


PERMIT NUMBER: B 22000 742

DATE ACCEPTED:

RECEIVED

MAR 04 2022

 <b>RESIDENTIAL BUILDING PERMIT APPLICATION</b>	
HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS 3430 COURT HOUSE DRIVE, ELLICOTT CITY, MD 21043 - PHONE: (410) 313-2455 OPTION #4 <a href="http://www.howardcountymd.gov">www.howardcountymd.gov</a>	
<b>BUILDING SITE ADDRESS REQUIRED</b>	
Street Address: 10517 Pudding Lane	Unit:
City: Ellicott City	State: MD
Subdivision/Village/Complex Name: King's Forrest	SDP/WP/BA #:
Lot: 32	Tax Map:
Parcel:	Grading Permit #:
<b>DESCRIPTION OF WORK REQUIRED</b>	
Existing Use: vacant lot	Proposed Use: SFD
Trade Work to Be Completed (Separate Permits Required): <input type="checkbox"/> Mechanical (HVACR) <input type="checkbox"/> Electrical <input type="checkbox"/> Plumbing <input type="checkbox"/> None	
<i>New 2 story "Parkhurst" Craftsman ELV with 2 car side load garage, 1 car side attached garage, luxury covered deck, Multi-gen suite, Prep kitchen, Loft, 3rd floor finished, and finished lower level (Rec Room, Bedroom, Bathroom, wet bar and finished area under multi-gen suite)</i>	
<b>PROPERTY OWNER INFORMATION REQUIRED</b>	
Owner(s) Name(s) (As it appears on tax records): Toll Mid Atlantic Lp. Co. Inc. Contact: Summer Riley Primary Residence: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Owner's Street Address: 250 Gibraltar Road	
City: Horsham	State: PA
Phone: 410-872-9105	Email: sriley1@tollbrothers.com
<b>APPLICANT NAME REQUIRED - INDIVIDUAL WHO SIGNS THIS APPLICATION</b>	
Business Name: Decatur Building Services	
Contact Name: Jim Kerwin	
Street Address: PO Box 552	
City: Woodbine	State: MD
Phone: 443-309-7792	Email: jim@decaturbuildingservices.com
<b>CONTRACTOR INFORMATION REQUIRED</b>	
Business Name: Toll Brothers	
Contact: Summer Riley	
Licensee's Name: Toll Mid Atlantic Lp. Co. Inc.	
License #: 8220	
Street Address: 6731 Columbia Gateway Drive, Suite 120	
City: Columbia	State: MD
Phone: 410-872-9105	Email: sriley1@tollbrothers.com
<b>ARCHITECT/ENGINEER INFORMATION INDIVIDUAL WHO SIGNED PLANS, IF APPLICABLE</b>	
Business Name:	
Name:	
Street Address:	
City:	State:
Phone:	Email:
<b>BUILDING CHARACTERISTICS REQUIRED</b>	
Primary Structure: <input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse <input type="checkbox"/> SF Duplex <input type="checkbox"/> Mobile Home <input type="checkbox"/> Multi-Family Dwelling (MF*)	
Condo: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Utilities: <input checked="" type="checkbox"/> Electric <input checked="" type="checkbox"/> Gas	
Water Supply: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private (Well)	
Sewage Disposal: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private (Septic)	
Heating System: <input checked="" type="checkbox"/> Electric <input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane <input type="checkbox"/> Other:	
Roadside Tree Project: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes: #	
Sprinkler System: <input type="checkbox"/> NFPA 13 <input type="checkbox"/> NFPA 13R <input type="checkbox"/> NFPA 13D <input type="checkbox"/> None	
Fire Alarm System: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Voice Evac	
<b>ADDITIONAL RESIDENTIAL INFORMATION (PLEASE SELECT/COMPLETE ALL THAT APPLY)</b>	
Model Name & Options: <i>Parkhurst "Craftsman ELV, 2+1 Car garages, luxury deck, Multi-gen suite, Prep kitchen, 3rd floor finished + Full</i>	
# of Bedrooms (SF): 6	# of efficiency units (MF*):
# of 1 BR (MF*):	# of 2 BR (MF*):
# of 3 BR (MF*):	
# Rooms: 13	# Full Baths: 6
# Half Baths: 1	# Fireplaces: 1
Garage/Carport Info: <input checked="" type="checkbox"/> Attached Garage <input type="checkbox"/> Detached Garage <input type="checkbox"/> Integral Garage <input type="checkbox"/> Carport <input type="checkbox"/> None	
Basement/Foundation Info: <input type="checkbox"/> Slab on Grade <input type="checkbox"/> Post & Pier <input type="checkbox"/> Unfinished Basement <input checked="" type="checkbox"/> Finished Basement: <input type="checkbox"/> Full or <input checked="" type="checkbox"/> Partial	
1st Fl Width: 73	1st Fl Depth: 72
2nd Fl Width: 59	2nd Fl Depth: 56
Bsmt Width: 59	Bsmt Depth: 72
Energy Method: <input type="checkbox"/> Prescriptive <input checked="" type="checkbox"/> Performance <input type="checkbox"/> UA Alternative <input type="checkbox"/> ERI	
Gross Area: 9466	sq ft
Occupable Area: 8361	sq ft
<b>AGREEMENT/ DISCALIMER REQUIRED</b>	
THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.	
APPLICANT'S ORIGINAL SIGNATURE: <i>Jim Kerwin</i>	
DATE SIGNED: 3/4/2022	
<b>FOR OFFICE USE ONLY</b>	
CHECKS PAYABLE TO: DIRECTOR OF FINANCE OF HOWARD COUNTY	
AGENCIES REQUIRED/APPROVALS:	
<input checked="" type="checkbox"/> PR	<input checked="" type="checkbox"/> DPZ
<input checked="" type="checkbox"/> DED	<input checked="" type="checkbox"/> Health
<input checked="" type="checkbox"/> SHA	<input checked="" type="checkbox"/> CID
SUBMITTAL FEES: 150-	PAYMENT: CK# 00113074
ACCEPTED BY: <i>MR</i>	



B22000742

ENTRANCE PERMIT

(410) 313-1810

HOWARD COUNTY  
DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS

Permission is hereby granted by the Howard County Department of Inspections, Licenses & Permits for an entrance permit:

Owner Toll Mid Atlantic Lp. Co. Inc. Phone 410-872-9105

Address 250 Gibraltar Road, Horsham, PA 19044

New Building Address  
10517 Pudding Lane, Ellicott City, MD 21042

For what use: Entrance To Single family detached house

Name of Contractor or Builder Toll Brothers

Address 6731 Columbia Gateway Drive, Suite #120, Columbia, MD 21046

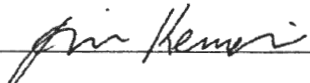
The applicant hereby certifies and agrees as follows: (1) that he is the owner or the duly authorized agent of the owner to make this application; (2) that he has read all of the information set forth and that the same is correct; (3) that the permit, when issued, may be declared void should said information be incorrect; (4) that he will comply with all rules and regulations of Howard County Bureau of Highways; (5) that he will perform no work on the entrance not specifically described in this permit.

It must be noted that a use & occupancy permit will not be issued until entrance is completed to Bureau of Highways Standards & Specifications.

It is agreed and understood by the acceptance of this permit, the following conditions will be followed.

- A. The construction of the entrance or approach will, in no way, change the grade/and or alignment of any existing drainage ditches or structures. In the event same are damaged or destroyed, they shall be replaced to the satisfaction of the Howard County Department of Public Works representative.
- B. The right-of-way, affected by this permit, will be left in a neat and clean condition and no excess material will be permitted to remain on or adjacent to the right-of-way. Shoulders and flow-line areas disturbed shall be shaped up according to the Howard County Bureau of Highways Standards and Specifications. (For Driveway and Flow-line area.)

In consideration of the issuance of this permit, the applicant agrees that if he fails to comply with the above set-out standards and thereby causes damage to the Howard County Road System, that the applicant will be responsible to Howard County for such damage to its road system.

Sign  agent/ Toll Brothers  
(Name of applicant)

Address 6731 Columbia Gateway Drive, Suite #120, Columbia, MD 21046

Date 3/4/2022 Approved \_\_\_\_\_

**ATTENTION: The permit, when issued, is valid for period not to exceed six months.**



Name: Jim Kerwin  
Street Address: PO Box 552  
City, State, Zip: Woodbine MD 21797  
Date: 10/25/2022

Amendment, Permit # B22000742

Ms. Debbie Whalen  
Division of Plan Review  
Department of Inspections, Licenses and Permits  
Howard County Government  
3430 Court House Dr  
Ellicott City, MD 21043

Dear Ms. Whalen:

I am requesting to amend Permit # B22000742 at  
10517 Pudding Lane, Ellicott City MD 21042 to  
change front elevation to "Fairview", add luxury covered deck, add  
prep kitchen, add walk up attic space w/ half bath, add loft  
and add 2 car garage. 12 Rooms, 6 Bedrooms, 6 Full Baths,  
2 half Baths, 1 fireplace (Finished LL same as original Application)  
GROSS SF = 9543 OG SF = 9278  
2018 IRC Performance Method

Enclosed:

☒ Fee: \$50.00 Toll # 00203831  
☐ Plot Plans  
☐ Sets of Construction Drawings  
☐ Other: \_\_\_\_\_

Building	Front	Depth
1	81	72
2	59	56
B	59	72

If there is anything we can do to assist you, please let me know.

Sincerely,

*Jim Kerwin*

Name: Jim Kerwin  
Title: AGENT Toll Brothers  
Phone: 443-309-7792  
Email: Jim@DecaturbuildingServices.com

RECEIVED

NOV 16 2022

LICENSES & PERMITS  
DIVISION





NOTE: THE SMOOTHIE KING "OPEN" IS AN OPTIONAL PURCHASE. HOWEVER, THIS IS CURRENTLY THE ONLY APPROVED "OPEN" SIGN THAT CAN BE PURCHASED AND INSTALLED WITHIN A SMOOTHIE KING STORE.

## ICE MACHINE NOTES

IF REMOTE CONDENSER - URG-5F - 115 / 60 / 1.  
 AMBIENT TEMP RANGE: -20 TO 122°F  
 VOLTAGE RANGE: 104 TO 127V

### EXHIBIT F SEALANTS

#### THE USE OF SEALANTS ON FOOD SERVICE EQUIPMENT

All sealants must be listed as approved by NSF International (NSF) under Standard 5.

- Sealants shall be used only in structural, sound joints and seams.
- Sealants may be used to fill in openings and openings such, but not limited, blind rivet heads and slot and Phillips head screws.
- Openings around equipment and utility lines should be closed intract as practical by:
  - Collars or grommets
  - Flexible foam gaskets

Sealants may be used to seal service and utility lines to walls or adjacent piece of equipment where the spacing is closed to less than 1/8 inch.

- Sealants may not be utilized in food and spill contact surfaces to fill in spaces or voids, which result due to improper design or fabrication. Any openings of 1/8 inch shall be considered excessive and must be closed using proper methods.

**Interior Alterations for:  
Smoothie King  
9050 Baltimore National Pike # 103  
Ellicott City, Maryland**

A1.3

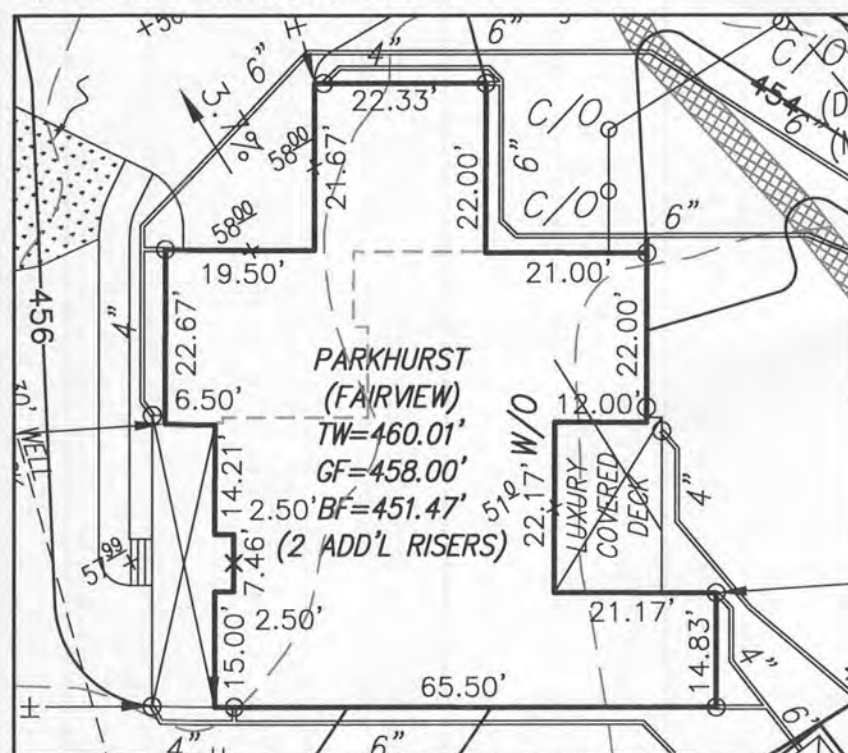
"Professional Certification."  
I certify that these documents were prepared or approved by me, and that I am a  
duly licensed architect under the laws of the State of Maryland, license number 8476,  
expiration date: 02/21/25."



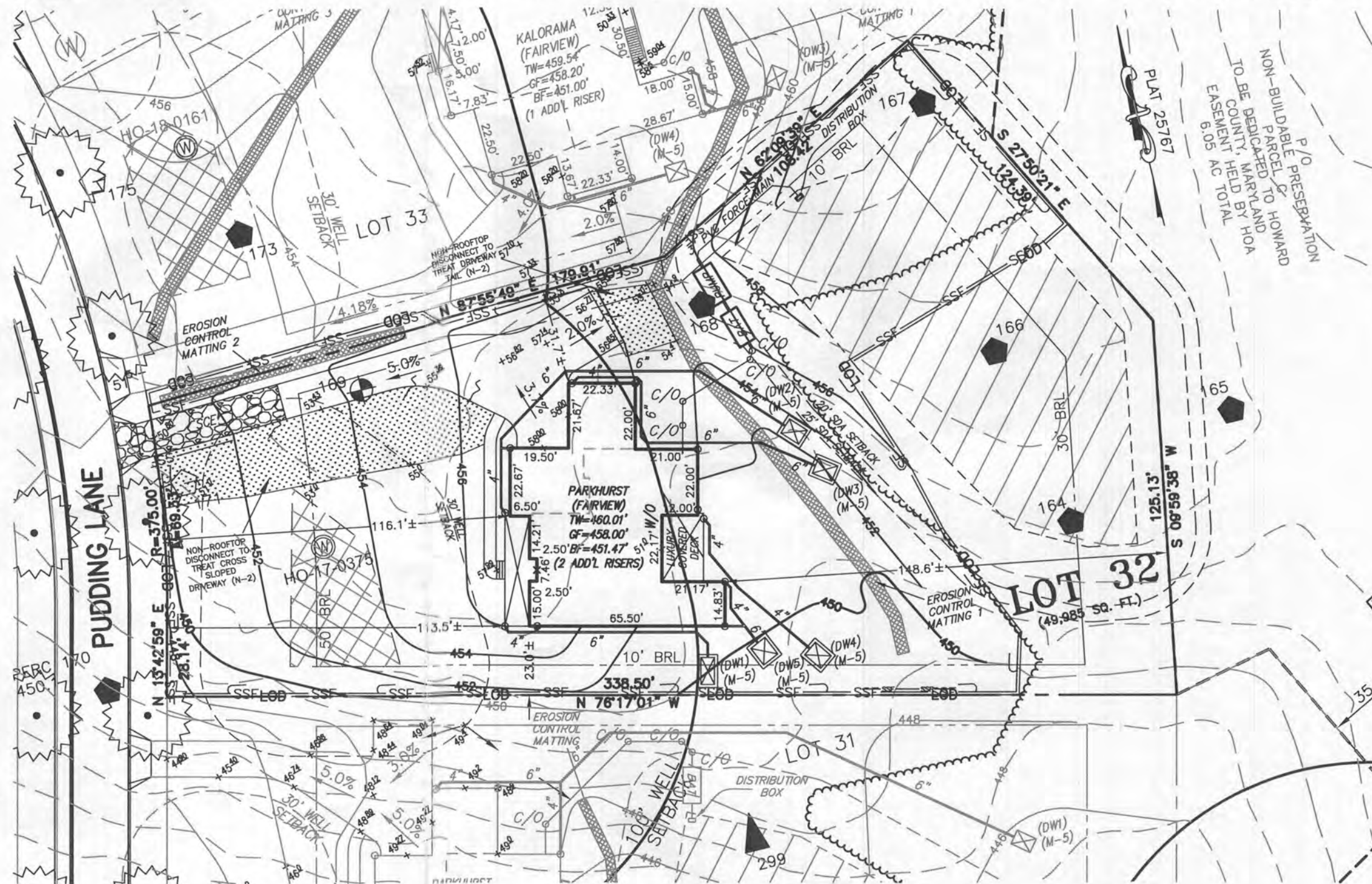
LEGEND:

- BRL BUILDING RESTRICTION LINE  
W WELL LOCATION  
T.W. TOP OF WALL  
G.F. GARAGE FLOOR  
B.F. BASEMENT FLOOR  
PASSED PERC LOCATION  
FAILED PERC LOCATION  
SEWAGE DISPOSAL AREA  
WELL BOX AREA  
SILT FENCE  
SUPER SILT FENCE  
LIMITS OF DISTURBANCE  
PROPOSED TREE  
STONE CONSTRUCTION ENTRANCE

NOTE:  
TOTAL LIMITS OF DISTURBANCE (LOD) = 39,839 SQ. FT.



HOUSE ENLARGEMENT  
NOT TO SCALE



BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN  
SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.

WELL NUMBER: HO-17-0375 ADDRESS: 10517 PUDDING LANE  
ELLICOTT CITY, MD 21042

HOUSE TYPE: PARKHURST (FAIRVIEW)

FINISHED LOFT  
TWO CAR SIDE ENTRY GARAGE  
FINISHED LOWER LEVEL  
WALK-OUT BASEMENT  
MORNING KITCHEN  
ADDITIONAL TWO CAR FRONT ENTRY GARAGE  
MULTI-GENERATIONAL SUITE ADDITION  
OPTIONAL DROP ZONE  
PREP KITCHEN  
WALK-OUT LUXURY COVER DECK  
BEDROOM - FINISHED LOWER LEVEL  
FINISHED SPACE BELOW MULTI-GEN SUITE  
FINISHED THIRD FLOOR WALK UP SPACE W/ HALF BATH  
OPTIONAL BATHROOM - FINISHED LOWER LEVEL  
WET BAR - FINISHED LOWER LEVEL  
DOUBLE WIDE DRIVEWAY TAIL

OPTION No. 007  
OPTION No. 012  
OPTION No. 013  
OPTION No. 017  
OPTION No. 048260  
OPTION No. 263019  
OPTION No. 263073  
OPTION No. 263081  
OPTION No. 263158  
OPTION No. 263169  
OPTION No. 263216  
OPTION No. 263279  
OPTION No. 263381  
OPTION No. 383  
OPTION No. 561  
OPTION No. 851

PERMIT PLOT PLAN  
LOT 32  
KINGS FOREST  
LIBER 20039, FOLIO 212  
PLAT NO. 25767  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

# ESE CONSULTANTS

ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

ESE Consultants, Inc.

6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046

T: 410-872-9105

DATE: 11/09/2022

SCALE: 1" = 40'

FILE: PP LOT 32 PARKHURST FAIR.

CHK'D: M.J.B.

JOB NO: 3502

DRAWN: R.C.K.

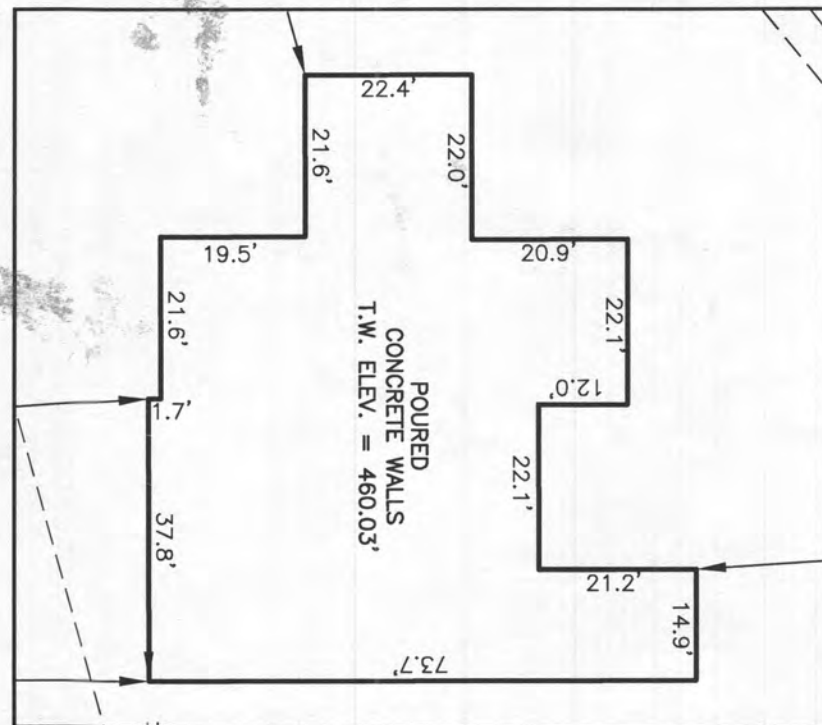




PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/25.

LEGEND:

- BRL BUILDING RESTRICTION LINE  
T.W. WELL LOCATION  
TOP OF WALL  
SEWAGE DISPOSAL AREA  
WELL BOX AREA



HOUSE ENLARGEMENT  
NOT TO SCALE

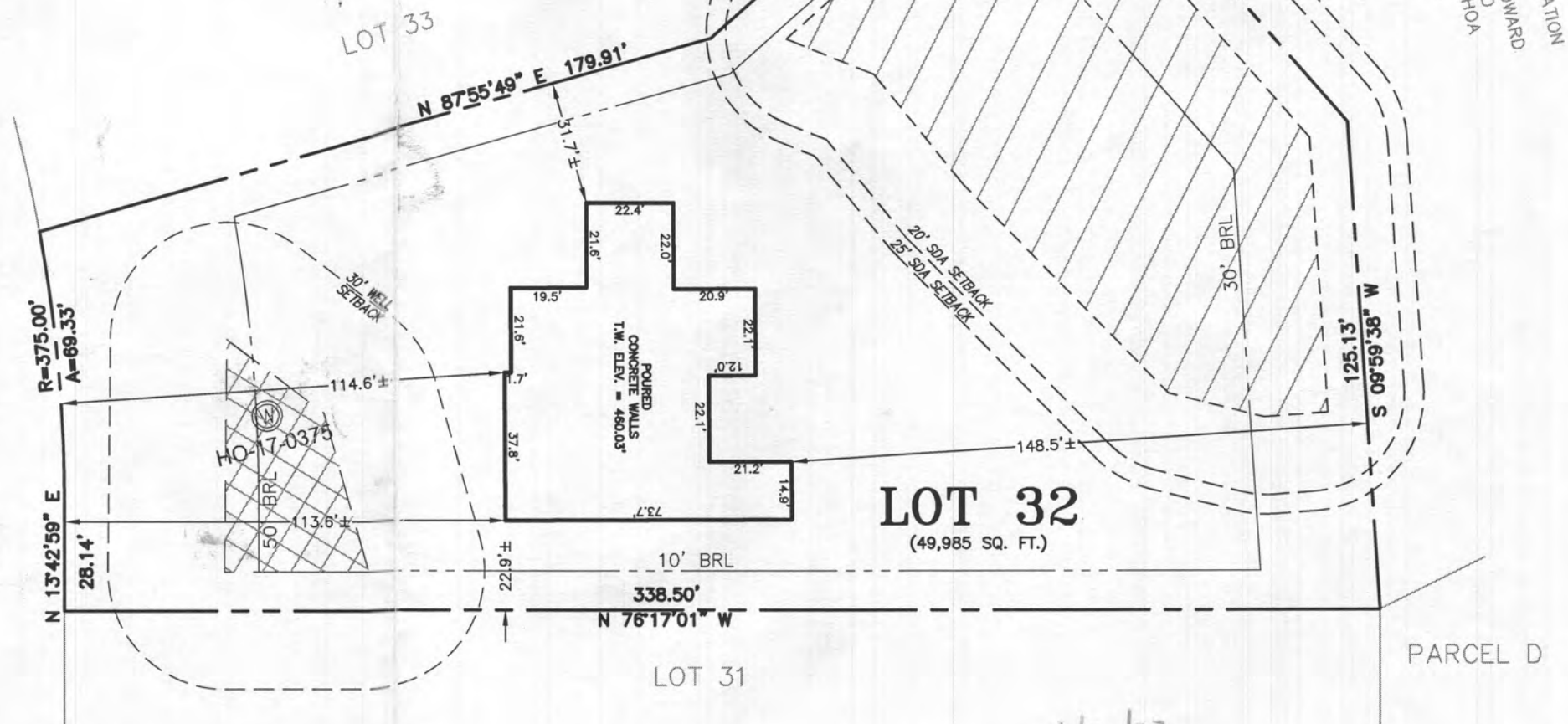
ADDRESS: 10517 PUDDING LANE  
ELLICOTT CITY, MD 21042

WELL NUMBER: HO-17-0375

PERMIT NO.: B22000742

BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPEMENT PLAN  
SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.

PUDDING LANE



P/O PRESERVATION  
NON-BUILDABLE PARCEL C TO HOWARD  
TO BE DEDICATED TO HOWARD  
COUNTY, MARYLAND  
EASEMENT HELD BY HOA  
6.05 AC TOTAL

PLAT 25767

1/11/23  
wall check okay

SURVEYOR'S CERTIFICATE

THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT-OF-WAYS, COVENANTS, AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY BOUNDARY LINES SHOWN HEREON ARE PER AVAILABLE RECORDS AND HAVE NOT BEEN FIELD VERIFIED.  
THIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.

SIGNATURE: MICHAEL JOE BOYCE  
MD. LIC NO. 21328

DATE 12/21/22

WALLCHECK  
LOT 32  
KINGS FOREST  
LIBER 20039, FOLIO 212  
PLAT NO. 25767  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

ESE CONSULTANTS

ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

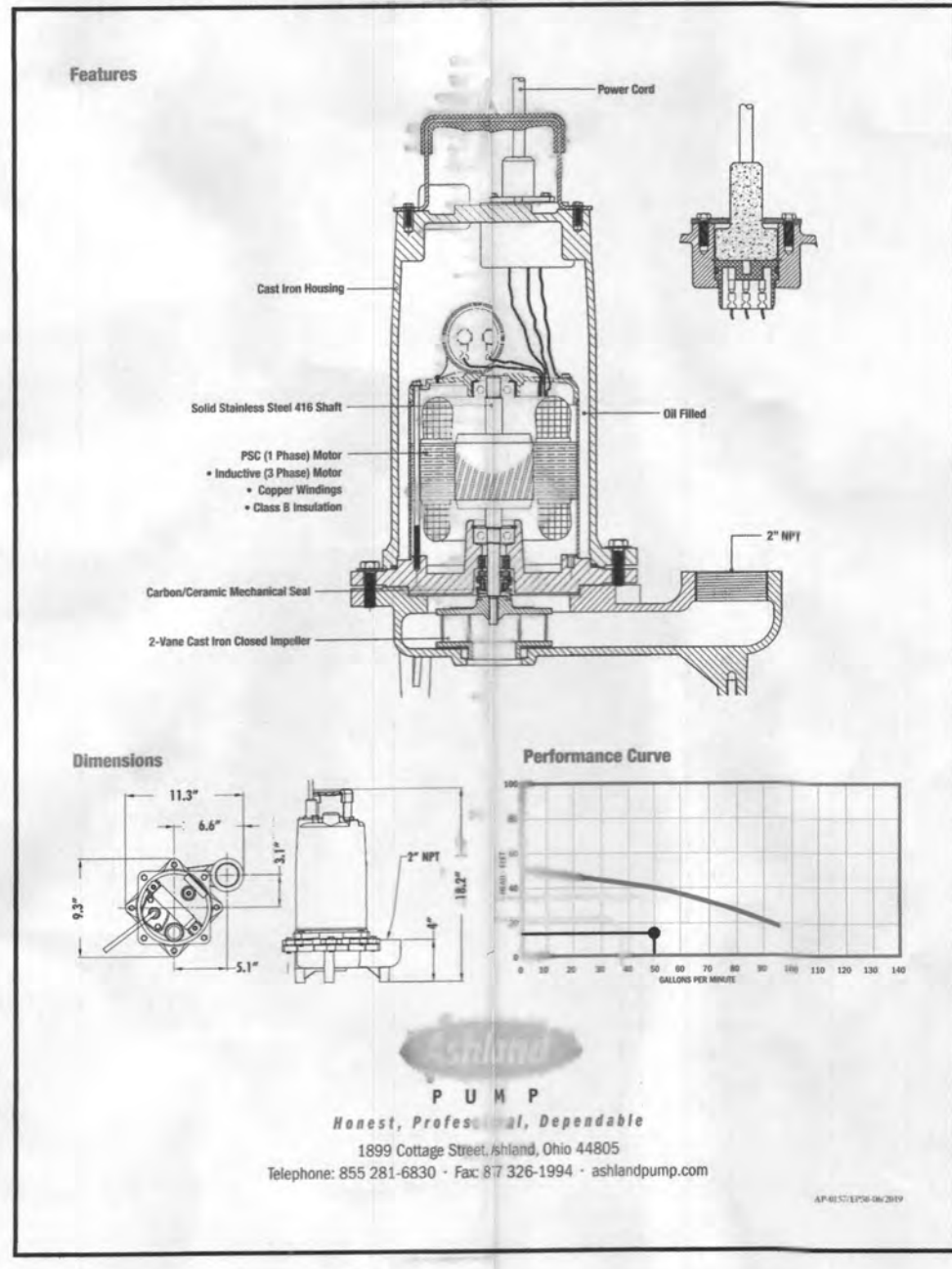
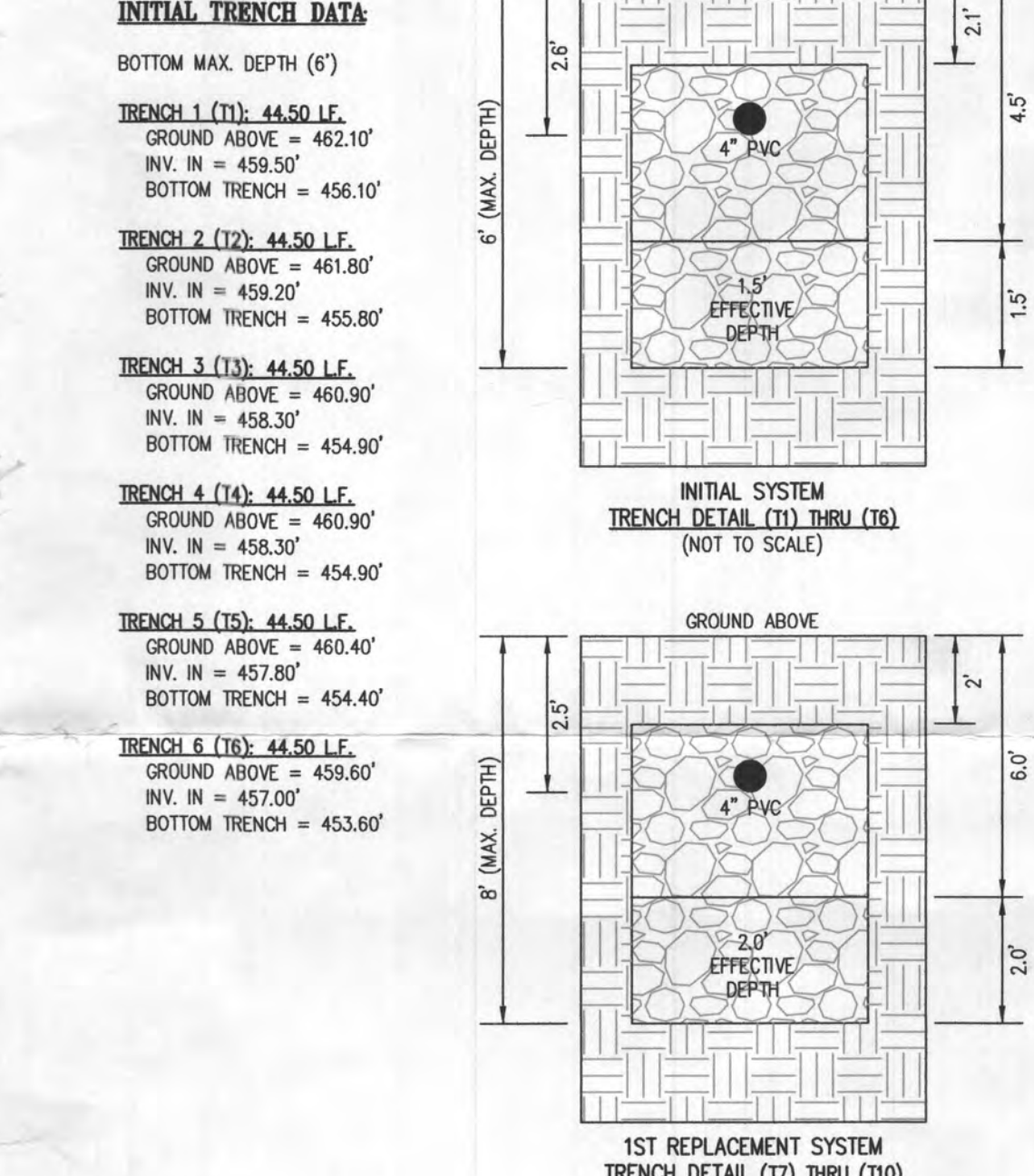
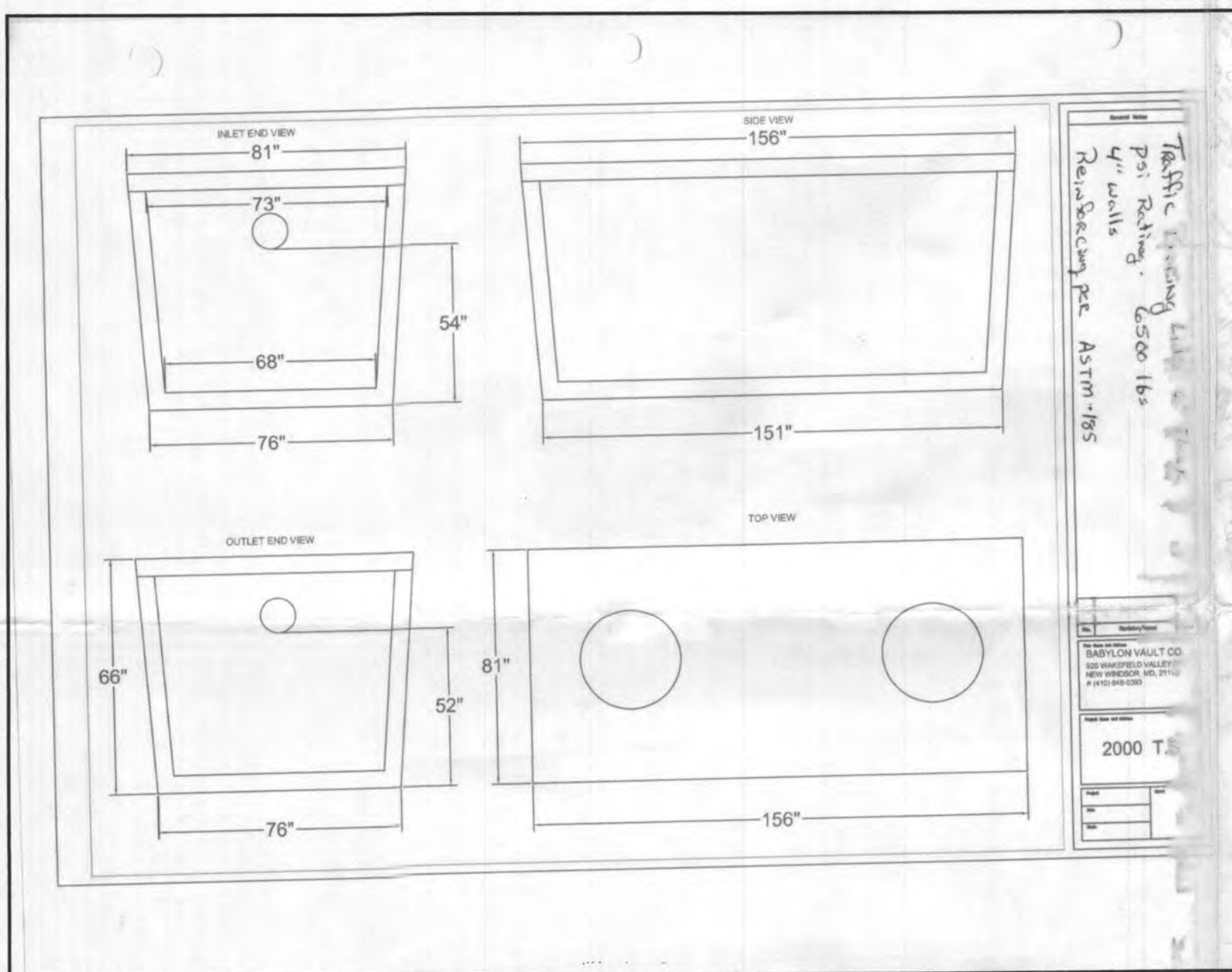
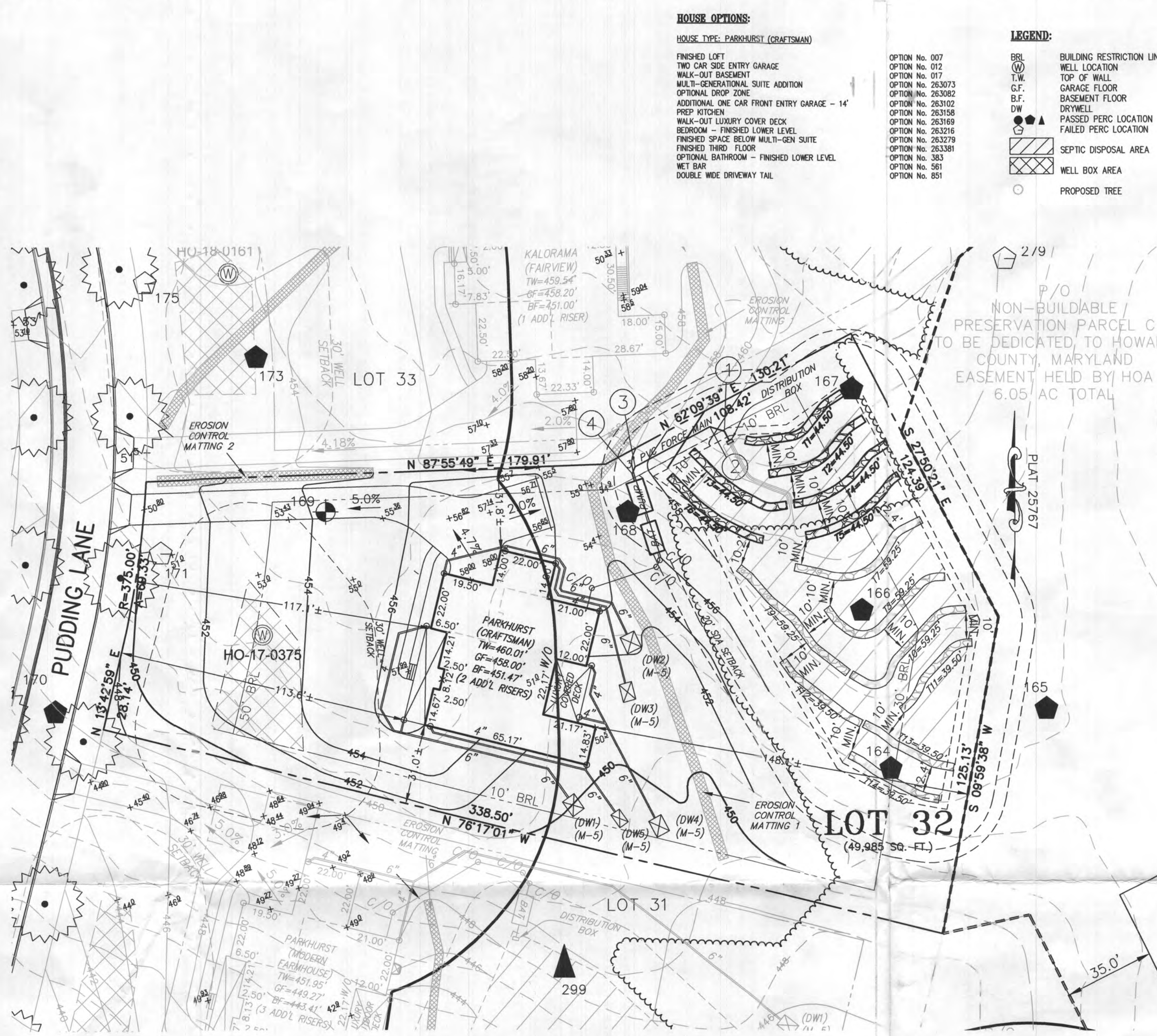
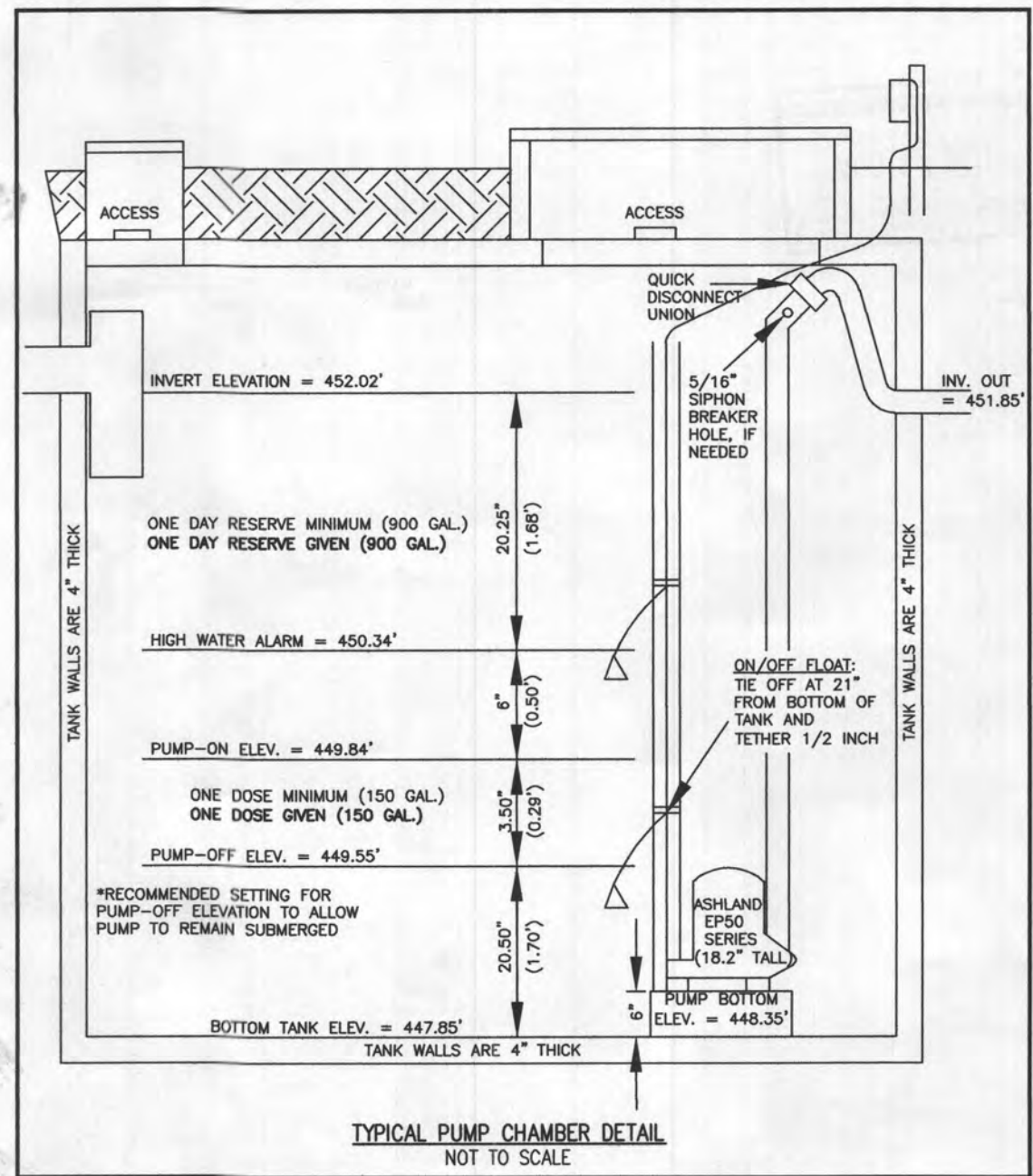
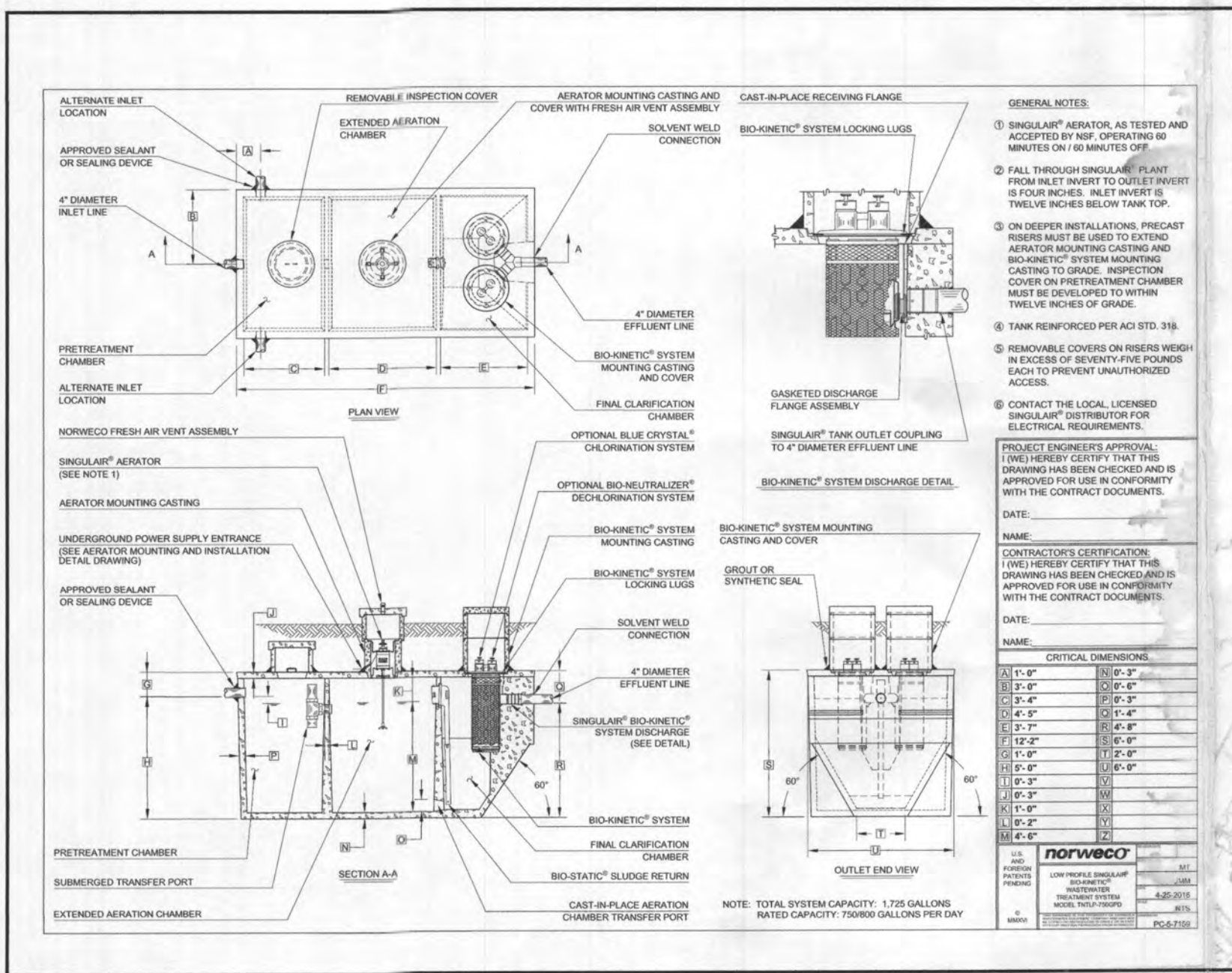
ESE Consultants, Inc.  
6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046  
T: 410-872-9105

DATE: 12/21/2022  
CHK'D: M.J.B.

SCALE: 1" = 40'  
JOB NO: 3502

FILE: WC LOT 32  
DRAWN: V.X.P.





**PUMP SYSTEM CALCULATIONS**

**TOTAL DOSE PER DAY = 150 GALLONS X 6 EVENTS PER DAY IS 900 GPD**

TRENCH	INV. ELEV.	LENGTH	DOSE
TRENCH 1 (T1)	459.50'	44.50'	150 GPD
TRENCH 2 (T2)	459.20'	44.50'	150 GPD
TRENCH 3 (T3)	458.30'	44.50'	150 GPD
TRENCH 4 (T4)	458.30'	44.50'	150 GPD
TRENCH 5 (T5)	457.80'	44.50'	150 GPD
TRENCH 6 (T6)	457.00'	44.50'	150 GPD

**FORCE MAIN LENGTH = 49.00' TYPE=SCH40**

**MIN. SYSTEM DISCHARGE RATE = 50 GPM**

**MANIFOLD DIAMETER = 3 IN.**

**FORCE MAIN DIAMETER = 3 IN.**

**MINIMUM DOSE = 150 GAL.**

**VELOCITY = 2.17 FPS**

**FRICITION LOSS (TABLE 4.4) = 0.58**

**FRICITION HEAD = 0.42' FT. (PER ABOVE CALCULATION)**

**STATIC HEAD = 10.55' FT. (HIGHEST POINT IN DISTRIBUTION SYSTEM - PUMP OFF FLOW ELEVATION)**

**TOTAL DYNAMIC HEAD = 10.97' FT. (FRICITION HEAD + STATIC HEAD)**

**THEREFORE A PUMP CAPABLE OF DELIVERING AT LEAST 50 GPM AGAINST 10.97' OF HEAD IS REQUIRED.**

**EP50M1-20, 1/2 H.P. IS EFFICIENT**

**SEWAGE DISPOSAL SYSTEM DATA (6 BDRM)**

**PROPOSED INVERT AT FOUNDATION WALL: 453.21'**

1. EX. GRADE OVER TANK: 457.50'  
PROPOSED GRADE OVER TANK: 455.90'  
INVERT IN: 452.40' INVERT OUT: 452.10'
2. DISTRIBUTION BOX  
EXISTING GRADE OVER TANK: 462.10'  
PROPOSED GRADE OVER TANK: 462.10'  
INVERT IN: 459.50' INVERT OUT: 459.60'
3. INITIAL TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)  
900 GPD ÷ 0.8 APP. RATE = 1,125 SF  
USE 3" WIDE TRENCH WITH 41" GRAVEL BELOW PIPE  
10' MIN. SPACING BETWEEN TRENCH EDGES  
1,125 SF ÷ 3' WIDTH = 375 LF x 0.71 (SIDEWALL REDUCTION) = 266.25 LF MIN.  
USE 6 44.50' LONG TRENCHES = 267.00 LF
4. 1ST REPLACEMENT TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)  
900 GPD ÷ 0.8 APP. RATE = 1,125 SF  
USE 3" WIDE TRENCH WITH 60" GRAVEL BELOW PIPE  
10' MIN. SPACING BETWEEN TRENCH EDGES  
1,125 SF ÷ 3' WIDTH = 375 LF x 0.63 (SIDEWALL REDUCTION) = 236.25 LF MIN.  
USE 4 59.25' LONG TRENCHES = 237.00 LF
5. 2ND REPLACEMENT TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)  
900 GPD ÷ 1.2 APP. RATE = 750 SF  
USE 3" WIDE TRENCH WITH 42" GRAVEL BELOW PIPE  
10' MIN. SPACING BETWEEN TRENCH EDGES  
750 SF ÷ 3' WIDTH = 250 LF x 0.63 (SIDEWALL REDUCTION) = 157.50 LF MIN.  
USE 4 39.50' LONG TRENCHES = 158.00 LF

**SITE PLAN FOR BAT INSTALLATION**  
**LOT 32**  
**KINGS FOREST**  
LIBER 11372, FOLIO 431  
PLAT NO. 25767  
ELECTION DISTRICT No. 2  
HOWARD COUNTY, MARYLAND  
ADDRESS: 10517 PUDDING LANE  
ELICOTT CITY, MARYLAND 21042

**ESE CONSULTANTS**  
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

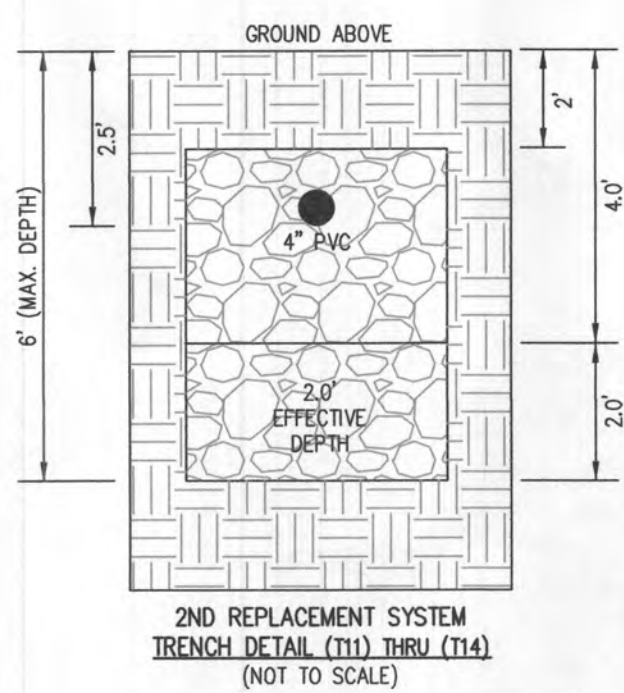
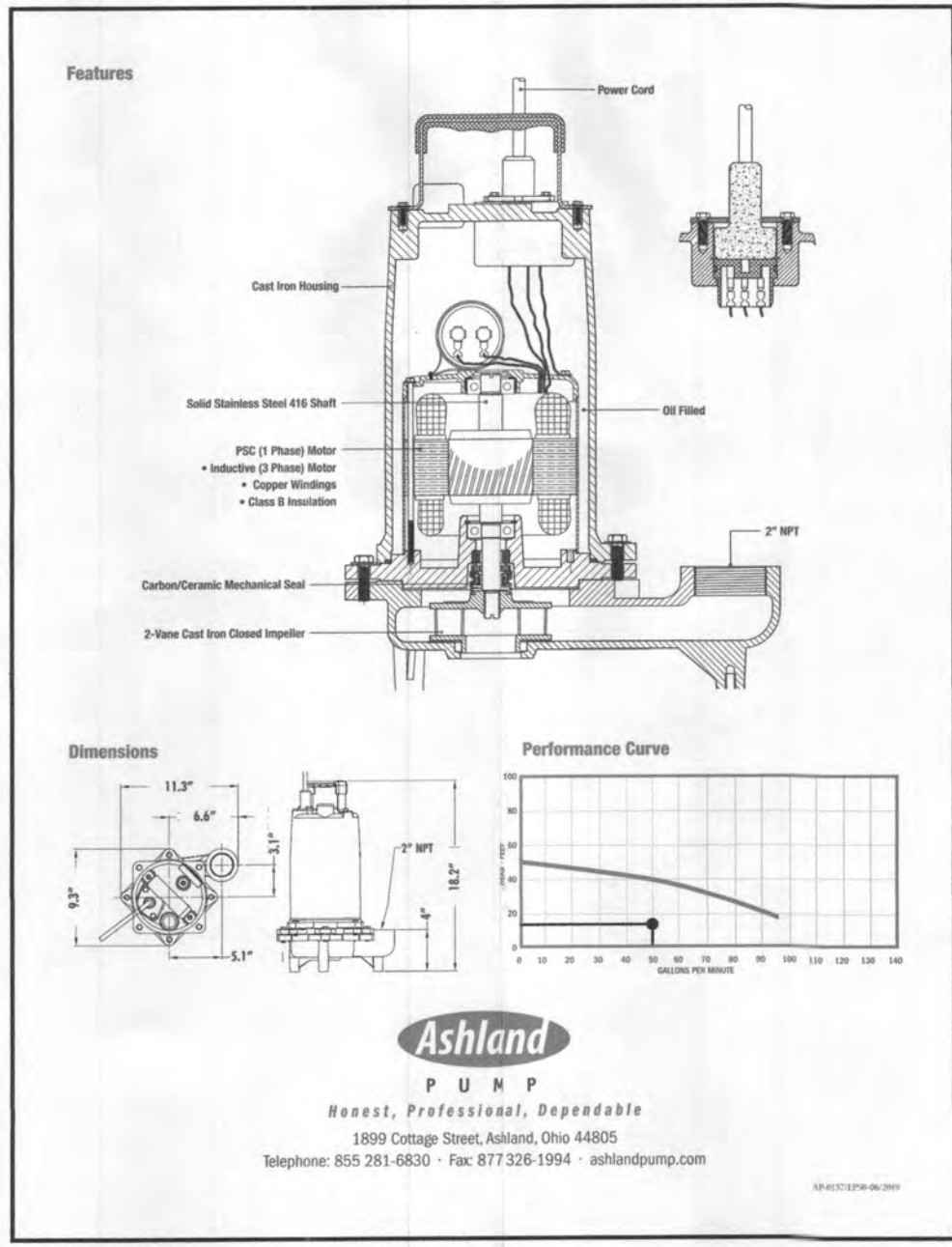
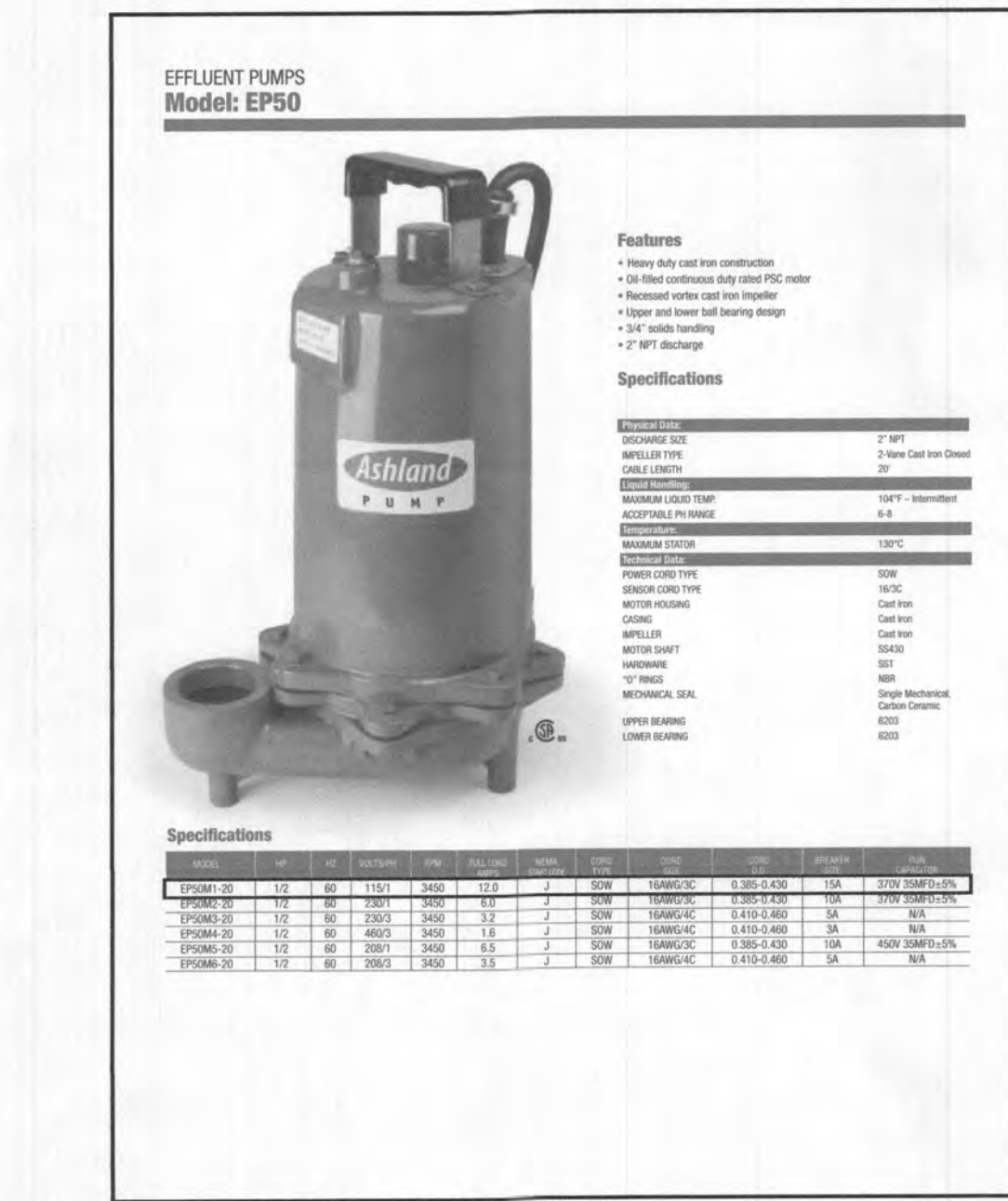
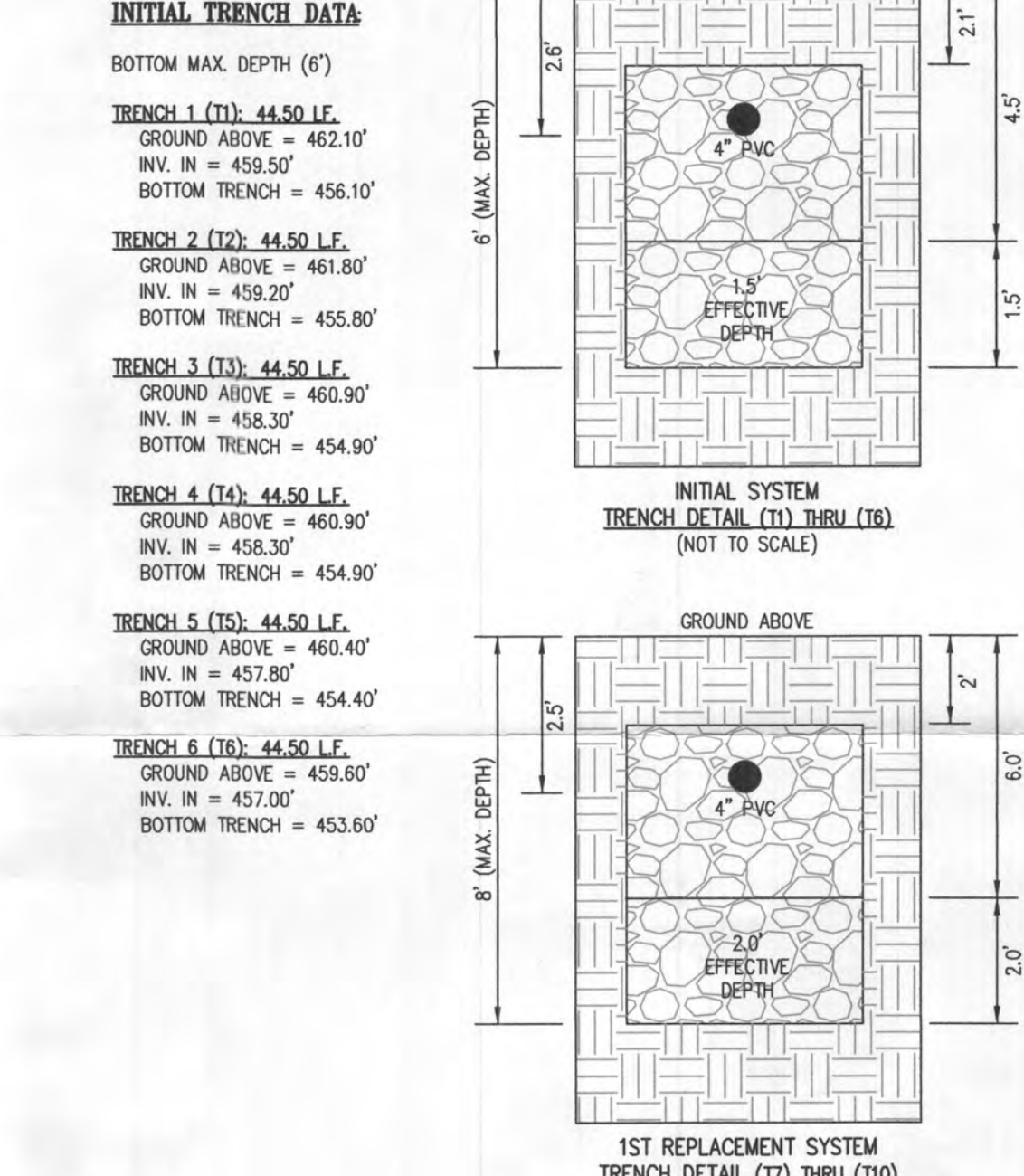
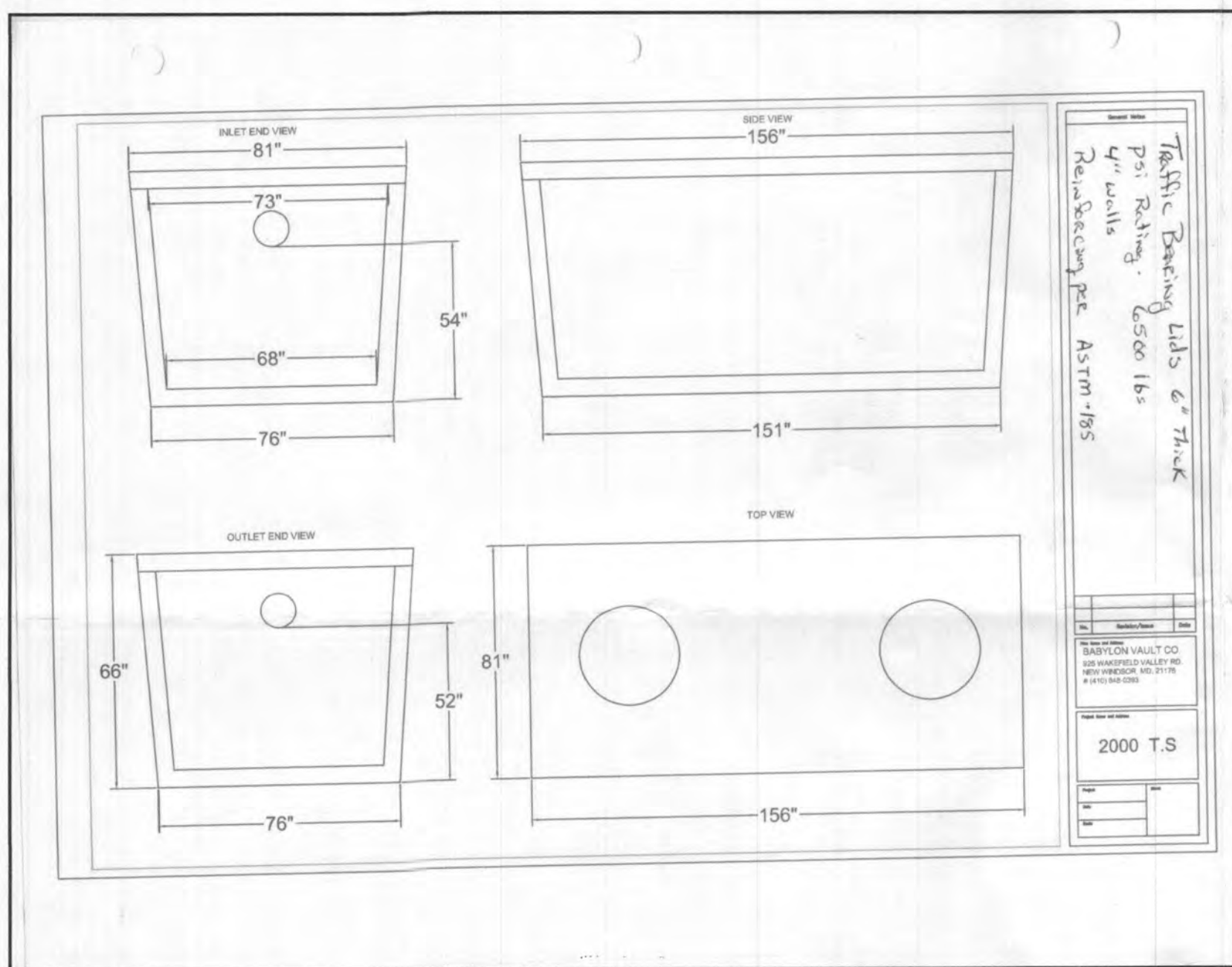
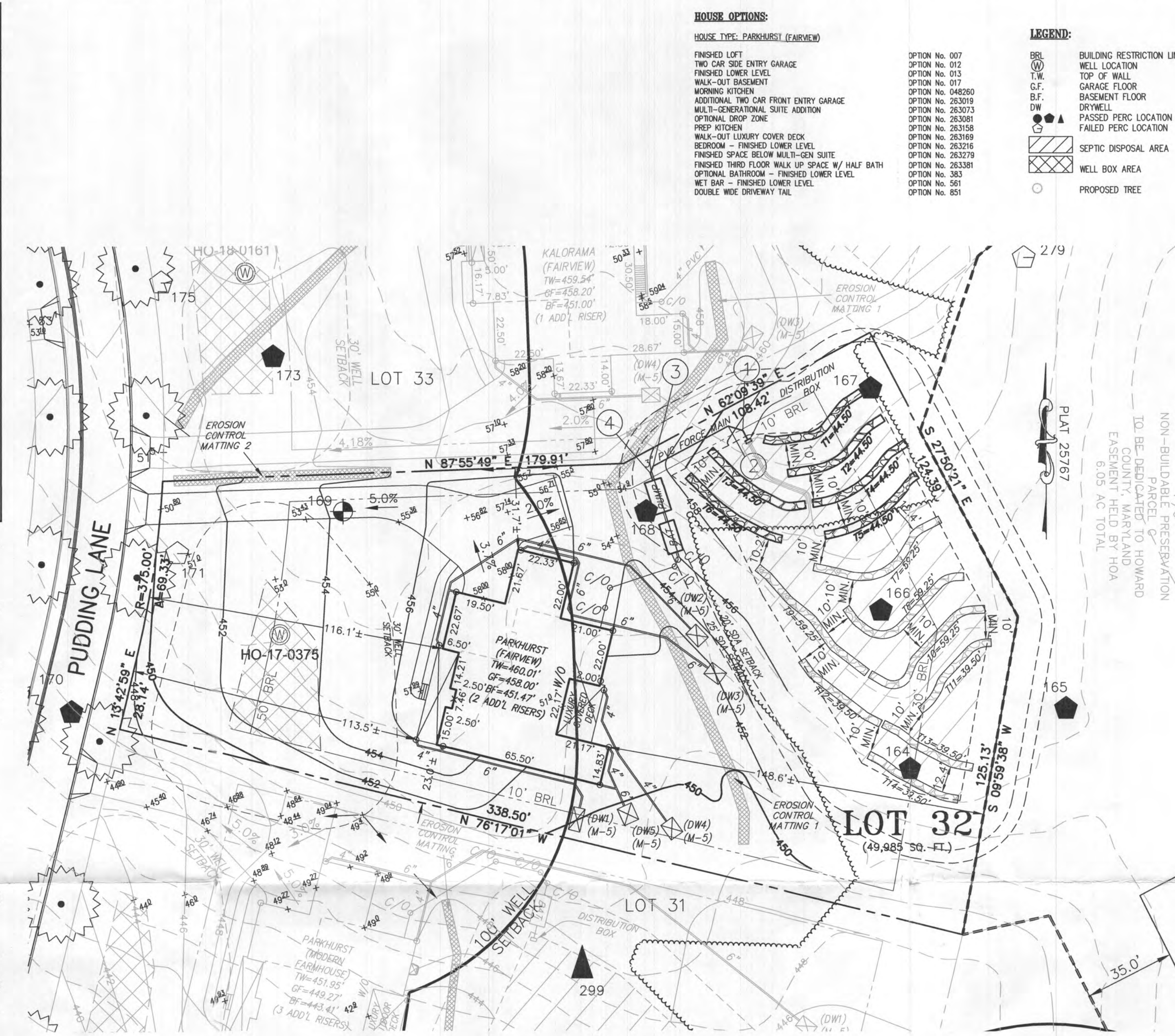
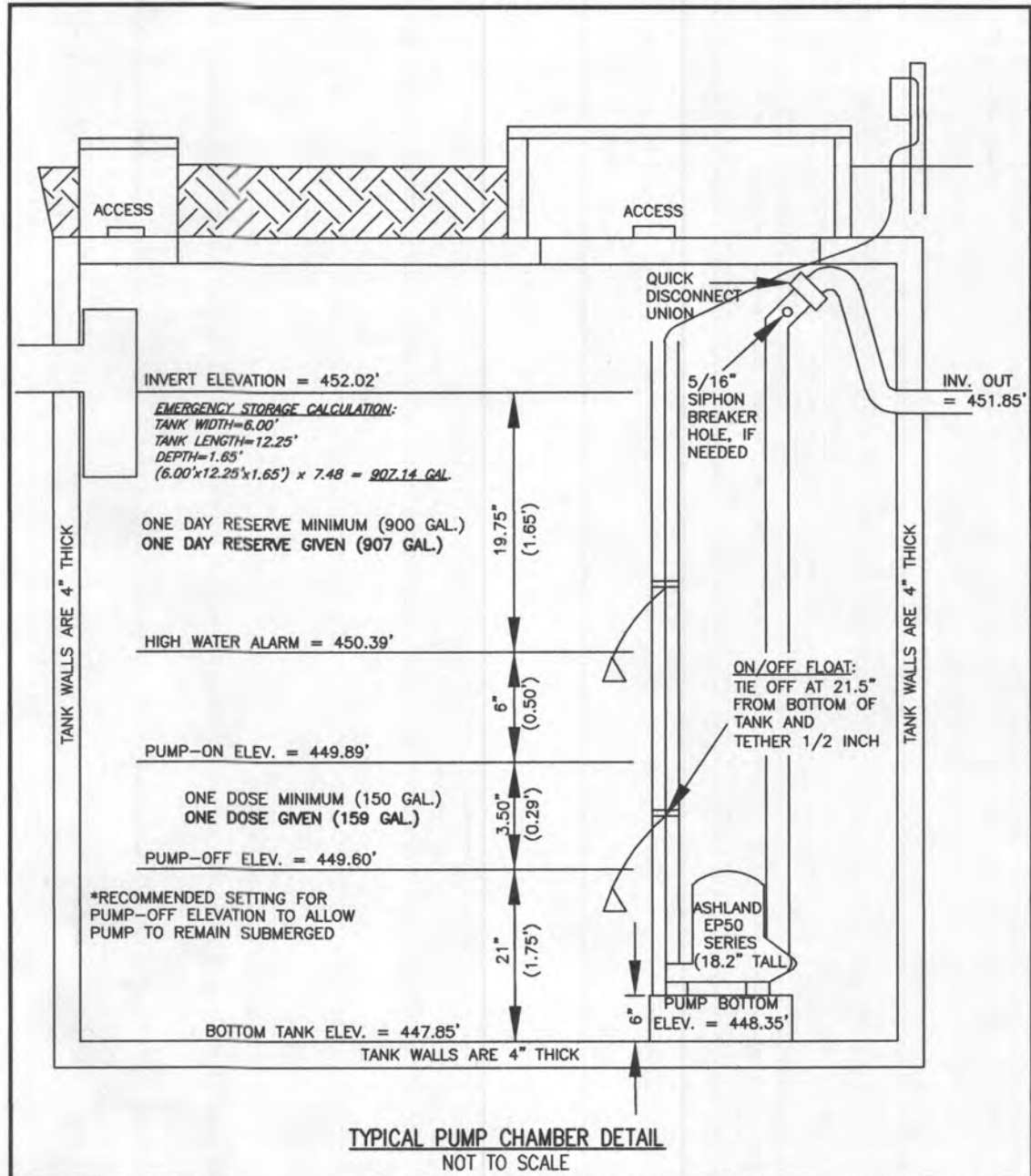
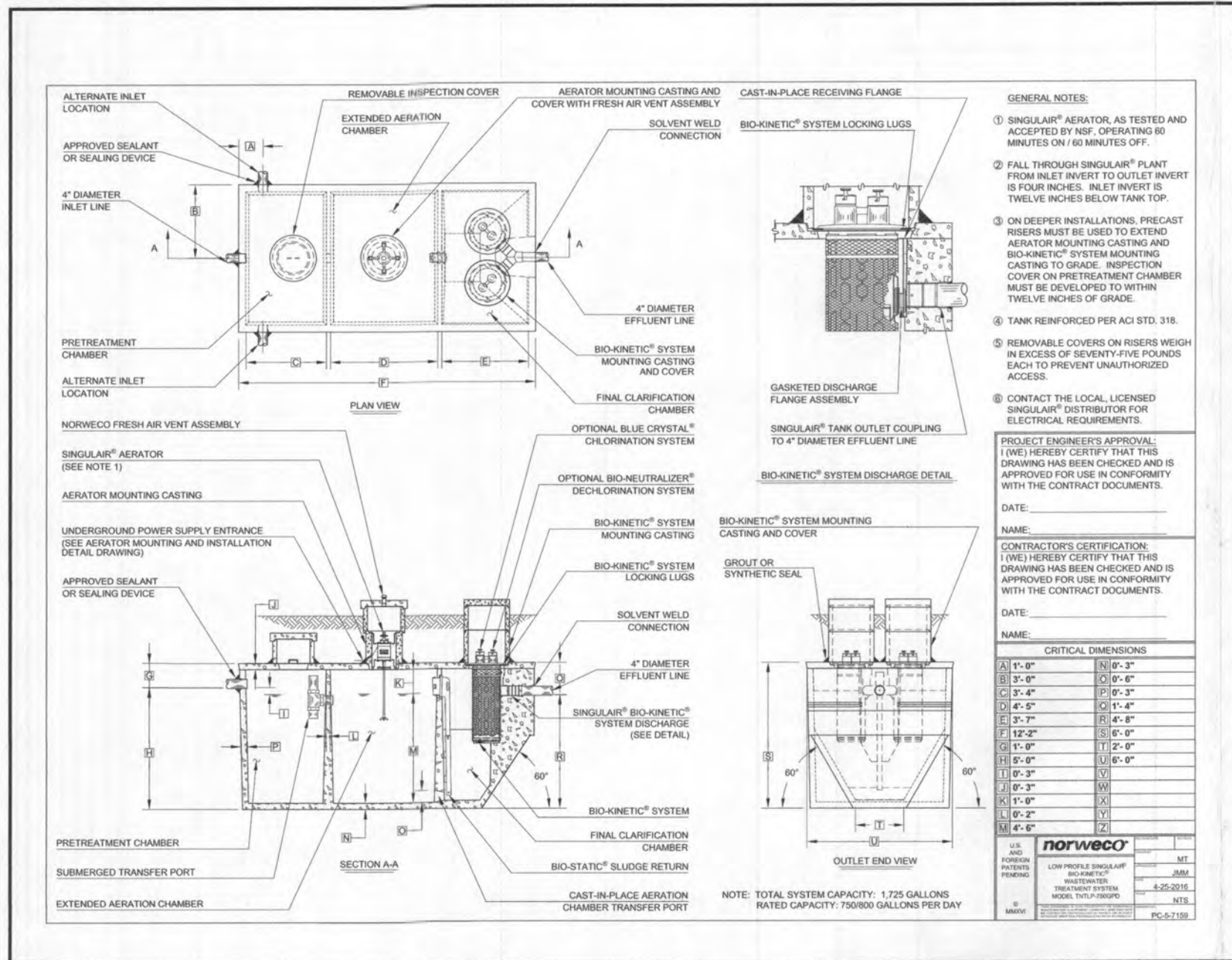
**ESE Consultants, Inc.**  
6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046  
T: 410-872-9105

**DATE:** 08/07/2022  
**CHK'D:** M.J.B.

**SCALE:** 1" = 30'  
**JOB NO:** 3502

**FILE:** BAT LOT 32  
**DRAWN:** R.C.K.





**PUMP SYSTEM CALCULATIONS**

TOTAL DOSE PER DAY = 150 GALLONS X 6 EVENTS PER DAY IS 900 GPD

TRENCH	INVERT ELEV.	LENGTH	DESIGN FLOW	PUMP OFF ELEV.	INV. OUT PUMP TANK	PUMP BOTTOM ELEV.	PUMP SELECTED
TRENCH 1 (T1)	459.50'	44.50'	900 GPD	449.60'	451.85'	448.35'	1/2 HP
TRENCH 2 (T2)	459.20'	44.50'					
TRENCH 3 (T3)	458.30'	44.50'					
TRENCH 4 (T4)	458.30'	44.50'					
TRENCH 5 (T5)	457.80'	44.50'					
TRENCH 6 (T6)	457.00'	44.50'					

**FORCE MAIN LENGTH = 49.00' TYPE-SH40**

MIN. SYSTEM DISCHARGE RATE = 50 GPM  
MANIFOLD DIAMETER = 3 IN.  
FORCE MAIN DIAMETER = 3 IN.  
MINIMUM DOSE = 150 GAL.

**VELOCITY = 2.17 FPS**

**FRICITION LOSS (TABLE 4.4) = 0.58**

**FRICITION HEAD = 0.42' FT. (PER ABOVE CALCULATION)**

**STATIC HEAD = 10.50' FT. (HIGHEST POINT IN DISTRIBUTION SYSTEM - PUMP OFF FLOW ELEVATION)**

**TOTAL DYNAMIC HEAD = 10.92' FT. (FRICITION HEAD + STATIC HEAD)**

**THEFORE A PUMP CAPABLE OF DELIVERING AT LEAST 50 GPM AGAINST 10.92' OF HEAD IS REQUIRED.**

**EP50M1-20, 1/2 H.P. IS EFFICIENT**

# SEWAGE DISPOSAL SYSTEM DATA (6 BDRM)

- PROPOSED INVERT AT FOUNDATION WALL: 453.37'
1. EX. GRADE OVER TANK: 457.50'  
PROPOSED GRADE OVER TANK: 455.90'  
INVERT IN: 452.40' INVERT OUT: 452.10'
  2. DISTRIBUTION BOX  
EXISTING GRADE OVER TANK: 462.10'  
PROPOSED GRADE OVER TANK: 462.10'  
INVERT IN: 459.90' INVERT OUT: 459.60'
  3. INITIAL TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)  
900 GPD ÷ 0.8 APP. RATE = 1,125 SF  
USE 3" WIDE TRENCH WITH 41" GRAVEL BELOW PIPE  
10' MIN. SPACING BETWEEN TRENCH EDGES  
1,125 SF ÷ 3" WIDTH = 375 LF x 0.71 (SIDEWALL REDUCTION) = 266.25 LF MIN.  
USE 6 44.50' LONG TRENCHES = 267.00 LF
  4. 1ST REPLACEMENT TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)  
900 GPD ÷ 0.8 APP. RATE = 1,125 SF  
USE 3" WIDE TRENCH WITH 66" GRAVEL BELOW PIPE  
10' MIN. SPACING BETWEEN TRENCH EDGES  
1,125 SF ÷ 3" WIDTH = 375 LF x 0.63 (SIDEWALL REDUCTION) = 236.25 LF MIN.  
USE 4 59.25' LONG TRENCHES = 237.00 LF
  5. 2ND REPLACEMENT TRENCH DESIGN (6 BDRM x 150 GPD/BDRM = 900 GPD)  
900 GPD ÷ 1.2 APP. RATE = 750 SF  
USE 3" WIDE TRENCH WITH 42" GRAVEL BELOW PIPE  
10' MIN. SPACING BETWEEN TRENCH EDGES  
750 SF ÷ 3" WIDTH = 250 LF x 0.63 (SIDEWALL REDUCTION) = 157.50 LF MIN.  
USE 4 39.50' LONG TRENCHES = 158.00 LF

SITE PLAN FOR BAT INSTALLATION  
LOT 32  
LIBER 20039, FOLIO 212  
PLAT NO. 25767  
ELECTION DISTRICT No. 2  
HOWARD COUNTY, MARYLAND  
ADDRESS: 10517 PUDDING LANE  
ELLICOTT CITY, MARYLAND 21042

**ESE CONSULTANTS**  
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

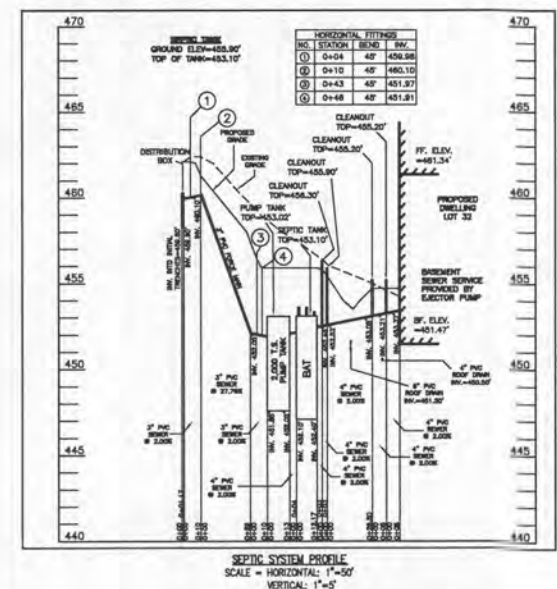
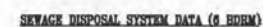
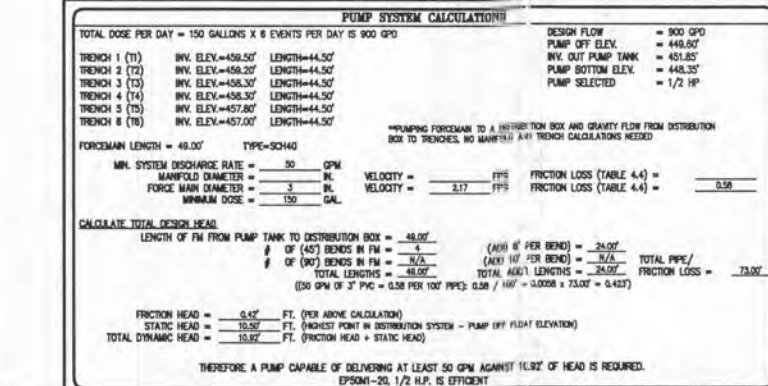
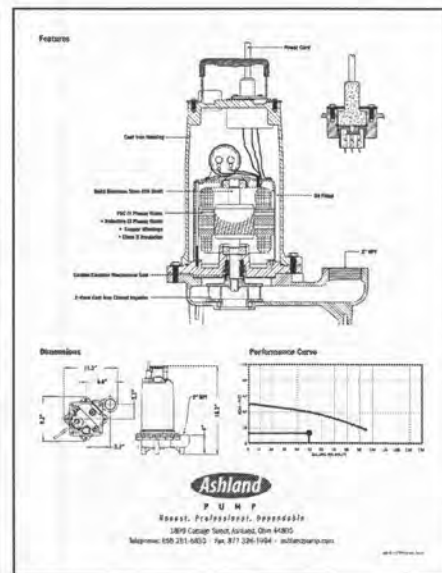
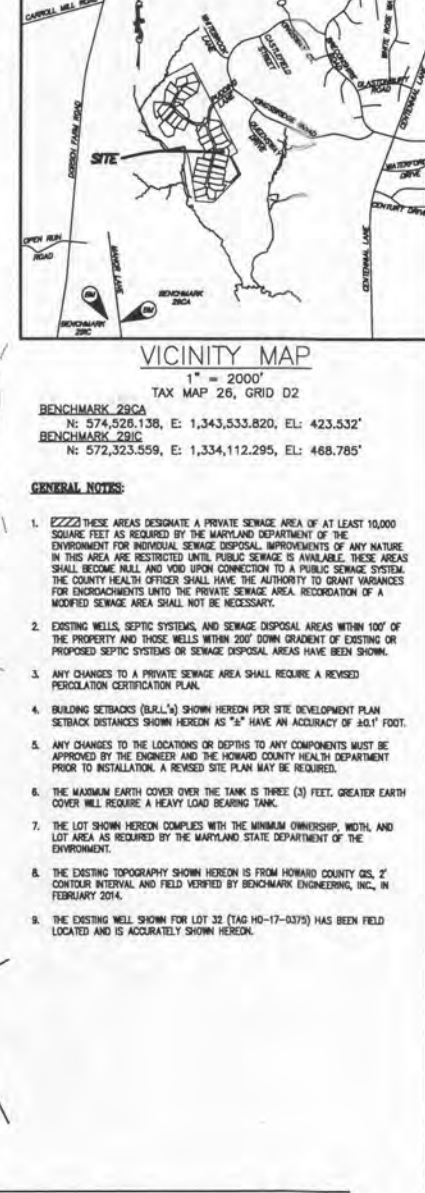
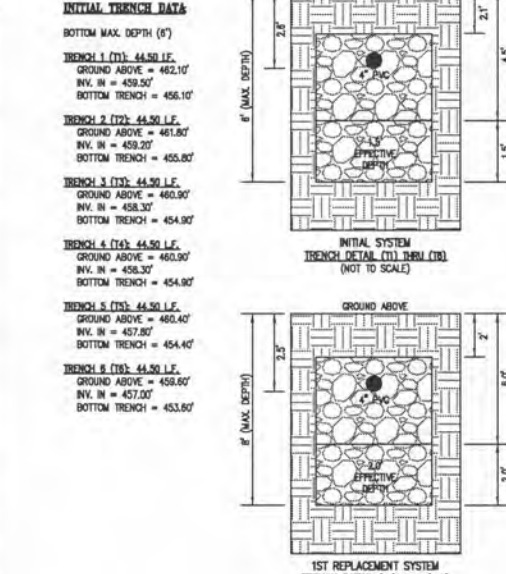
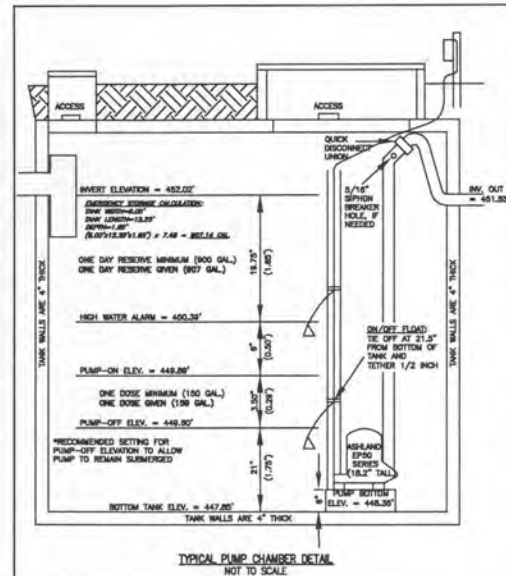
ESE Consultants, Inc.  
6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046  
T: 410-872-9105

DATE: 11/09/2022 SCALE: 1" = 30' FILE: BAT LOT 32  
CHK'D: M.J.B. JOB NO: 3502 DRAWN: R.C.K.









SITE PLAN FOR BAT INSTALLATION  
LOT 32  
**KINGS FOREST**  
LIBER 20039, FOLIO 212  
PLAT NO. 25767  
ELECTION DISTRICT No. 2  
HOWARD COUNTY, MARYLAND  
ADDRESS: 10517 PUDDING LANE  
ELLCOTT CITY, MARYLAND 21042

<h1 style="margin: 0;">ESE CONSULTANTS</h1> <p style="margin: 0;">ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL</p>		
<p>ESE Consultants, Inc.          6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046          T: 410-872-9105</p>		
DATE: 11/09/2022 CHK'D: M.J.B	SCALE: 1" = 30' JOB NO: 3502	FILE: BAT LOT 32 DRAWN: R.C.K.



Health

Health Dept

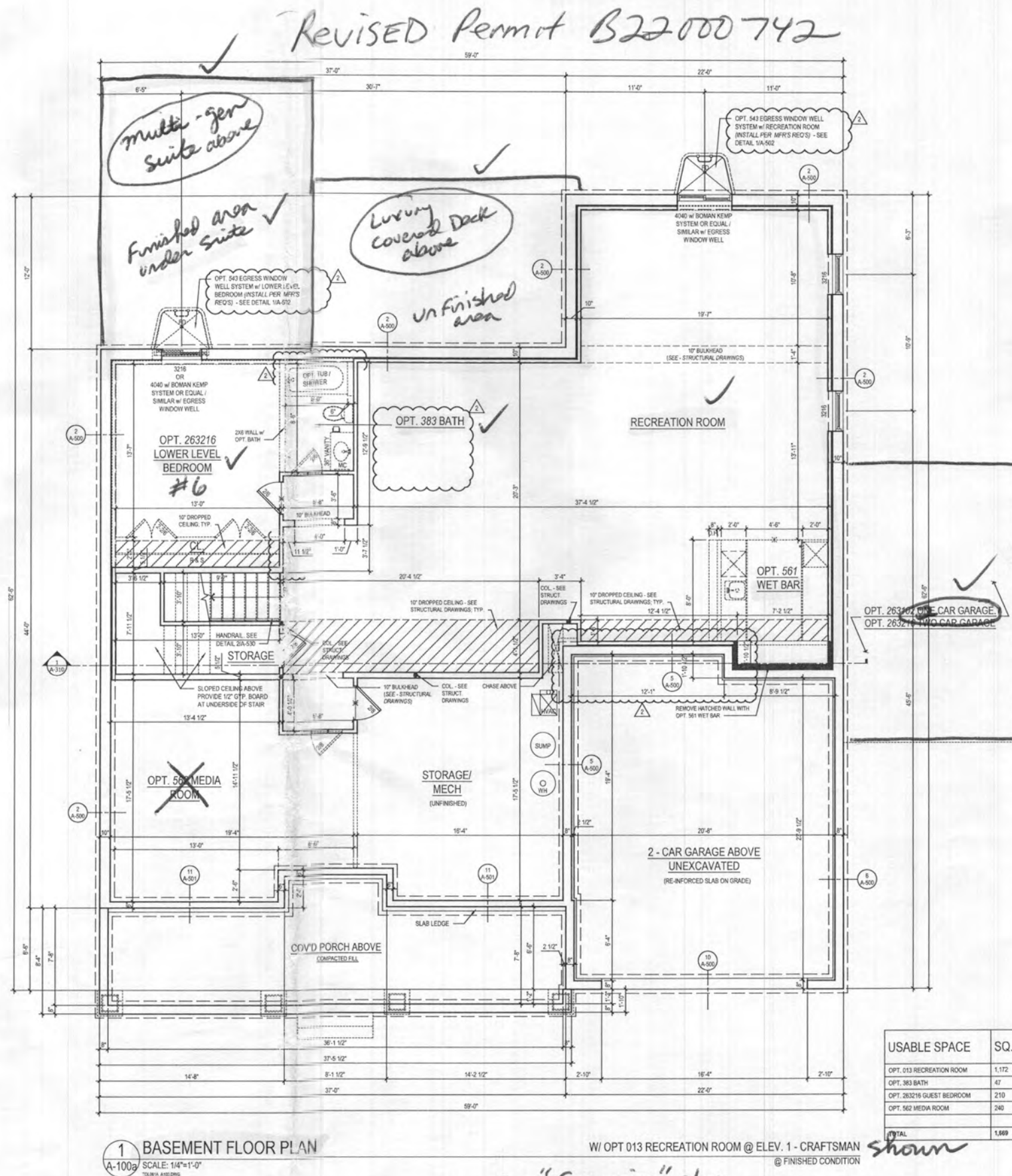
10517 Pudding Lane

LOT 32

Kings Forest

Approved Septic System Plan  
Howard County Health Department  
Dana Bernad 12-9-22  
Signature Date  
Approved for 6 BR only

- GENERAL PLAN NOTES
- ALL WOOD STUD PARTITIONS NOT DIMENSIONED ARE TO BE 3 1/2" FOR INTERIOR AND 5 1/2" FOR EXTERIOR WALLS UNLESS OTHERWISE NOTED.
  - ALL INTERIOR DIMENSIONS ARE TO FACE OF STUDS.
  - ALL EXTERIOR DIMENSIONS ARE TO FACE OF STUDS.
  - ALL DIMENSIONS GOVERN OVER SCALE.
  - ALL SMOKE DETECTORS ARE TO BE WIRED IN SUCH A MANNER THAT ACTIVATION OF ONE WILL ACTIVATE THEM ALL.
  - ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS AND SOFFITS PROTECTED ON ENCLOSED SIDE WITH 1/2" GYPSUM BOARD.
  - ALL WINDOWS SIZE ARE NOTED IN FEET + INCHES AS MEASURED FROM SASH TO SASH.
  - REFER TO ELEVATIONS FOR WINDOW HEAD HEIGHTS.
  - ALL DOORS ARE TO BE 6'-8" HIGH UNLESS OTHERWISE NOTED.
  - WASHER ALWAYS TO BE ON LEFT SIDE OF DRYER.
  - DISHWASHER ALWAYS TO BE ON RIGHT SIDE OF SINK.



ARCHITECT:

**lessard DESIGN**

8521 Leesburg Pike  
Suite 700 | Vienna, VA 22182  
P: 571.830.1800 | F: 571.830.1801  
www.lessarddesign.com

SEAL & SIGNATURE:

OWNER:

TOLL BROTHERS  
19775 BELMONT EXECUTIVE PLAZA  
ASHBURN, VA 20147  
P: 571.291.8068  
CONTACT: CHRISTINA LEHLEY  
clehley@tollbrothers.com

PROJECT NAME: PARKHURST FLOOR PLANS

ISSUE / REVISION

NO.	DESCRIPTION	DATE
1	BID SET	05.29.19
2	PERMIT SET	06.19.19
3	NO NEW STANDARDS	09.16.19
4	MR #220241	12.11.20

PROJECT No: TOL081a  
DRAWN BY: AC/RA  
CHECKED BY: AC/RA  
PLOT DATE: Jan. 20, 2022  
FILE NAME: TOL081a\_A100.dwg

A-100a