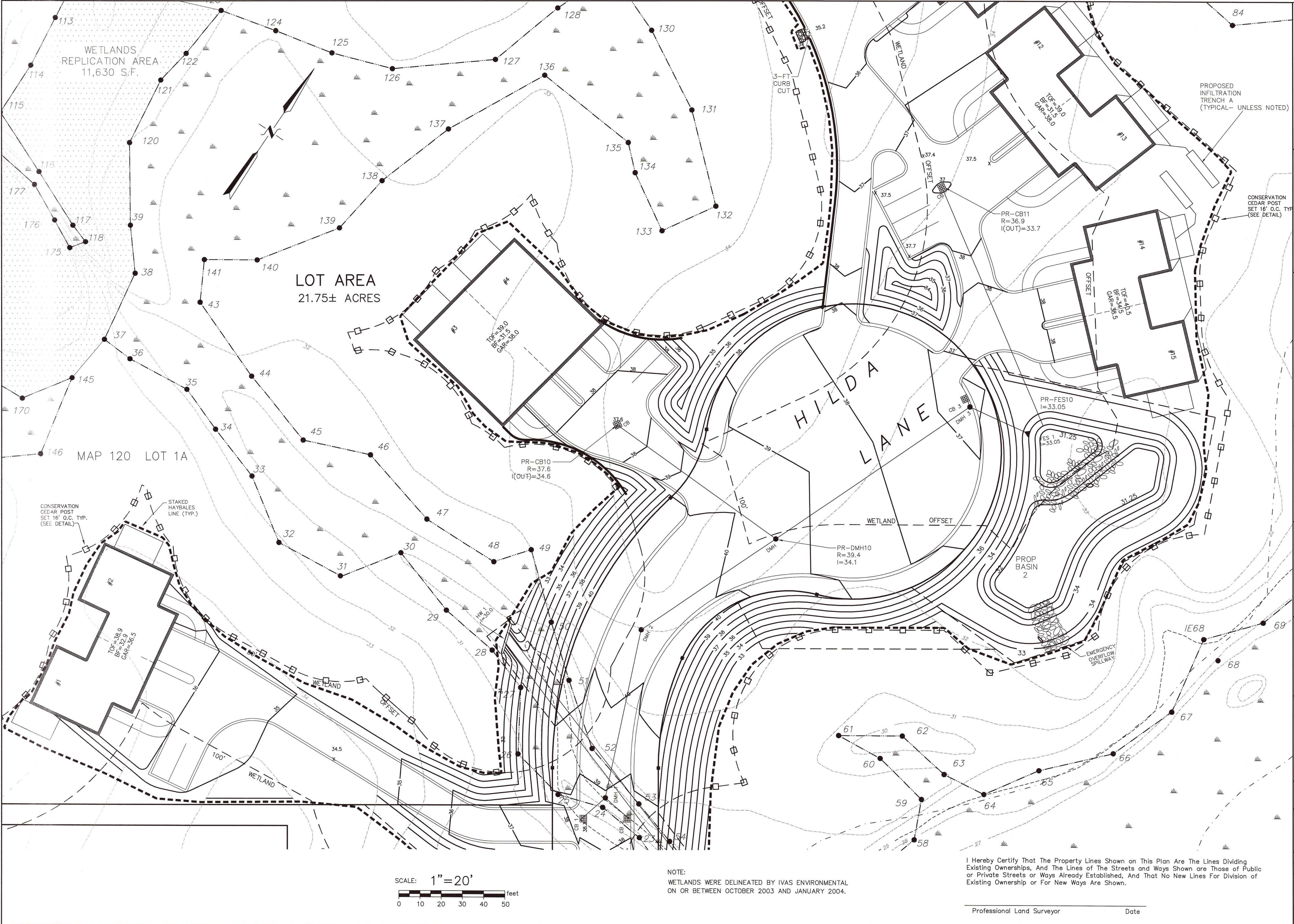
PROJECT TITLE:
**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

**CONSERVATION
GRADING & DRAINAGE**

PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050

DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
DRAWN: G.R.R.

FIELD: M.W.C.	13 SHEET OF 16
ENG.: B.J.T. mr JOB # mr-409	



FOR REGISTRY USE ONLY

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RALPH H. COLE P.L.S. DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:
mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:
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AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

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MARSHFIELD, MA 02050**

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DRAWN: G.R.R.

FIELD: M.W.C.
ENG.: B.J.T.
mr JOB # mr-409

DATE
SHEET
14 OF 16

NOTE:
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Professional Land Surveyor Date

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RALPH H. COLE P.L.S. DATE

REVISIONS:

No.	DESCRIPTION	DATE

BARBARA THISSELL P.E. DATE

PHILLIP SPATH P.E. DATE

PREPARED BY:
mr SURVEYING, INC.

P.O. BOX 5104
NORWELL, MA 02061

PROJECT TITLE:

**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

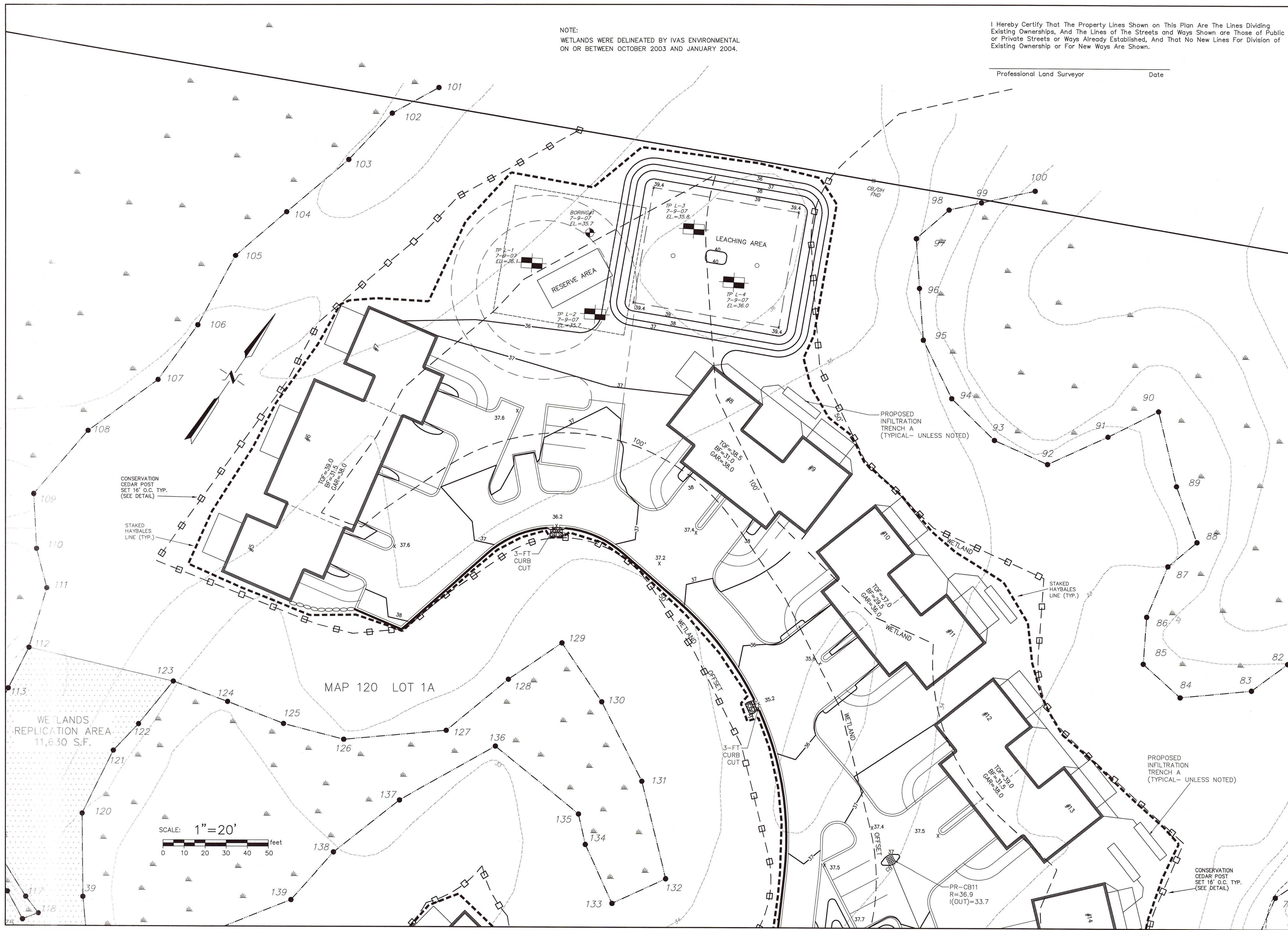
**CONSERVATION
GRADING & DRAINAGE**

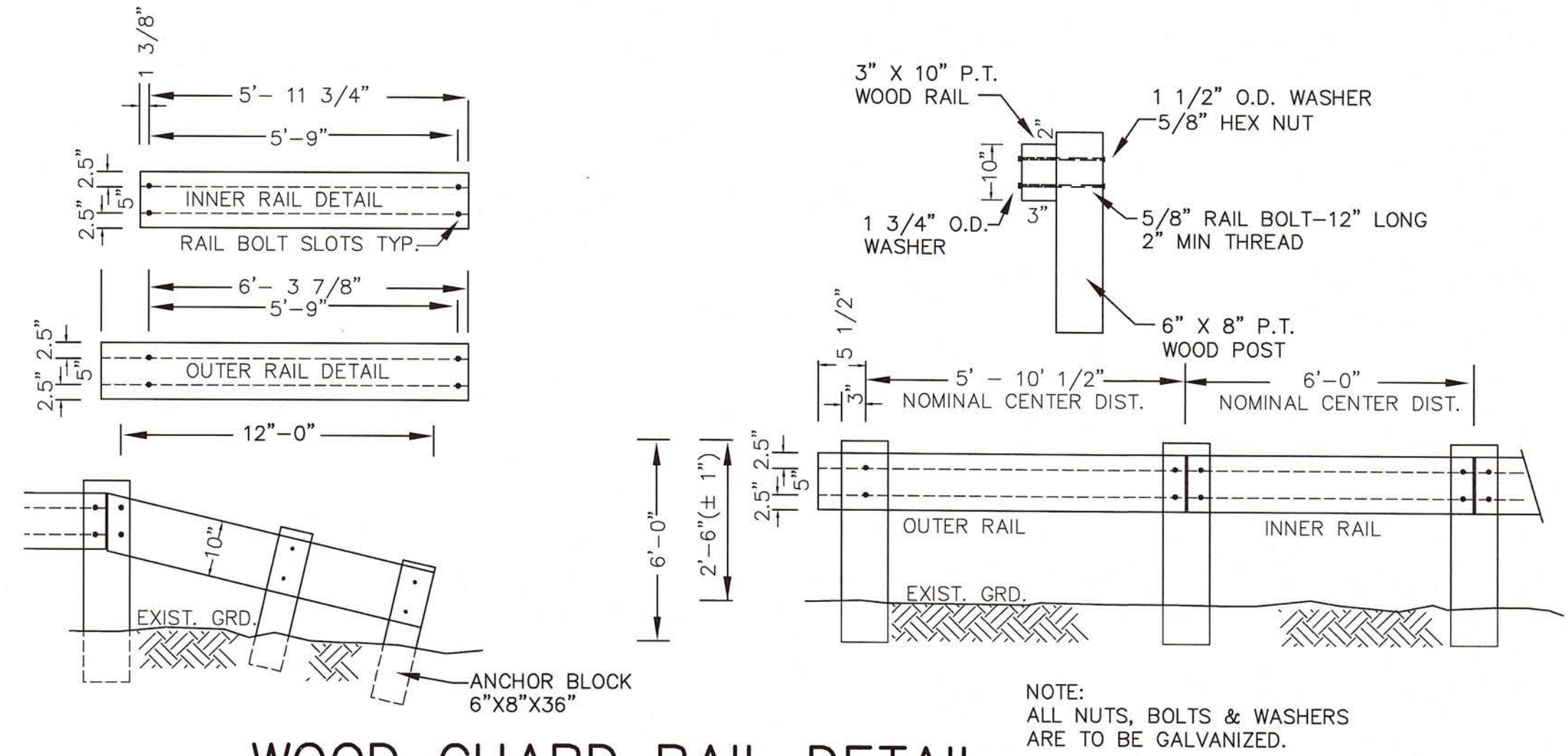
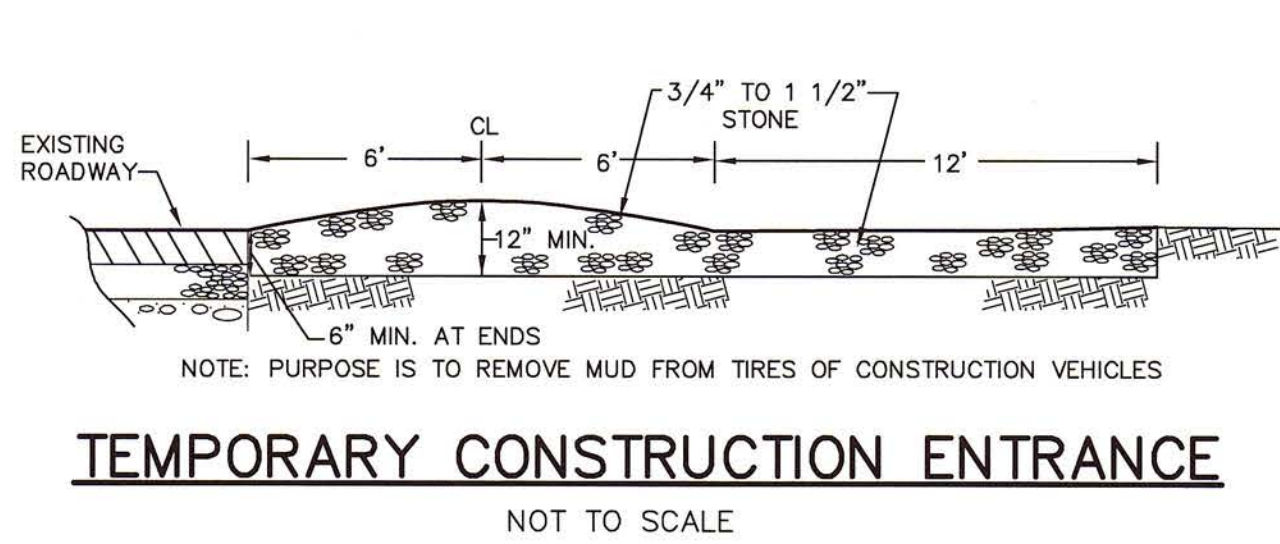
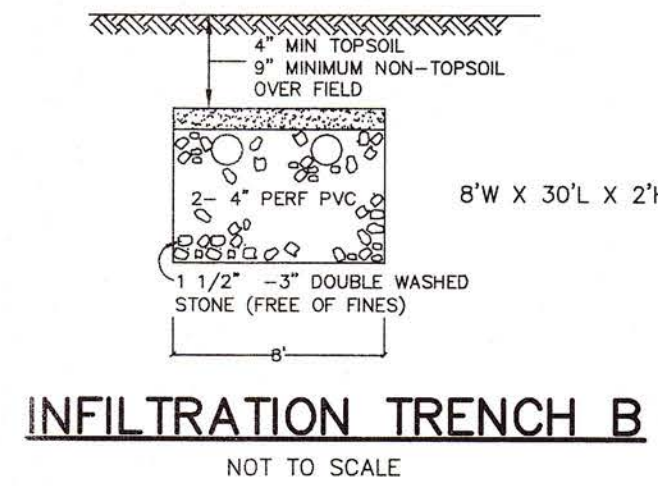
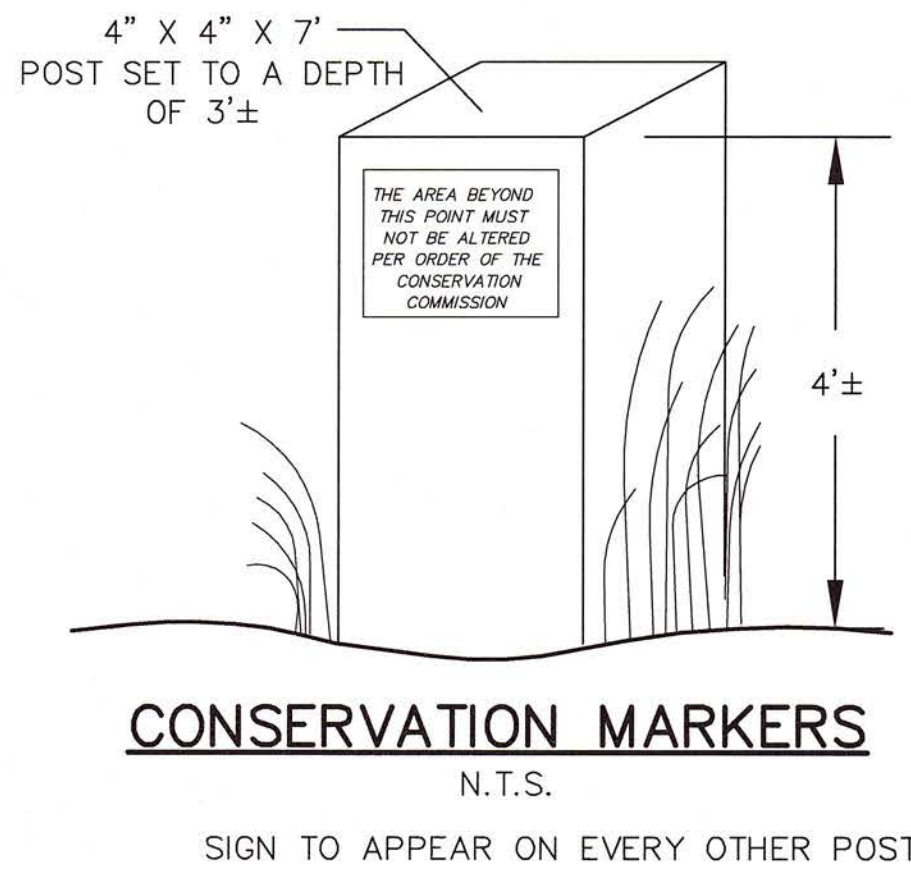
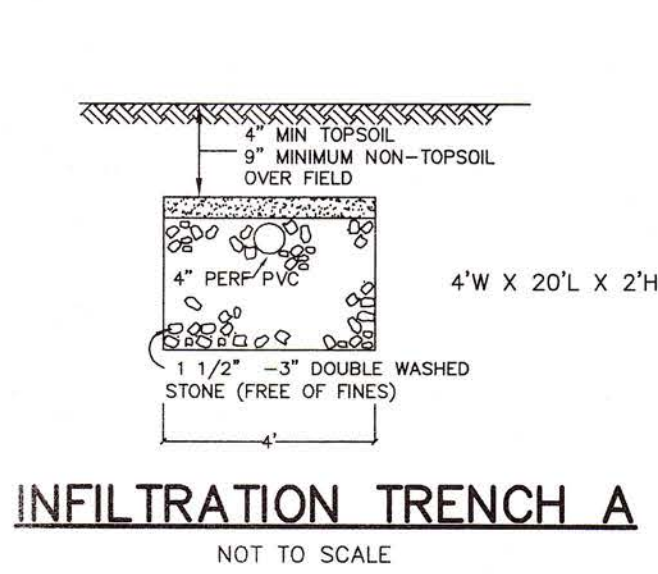
PREPARED FOR:
**WALTER GREANEY
95 OLD BARN PATH
MARSHFIELD, MA 02050**

DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
DRAWN: G.R.R.

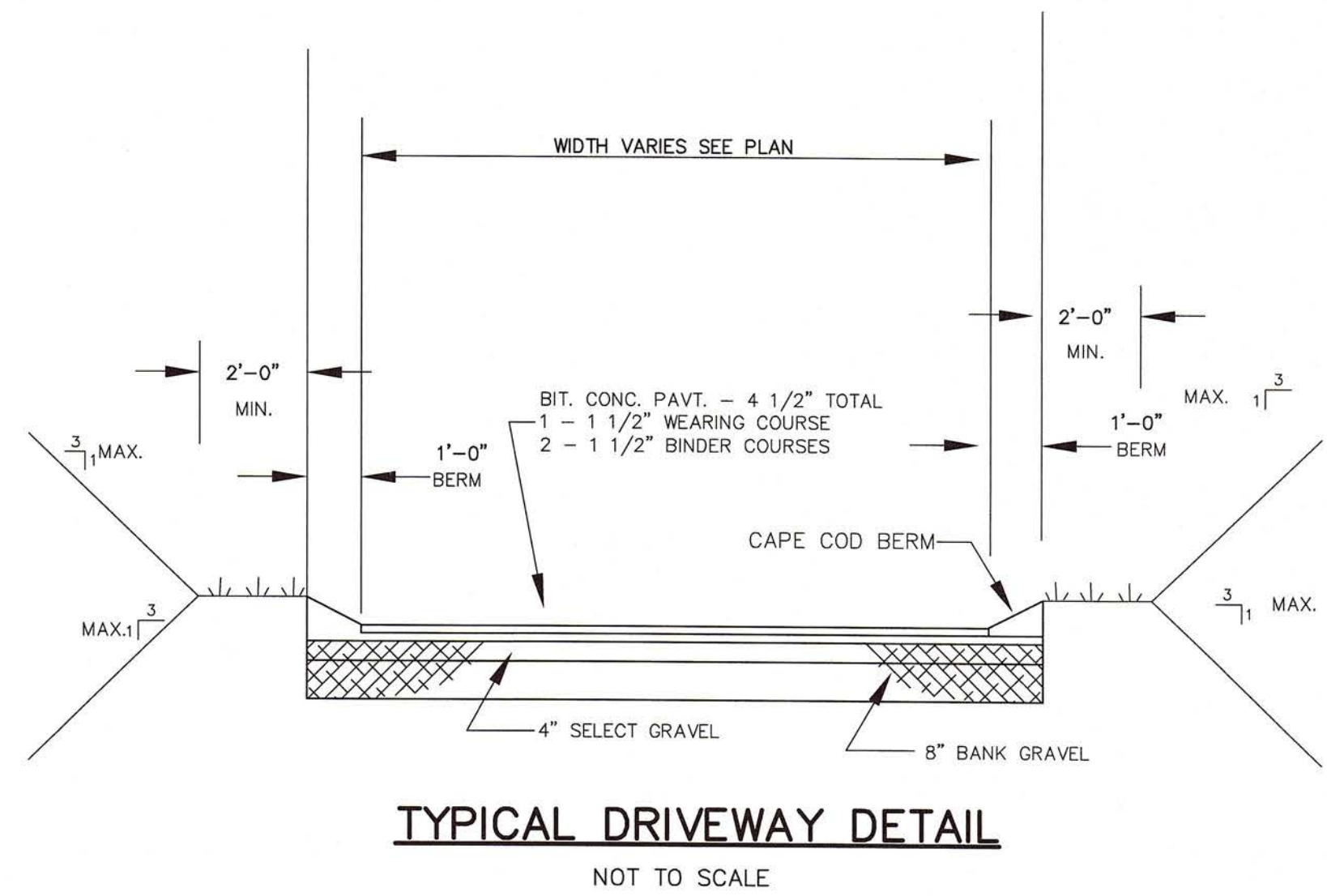
FIELD: M.W.C.
ENG.: B.J.T.
mr JOB # mr-409

SHEET
15 OF 16

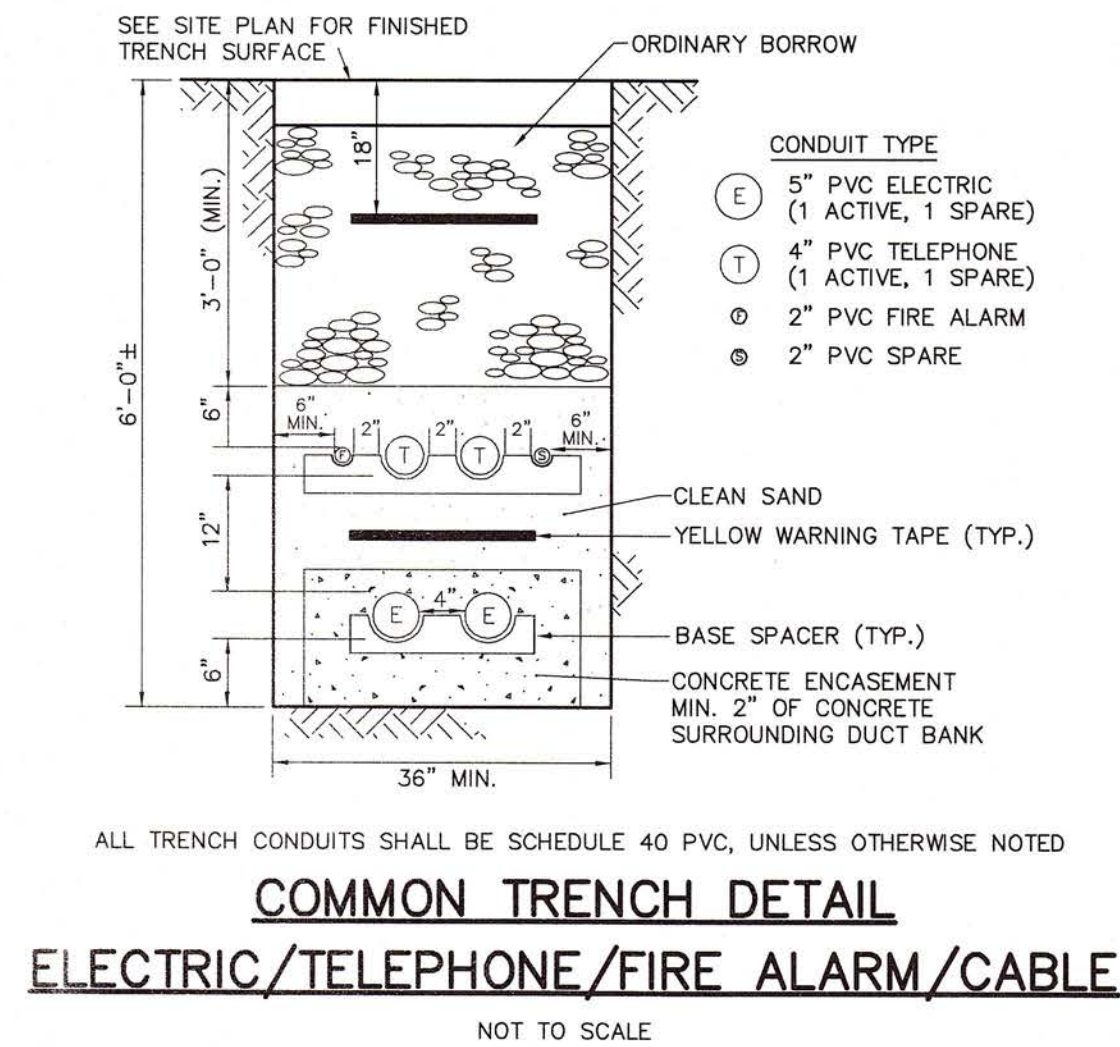




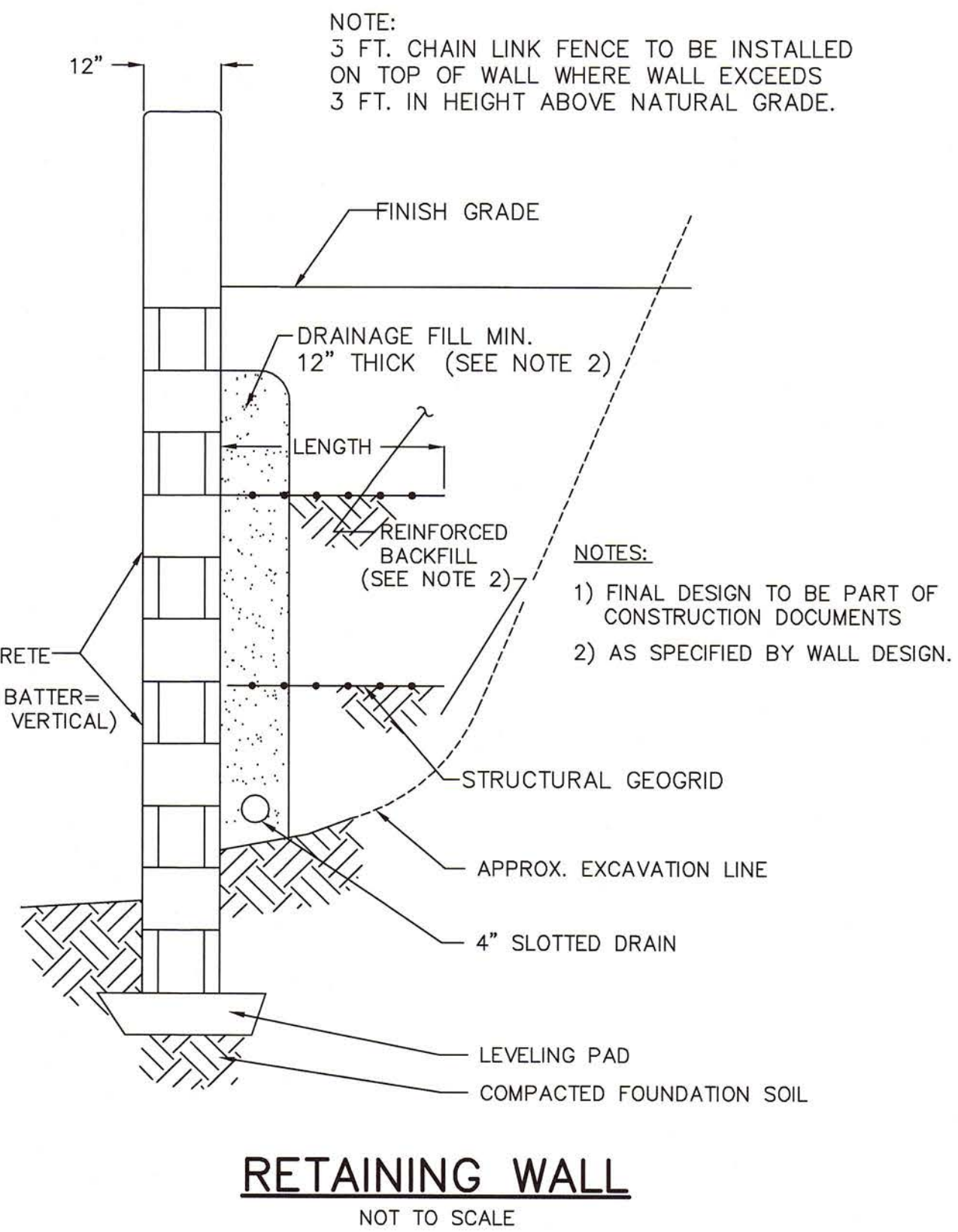
WOOD GUARD RAIL DETAIL
NOT TO SCALE



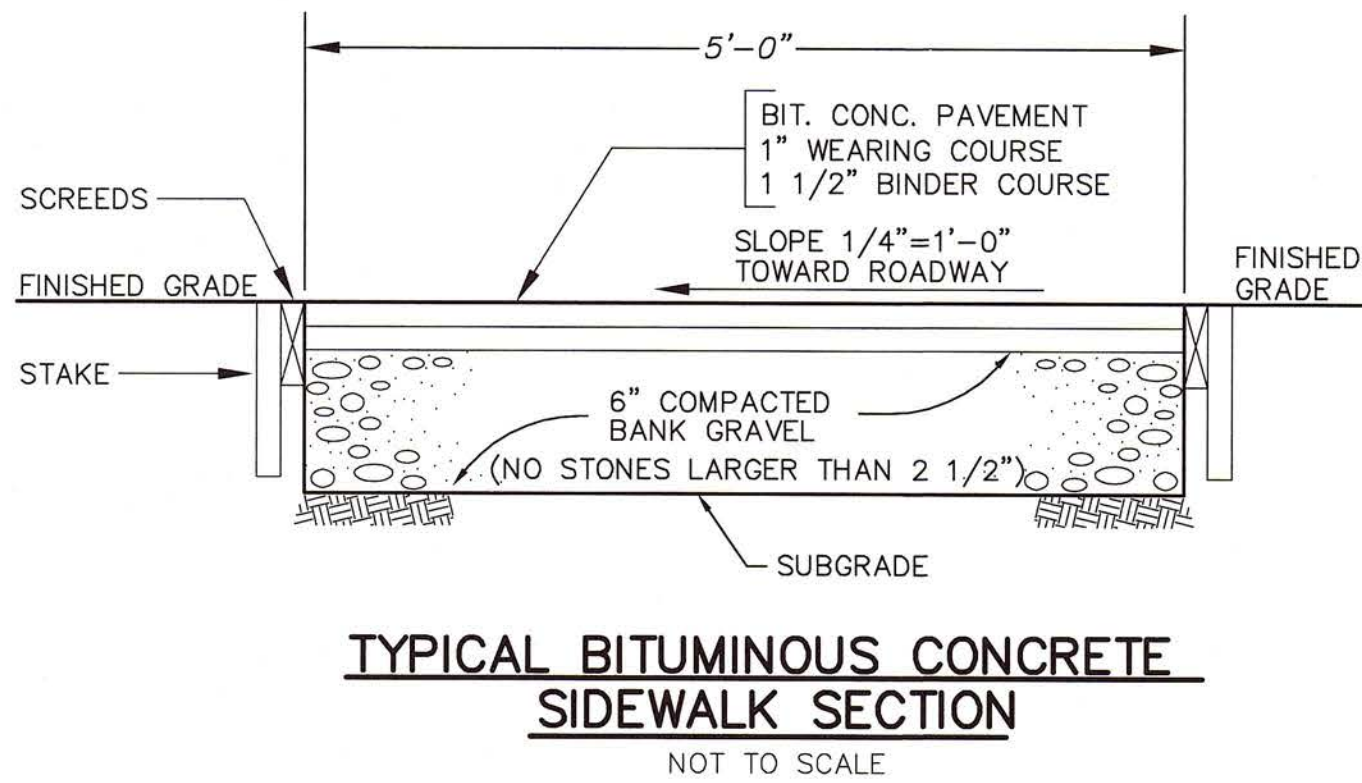
TYPICAL DRIVEWAY DETAIL
NOT TO SCALE



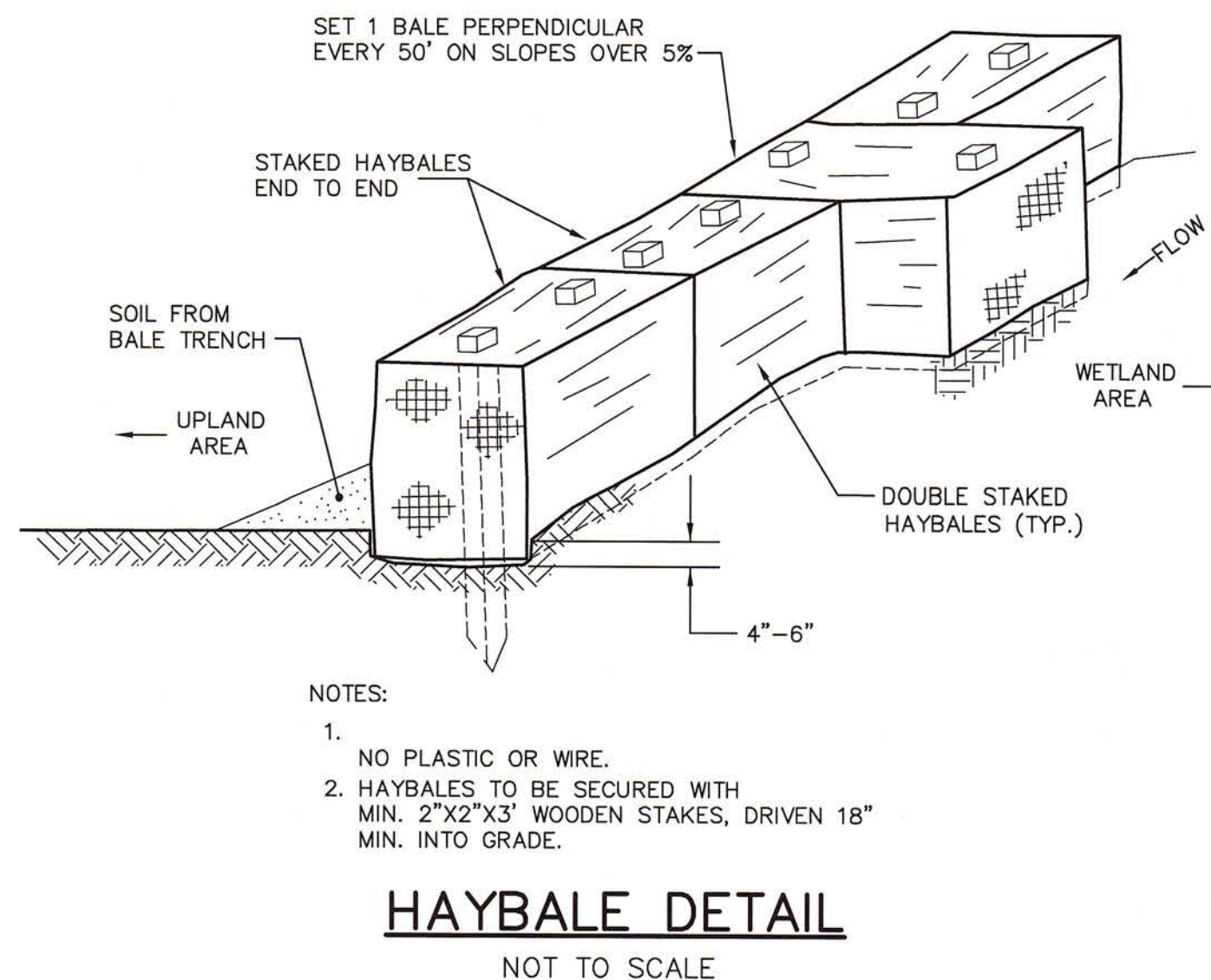
COMMON TRENCH DETAIL
ELECTRIC/TELEPHONE/FIRE ALARM/CABLE
NOT TO SCALE



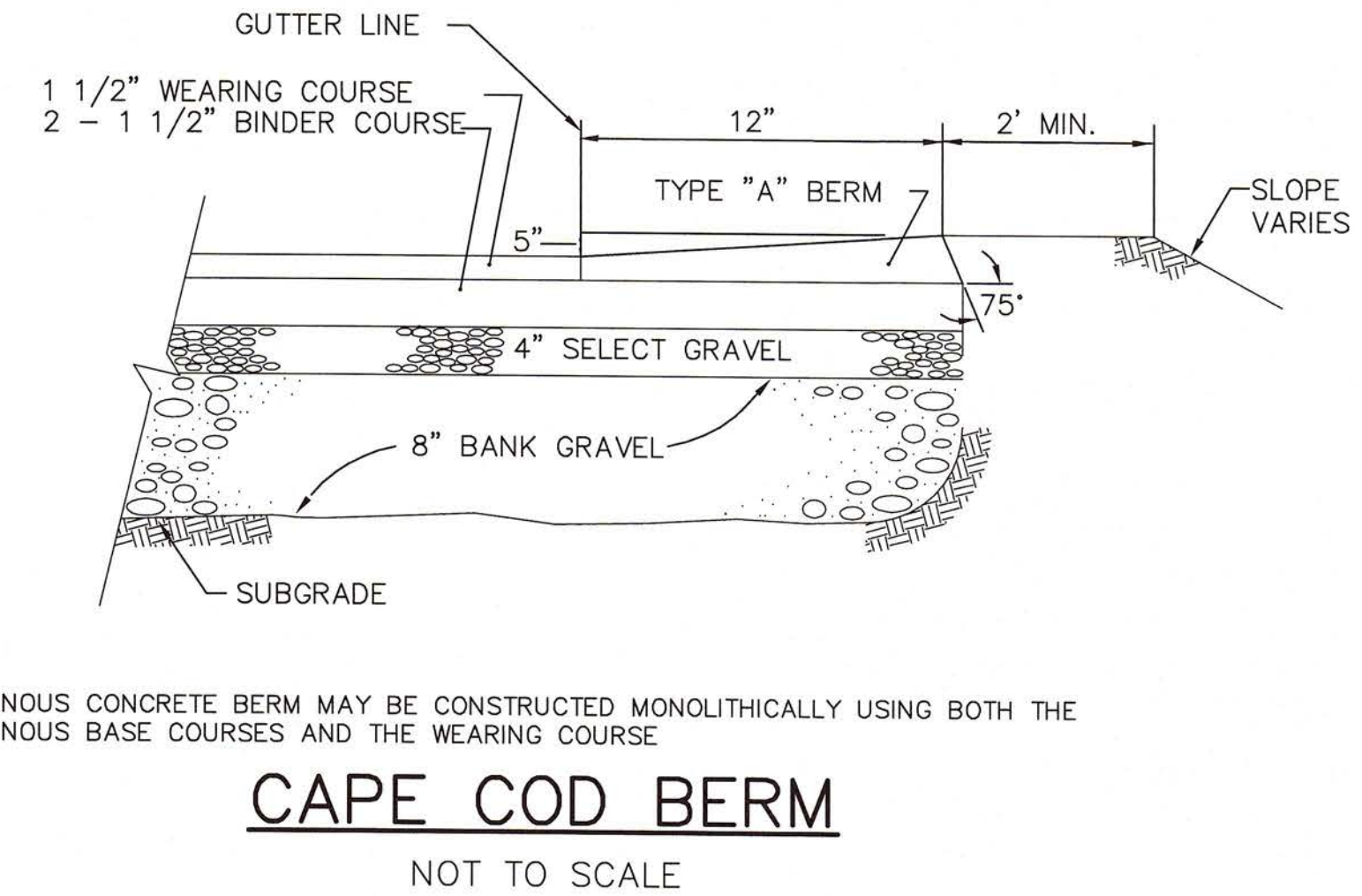
RETAINING WALL
NOT TO SCALE



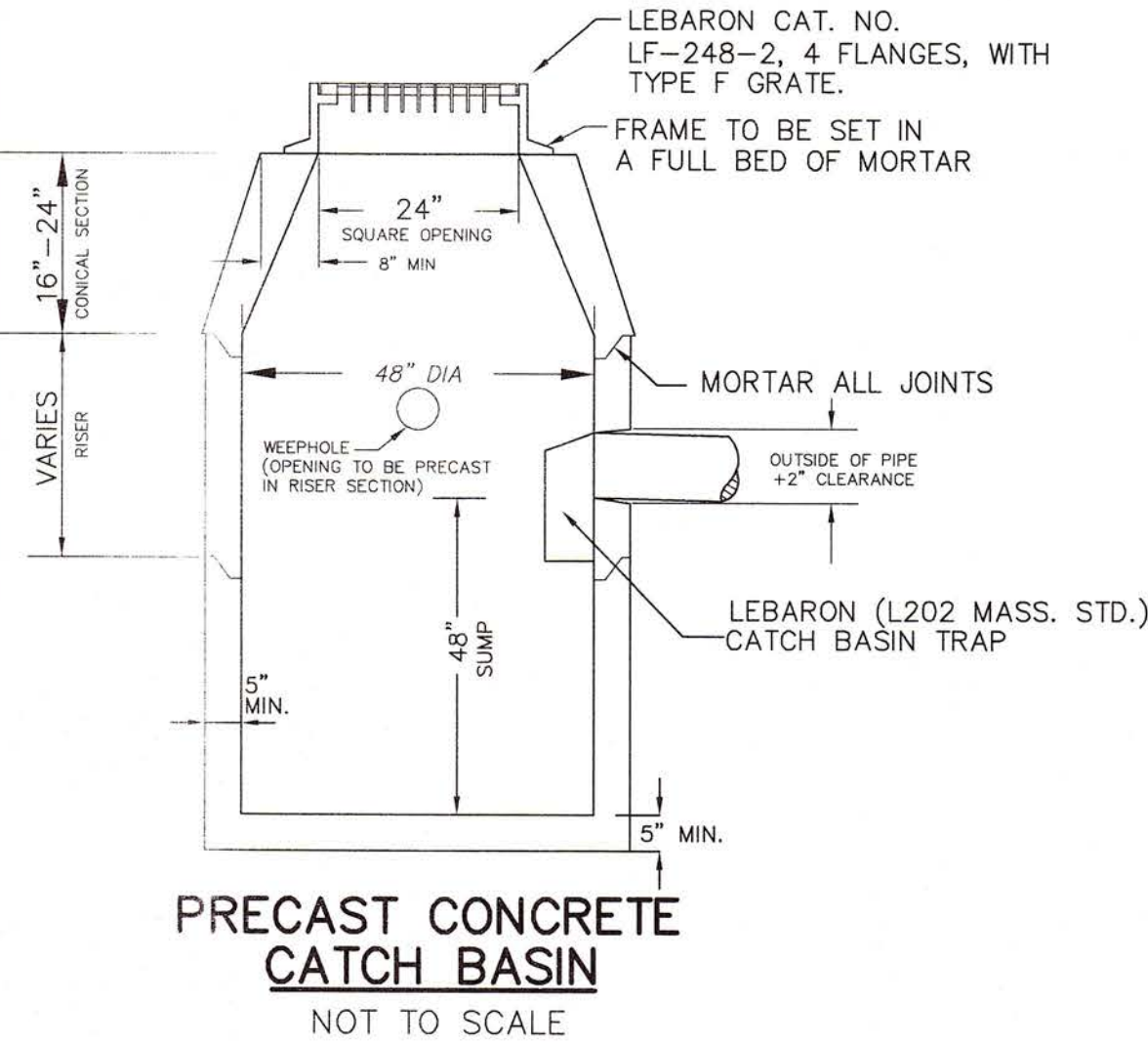
TYPICAL BITUMINOUS CONCRETE
SIDEWALK SECTION
NOT TO SCALE



HAYBALE DETAIL
NOT TO SCALE



CAPE COD BERM
NOT TO SCALE



PRECAST CONCRETE
CATCH BASIN
NOT TO SCALE

FOR REGISTRY USE ONLY
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WITH THE RULES AND REGULATIONS OF
THE REGISTERS OF DEEDS.

No.	DESCRIPTION	DATE

RALPH H. COLE	P.L.S.	DATE
BARBARA THISSELL	P.E.	DATE
PHILLIP SPATH	P.E.	DATE

PREPARED BY:
mr SURVEYING, INC.
P.O. BOX 5104
NORWELL, MA 02061
PROJECT TITLE:
**SITE PLAN
AT BROOKSIDE FARM
HILDA LANE
IN HALIFAX, MA**

**LAYOUT, MATERIALS AND
CONSERVATION DETAIL PLAN**
PREPARED FOR:
WALTER GREANEY
95 OLD BARN PATHE
MARSHFIELD, MA 02050
DATE: SEPT. 12, 2007
COMP./DESIGN: P.H.SPATH
CHECK: P.H.SPATH / R.H.COLE
DRAWN: G.R.R.
FIELD: M.W.C.
ENG.: B.J.T.
mr JOB # mr-409
SHEET
16 OF 16