

Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 3-28-17 **ONSITE SEWAGE DISPOSAL SYSTEM** P 300582
 APPROVAL DATE: 7/17/18 sec **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 13891 Brighton Dam Road
 SUBDIVISION: _____ LOT: _____ TAX ID: 05-596558
 CONTRACTOR: Hatfield's Equipment EMAIL: ken@hatfieldsequipment.com
 CONTRACTOR ADDRESS: P.O. Box 519 Annapolis Junction, MD 20701 PHONE: 301-490-4289
 PROPERTY OWNER: F. Derek Tomenko EMAIL: _____
 OWNER ADDRESS: 800 Maplewood Avenue#1, Takoma Park, MD 20912 PHONE: 240-339-3399
 SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: Mayer Bros.
 PUMP MODEL: Zoeller BN53 PUMP SIZE 0.3 PUMP TANK CAPACITY: 1500

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>132</u>	INLET DEPTH: <u>3.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7.5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Robert Bricker ISSUE DATE: _____ EXPIRATION DATE: _____

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E _____
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
 CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

NOT TO SCALE

7/17/18 Met Hatfield's on site for pump + alarm test. Need 32" above alarm float for 750 gal (= 1 day storage) - only 26" Hatfield's lowered alarm float to get storage. [Corrective action + completed.] Alarm sounds + pump pumps effluent to D-box. (SC)

See Separate Sheet for As-Built

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3.5'	7.5'
NUMBER OF TRENCHES		2
TOTAL LENGTH		139'
ABSORPTION AREA		117' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	4'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT - REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	8-26-17

PUMP/SEPTIC TANK LEVEL

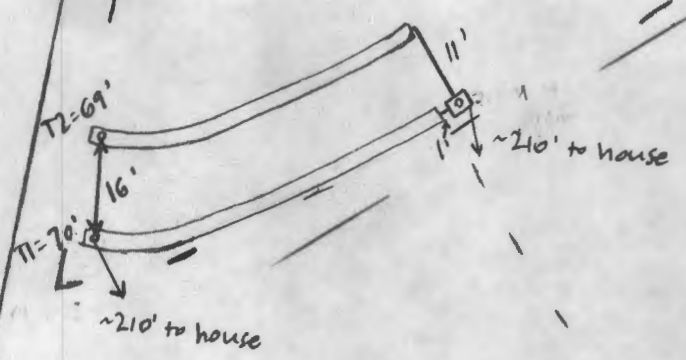
PUMP/SEPTIC TANK LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	4'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	8-30-17

PRE-CONSTRUCTION:

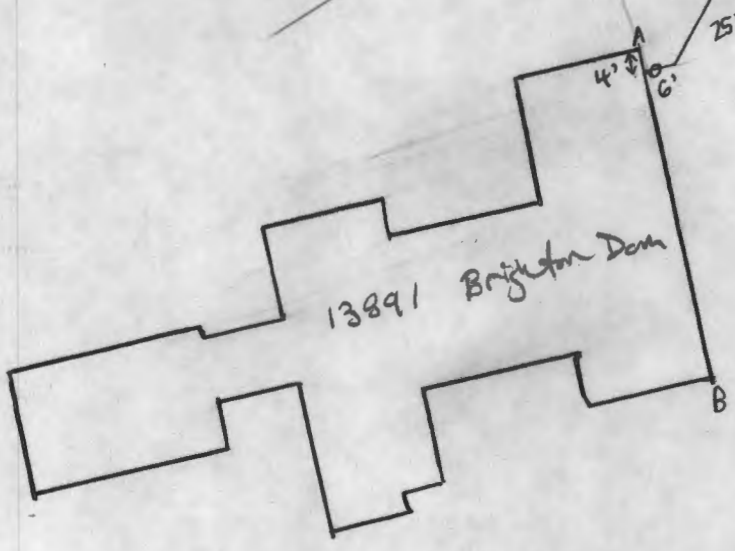
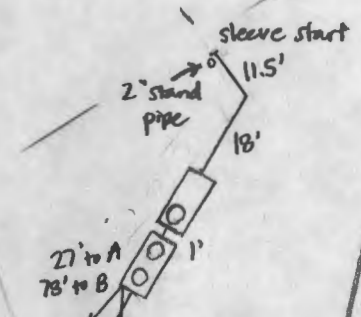
3/29/17 met w/ contractor on-site. Also present was Johnnie Reebuck from Williams Gas Co. Explained how crossing gas easement is performed, in particular this job. Told contractor 3:1 slope should be maintained w/ sewer drainage to F.M. to drainfields. Shot contour for trenches, 2 sets of 2x66' trenches in one per approved plan. Lower trench lies in broad swale. Start and end of trench will be

INSTALLATION: down-hill some (~14'-16' from upper trench). (R.M.)
3/30/17 Trenches complete, T1 open at ends and T2 left open, 3' wide, 3' to stone. Levelled speed levelers in D-box. (SC) [REMOVE SPEED LEVELERS IN BOX PER KW.] 10/3/17 Force main installed in sleeve above grade across gas line easement. Grading complete over line. Tank stake present + sewer line marked @ house - okay to set tanks as shown on plan. Need standpipes to mark beginning + end of sleeve. (SC) 10/11/17 Tanks set. Both have traffic-bearing lids. House connection made + f.m. connected to sleeved portion through easement. 2" stand pipe installed @ sleeve start - need one at sleeve end. Need pump + alarm test. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 7/17/18

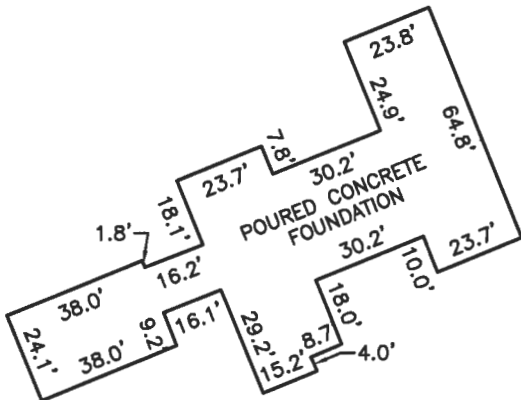


~185' firm



WALL CHECK
 13879 BRIGHTON DAM ROAD
 TAX MAP: 34
 PARCELS: 130
 PARCEL 1

13879 BRIGHTON DAM ROAD
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: 1" = 100' DATE: 03/27/2017



FOUNDATION DETAIL
 SCALE: 1" = 50'

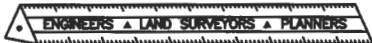
TOP OF FOUNDATION WALL = 505.0'
 OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THESE DOCUMENTS, WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21320, EXPIRATION DATE 1-7-2019 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THAT THE DIMENSIONS OF THE BUILDING WALLS SHOWN HEREON ARE CORRECT; THAT THEY ARE BASED ON A FIELD RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. ON 03/27/2017.

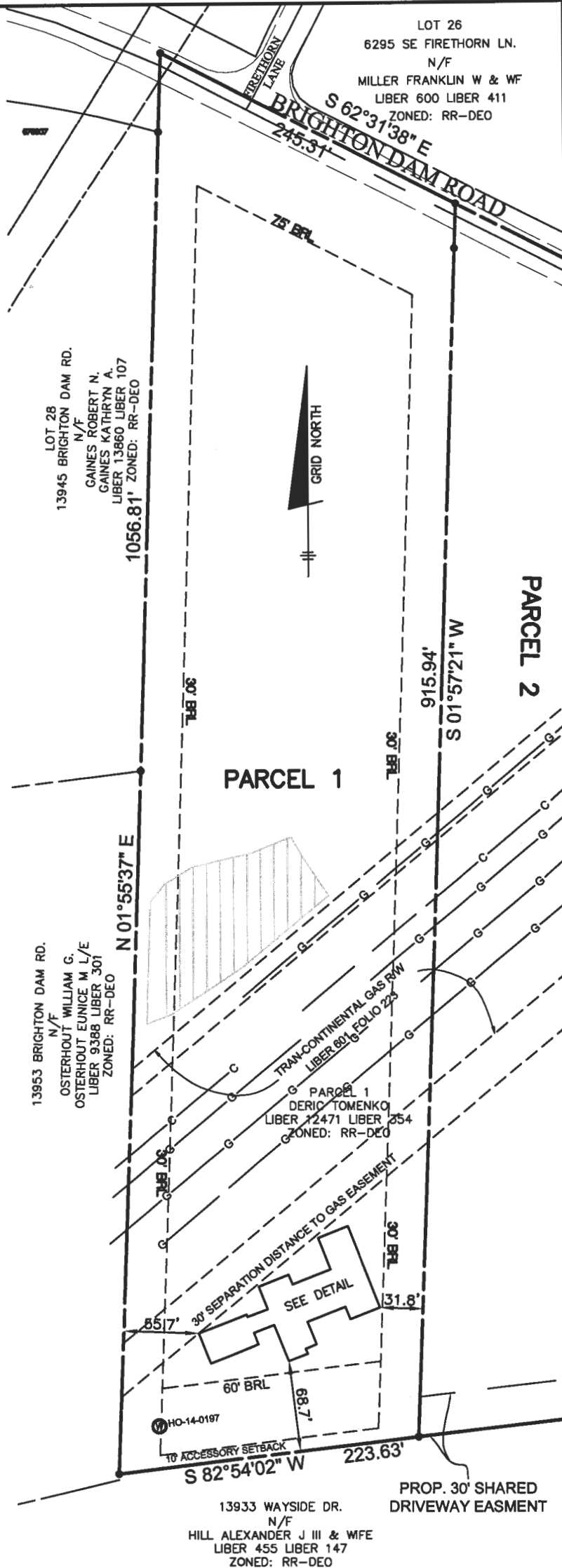
Donald A. Mason
 DONALD A. MASON
 PROFESSIONAL LAND SURVEYOR
 MD REG. No. 21320
 FOR BENCHMARK ENGINEERING, INC.
 MD REG. No. 351
 FEMA FIRM No. 24027C0130D
 ZONE: X
 DATED: 11/06/2013

BENCHMARK



ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 phone: 410-465-6105 & fax: 410-465-6644
 www.bei-civilengineering.com



FIELD OBS. BY AS
 COMP. BY EWF
 DRAWN BY EWF

November 28, 2016

Robert Bricker
Howard County Health Department
Well and Septic Program
8930 Stanford Blvd.
Columbia, MD 21046

Re: 13891 Brighton Dam Road
BAT System Replacement

Dear Bricker:

The purpose of this letter is to request replacing the approved BAT tank for the referenced property with a 2,000 gallon two compartment septic tank. Along with the request is a revised 'Onsite Sewerage Disposal System Design Plan' for your review and approval.

Should you have any additional questions or concerns please do not hesitate to contact me.

Sincerely,



Deric Tomenko
Property Owner

RECEIVED

NOV 30 2016

HOWARD COUNTY HEALTH DEPT.
BUREAU OF ENVIRONMENTAL HEALTH

4/8/2016 01:57 PM Csh 0045 Reg 0048
T/Ref 0048096524 Grp 000001 R/Lne 000001
01 - Main Location
\$0.00
Validation Number: 0048-108103
1000000000-1300-409910-1300000000-999999
9999999999
Parcel Number: 5342929
Doc Type: Easements
Consideration Amount: \$0.00

Prepared by: James Hutchins
Transcontinental Gas Pipe Line Company, LLC
After recording return to:
Transcontinental Gas Pipe Line Company, LLC
Land Department, Level 17
P.O. Box 1396, Houston, Texas 77251

Line 9-100 et al
R/W 100
Tax ID 05-342929

STATE OF MARYLAND
COUNTY OF HOWARD

CONSENT TO USE EASEMENT AREA AGREEMENT

THIS AGREEMENT made this 18th day of MARCH, 2016, by and between Fedor Deric Yuri Tomenko and Keri Vandeman Tomenko, its successor and assign, hereinafter called "Tomenko"; and TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC, a Delaware limited liability company, having its principal office at 2800 Post Oak Boulevard, Houston, Texas (P.O. Box 1396, Zip 77251), its successors and assigns, hereinafter called "TRANSCO";

20
40
ds

WHEREAS, TRANSCO is the holder of certain rights of way and easements as reserved and described in those certain Right of Way and Supplemental Right of Way Agreements recorded among the Land Records of Baltimore County, Maryland, in Liber 601 at Folio 223; and

WHEREAS, Tomenko is the present owner of the lands described in the hereinabove referenced Agreements, by virtue of a deed from dated May 19, 2014, recorded among the aforesaid records in Liber 15746 at Folio 520, said lands hereinafter called "PROPERTY"; and

WHEREAS, Tomenko desires to install, operate and maintain a Sixteen (16) inch wide driveway, Four (4) inch steel casing with a two (2) inch plastic pipe for carrying grey water and a berm which will allow unconstructive passage for pipeline maintenance, all referred to herein as "Improvements", located on or adjacent to TRANSCO's right of way as hereinabove referenced

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
Transcontinental
Reference/Control #:
LR - Agreement
Collectively as 40.00
Total: 60.00
04/08/2016 02:21
CC13-LS
#5904342 CC0503 -
Howard Co
Columbia/CC05.03.08 -
Register 08

WHEREAS, TRANSCO is willing to consent thereto subject to the following terms and conditions:

WITNESSETH:

- 1) Subject to the terms and conditions stated herein, consent is hereby given by TRANSCO to Tomenko, insofar as it has the right to do so, to install and maintain said Improvements within TRANSCO's rights of way and easements.
- 2) TOMENKO acknowledges receipt of TRANSCO's Encroachment Specifications and warrant that any construction, maintenance or landscaping in the area of TRANSCO's right of way will conform to the conditions and requirements listed in said TRANSCO's Encroachment Specifications.
- 3) TOMENKO accepts this approval with full knowledge of TRANSCO's prior rights and existing facilities.
- 4) Prior to TOMENKO performing any construction over or within TRANSCO's right of way, TOMENKO (or their contractor) will furnish to TRANSCO verification of comprehensive general liability insurance in the amount of at least \$2,000,000.00 or in a form satisfactory to TRANSCO.

000093

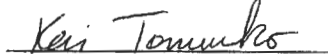
- 5) No trees or other deep-rooted shrubs or plantings will be allowed on or within TRANSCO's right of way, and all plantings will conform to the Encroachment Specifications referenced herein. Trees shall be placed off of Transco's right of way so that the canopies of mature plantings do not encroach into or over Transco's right of way. All landscaping to be located on or over Transco's right of way shall require prior approval from Transco.
- 6) TRANSCO shall not be liable for any damages to, or the replacement of, any of said Improvements or other Improvements placed on, or extending into or over TRANSCO's right of way, due to or during periods of construction, maintenance, inspection or replacement of its existing or future pipeline(s). If at any time in the future, TRANSCO deems it prudent to remove the improvements from the right of way, TRANSCO will notify TOMENKO and TOMENKO shall have the right to remove the improvements. In the event TOMENKO fails to remove the Improvements, TRANSCO shall have the right to remove the Improvements, without cost or obligation to TRANSCO.
- 7) Due to the impacts of the contemplated improvements, Tomenko hereby grants to Transco additional areas of temporary workspace along and adjacent to the northwesterly edge of the existing right of way as described in that Supplemental Right of Way Agreement dated April 26, 1972, recorded in Liber 601, Folio 223 at no expense to Transco. Transco shall exercise care to minimize the areas of temporary workspace needed, and shall restore the grade of any temporary workspace areas disturbed during periods of construction or maintenance activities.
- 8) TRANSCO shall have no responsibility for the maintenance of any of the Improvements authorized herein.
- 9) In consideration of the consent hereinabove granted, TOMENKO hereby agree to indemnify, defend and hold TRANSCO harmless of and from all claims for injury to or death of any person or for damage to property arising out of or in any way connected with the installation, operation or maintenance of said improvements on TRANSCO's right of way, except where such injuries, death or damages are caused solely by the negligence of TRANSCO.
- 10) The obligations and undertakings contained in this Agreement shall be binding upon and shall inure to the benefit of TOMENKO, their successors and assigns, and to TRANSCO, its successors and assigns.

ATTEST/WITNESS:

/Fedor Deric Yuri Tomenko



/Keri Vandeman Tomenko



ATTEST/WITNESS:

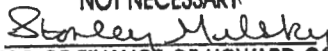
TRANSCONTINENTAL GAS PIPE LINE
COMPANY, LLC

By: _____

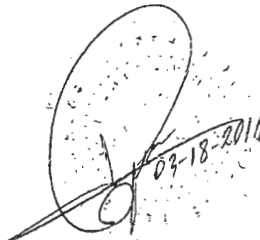
REMAINDER OF PAGE LEFT BLANK

2

PAYMENT OF TAXES
NOT NECESSARY


DIRECTOR OF FINANCE OF HOWARD COUNTY

LB


03-18-2016

STATE OF MARYLAND §
COUNTY OF MONTGOMERY §

I, CARLOS M. PEROZO, Notary Public, certify that **Fedor Deric Yuri Tomenko and Keri Vandeman Tomenko**, personally came before me (or satisfactorily proven) and did acknowledge that they executed the foregoing agreement for the purposes therein contained, and as their act and deed.

Witness my hand and official seal, this the 18TH day of MARCH, 2016.

(SEAL)
58-59
03-18-2016

Carlos M. Perozo
Notary Public

CARLOS M. PEROZO
NOTARY PUBLIC - MARYLAND
MONTGOMERY COUNTY
MY COMMISSION EXPIRES
DECEMBER 19, 2019

STATE OF VIRGINIA §
COUNTY OF ALBEMARLE §

I, Carol A. Crowley, Notary Public, certify that _____ personally came before me this day and acknowledged that he is the Land Lead Representative of **TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC** and that by authority duly given and as the act of the limited liability company, the foregoing instrument was signed in its name by its Land Lead Representative.

Witness my hand and official seal, this the _____th day of _____, 2016.

(SEAL)

Notary Public

My commission expires: October 31, 2017



GAS PIPELINES
Transco

11910 Carroll Mill Road
Ellicott City, MD. 21042
410-465-0960
Fax 410-465-3694

February 18, 2016

Mr. F. Deric Tomenko
13891 Brighton Dam Road
Clarksville, MD 21029

This is to acknowledge receipt and review of the Benchmark Engineering print entitled "13891 Brighton Dam Road, Parcel 1" and dated March, 2015.

The subject print depicts a 4" steel casing to be installed on existing grade across the full width of our pipeline easement at a 90 degree angle. This 4" casing will contain a 2" plastic pipe carrying grey water from the east side of our easement to a drain field on the west side of our easement. A berm across the easement will be installed to cover the installed pipes and said berm will be at a grade that will allow the unobstructed passage by pipeline maintenance vehicles.

Williams Gas Pipe Line-Transco has no objection to the pipe being installed as indicated on the subject print as long as the Requirements for Landowner & Third Party Construction are strictly adhered to, most importantly the notification and construction safety requirements which include the requirement to have a Williams representative on site any and all times that construction is being performed on our pipeline easement.

If there are any subsequent changes to the proposed installation or any additional work planned on or near our easement, it is essential that you contact us prior to commencing that work so that we can review the potential impact of those revisions.

Sincerely,

A handwritten signature in black ink that reads "Timothy O. Rich". The signature is written in a cursive, flowing style.

Timothy O. Rich
District Manager – WGP Transco
Ellicott City, MD

Prepared by: James Hutchins
Transcontinental Gas Pipe Line Company, LLC
After recording return to:
Transcontinental Gas Pipe Line Company, LLC
Land Department, Level 17
P.O. Box 1396, Houston, Texas 77251

Line 9-100 et al
R/W 100
Tax ID 05-342929

STATE OF MARYLAND

COUNTY OF HOWARD

CONSENT TO USE EASEMENT AREA AGREEMENT

THIS AGREEMENT made this ____ day of _____, 2016, by and between ^{DT}~~Fedor~~ **Derek Yuri Tomenko and Keri Vandeman Tomenko**, its successor and assign, hereinafter called "Tomenko"; and **TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC**, a Delaware limited liability company, having its principal office at 2800 Post Oak Boulevard, Houston, Texas (P.O. Box 1396, Zip 77251), its successors and assigns, hereinafter called "TRANSCO";

WHEREAS, TRANSCO is the holder of certain rights of way and easements as reserved and described in those certain Right of Way and Supplemental Right of Way Agreements recorded among the Land Records of Baltimore County, Maryland, in Liber 601 at Folio 223; and

WHEREAS, Tomenko is the present owner of the lands described in the hereinabove referenced Agreements, by virtue of a deed from dated May 19, 2014, recorded among the aforesaid records in Liber 15746 at Folio 520, said lands hereinafter called "PROPERTY"; and

WHEREAS, Tomenko desires to install, operate and maintain a Sixteen (16ft.) foot wide driveway, Four (4) inch steel casing with a two (2) inch plastic pipe for carrying grey water and a berm which will allow unconstructive passage for pipeline maintenance, all referred to herein collectively as "**Improvements**", located on or adjacent to TRANSCO's right of way as hereinabove referenced; and

WHEREAS, TRANSCO is willing to consent thereto subject to the following terms and conditions:

WITNESSETH:

- 1) Subject to the terms and conditions stated herein, consent is hereby given by TRANSCO to Tomenko, insofar as it has the right to do so, to install and maintain said Improvements within TRANSCO's rights of way and easements.
- 2) TOMENKO acknowledges receipt of TRANSCO's Encroachment Specifications and warrant that any construction, maintenance or landscaping in the area of TRANSCO's right of way will conform to the conditions and requirements listed in said TRANSCO's Encroachment Specifications.
- 3) TOMENKO accepts this approval with full knowledge of TRANSCO's prior rights and existing facilities.
- 4) Prior to TOMENKO performing any construction over or within TRANSCO's right of way, TOMENKO (or their contractor) will furnish to TRANSCO verification of comprehensive general liability insurance in the amount of at least \$2,000,000.00 or in a form satisfactory to TRANSCO.

STATE OF MARYLAND §
COUNTY OF _____ §

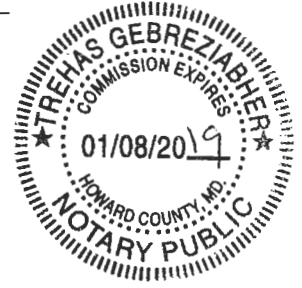
DERIC

I, Trehas Gebreziabher, Notary Public, certify that ~~Fedor~~ **Derek Yuri Tomenko and Keri Vandeman Tomenko**, personally came before me (or satisfactorily proven) and did acknowledge that they executed the foregoing agreement for the purposes therein contained, and as their act and deed.

Witness my hand and official seal, this the 29th day of February, 2016.

(SEAL)

Trehas Gebreziabher
Notary Public



STATE OF VIRGINIA §
COUNTY OF ALBEMARLE §

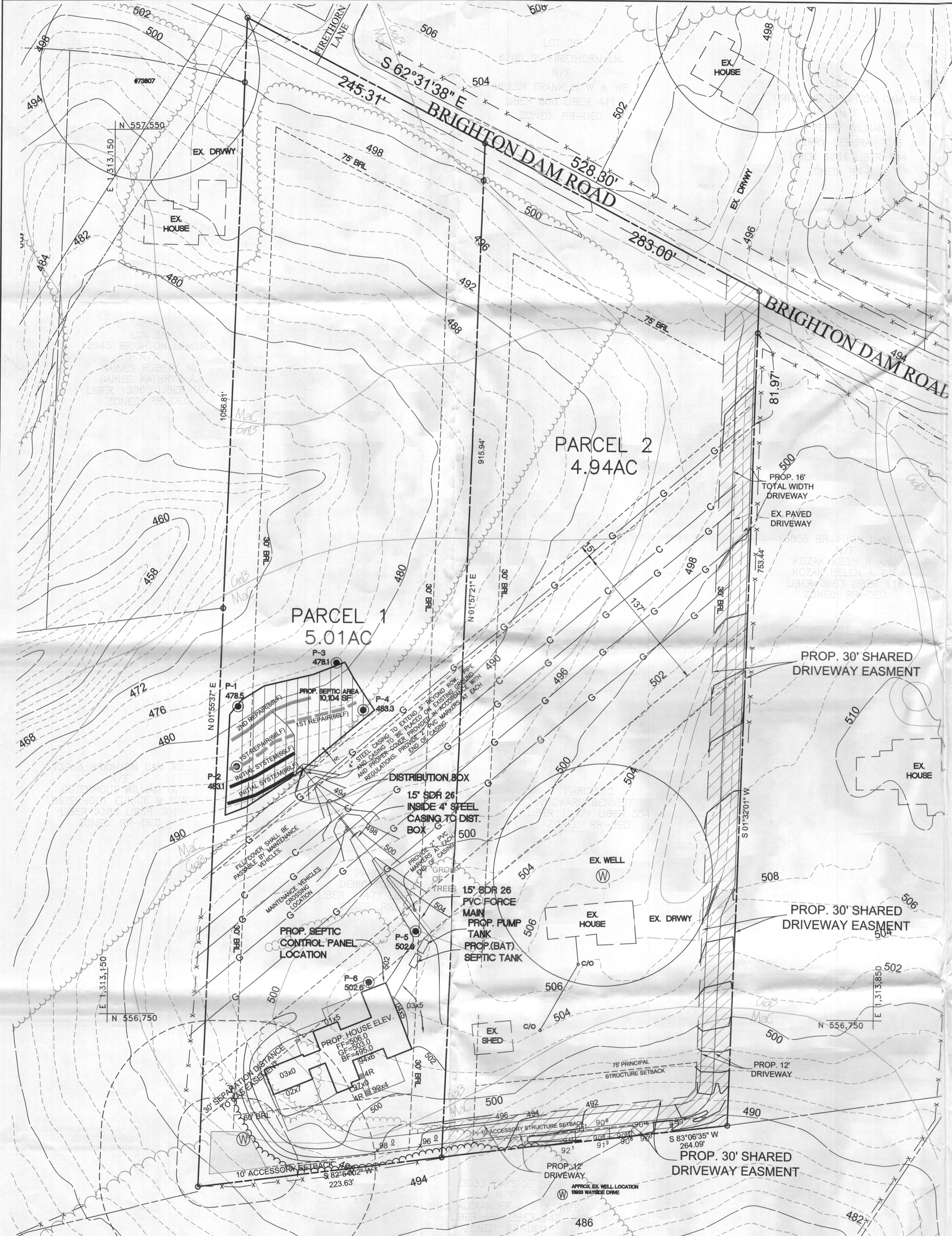
I, Carol A. Crowley, Notary Public, certify that _____ personally came before me this day and acknowledged that he is the Land Lead Representative of **TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC** and that by authority duly given and as the act of the limited liability company, the foregoing instrument was signed in its name by its Land Lead Representative.

Witness my hand and official seal, this the _____th day of _____, 2016.

(SEAL)

Notary Public

My commission expires: October 31, 2017



PLAN
SCALE: 1" = 50'

SYMBOL	HYDRIC	HYDROLOGIC GROUP	SOILS CHART	NAME
GgB		B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	
GmC		C	GLENVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	
GnB*	YES	C	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	
MaC		B	MANOR LOAM, 8 TO 15 PERCENT SLOPES	

BASED ON USDA NRCS WEB SOIL NATIONAL COOPERATIVE SOIL SURVEY. SEE HOWARD COUNTY SOIL SURVEY MAP NO. 22

SEPTIC DATA

INV. AT HOUSE	500.35
BASEMENT ELEVATION	496.00
GRD. AT INV. AT HOUSE	504.50
• PUMP IN BASEMENT	
INV. IN BAT	500.04
INV. OUT BAT	499.71
TOP OF BAT	501.0
GROUND OVER BAT	503.00
INV. IN PUMP TANK	499.68
INV. OUT PUMP TANK	499.38
TOP OF PUMP TANK	500.46
GROUND OVER PUMP TANK	502.96
INV. IN DIST. BOX	484.3
INV. OUT DIST. BOX	484.0
GROUND AT BOX	487.8

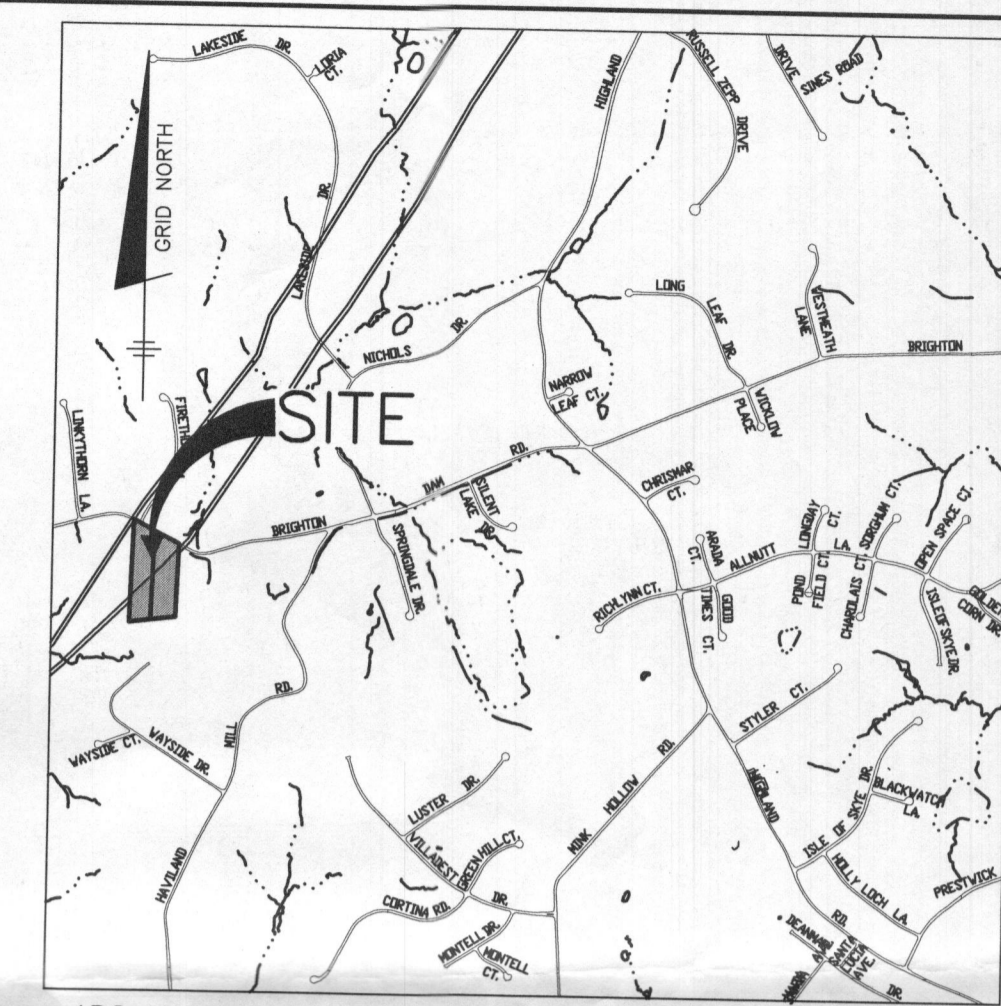
INITIAL SYSTEM		
Number of Bedrooms	5	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.5	ft
Bottom Max Depth	7.5	ft
Design Flow	750	gpd
Drainage Field square footage	937.5	sf
Sidewall reduction credit	0.42	
Trench width	3	
Effective Depth	4	
Linear Length of trench Required	131	lf

1st REPAIR SYSTEM		
Number of Bedrooms	5	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3	ft
Bottom Max Depth	7	ft
Design Flow	750	gpd
Drainage Field square footage	937.5	sf
Sidewall reduction credit	0.42	
Trench width	3	
Effective Depth	4	
Linear Length of trench Required	131	lf

2nd REPLACEMENT SYSTEM		
Number of Bedrooms	5	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	3	ft
Bottom Max Depth	7	ft
Design Flow	750	gpd
Drainage Field square footage	625	sf
Sidewall reduction credit	0.42	
Trench width	3	
Effective Depth	4	
Linear Length of trench Required	88	lf

INITIAL SYSTEM TRENCH DATA

UPPER TRENCH+ (66LF)	
GROUND	487.8
INVERT IN	484.3
MAX. BOTTOM	480.3
LOWER TRENCH+ (66LF)	
GROUND	485.0
INVERT IN	481.5
MAX. BOTTOM	477.5



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF A MINIMUM OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA IS RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
- THE EXISTING WELL SHOWN ON PARCEL 1 PLAN HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS ACCURATELY SHOWN. TAG NUMBER HO-14-0197.
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ANY CHANGES TO THE PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY'S BOUNDARIES EXCEPT THAT WHICH IS SHOWN.
- TOPOGRAPHY SHOWN IN THE AREA OF THE PROPOSED HOUSE AND SEPTIC EASEMENT IS PER FIELD RUN TOPOGRAPHY BY BENCHMARK ENGINEERING, INC., IN OCTOBER, 2014. ALL OTHER TOPOGRAPHY IS PROVIDED BY HOWARD COUNTY GIS.
- PRIOR TO HEALTH DEPARTMENT APPROVAL OF BUILDING PERMIT FOR PARCEL 2, PERCOLATION TESTS MUST BE CONDUCTED AND A PERCOLATION CERTIFICATION PLAN MUST BE SIGNED BY THE APPROVING AUTHORITY, THEREBY CERTIFYING AREA FOR AN SDA ON PARCEL 2.

Approved Septic System Plan
Howard County Health Department

*WORNECO INT'L LP-600
1/1500 gal Pump Tank & Zoeller BNS5 Pump or equiv.*

R. Bieda 5/4/2016 Date

1529 Brighton Dam Road

B1600042

SOILS CLASSIFICATION
SOILS DELINEATION
EXISTING CONTOURS (HOWARD COUNTY DIGITAL)
EXISTING WOODS LINE

EXISTING STRUCTURE
PROPOSED STRUCTURE
EXISTING WELL
EXISTING SEPTIC FIELD
PROPOSED SEPTIC FIELD
PASSED PERCOLATION TEST
FAILED PERCOLATION TEST
1500 S.F. WELL ZONE

Superceded by OSDS PLAN 2/27/2017

THE PURPOSE OF THE PLAN IS TO PROVIDE THE REQUIRED INFORMATION AND DETAILS FOR THE PROPOSED BAT SYSTEM ON PARCEL 1.

BENCHMARK
ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

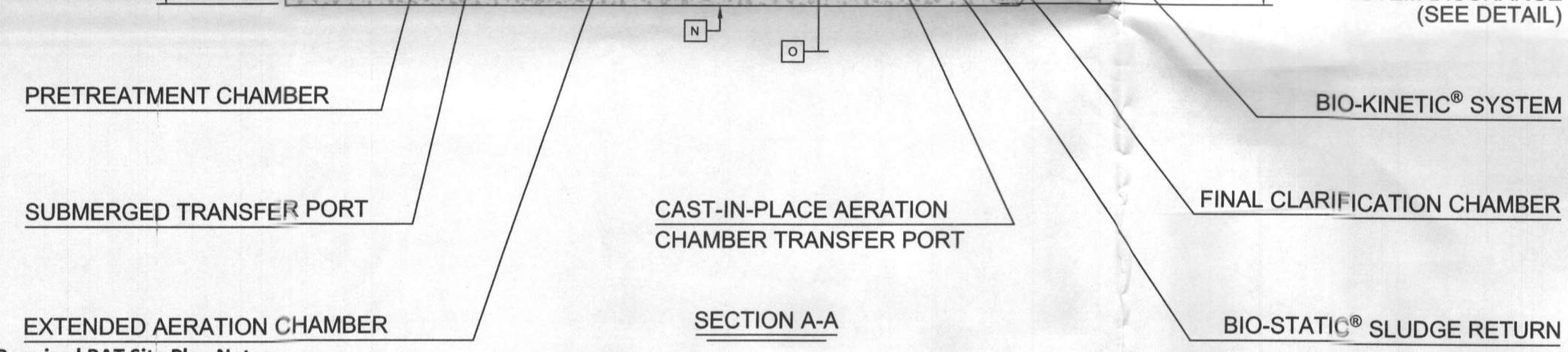
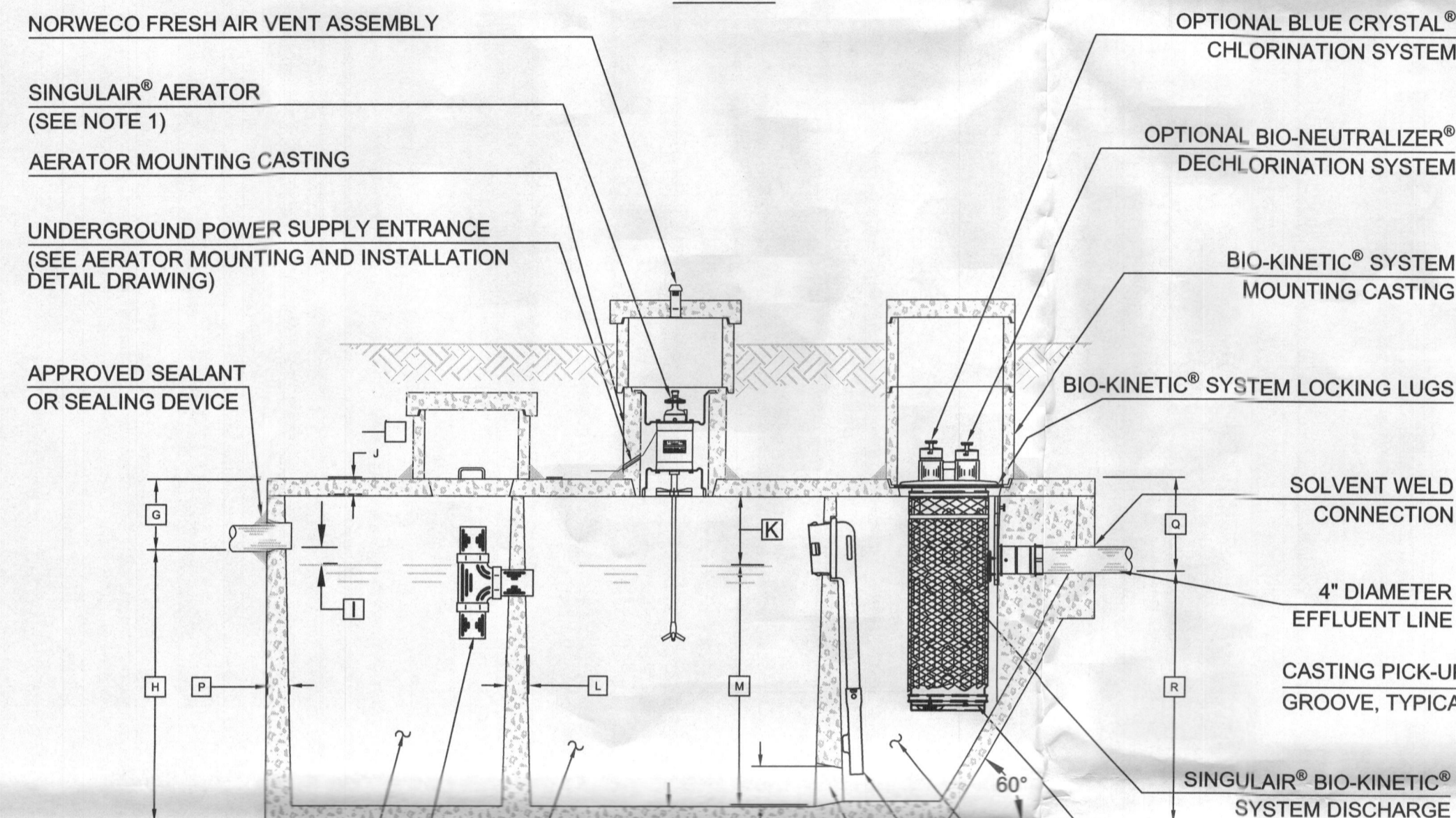
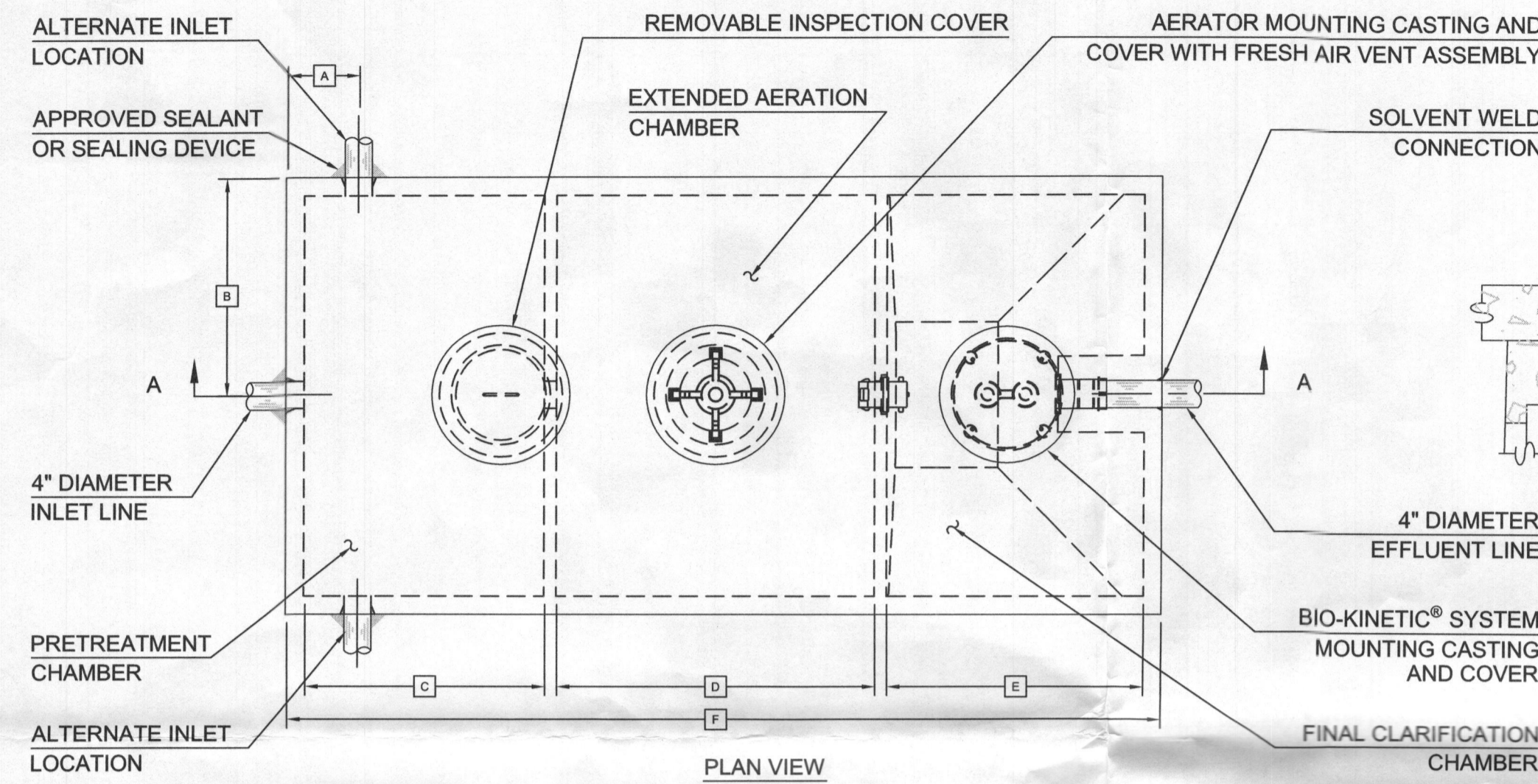
APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

HOWARD COUNTY HEALTH OFFICER DATE

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

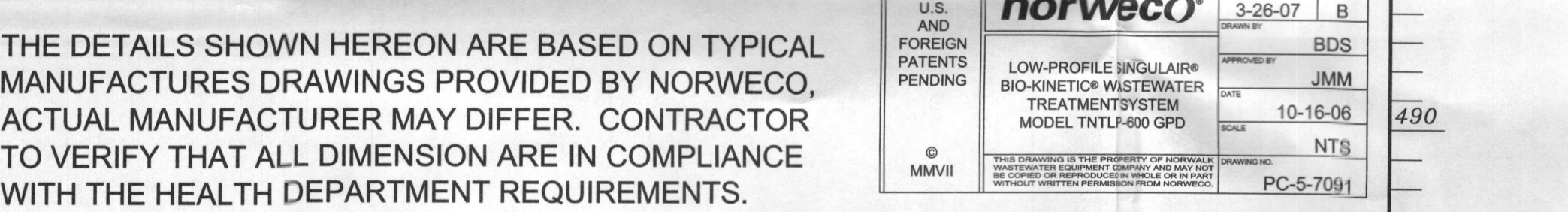
J. Chris Ogle
J. CHRIS OGLE

OWNER/DEVELOPER:	PROJECT:
MR. F. DERIC TOMENKO 800 MAPLEWOOD AVE. #1 TAKOMA PARK, MD 20912 240-339-3399	BRIGHTON DAM ROAD PARCEL 1
LOCATION:	TAX MAP: 34 GRID: 13 -PARCEL: 445 5TH ELECTION DISTRICT HOWARD COUNTY, CLARKSVILLE, MARYLAND 21029
TITLE:	BAT SITE PLAN
DATE: APRIL 2016	PROJECT NO. 2560
SCALE: 1" = 50'	SHEET 1 OF 2
DRAFT: JCO DESIGN: JCO CHECK:	



Required BAT Site Plan Notes

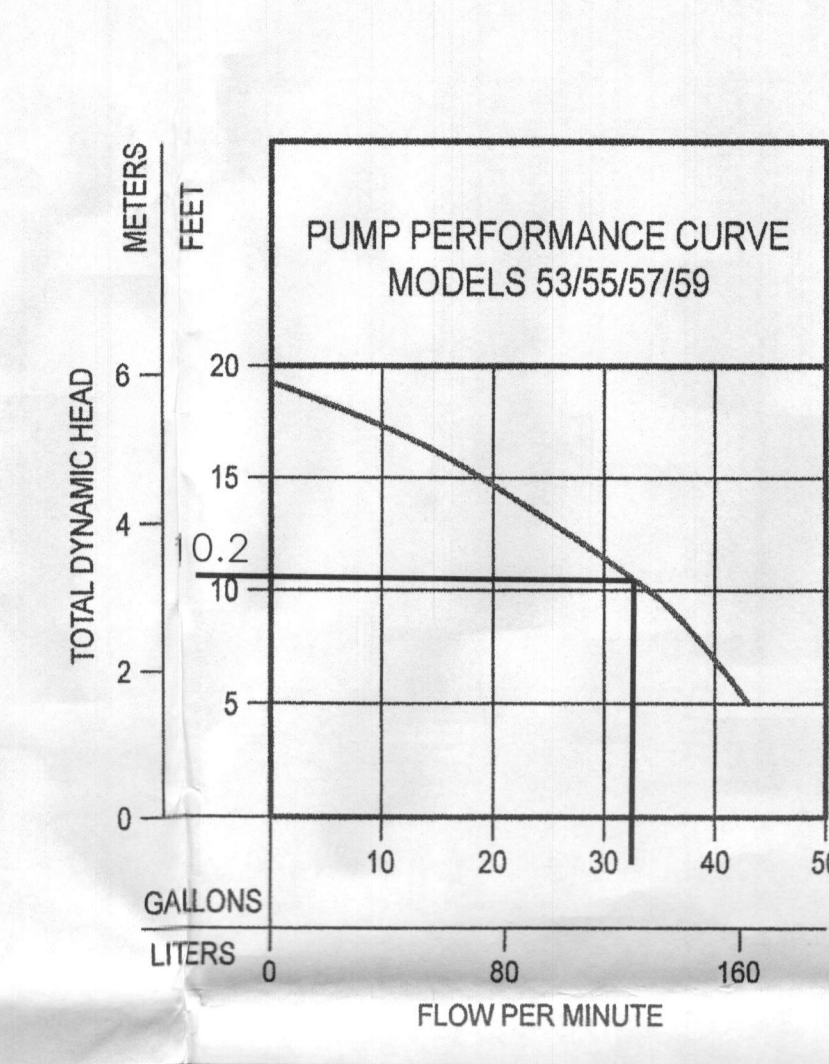
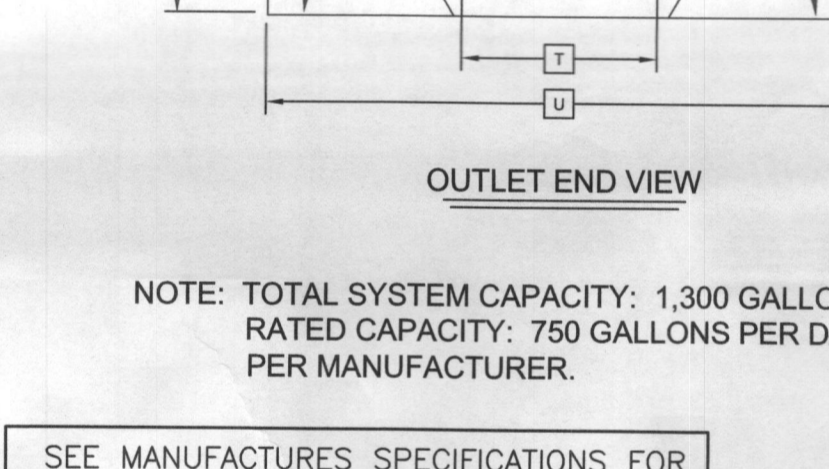
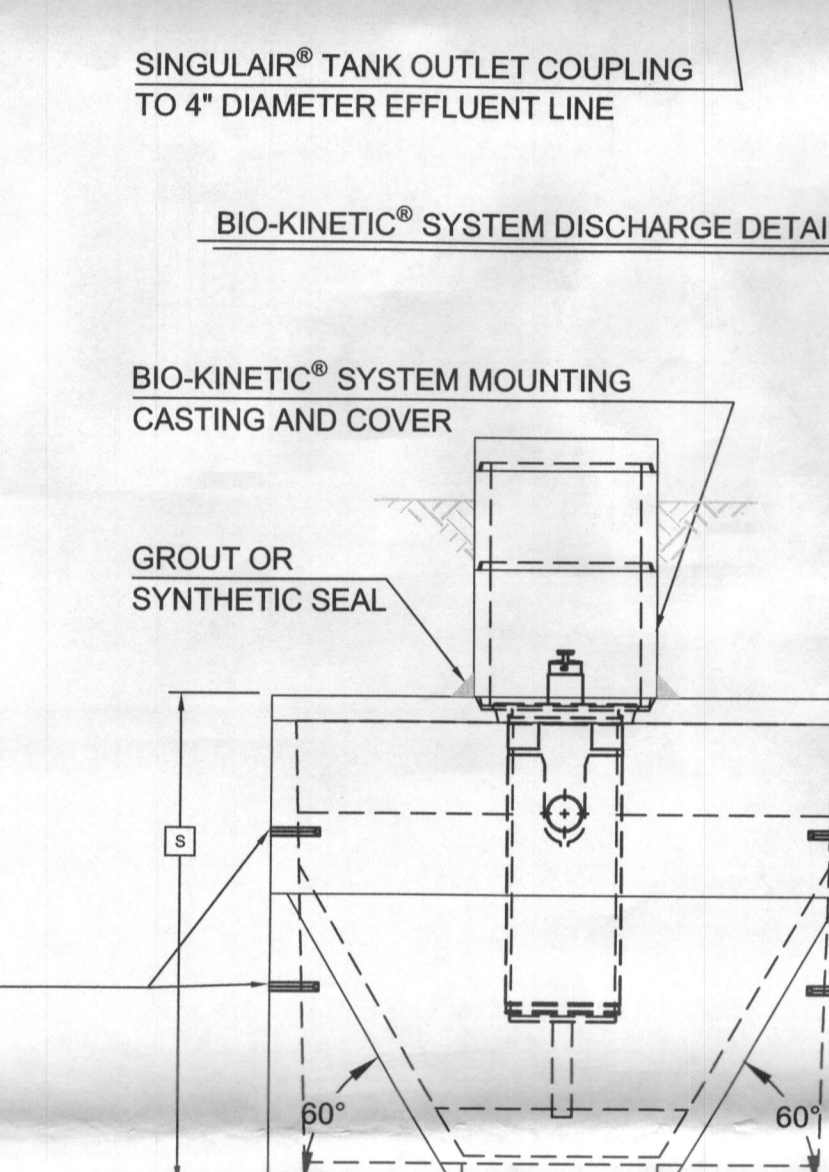
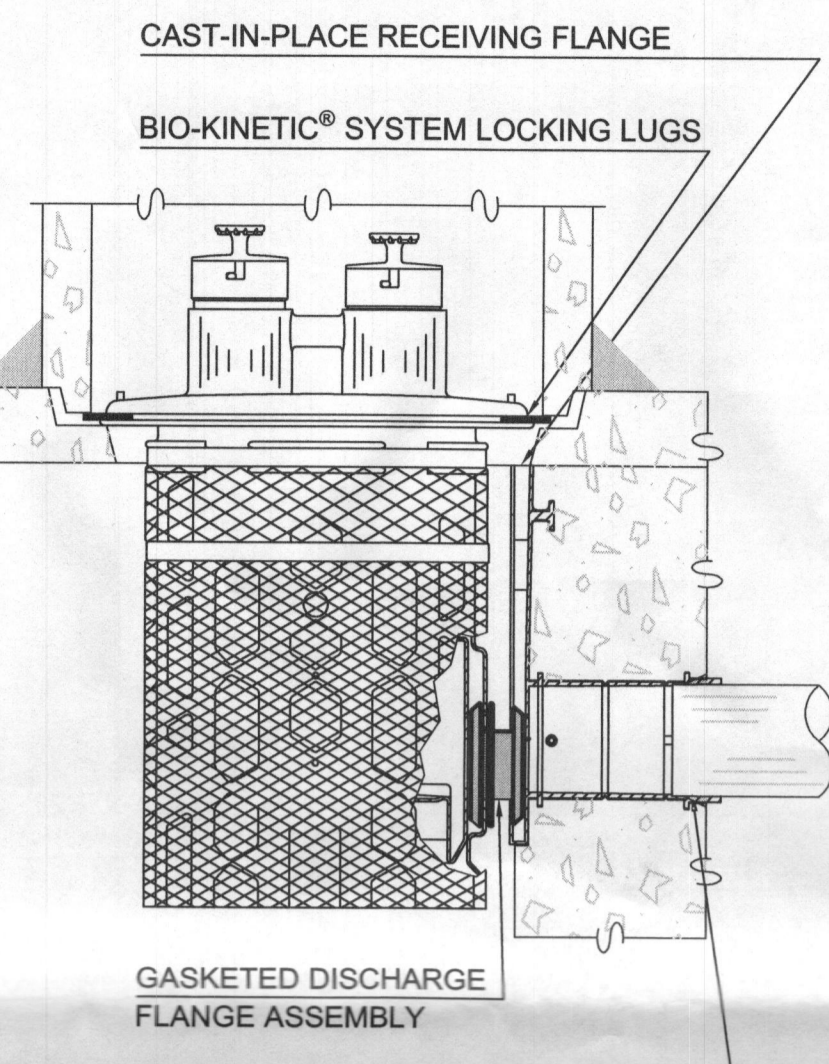
1. Any change to the locations or depths to any components must be approved by the engineer and the Howard County Health Department prior to installation. A revised site plan may be required.
2. The maximum depth of the BAT shall be per the manufacturer's specification (3 feet).
3. The BAT system shall be maintained and operated for the life of the system.
4. The BAT shall be operated by and maintained by a certified service provider.
5. Within one month of installation, a person installing the BAT system shall report to the Maryland Department of the Environment (MDE) in a manner acceptable to MDE, the address and date of completion of the BAT installation and the type of BAT installed.
6. Electrical work for the BAT installation must be performed by a licensed electrician.
7. An agreement and Easement must be completed and signed by all applicable parties, and recorded in Land Records of Howard County.
8. The Health Department requires documentation for the start-up certification from the manufacturer prior to final approval of the installation.



THE DETAILS SHOWN HEREON ARE BASED ON TYPICAL MANUFACTURERS DRAWINGS PROVIDED BY NORWECO, ACTUAL MANUFACTURER MAY DIFFER. CONTRACTOR TO VERIFY THAT ALL DIMENSION ARE IN COMPLIANCE WITH THE HEALTH DEPARTMENT REQUIREMENTS.

GENERAL NOTES:

1. SINGULAIR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
2. FALL THROUGH SINGULAIR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
3. ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE.
4. TANK REINFORCED PER ACI STD. 318-05.
5. REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
6. CONTACT THE LOCAL, LICENSED SINGULAIR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.



CONSULT FACTORY FOR SPECIAL APPLICATIONS

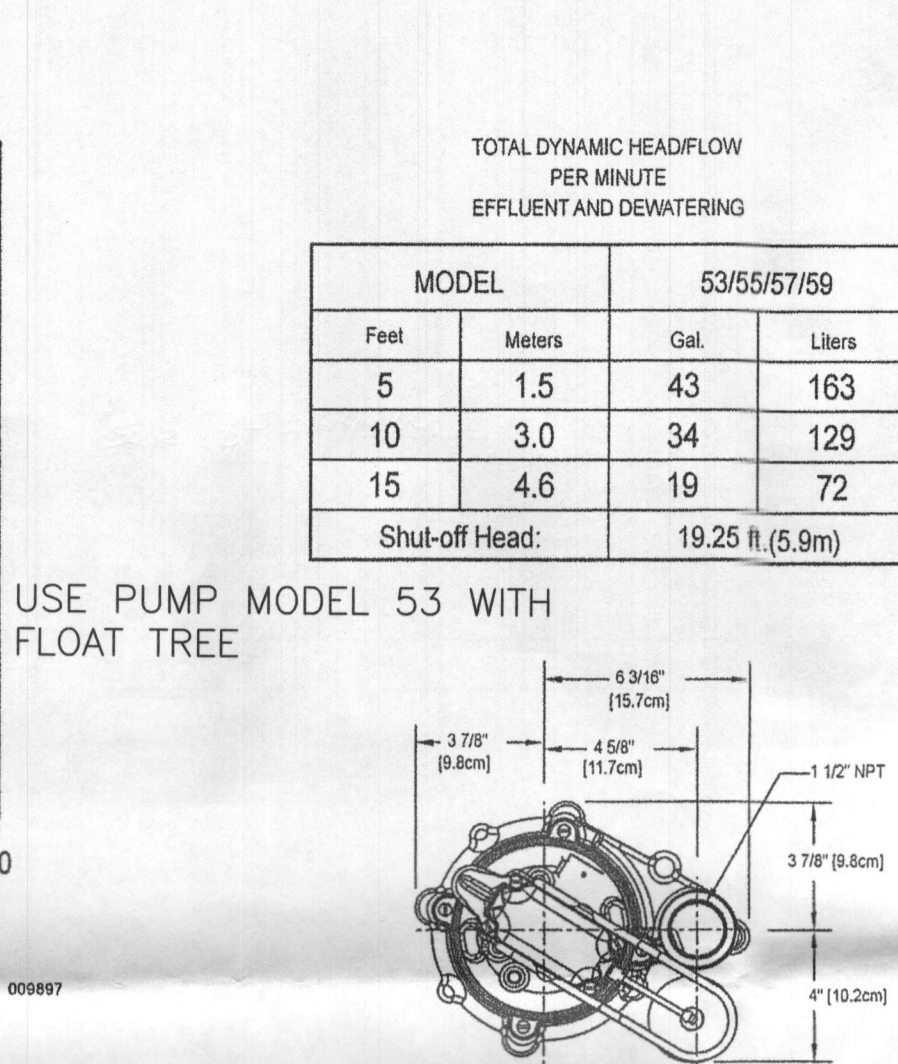
- Variable level float switches available
- Variable level long cycle systems available
- Available with special cord lengths of 15', 25', 35', (50' 230V only)
- Alarm systems available
- Duplex systems available

SELECTION GUIDE

1. Integral float operated mechanical switch, no external control required.
2. Single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. Mechanical alternator "M-Pak" 10-0072 or 10-0075.
4. See FM072 for correct model of Electrical Alternator.
5. Variable level control switch 10-0743 used as a control activator, with Electrical Alternator (3) or (4) float system.

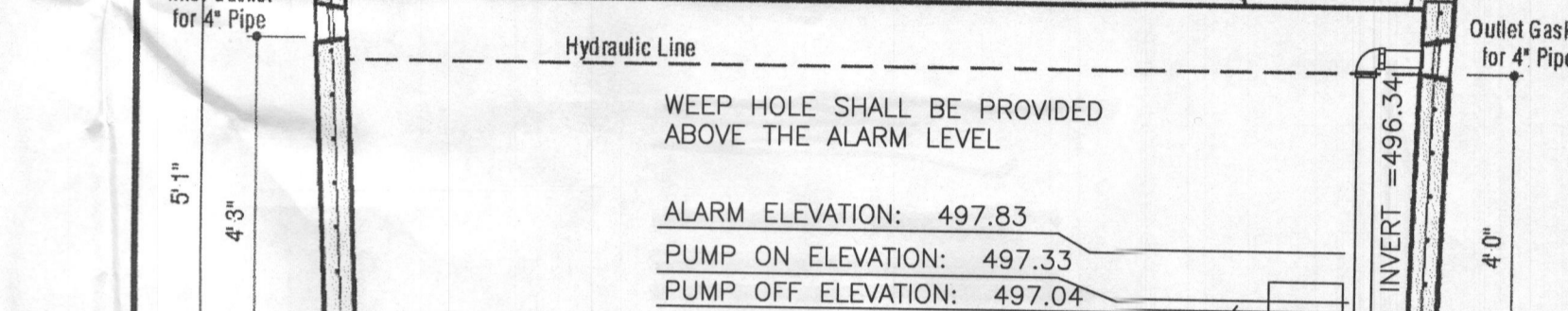
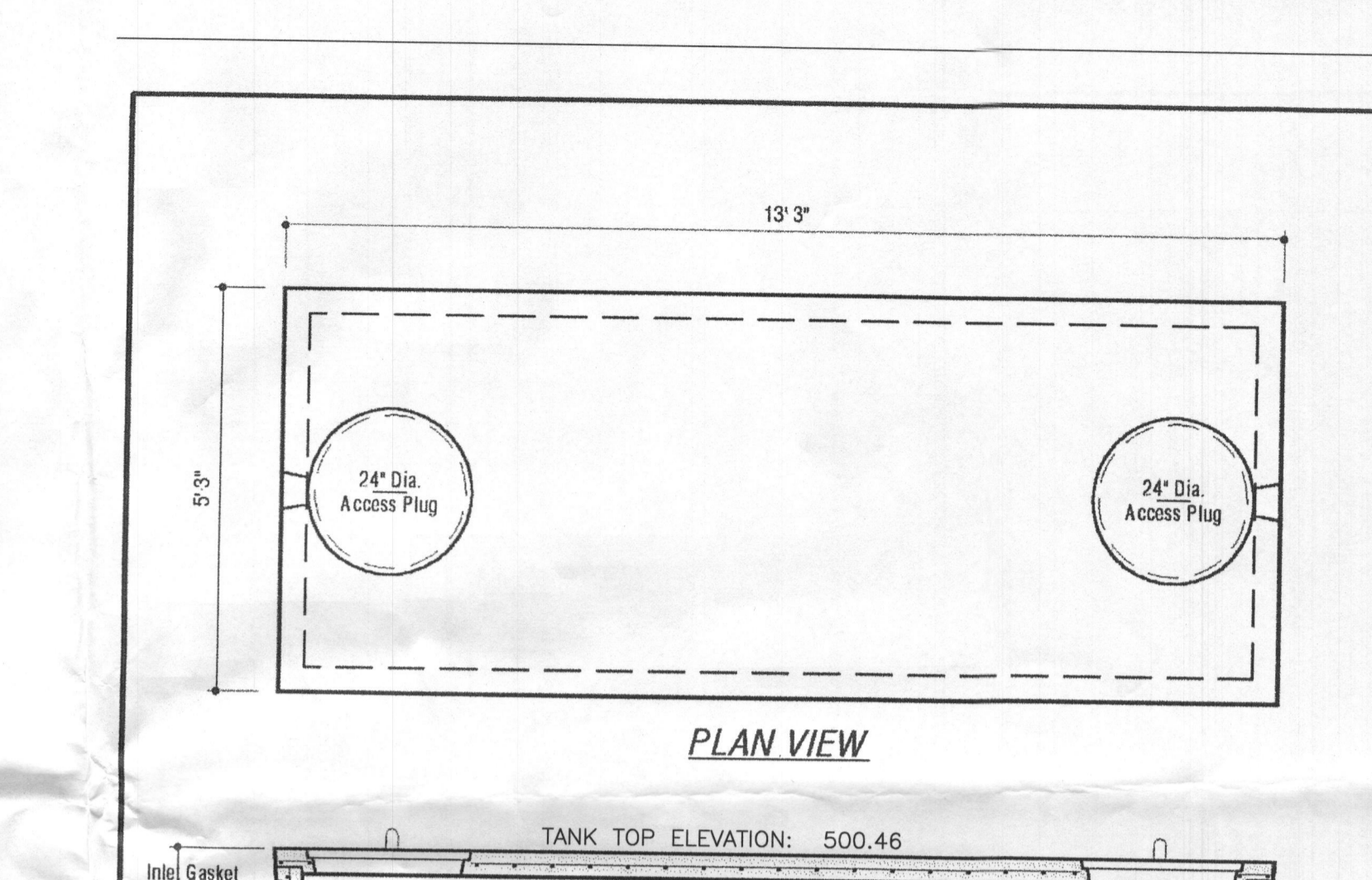
Single Switch Model	Volts	Phase	Mode	Amps	Simplex	Duplex	CSA	UL
M5355 & M759	115	1	Auto	9.7	1	---	Y	Y
N5355 & N759	115	1	Non	9.7	2	3 or 4 & 5	Y	Y
BNS3	115	1	Auto	9.7	*	---	Y	Y
BNS7	115	1	Auto	9.7	*	---	Y	Y
BES357	230	1	Auto	4.8	*	---	Y	Y
D5355 & D759	230	1	Auto	4.8	1	---	Y	Y
E5355 & E759	230	1	Non	4.8	2	3 or 4 & 5	Y	Y

NOTE: Make sure float is free from obstruction.



RESERVE POWERED DESIGN
For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.
© Copyright 2014 Zoeller Co. All rights reserved.

Project	13891 BRIGHTON DAM RD	BEI#	2560	Date	4/8/2016
Waste Water Flows					
# dwellings =	1	bedrooms =	5	gal/day/bedroom =	150
Total flow =	750 GPD	Dose =	1/4	design flow	
		Dose =	187.5 gallons		
Tank Sizing					
COMAR septic tank sizing =	1,500 gallons	BAT Tank Size =	1,300 gallons	Pump Tank =	1,500 gallons
Tank Design and Flow Rates					
Tank Size	x = 12.58 ft	Pump Model =	53	H(wet) =	16 inches
	y = 4.59 ft				
Width (bottom) =	3.87 ft	(to inlet elevation)			
Width (top) =	0.33 ft				
	0.42 ft				
Controls					
Bottom Elevation =	495.71	Storage above alarm =	756	Gallons	
Off Elevation =	497.04	Required depth =	1.75	ft	
On Elevation =	497.33	Desired runtime =	3	minutes	
Alarm Elevation =	497.83	Pump design volume =	13.0	cf	
		Flow rate =	32.5	GPM	
Does storage above alarm sufficient YES					
Friction Head					
Force Main Size =	1.5	inches			
Invert @ pump =	496.34				
Invert @ high pt. =	502.00	Force Main Length =	66	ft	
Static Head =	5.66				
45° Bend Loss =	3	ft/fitting - Table 4.3	7	21	ft
90° Bend Loss =	7	ft/fitting - Table 4.3	0	0	ft
Gate Valve =	1.3	ft/fitting - Table 4.3	0	0	ft
		Total Horizontal Equivalent =	87	ft	
Pipe Loss =	5.22	ft/100ft - Table 4-4			
		Friction Head =	4.54	ft	
Total Dynamic Head =	10.20	For pump design			



DESIGN DATA & GENERAL NOTES

- 1] Concrete strength $f_c = 4,000$ p.s.i. @ 28 days. Density = 150 pcf.
- 2] Cement - Portland Type I/II per ASTM C 150-92.
- 3] Admixtures & plasticizers per ASTM C 260-86 & C 494-92.
- 4] Reinforcing per ASTM A185. Min. 1-1/2" cover.
- 5] Top slab sealed with butyl rope mastic.
- 6] 4" wall, base, & top thickness.

