

FULTON RIDGE SHARED SEPTIC SYSTEM HOWARD COUNTY, MARYLAND

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DEVELOPER'S CERTIFICATION

"I / WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

DATE _____

SIGNATURE OF DEVELOPER _____
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATION

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

DATE _____

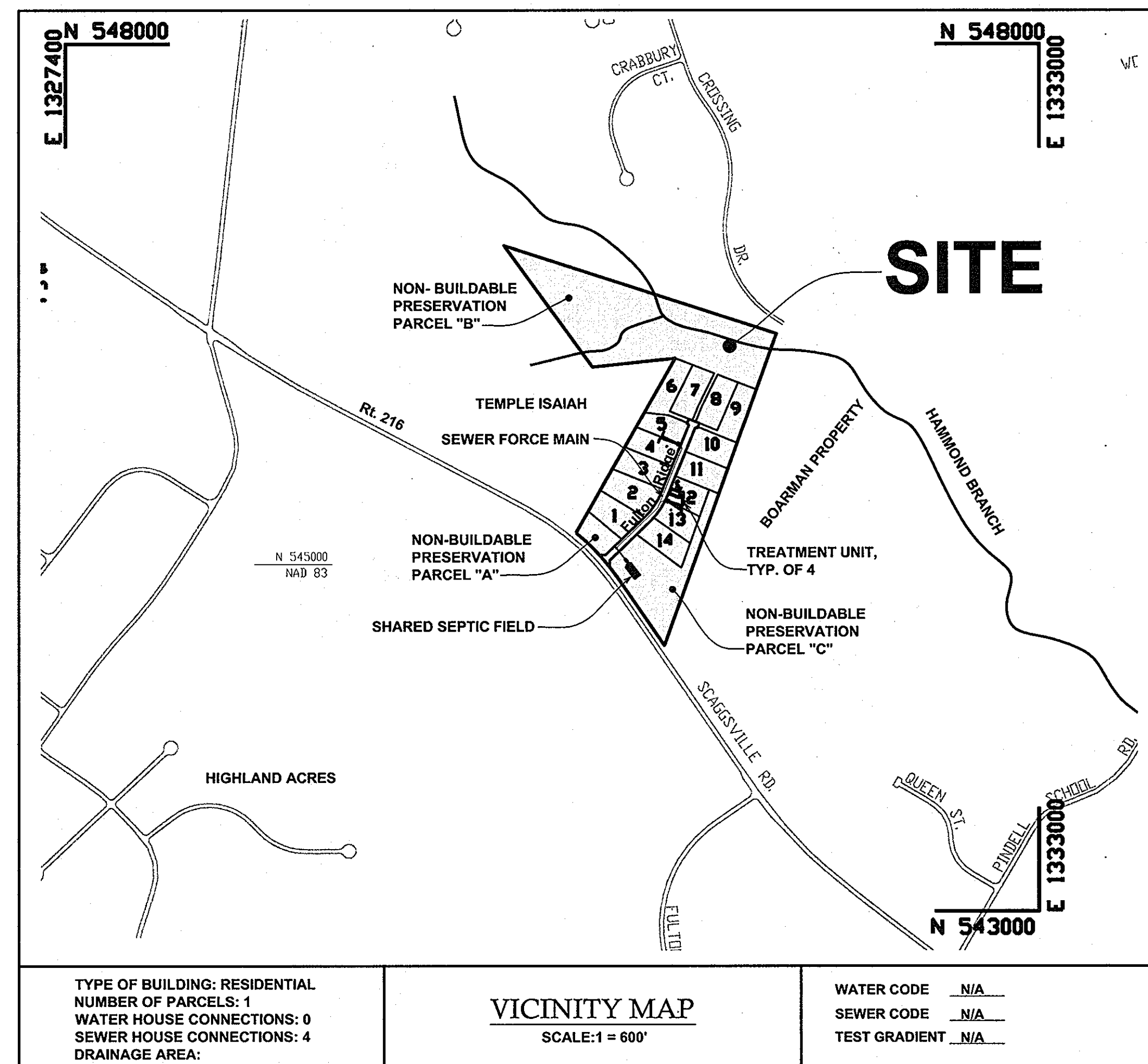
McCCRONE, INC.
20 RIDGELY AVENUE
ANNAPOLIS, MARYLAND
21401 (410) 267-8621

REVIEWED FOR HOWARD COUNTY S.C.D.
MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE DATE _____

THIS DEVELOPMENT PLAN IS APPROVED FOR THE SOIL EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY CONSERVATION DISTRICT.

APPROVED _____ DATE _____
HOWARD S.C.D.



TYPE OF BUILDING: RESIDENTIAL
NUMBER OF PARCELS: 1
WATER HOUSE CONNECTIONS: 0
SEWER HOUSE CONNECTIONS: 4
DRAINAGE AREA:

VICINITY MAP
SCALE: 1" = 600'

WATER CODE: N/A
SEWER CODE: N/A
TEST GRADIENT: N/A

GENERAL NOTES

PART I

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES, NAD 83/91.
- ALL VERTICAL CONTROLS ARE BASED ON USGS DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [] AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

AT&T.....1-800-252-1133
BGE (CONTRACTOR SERVICES).....410-850-4620
BGE (UNDERGROUND DAMAGE CONTROL).....410-787-9068
BUREAU OF UTILITIES.....410-313-4900
COLONIAL PIPELINE CO.....410-795-1390
MISS UTILITY.....1-800-257-7777
STATE HIGHWAY ADMINISTRATION.....410-531-5533
VERIZON.....1-800-743-0033 / 410-224-9210

- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATERSSEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. AND P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE SDR 21 P.V.C.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVICE.

TRENCH REQUIREMENTS:

THE FOLLOWING 4 LOTS ARE TO BE SERVED BY THE SHARED SYSTEM: LOTS 4, 5, 12, AND 13.

*USE 5 BEDROOM PER HOUSE.

750 GPD PER HOUSE
750 GPD/HOUSE x 4 HOUSES = 3,000 GPD
3,000 GPD / 0.71 GPD/SQ.FT. = 4,225 SQ. FT. EFFECTIVE AREA
4,225 SQ.FT. x 0.50' / 3 FT. WIDE TRENCH = 704 L.F. (REQUIRED)
PROVIDED: 765 L.F. (9 TRENCHES 85-FEET LONG EACH)

*USE 50% OF STANDARD TRENCH LENGTH FOR 3 FT. WIDE AND 3 FT. DEEP STANDARD TRENCH.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.



M. NAJIB ROSHAN
LICENSE No. 11049
EXPIRATION DATE, FEB 10, 2013

OWNER:
CHRISTOPHER R. COLE
GAIL VICTORIA GRAY
12182 SCAGSVILLE RD.
FULTON, MD 20759
301-776-0181

DEVELOPER:
CHRISTOPHER R. COLE
GAIL VICTORIA GRAY
12182 SCAGSVILLE RD.
FULTON, MD 21044
443-535-9200

AS-BUILT

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	AS-BUILT	
			TYPE	MANUF./SUPPLIER
DUPLIX GRINDER PUMPS	2 E.A.		1000 SERIES DUPLEX	ENVIRONMENTAL ONE CORP.
1 1/2" HOUSE CONNECTION	60		SDR - 11	FLYING "W" PLASTICS, INC.
2" FORCE MAIN	720		SDR - 11	FLYING "W" PLASTICS, INC.
TERMINAL FLUSHING CONNECTION	1			
TRANSITION MH	1			
4" PVC SCH 40 PERFORATED LATERAL	425			
4" PVC SCH 40 GRAVITY PIPE	191			
6,200 GALLON SEPTIC TANK	1		6200 GAL. TWO COMP. TANK	MAYERS BROTHERS, INC.
DISTRIBUTION BOX	1		CUSTOM DIST. BOX	MAYERS BROTHERS, INC.
1,500 GALLON SEPTIC TANKS	4			
TREATMENT UNITS	4		MICRO FAST MODEL 075F	
AIR RELEASE MANHOLE	1		APCO MODEL 400 ARV	BEL AIR ROAD SUPPLY

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Robert J. Weber 6/29/06
HOWARD COUNTY HEALTH OFFICER DATE

HOWARD SOIL CONSERVATIONS DISTRICT:
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer 7/20/06
USDA NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John K. Roberts 7/20/06
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS PER F-06-111

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Ruth B... 7-5-06
CHIEF, BUREAU OF UTILITIES DATE

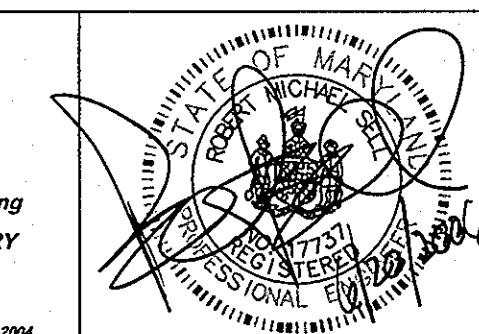
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature] 7/20/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

McCCRONE

• Engineering • Environmental Sciences
• Construction Services • Land Planning & Surveying
ANNAPOLIS • CENTREVILLE • DOVER • ELKTON • SALISBURY

20 RIDGELY AVENUE
ANNAPOLIS, MARYLAND 21401
PHONE (410) 267-8621 FAX (410) 267-8932
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DES: B.T.D., N.V.S.				
DRN: B.T.D., N.V.S.				
CHK: R.M.S.				
DATE: MAY., 2006	BY	No.	REVISION	DATE

TITLE SHEET

JOB No. C1050045

FULTON RIDGE SHARED SEPTIC SYSTEM

LOTS 1, 14
CONTRACT # 50-4293-D
TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 9



GENERAL SITE LAYOUT

SCALE: 1" = 50'

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 Robert J. Walden
 HOWARD COUNTY HEALTH OFFICER
 6/28/06
 DATE

HOWARD SOIL CONSERVATIONS DISTRICT:
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND
 MEETS TECHNICAL REQUIREMENTS.
 Jim Meyer
 USDA NATURAL RESOURCES CONSERVATION SERVICE
 7/20/06
 DATE

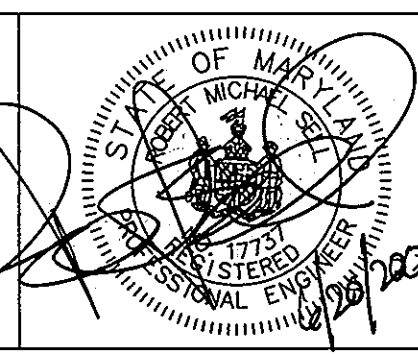
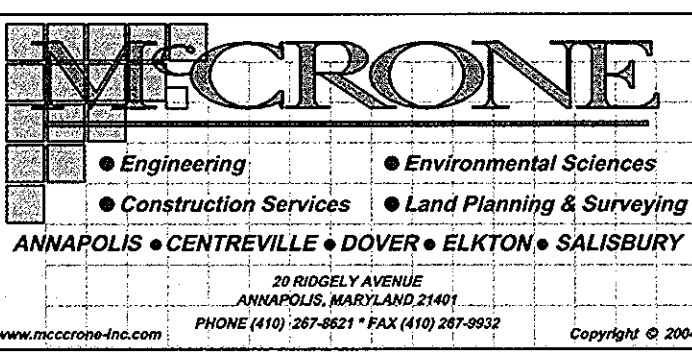
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY
 THE HOWARD SOIL CONSERVATION DISTRICT.
 John K. Blanton
 HOWARD SOIL CONSERVATION DISTRICT
 7/20/06
 DATE

- GENERAL NOTES:
 1) THE OWNER IS IN THE PROCESS OF APPLYING FOR A VARIANCE TO THE FRONT YARD SET BACK REQUIREMENTS. IF THIS VARIANCE IS APPROVED THE SHED AND FENCE SHALL BE INSTALLED PER OPTION 2, OTHERWISE THE SHED AND FENCE SHALL BE INSTALLED PER OPTION 1.
 2) CONTRACTOR TO ABANDON ALL EXISTING DWELLING, WELL, SEPTIC SYSTEM AND SEWAGE DISPOSAL AREA.
 3) TEST STATIONS TO BE PLACED AT 200' INTERVALS.
 4) TRACER WIRE CONNECTIONS OFF OF THE MAIN MUST BE OVERLAPPING, INSULATED #6, FIRMLY CONNECTED AND ENCAPSULATED.
 5) Spoil from trenching operations is to be placed on the uphill side of trench

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS PER F-05-29.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert J. Walden
 CHIEF, BUREAU OF UTILITIES
 7-5-06
 DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE



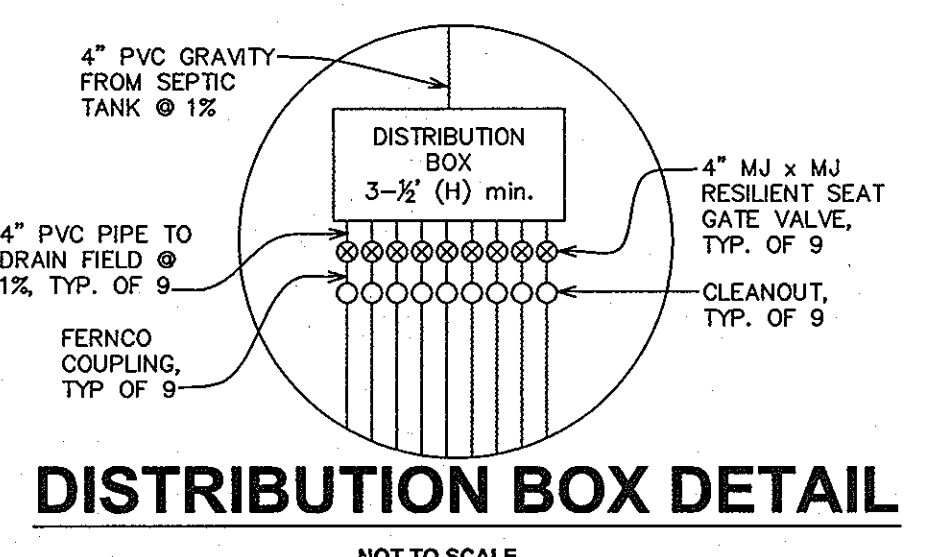
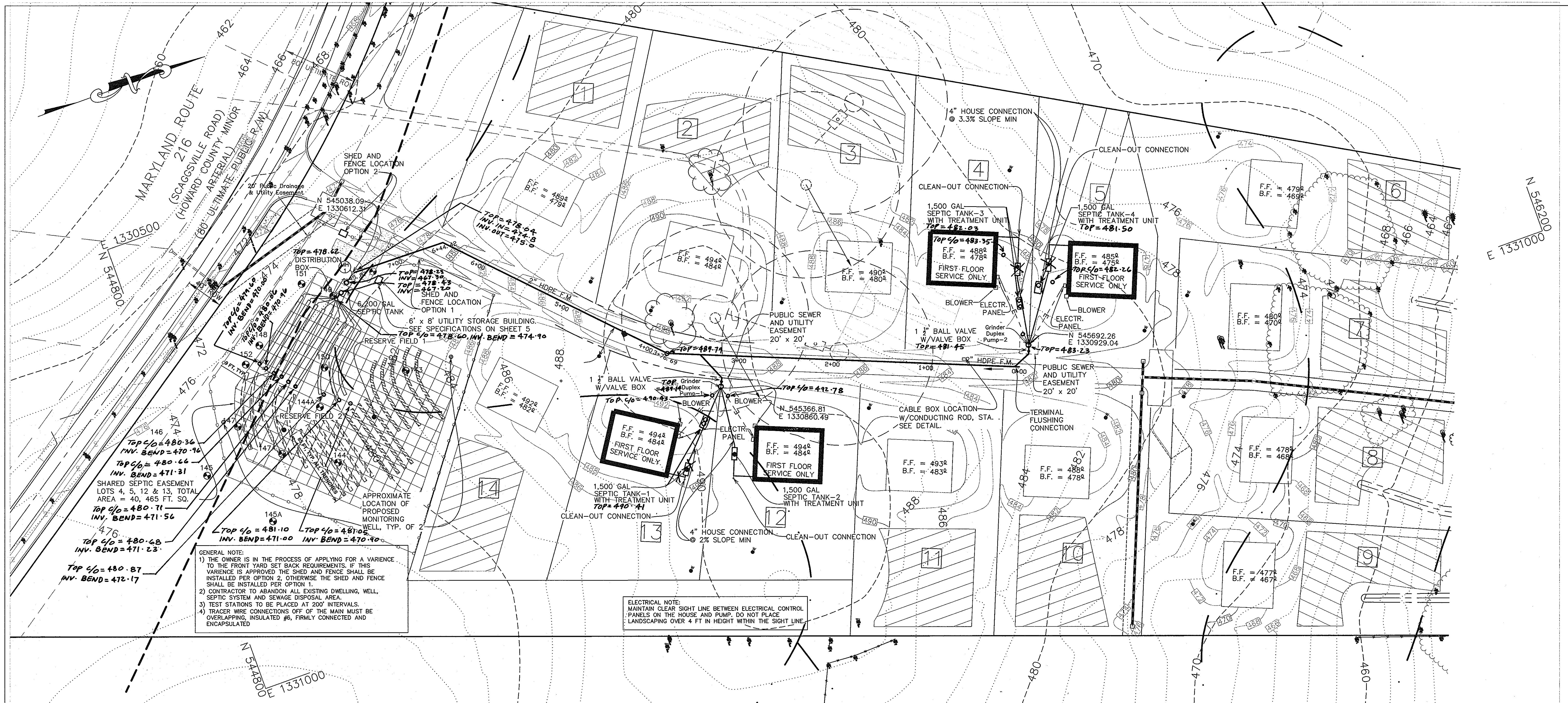
DES: B.T.D., N.V.S.					
DRN: B.T.D., N.V.S.					
CHK: R.M.S.					
DATE: MAY, 2006	BY	No.	REVISION	DATE	

GENERAL SITE LAYOUT
 JOB No. C1050045

FULTON RIDGE SHARED SEPTIC SYSTEM
 LOTS 1-14
 CONTRACT # 50-4293-D
 TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 2 OF 9



THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.
 AS-BUILT
 McKenna 06/10/2011



APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Robert J. Walter
HOWARD COUNTY HEALTH OFFICER
DATE: 6/28/06

HOWARD SOIL CONSERVATIONS DISTRICT:
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE
DATE: _____

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
DATE: _____

HOWARD SOIL CONSERVATION DISTRICT
DATE: _____

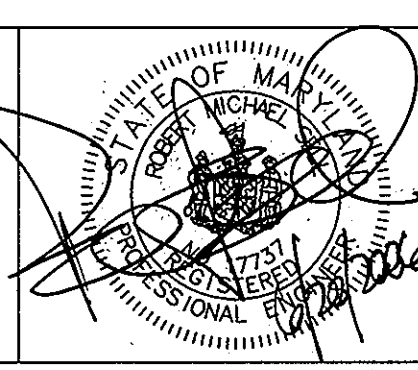
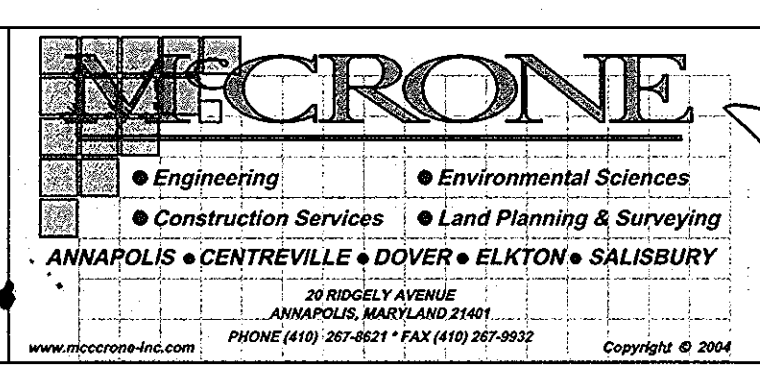
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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. Walter
CHIEF, BUREAU OF UTILITIES
DATE: 7-5-06

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: _____



DES: B.T.D., N.V.S.			
DRN: B.T.D., N.V.S.			
CHK: R.M.S.			
DATE: MAY, 2006	BY	No.	REVISION
			DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

M. Najib Rosnan
M. NAJIB ROSNAN
LICENSE No. 11049
EXPIRATION DATE, FEB. 10, 2013

M. Najib Rosnan
06/10/2012



NAME	TOP ELEVATION	INVERT ELEVATION	MODEL
GRINDER PUMP - 1	489	485.00	2014-93
GRINDER PUMP - 2	483	474.92	2014-129*
SEPTIC TANK 1		487.45 IN	1,500 GAL STD
		487.20 OUT	
SEPTIC TANK 2		487.45 IN	1,500 GAL STD
		487.20 OUT	
SEPTIC TANK 3		477.67 IN	1,500 GAL STD
		477.42 OUT	
SEPTIC TANK 4		477.67 IN	1,500 GAL STD
		477.42 OUT	
SEPTIC TANK 5		474.23 IN	6,200 GAL STD
		473.98 OUT	

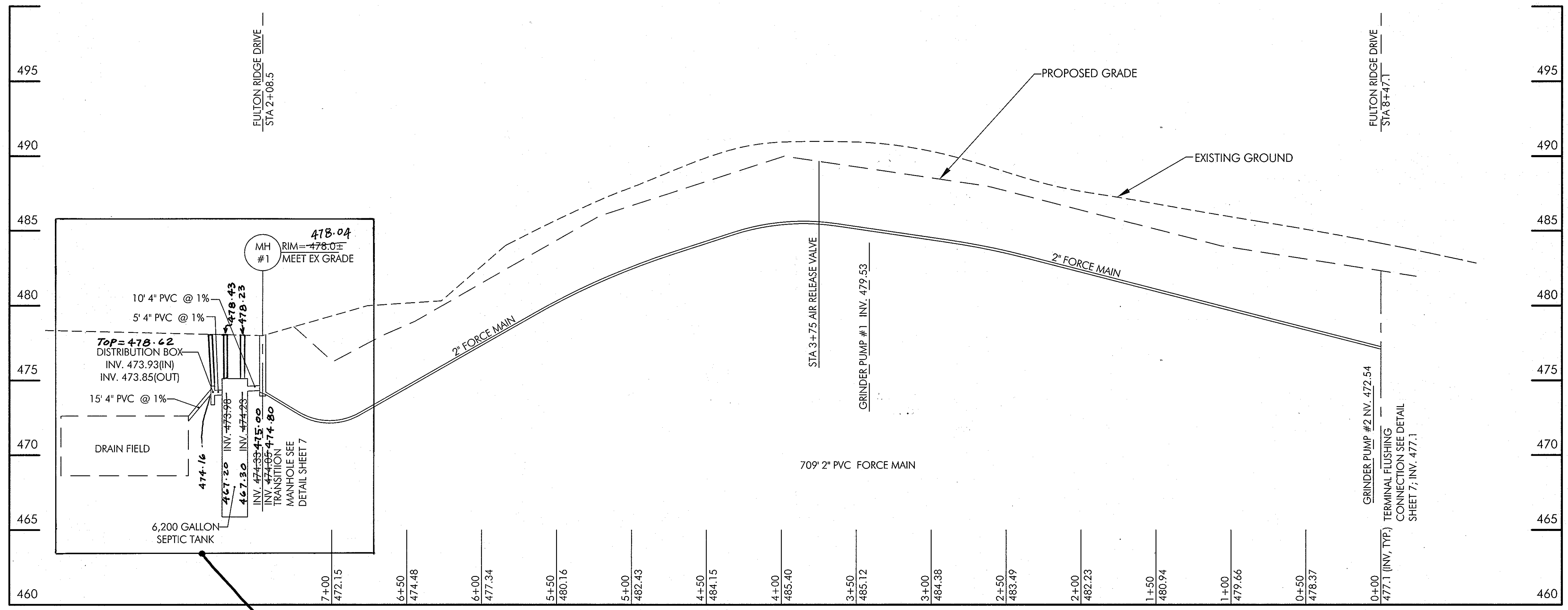
* - GRINDER PUMP MUST BE GREATER THAN THE REQUIRED 10' DEEP TO BE ABLE TO SERVE THE FIRST FLOOR OF THE HOUSES.

AS-BUILT
FULTON RIDGE SHARED SEPTIC SYSTEM

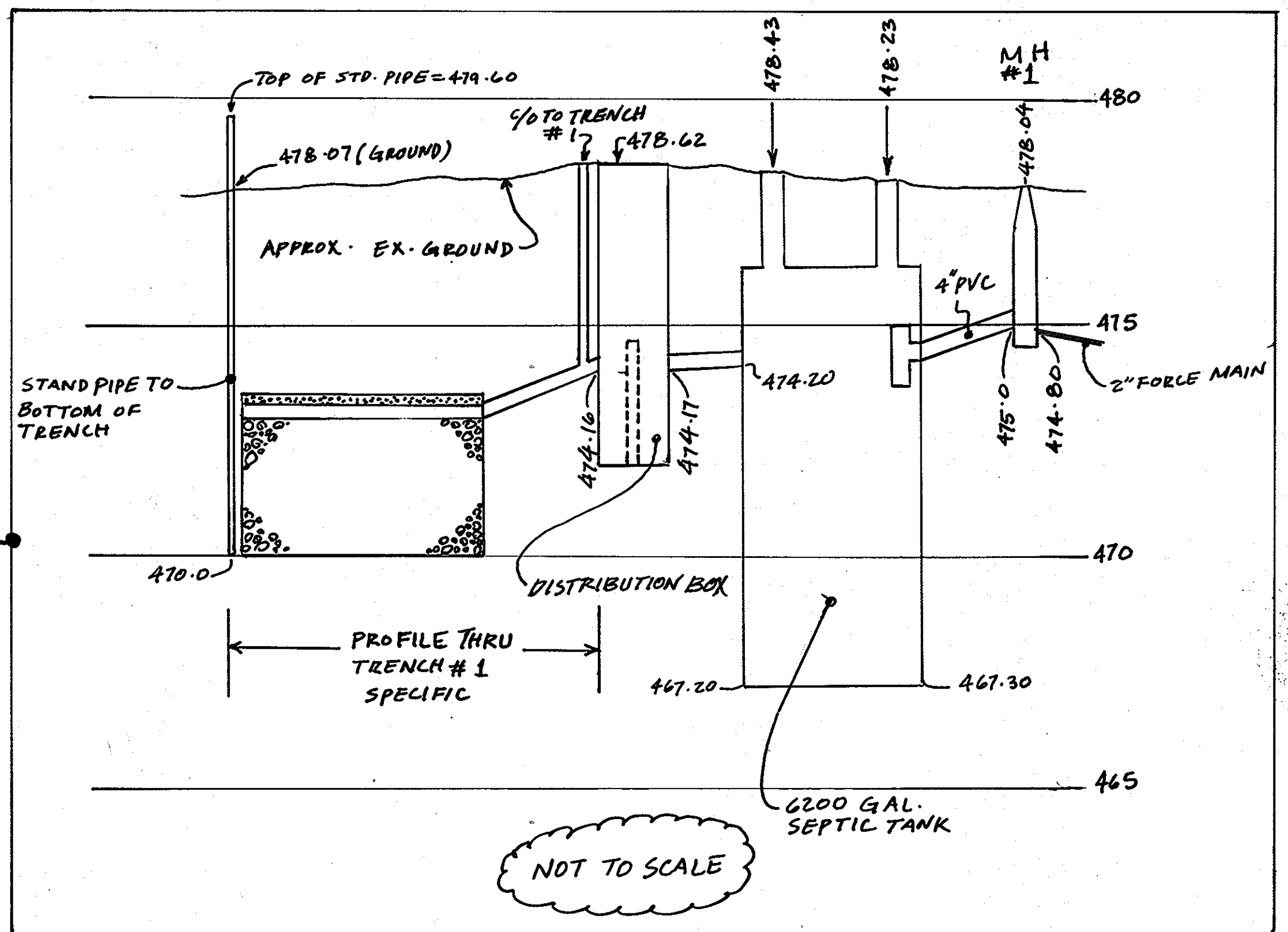
LOTS 1 - 14
CONTRACT # 50-4293-D
TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SEWER PLAN VIEW

JOB No. C1050045



PLAN
 1" = 50' HORIZONTAL;
 1" = 5' VERTICAL



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

M. NAJIB ROSHAN
 LICENSE No. 11049
 EXPIRATION DATE, FEB. 10, 2013

M. Najib Roshan
 06/10/2012

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

Robert J. Weller
 HOWARD COUNTY HEALTH OFFICER
 DATE: 6/25/06

HOWARD SOIL CONSERVATIONS DISTRICT:
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE
 DATE: _____

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

JUN
 HOWARD SOIL CONSERVATION DISTRICT
 DATE: _____

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS PER F-05-29.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Robert J. Weller
 CHIEF, BUREAU OF UTILITIES
 DATE: 6/25/06

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

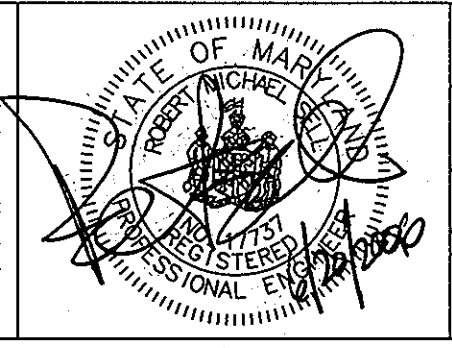
[Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: _____

MICRONE

Engineering • Environmental Sciences
 Construction Services • Land Planning & Surveying

ANNAPOLIS • CENTREVILLE • DOVER • ELKTON • SALISBURY

20 RIDGELY AVENUE
 ANNAPOLIS, MARYLAND 21401
 PHONE: (410) 291-8221 FAX: (410) 291-9932
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DES: D.U.S.					
DRN: D.U.S.					
CHK: R.M.S.					
DATE: MAY., 2006	BY	No.	REVISION	DATE	

PROFILES

JOB No. C1050045

FULTON RIDGE SHARED SEPTIC SYSTEM

LOTS 1-14
 CONTRACT # 50-4293-D
 TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

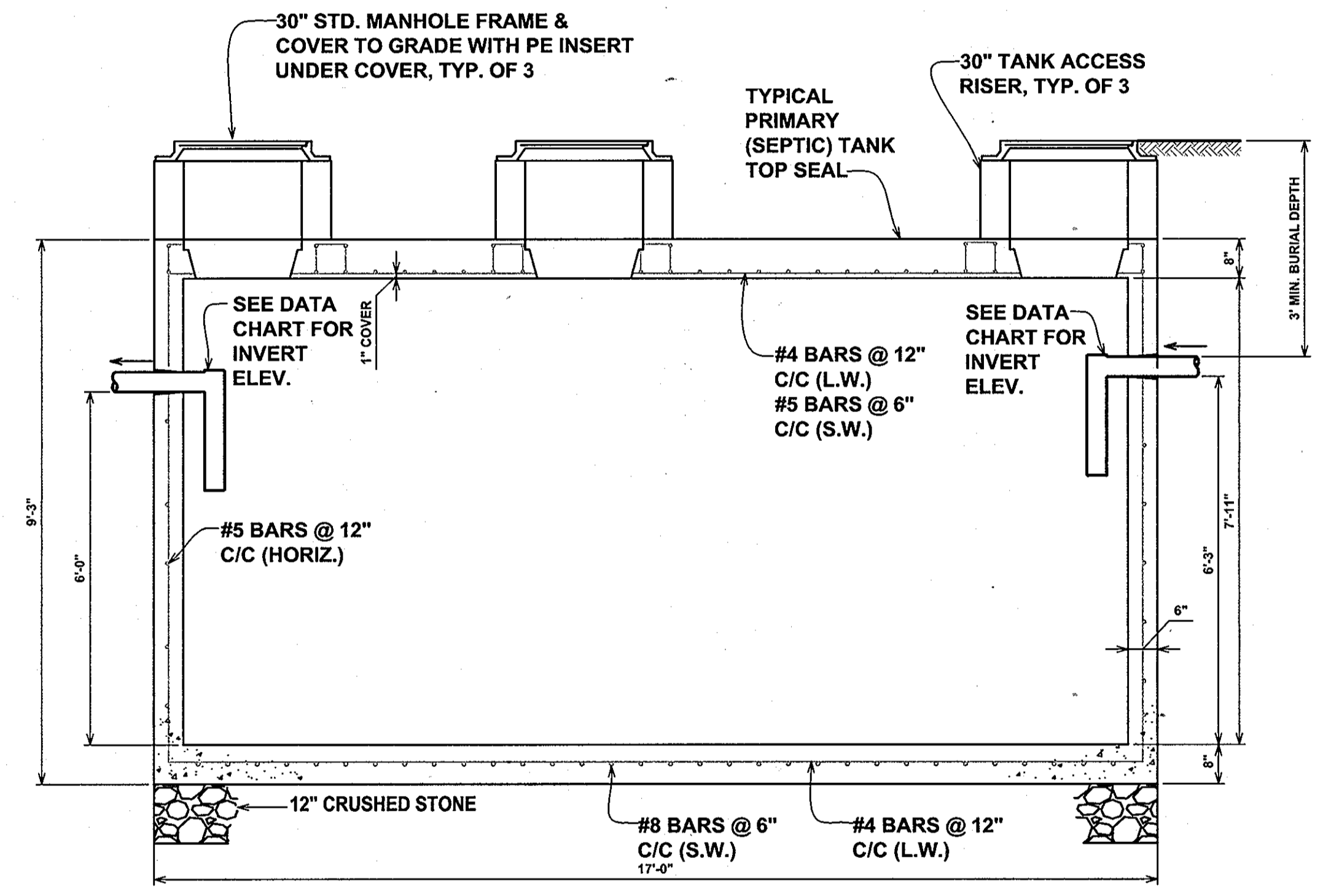
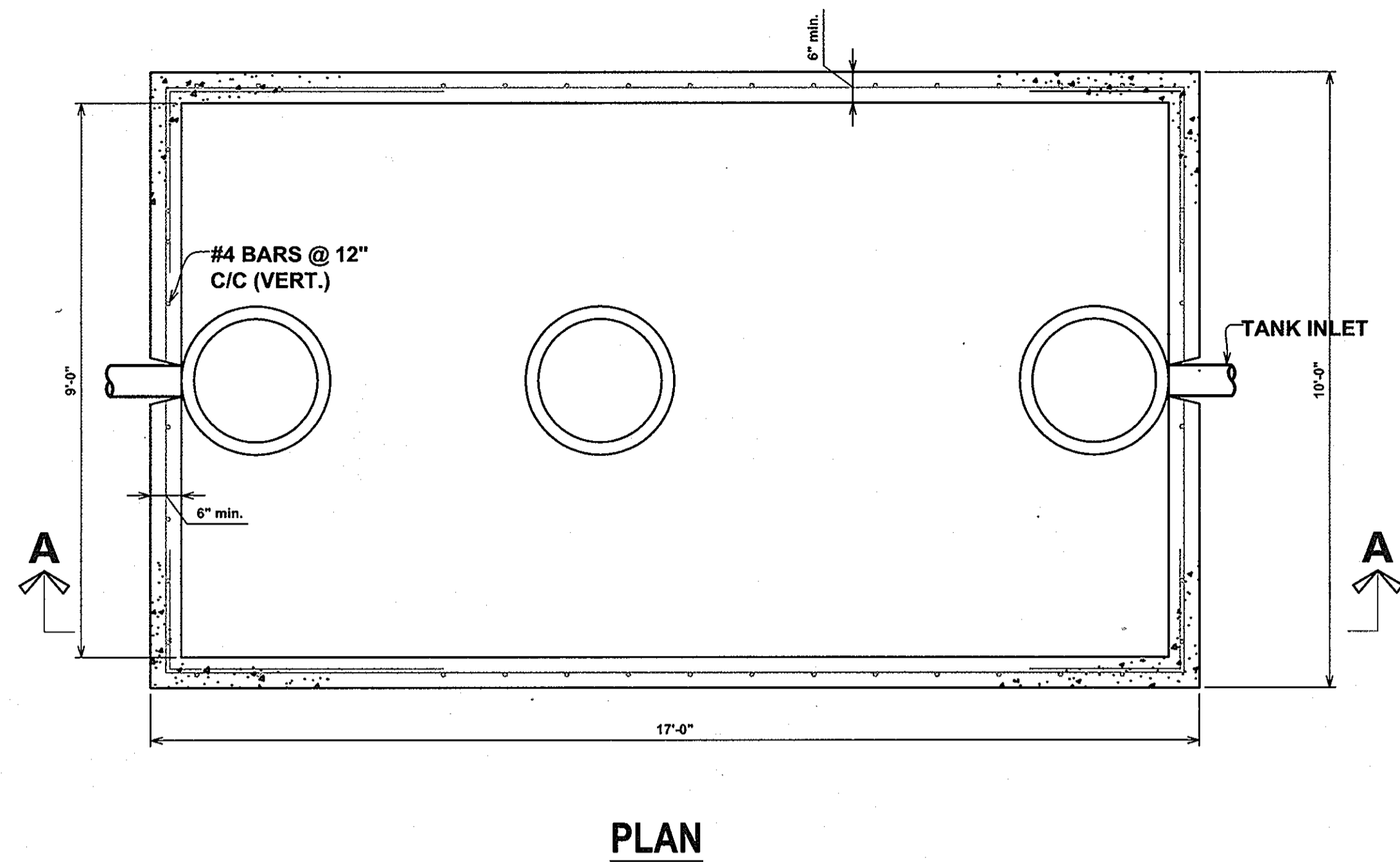
SHEET 4 OF 9

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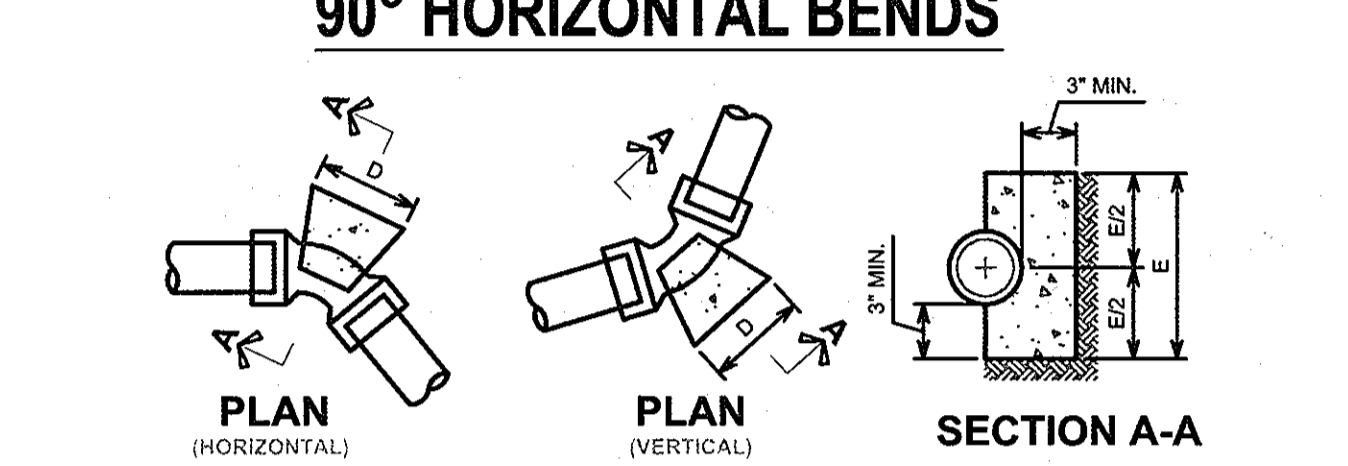
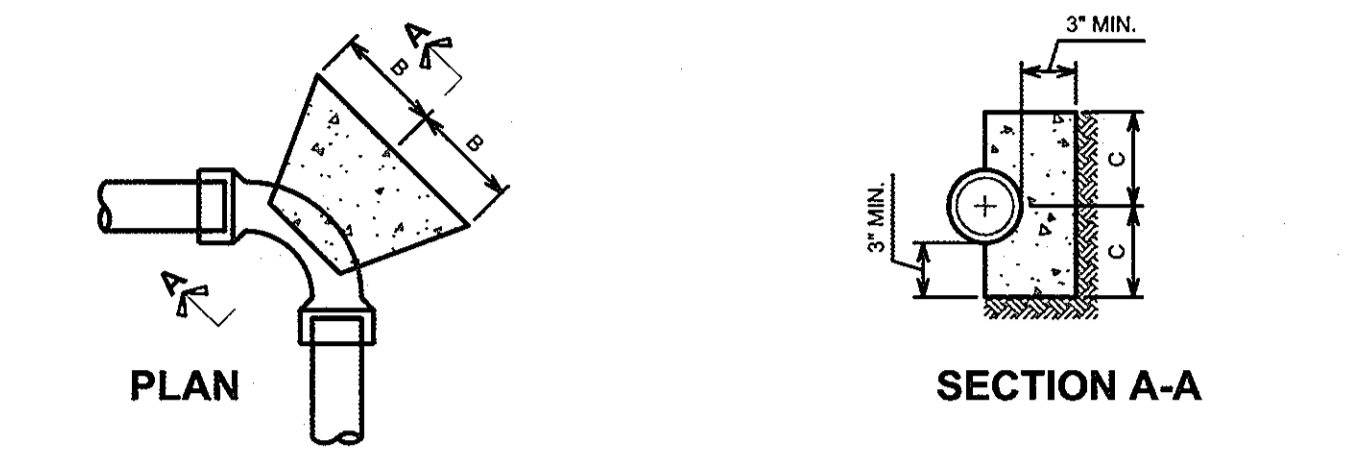
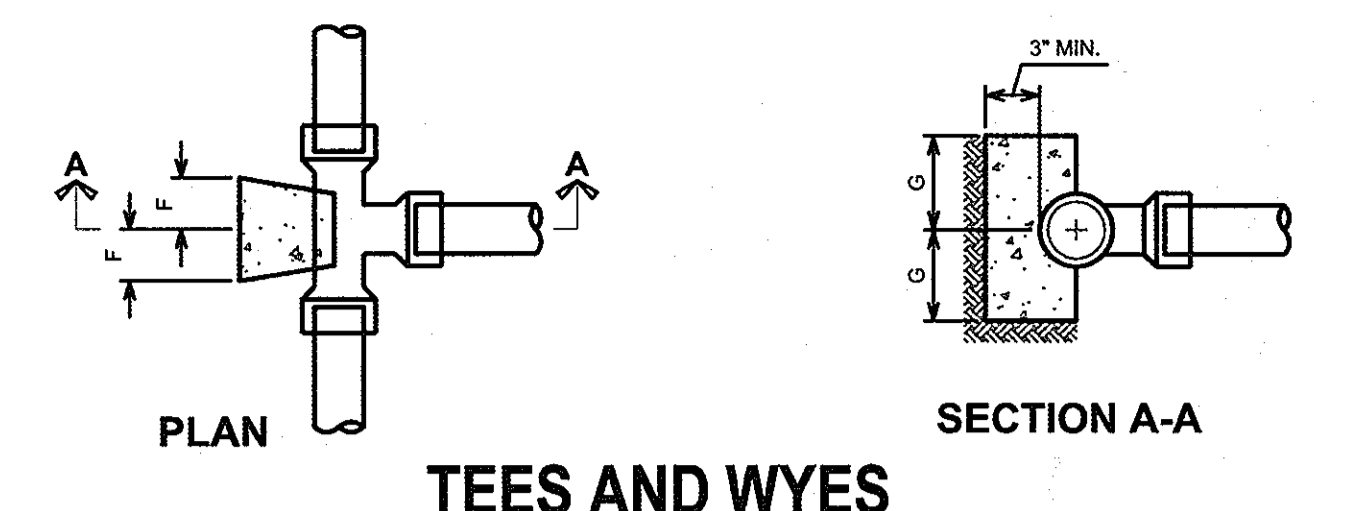
CADD FILE: G:\1050045 - Fulton Ridge Septic.dwg\Shared Septic Design\PM PROFILE.dwg Tab..... PLAN & PROFILE

NOTES

1. THE CONTRACTOR SHALL INSTALL DISTRIBUTION BOX, VALVE BOX AND TURF BOX AT GRADE TO MINIMIZE PROTRUSIONS ABOVE GRADE.
2. THE CONTRACTOR SHALL FRAME AND GRAVEL THE AREA IMMEDIATELY SURROUNDING THE DISTRIBUTION BOX; ENCOMPASS THE CLEANOUT STANDPIPES TO ASSIST WITH GROUNDS MAINTENANCE.
3. THE CONTRACTOR SHALL INSTALL STANDARD FRAME AND MANHOLE COVER WITH PLASTIC INSERT UNDER LID.
4. THE CONTRACTOR SHALL PROVIDE EFFLUENT FILTER FOR SEPTIC TANK IN WHICH ONE CARTRIDGE OFF OF THE TEE CAN HANDLE THE EXPECTED FLOW; THE EFFLUENT FILTER SHALL BE MANUFACTURED BY ZABEL OR ORENCO.
5. THE CONTRACTOR SHALL INSTALL "STAND-OFF" SUPPORTS FOR TAIL ENDS OF INLET AND OUTLET TEES AND ANCHOR THEM AGAINST SIDEWALLS OF TANK.



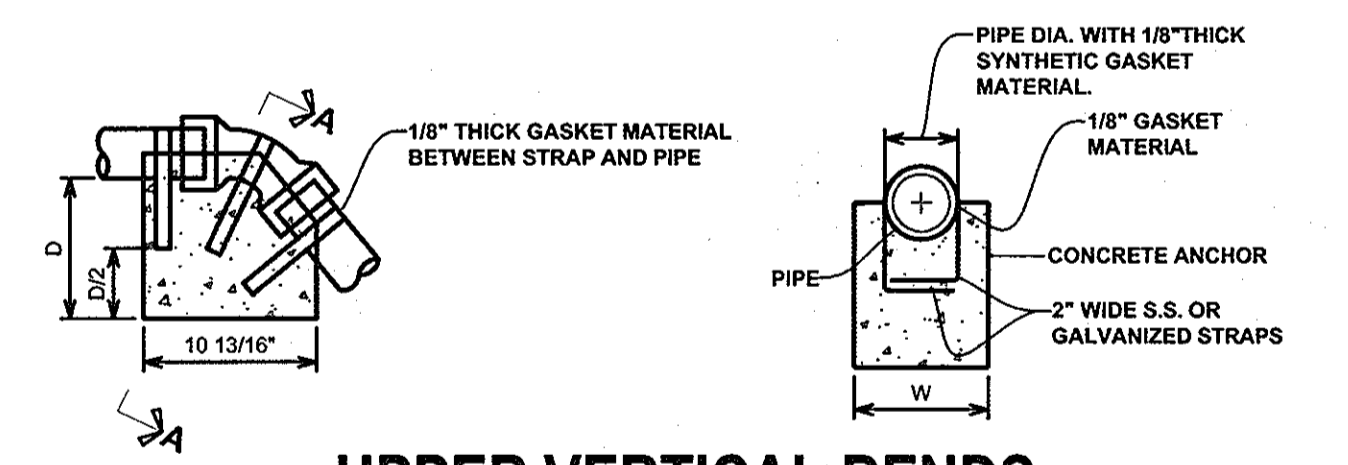
SECTION
6,200 GAL SEPTIC TANK
SCALE: 1/2" = 1'-0"



BUTTRISS DIMENSIONS						
PIPE SIZE	B	C	D	E	F	G
1 1/2" OR 2"	4 1/2"	4 1/2"	5"	9"	4 1/2"	4"
2"	5"	5"	7"	7"	5"	5"
2 1/2"	5"	5"	7"	7"	5"	5"
3"	6"	6"	9"	9"	6"	6"

- NOTES:
 1. FC-3000 P.S.I. @ 28 DAYS
 2. CARRY ALL BEARING SURFACES TO UNDISTURBED GROUND OR FIRM SUBGRADE.
 3. BUTTRISS SIZED FOR 160 P.S.I. AND SOIL WITH C = 2000 P.S.I.

11 1/4°, 22 1/2°, 45° HORIZONTAL AND LOWER VERTICAL BENDS
NOT TO SCALE



UPPER VERTICAL BENDS
NOT TO SCALE

BEND		SIZE IN INCHES		
		1 1/4", 1 1/2"	2", 2-1/2"	3"
11 1/4°	L	12	15	18
	W	10	12	15
	D	10	15	15
22 1/2°	L	15	20	20
	W	15	20	20
	D	12	12	18
45°	L	20	24	24
	W	20	20	24
	D	12	20	24

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.

AS-BUILT
FULTON RIDGE SHARED SEPTIC SYSTEM
 LOTS 1-14
 CONTRACT # 50-4293-D
 TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

Robert J. Walden
 HOWARD COUNTY HEALTH OFFICER
 DATE: 6/25/06

HOWARD SOIL CONSERVATIONS DISTRICT:
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE
 DATE: _____

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT
 DATE: _____

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS PER F-05-29.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

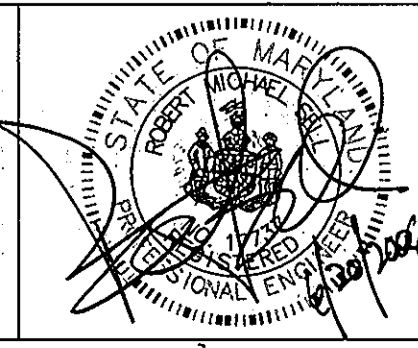
Robert J. Walden
 CHIEF, BUREAU OF UTILITIES
 DATE: 7-5-06

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

[Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3/1/06

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 • Construction Services • Land Planning & Surveying
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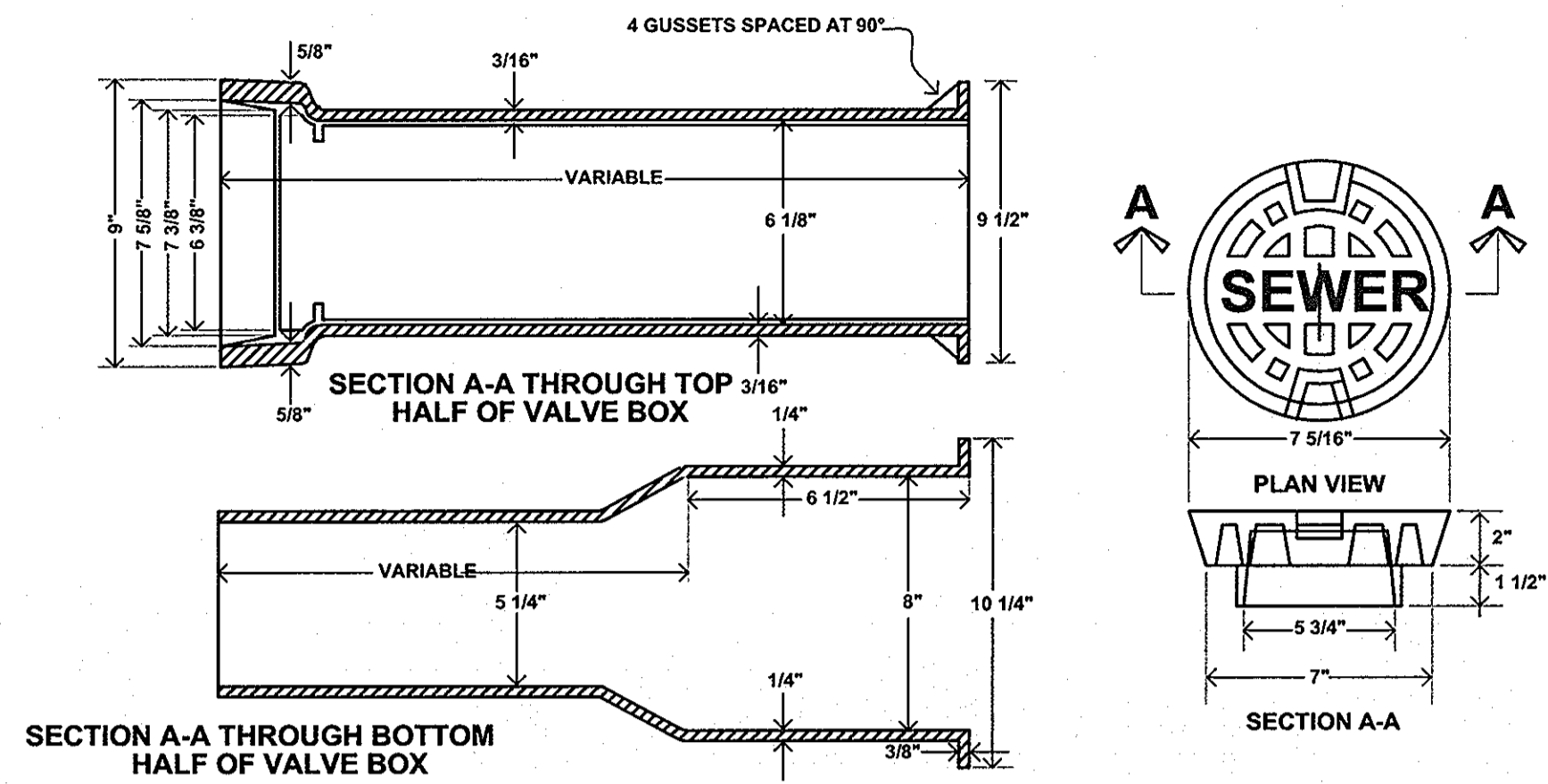


DES: B.T.D., N.V.S.					
DRN: B.T.D., N.V.S.					
CHK: R.M.S.					
DATE: MAY., 2006	BY	No.	REVISION	DATE	

DETAILS

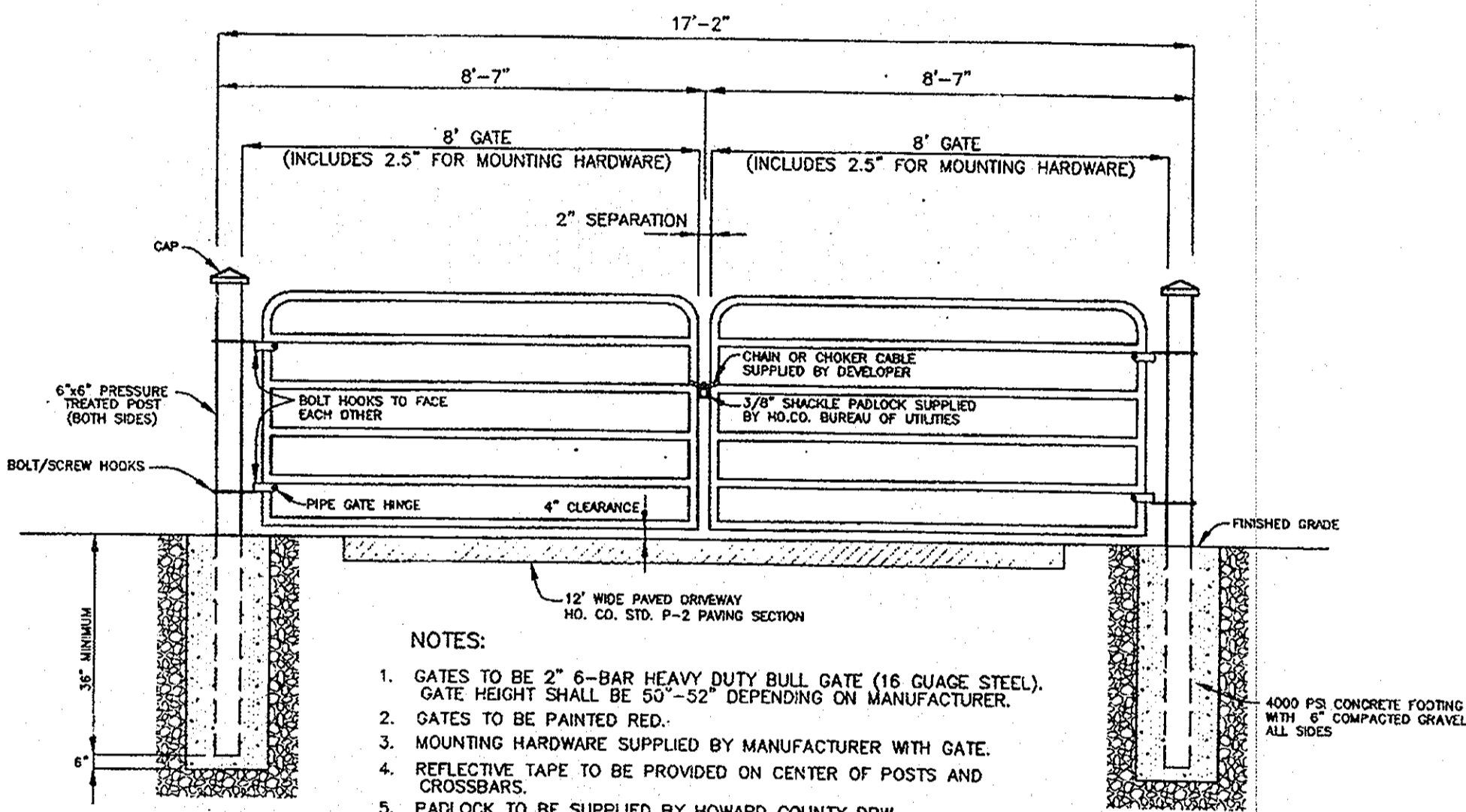
JOB No. C1050045

- SPECIFICATIONS:**
1. CAST IRON-SLIDING TYPE MIN. T.S. 30,000 PSI
 2. TOP SECTION- 16" BOTTOM SECTION 18"
 3. BOXES ADJUSTABLE 34" TO 46"
 4. TOP SECTION- 16" BOTTOM SECTION 30" MIN. WT. PER BOX- 100 LBS



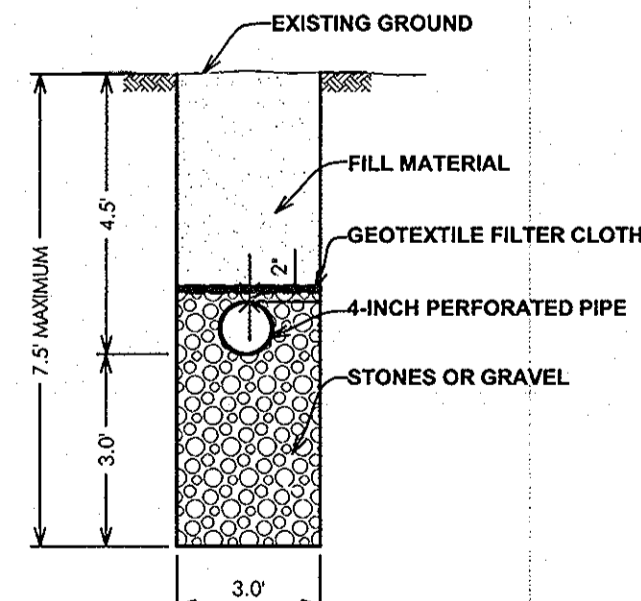
**ADJUSTABLE VALVE BOX ROUND
HEAD SLIDING TYPE**

NOT TO SCALE



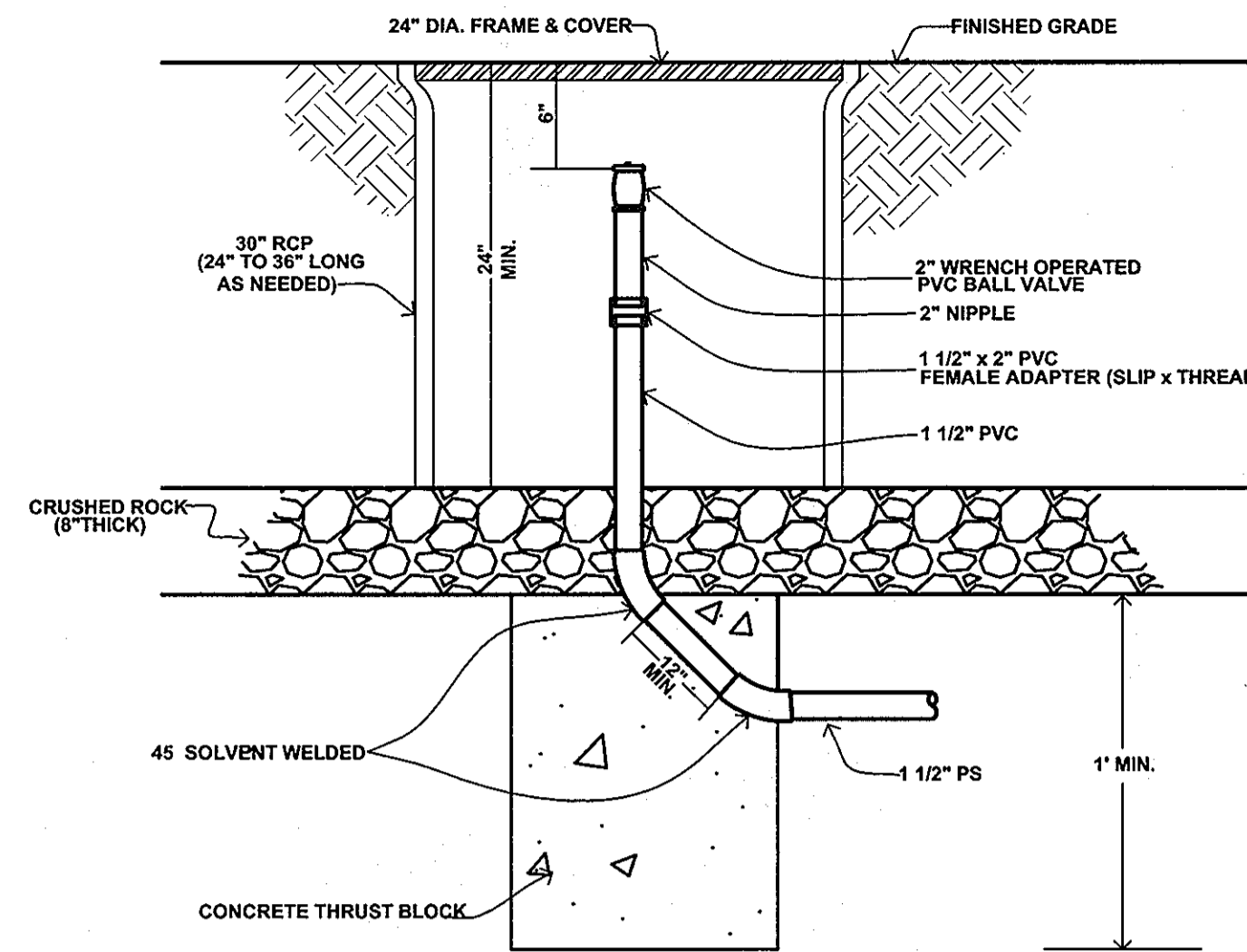
GATE DETAIL

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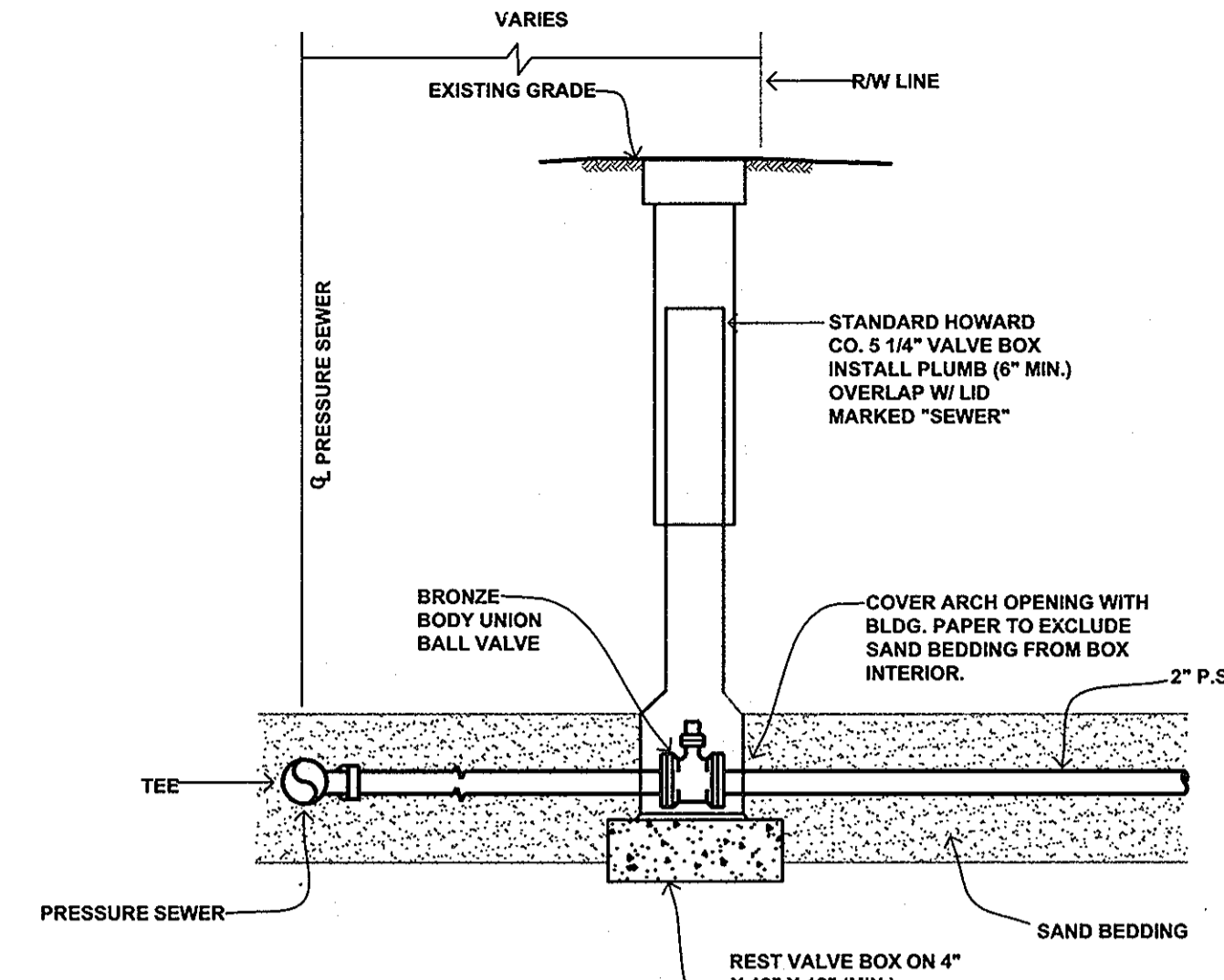
SEPTIC TRENCH DETAIL

NOT TO SCALE



TERMINAL FLUSHING CONNECTION

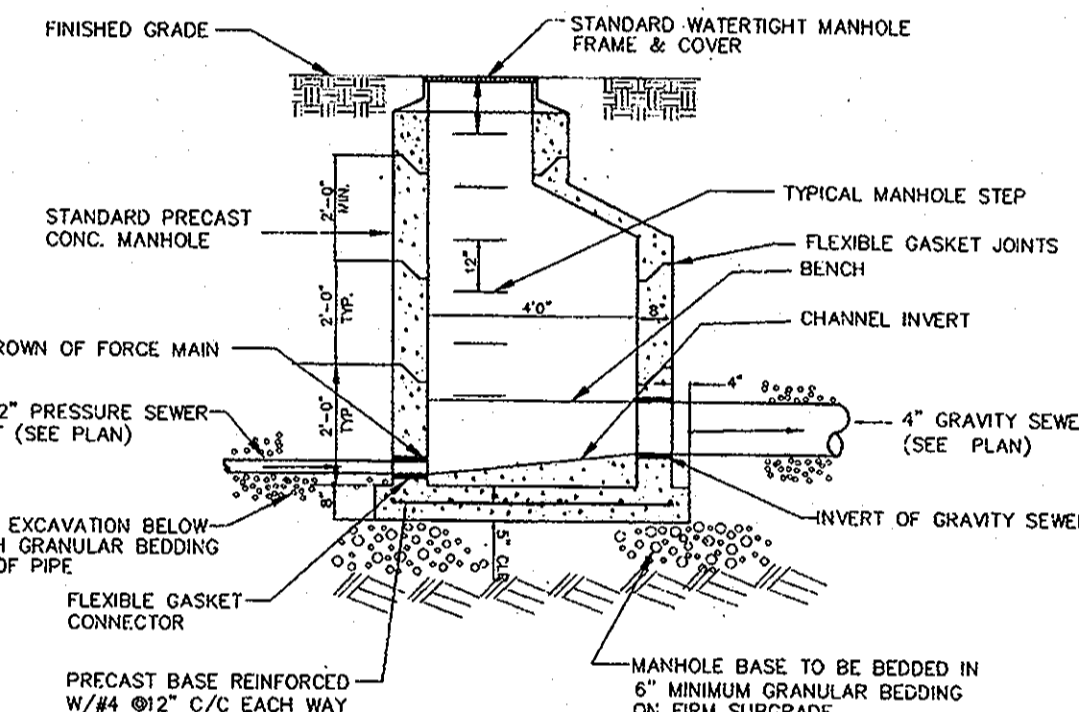
NOT TO SCALE



- NOTES:**
1. MAINTAIN 4" MIN. COVER OVER PRESSURE SEWER.
 2. CONCRETE SLAB ON UNDISTURBED EARTH OR FIRM SUBGRADE.

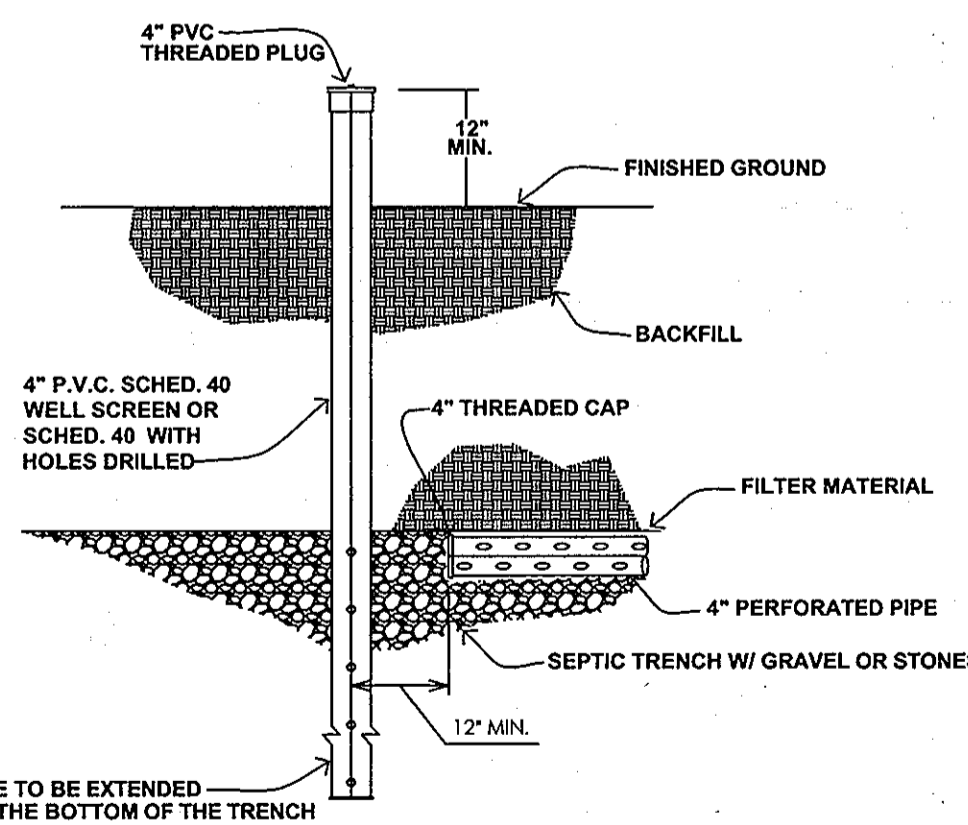
UNION BALL VALVE ASSEMBLY

NOT TO SCALE



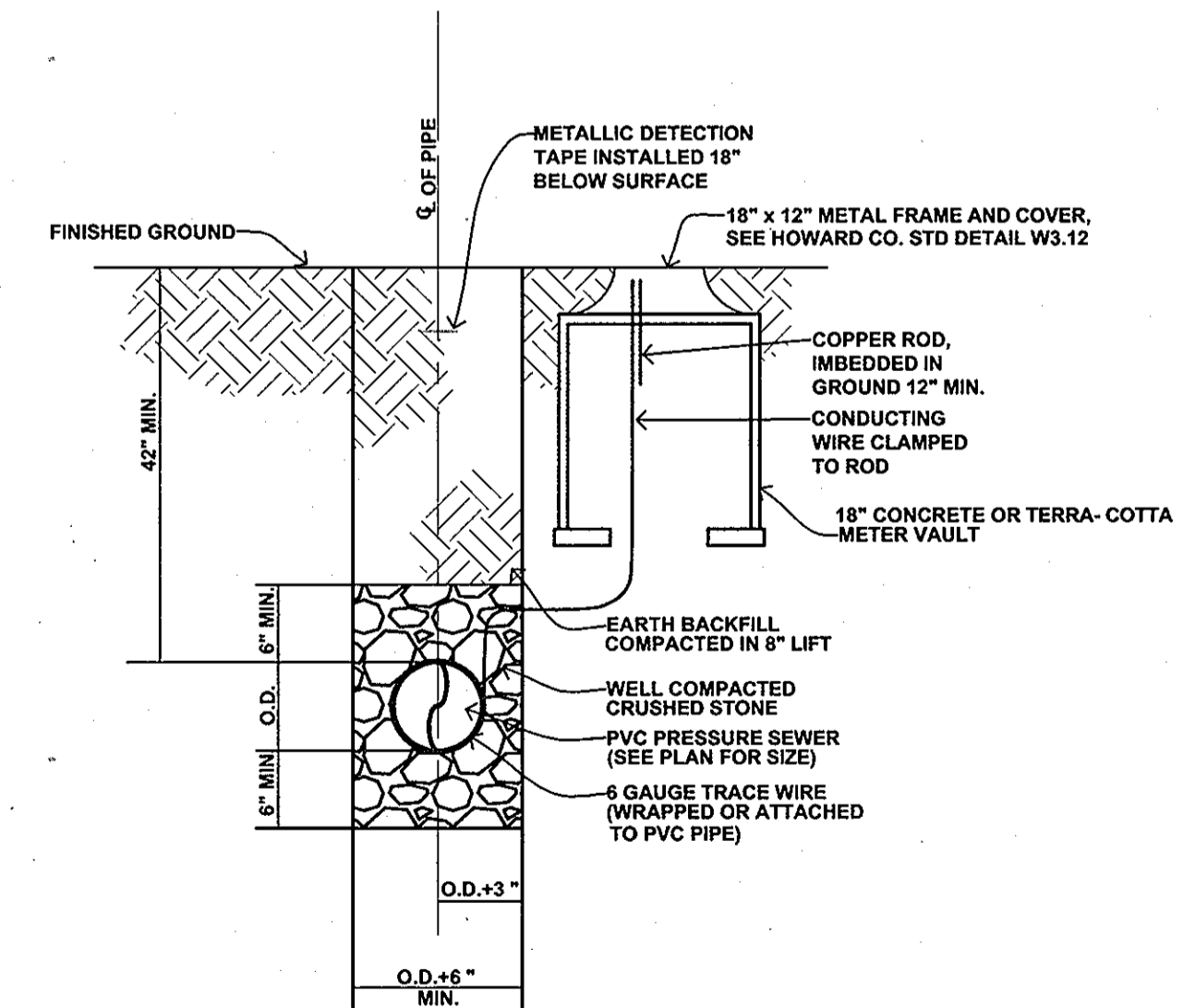
**TRANSITION MANHOLE: PRESSURE SEWER TO
GRAVITY SEWER**

NOT TO SCALE



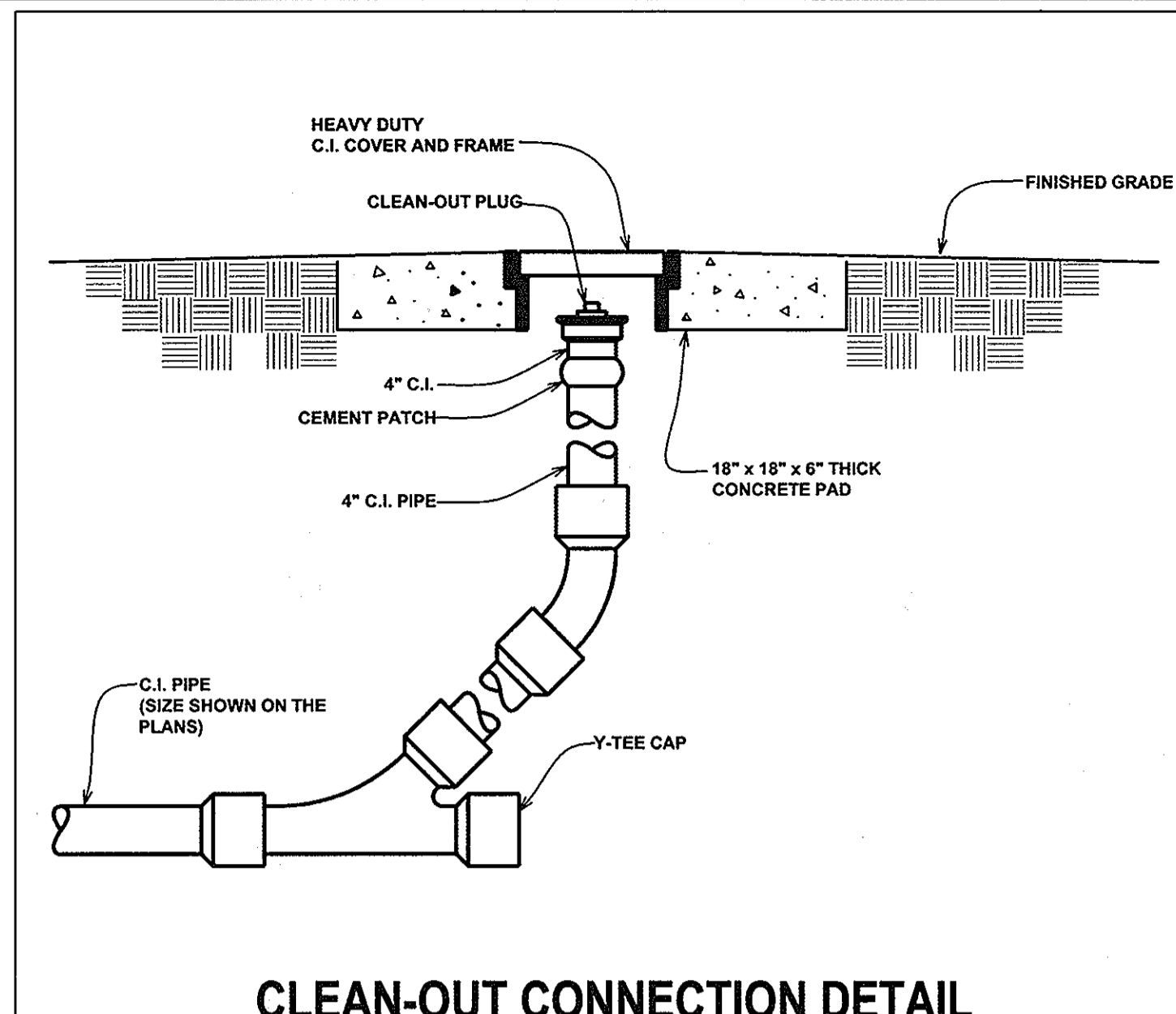
**DISTRIBUTION LATERAL
TERMINATION DETAIL**

NOT TO SCALE



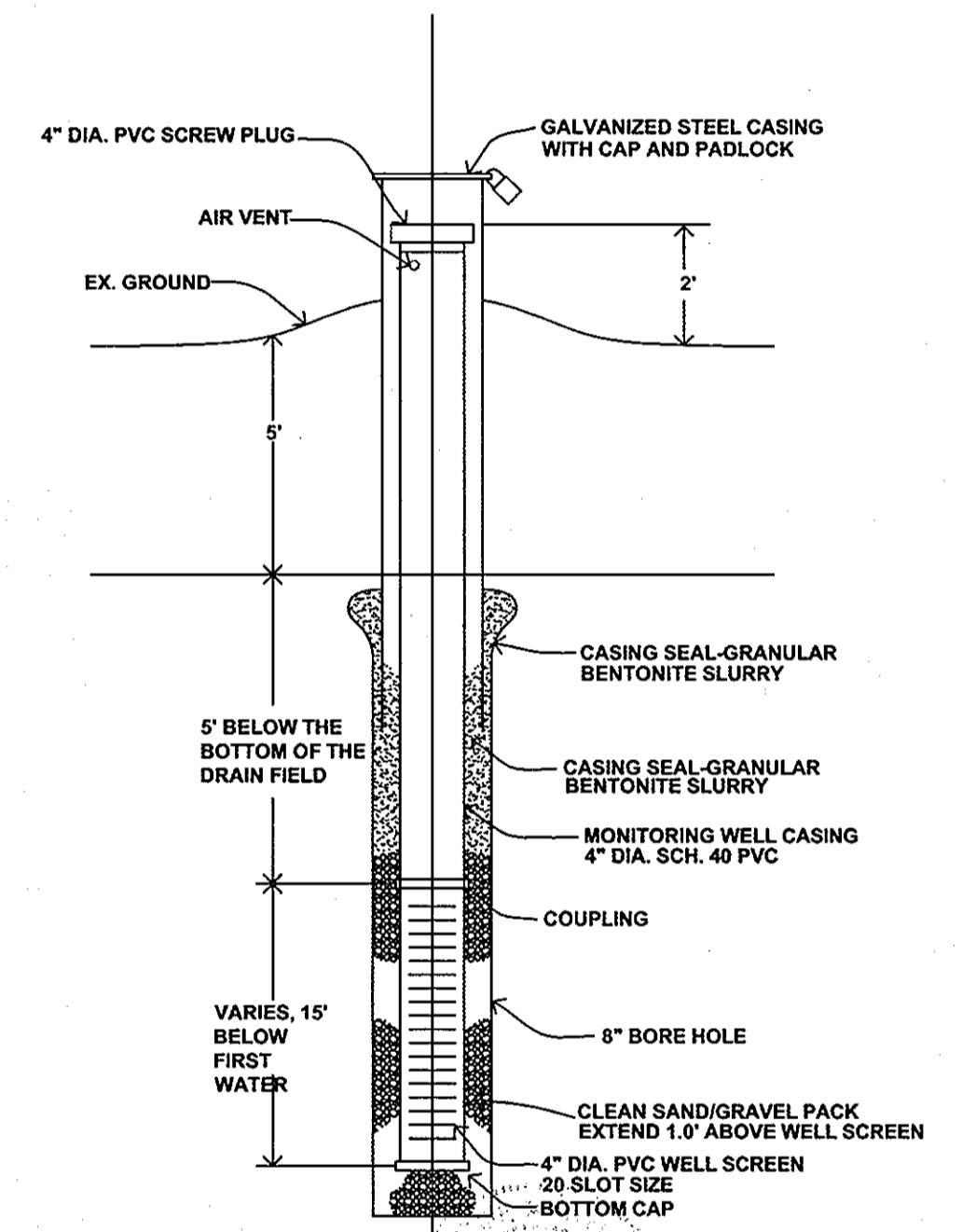
**PRESSURE SEWER TRENCH, BEDDING & CONDUCTING
ROD CABLE BOX LOCATION DETAIL**

NOT TO SCALE



CLEAN-OUT CONNECTION DETAIL

NOT TO SCALE



MONITORING WELL DETAIL

NOT TO SCALE

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Robert J. Wahn
HOWARD COUNTY HEALTH OFFICER

6/28/06
DATE

HOWARD SOIL CONSERVATIONS DISTRICT:
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND
MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY
THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE
IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD
COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD
CONSTRUCTION PLANS PER F-05-29.

SEPTIC TRENCH DETAIL

NOT TO SCALE

**DISTRIBUTION LATERAL
TERMINATION DETAIL**

NOT TO SCALE

**PRESSURE SEWER TRENCH, BEDDING & CONDUCTING
ROD CABLE BOX LOCATION DETAIL**

NOT TO SCALE

MONITORING WELL DETAIL

NOT TO SCALE

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

AS-BUILT

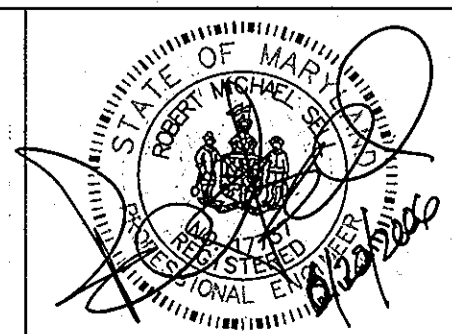
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

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DES: B.T.D., N.V.S.					
DRN: B.T.D., N.V.S.					
CHK: R.M.S.					
DATE: MAY, 2006	BY	No.	REVISION	DATE	

DETAILS

JOB No. C1050045

**FULTON RIDGE SHARED
SEPTIC SYSTEM**

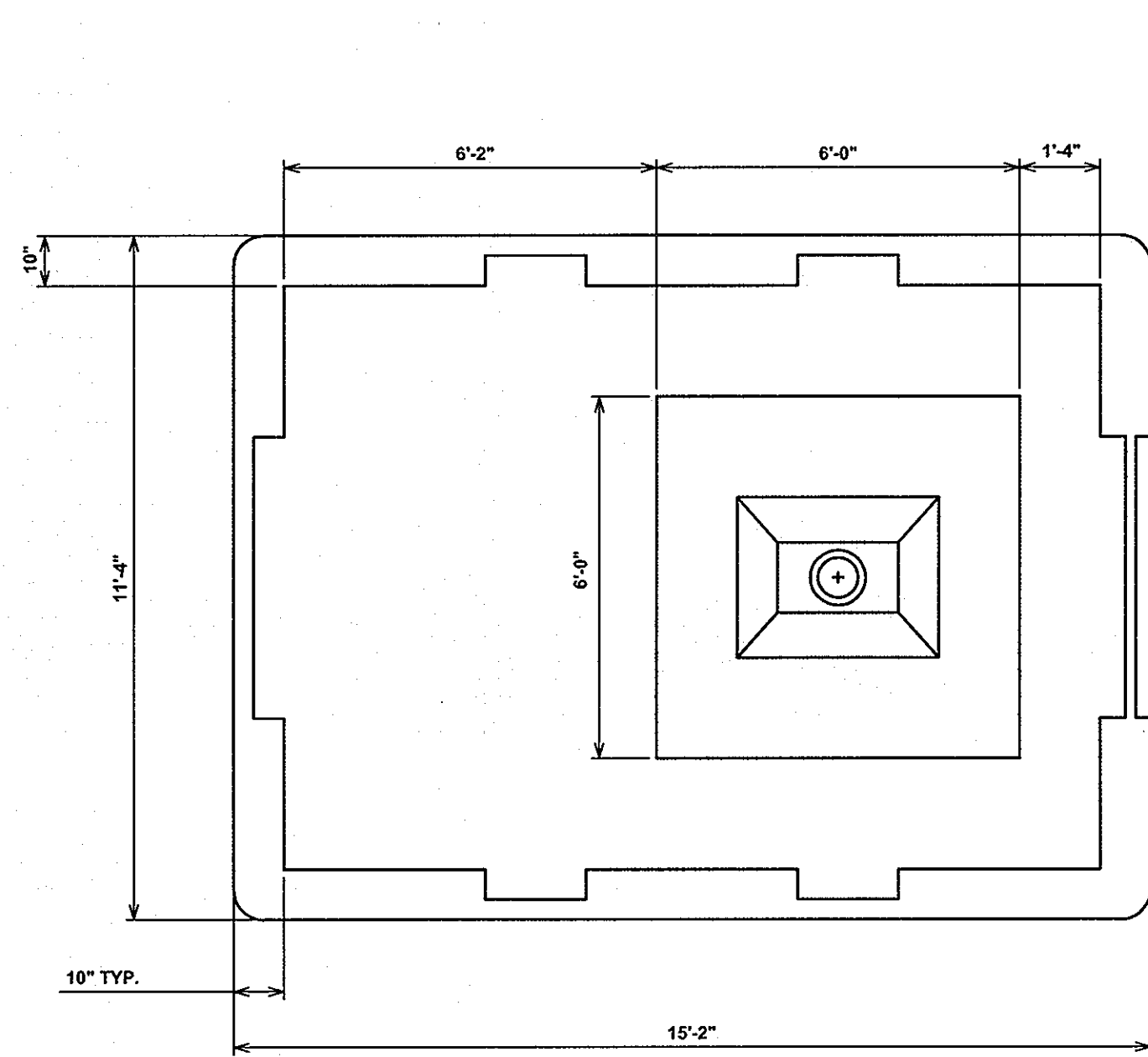
LOTS 1 - 14
CONTRACT # 50-4293-D
TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SCALE
AS SHOWN

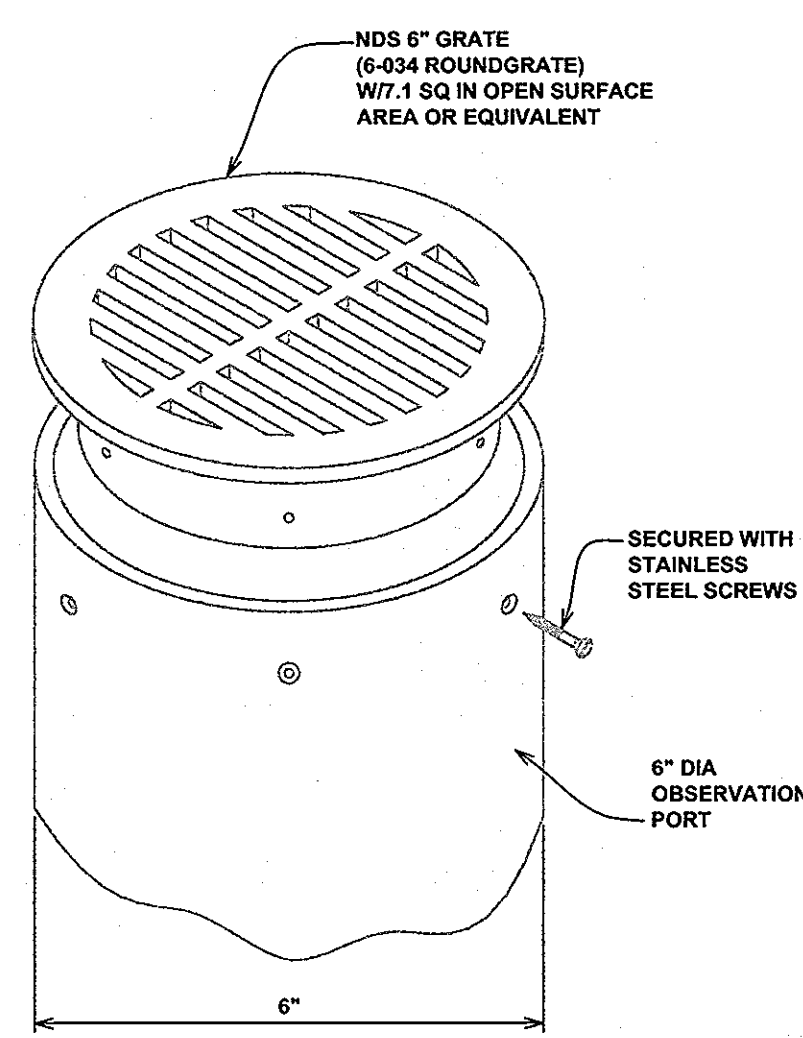
SHEET
7 OF 9

PLOTTED: Jun 20, 2006 - 5:26pm

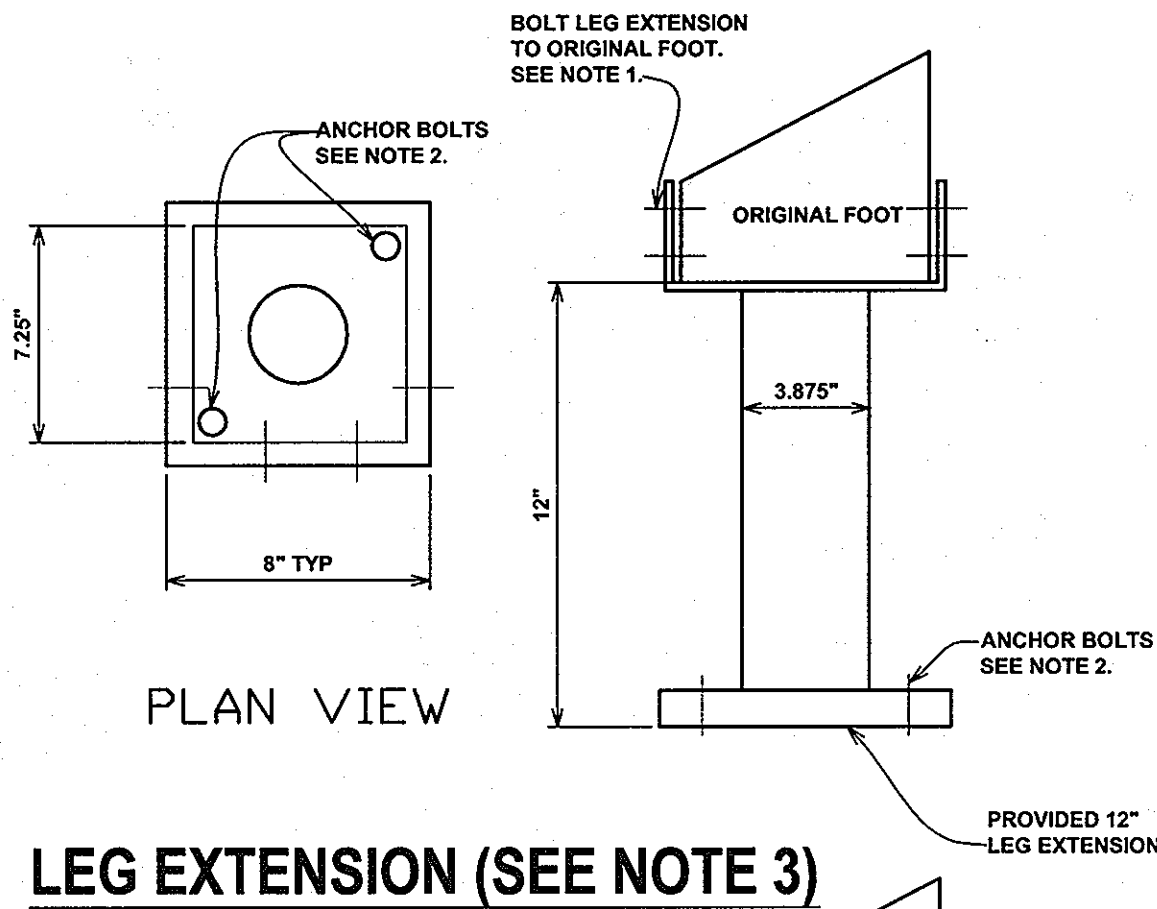
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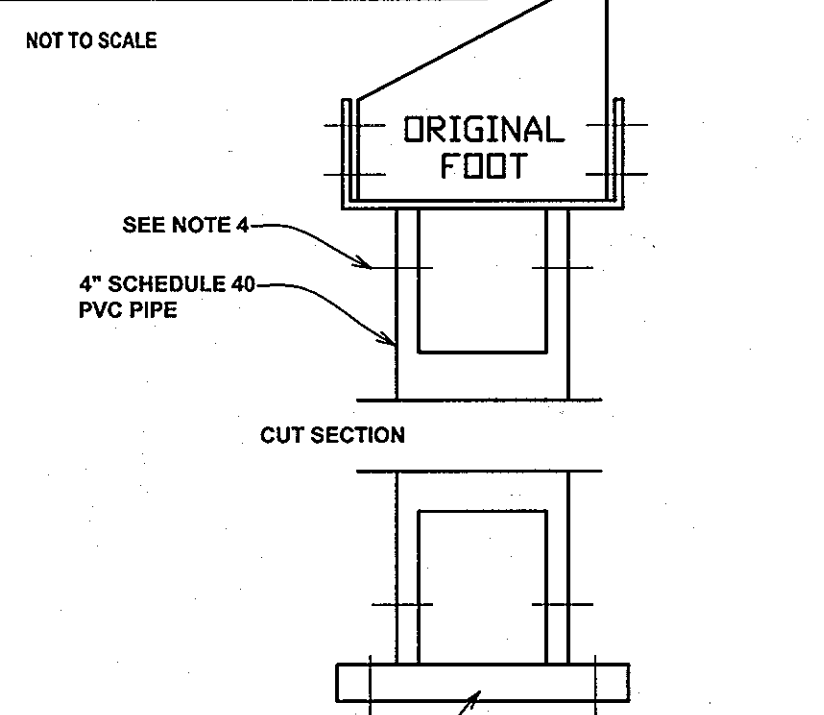
**SECTION A-A
BLOWER HOUSING BASE DIMENSIONS**
NOT TO SCALE



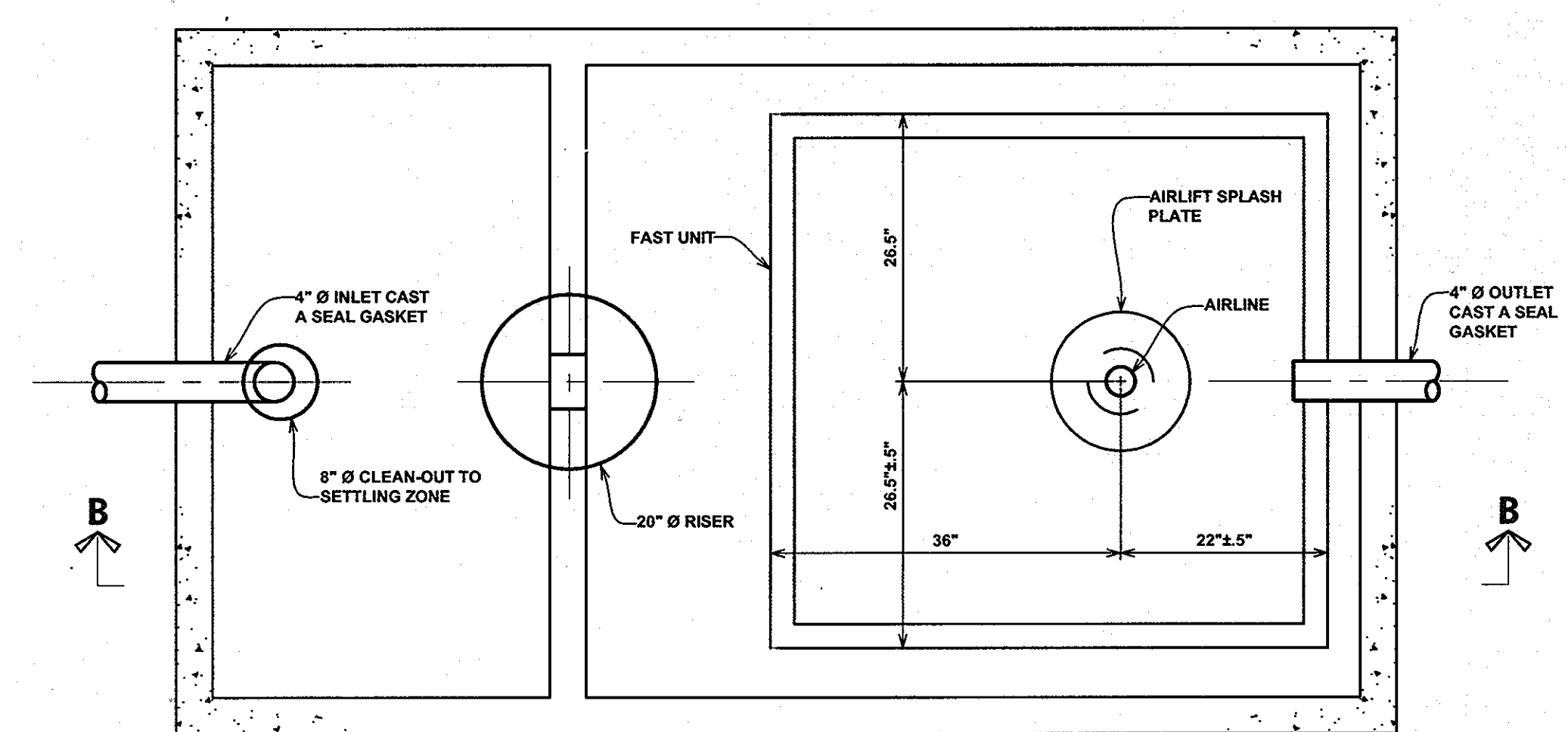
VENTS WITH LID
NOT TO SCALE



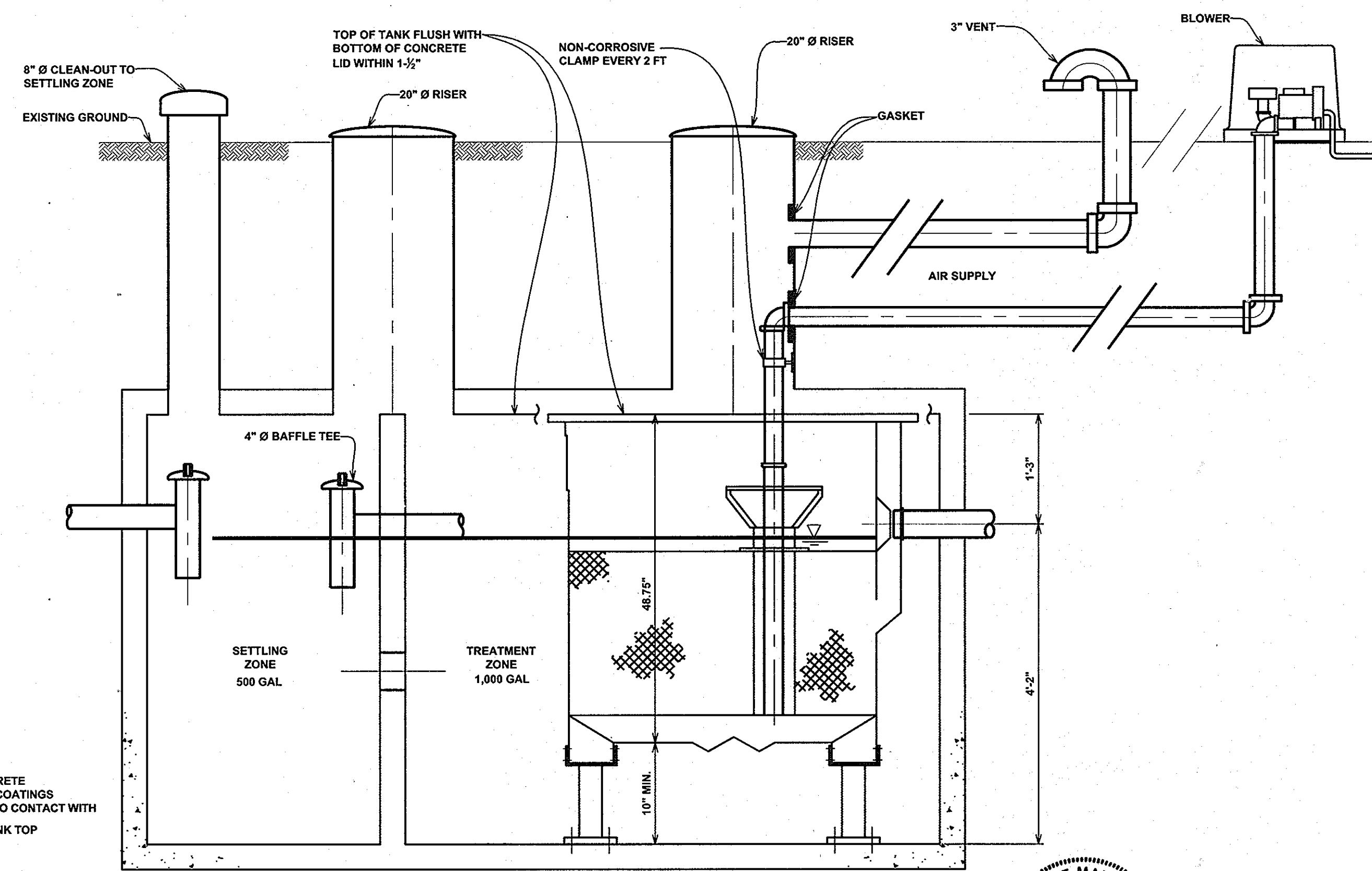
LEG EXTENSION (SEE NOTE 3)
NOT TO SCALE



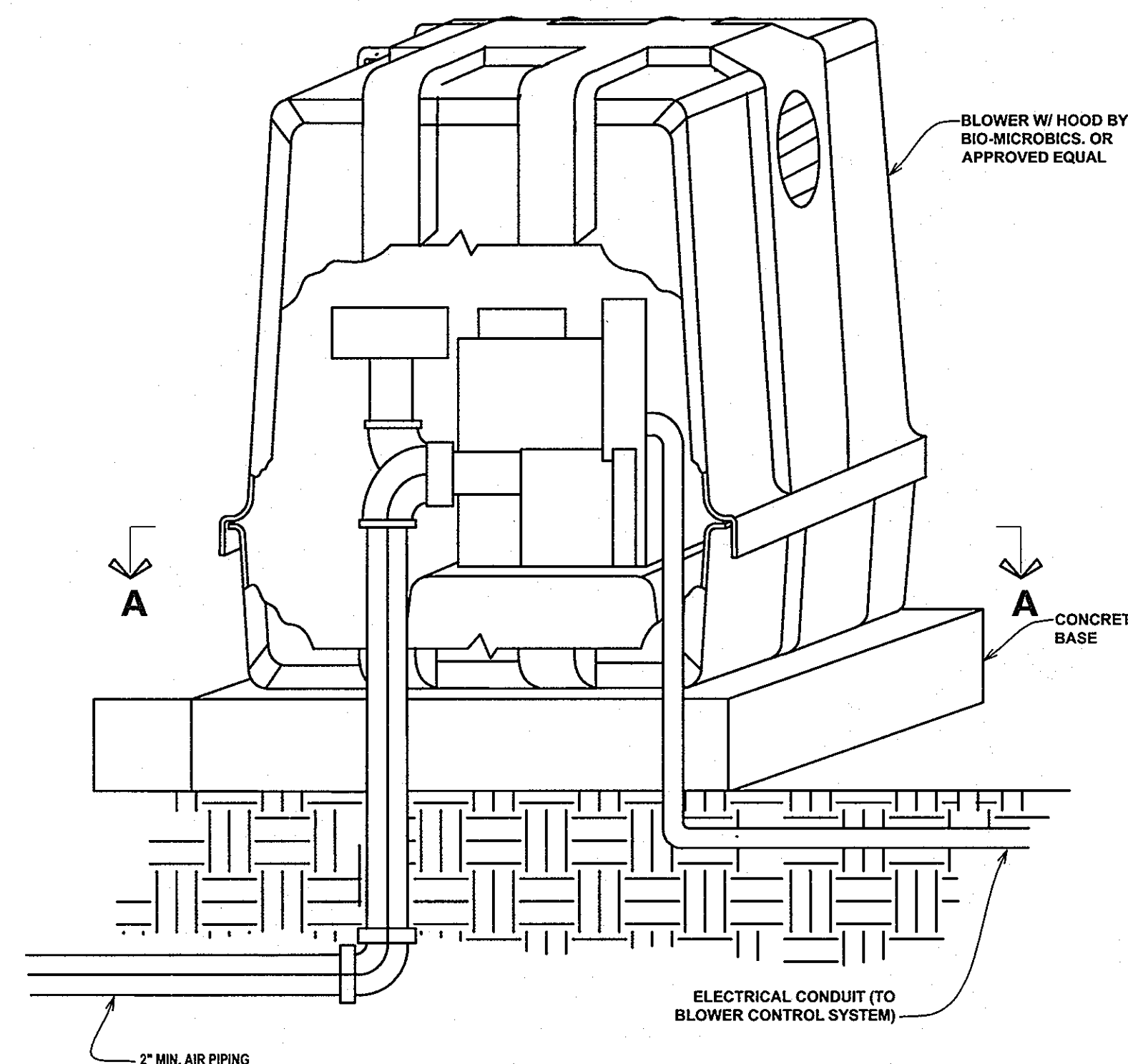
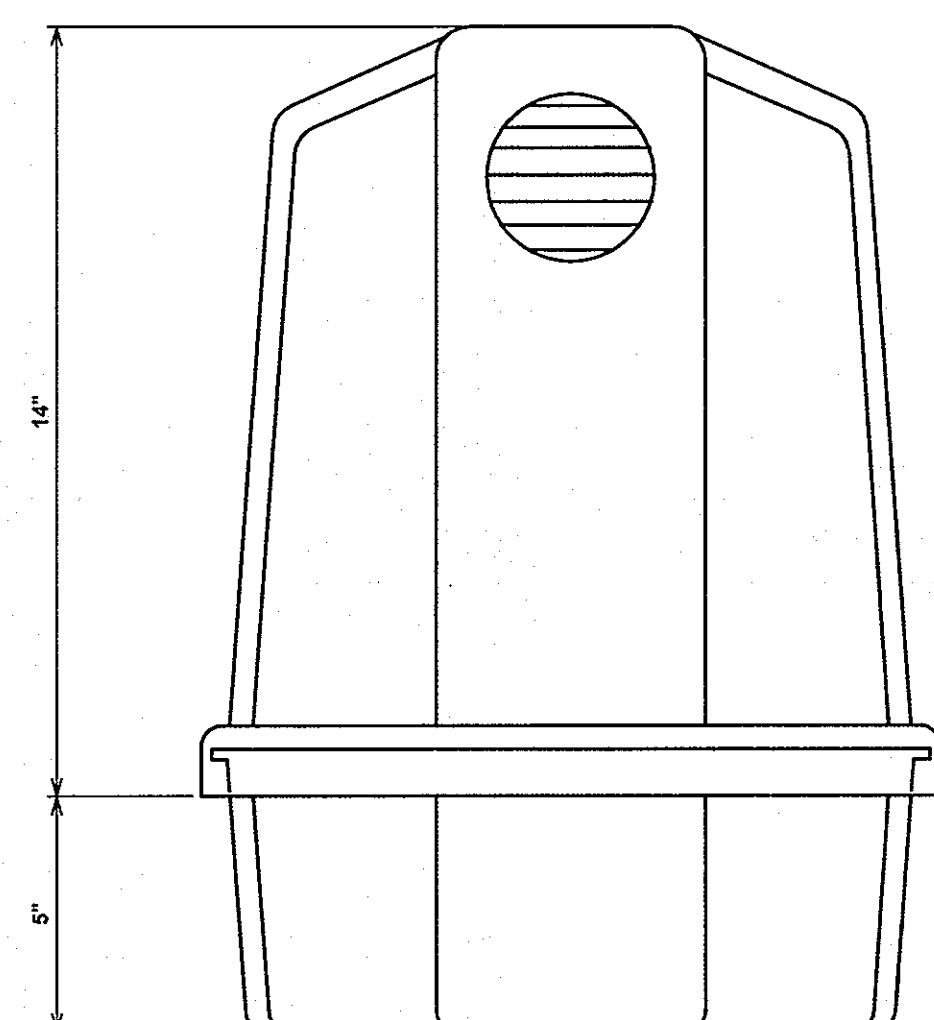
- NOTES**
1. SECURE ORIGINAL 7" X 7" FOOT TO LEG EXTENSION BY PLACING TWO (2) SCREWS IN EACH SIDE OF THE LEG EXTENSION. EIGHT (8) SCREWS PER FOOT ARE INCLUDED AND SHOULD BE USED ON EACH OF THE FOUR (4) CORNER LEG EXTENSIONS.
 2. ANCHOR THE LEG EXTENSIONS (4 CORNER LEGS ONLY) TO THE BASE OF THE TANK. PLACE BOLTS AT OPPOSITE CORNERS OF THE LEG EXTENSION BASE.
 3. TO ELONGATE FOOT PAST THE PROVIDED 12", CUT THE 3.875" LEG EXTENSION IN THE CENTER INTO TWO SEPARATE PIECES. THEN CUT A SCH 40 PVC PIPE TO THE DESIRED LENGTH AND SLIP THE PIPE OVER THE TOP AND BOTTOM CUT SECTIONS OF THE LEG EXTENSIONS.
 4. ATTACH PIPES WITH STAINLESS STEEL SCREWS.
 5. VENT TO BE LOCATED ABOVE FINISH GRADE OR HIGHER TO AVOID INFILTRATION. CAP WITH 6" VENT GRATE W/AT LEAST 7.1 SQ. IN. OF OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS (SEE MCF 0.75 L DWG).
- OR:
RUN VENT TO DESIRED LOCATION AND COVER OPENING WITH 3" VENT GRATE W/AT LEAST 7.1 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS. VENT MUST NOT ALLOW EXCESS MOISTURE BUILDUP OR BACK PRESSURE.



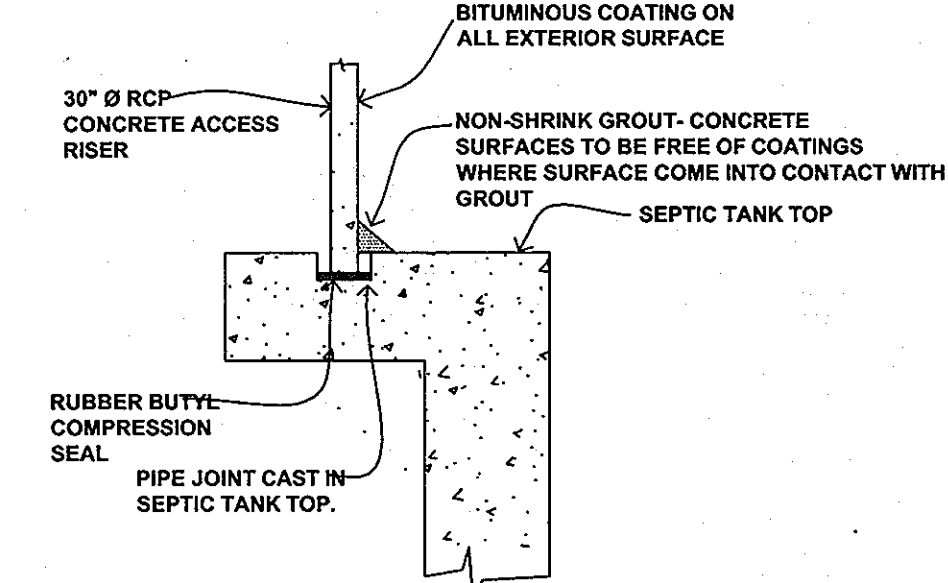
PLAN



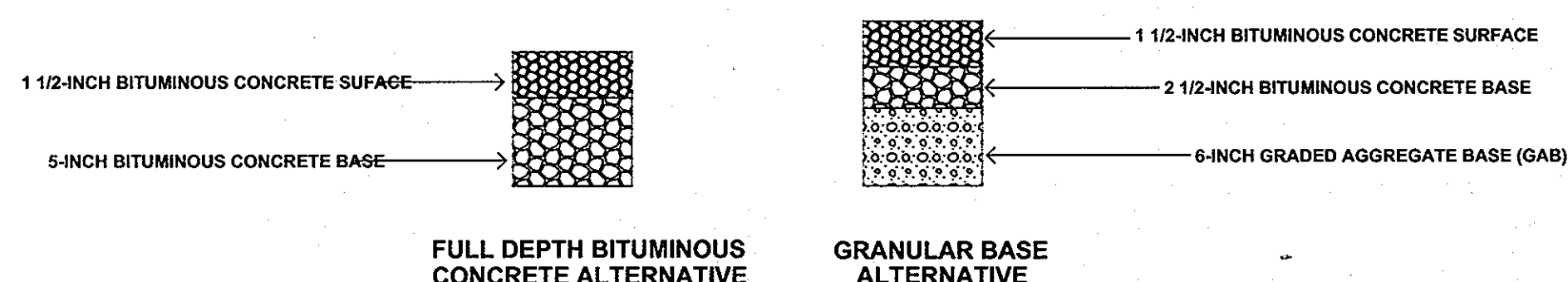
**SECTION B-B
MicroFAST MODEL 0.75F TREATMENT
UNIT IN 1,500 GAL TANK**
NOT TO SCALE



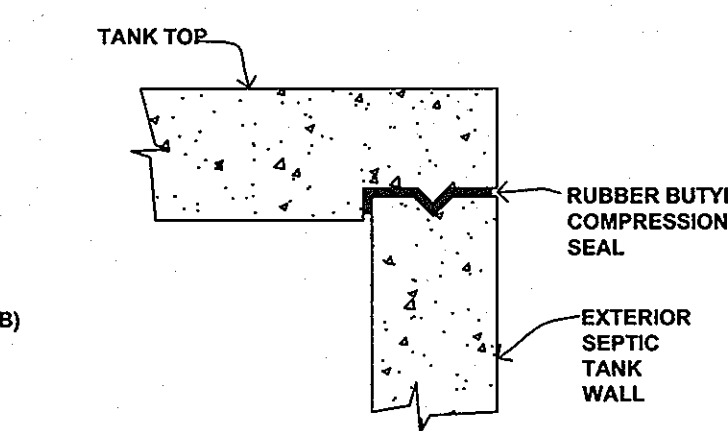
BLOWER HOUSING DIMENSIONS
NOT TO SCALE



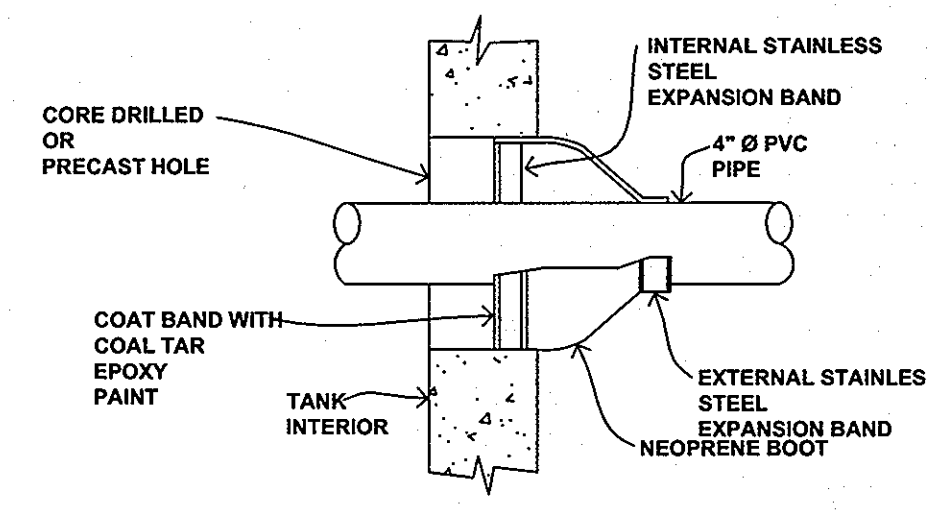
RISER/TANK JOINT DETAIL
NOT TO SCALE



PAVING SECTION DETAIL
NOT TO SCALE



TANK TOP/WALL JOINT DETAIL



WALL PENETRATION DETAIL
NOT TO SCALE

NOTES THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.

1. MICROFAST UNITS AND ALL RELATED EQUIPMENT WILL BE PROPERTY OF THE HOMEOWNER. THE HOMEOWNER WILL BE RESPONSIBLE FOR ALL MAINTENANCE AND REPAIR. THE COUNTY'S OWNERSHIP OF THE COLLECTION SYSTEM BEGINS WITH THE GRINDER PUMPS.
2. VENT TO BE LOCATED ABOVE FINISH GRADE OR HIGHER TO AVOID INFILTRATION. CAP WITH 6" VENT GRATE W/AT LEAST 7.1 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS (SEE MCF 0.75 X DRAWING).
OR:
RUN VENT TO DESIRED LOCATION AND COVER OPENING WITH 3" VENT GRATE W/AT LEAST 7.1 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS. VENT MUST NOT ALLOW EXCESS MOISTURE BUILDUP OR BACK PRESSURE.
3. ALL APURTANCES TO FAST (E.G. SEPTIC TANK, PUMP-OUTS, ETC.) MUST CONFORM TO ALL COUNTRY, STATE, PROVINCE, AND LOCAL CODES.
4. BLOWER CONTROL SYSTEM BY BIO-MICROBICS, INC. OR APPROVED EQUAL.
5. CONTRACTOR MUST INCREASE TANK SIZE BY 20% IF MINIMUM OF 10 INCHES IS USED BETWEEN THE UNIT AND THE BASE OF TANK.
6. THE PRIMARY LEG EXTENSIONS MAY BE USED TO STAND UNIT IN TANK ELIMINATING NEED FOR LID.
7. CONTRACTOR MUST CONFORM THAT EITHER THE INFLUENT PIPE TEE SHALL BE FITTED WITH A PIPE CAP OR THE BAFFLE SEPARATING THE TWO ZONES SHALL BE EXTENDED ALL THE WAY TO THE TOP OF THE CONCRETE TANK. IF CHOOSING TO USE THE PIPE CAP, THEN THE BAFFLE SHALL BE AT LEAST 3" HIGHER THAN THE WATER LEVEL AS SHOWN ON THE DRAWING.
8. BLOWER PIPING TO FAST MAY NOT EXCEED 100 FT. TOTAL LENGTH AND USE A MAXIMUM OF 4 ELBOWS IN THE PIPING SYSTEM (@ 100 FT). FOR DISTANCES GREATER THAN 100 FT--CONSULT FACTORY. BLOWER MUST BE LOCATED ABOVE FLOOD LEVELS.

AS-BUILT

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Robert W. Wahn
HOWARD COUNTY HEALTH OFFICER

6/25/06
DATE

HOWARD SOIL CONSERVATIONS DISTRICT:
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS PER F-05-29.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert W. Wahn
CHIEF, BUREAU OF UTILITIES

DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Robert W. Wahn
CHIEF, DEVELOPMENT ENGINEERING DIVISION

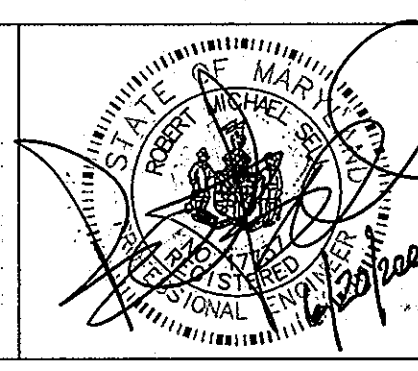
DATE

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DES: B.T.D., N.V.S.	
DRN: B.T.D., N.V.S.	
CHK: R.M.S.	
DATE: MAY, 2006	
BY	No.
REVISION	DATE

DETAILS

JOB No. C1050045

FULTON RIDGE SHARED SEPTIC SYSTEM

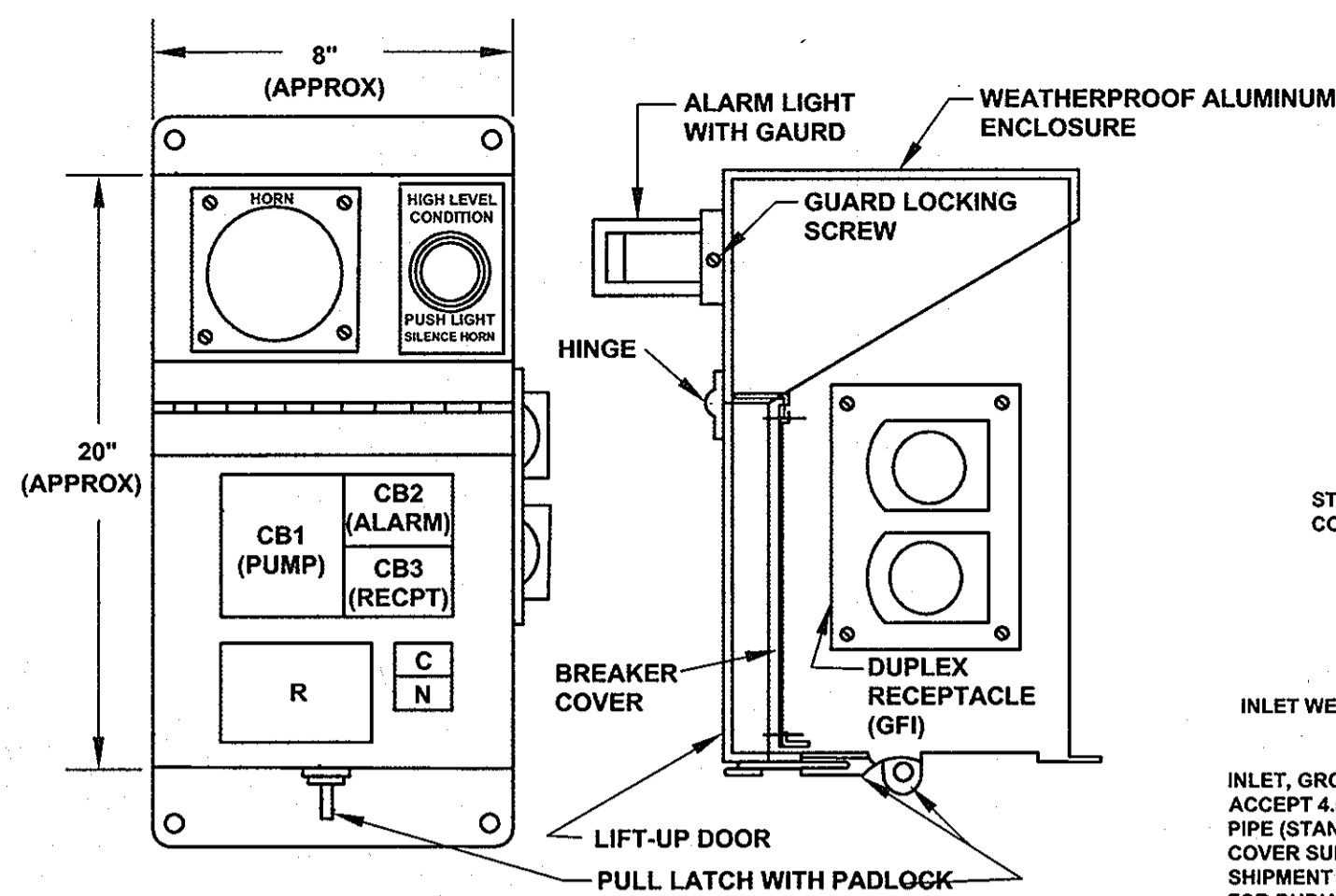
LOTS 1-14
CONTRACT # 50-4293-D
TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

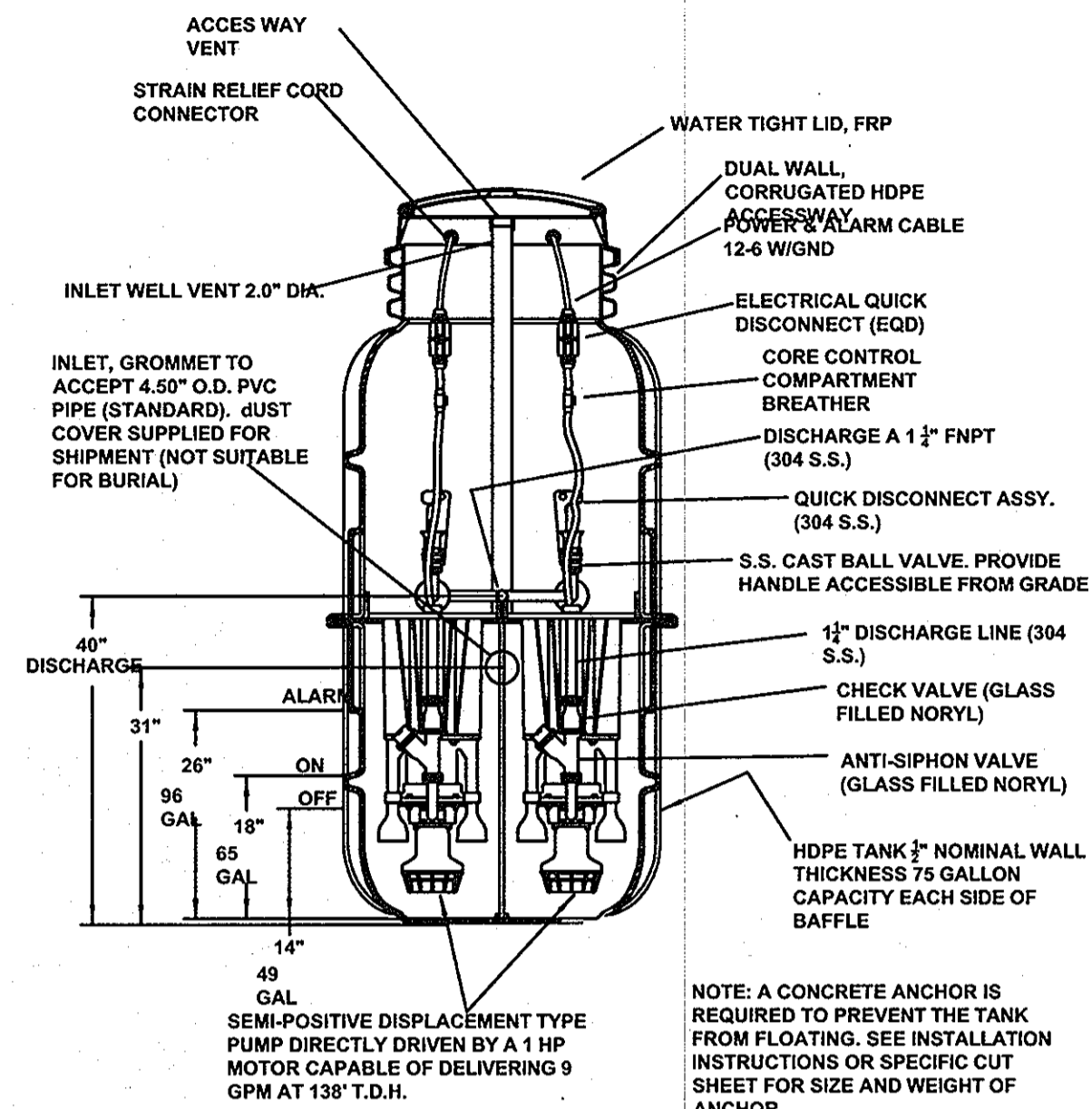
SHEET 8 OF 9

PLOTTED: Jun 20, 2006 - 5:10pm

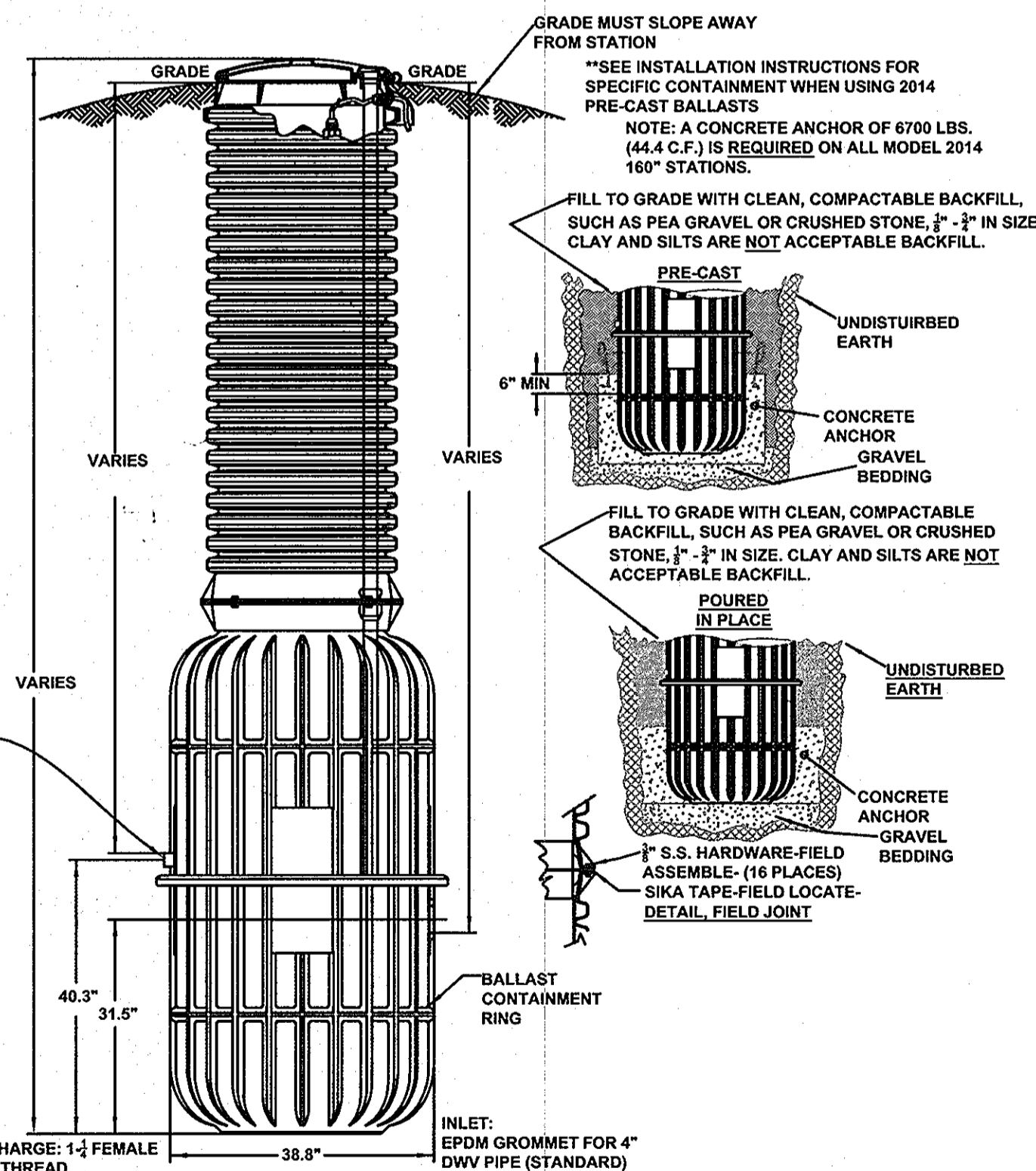
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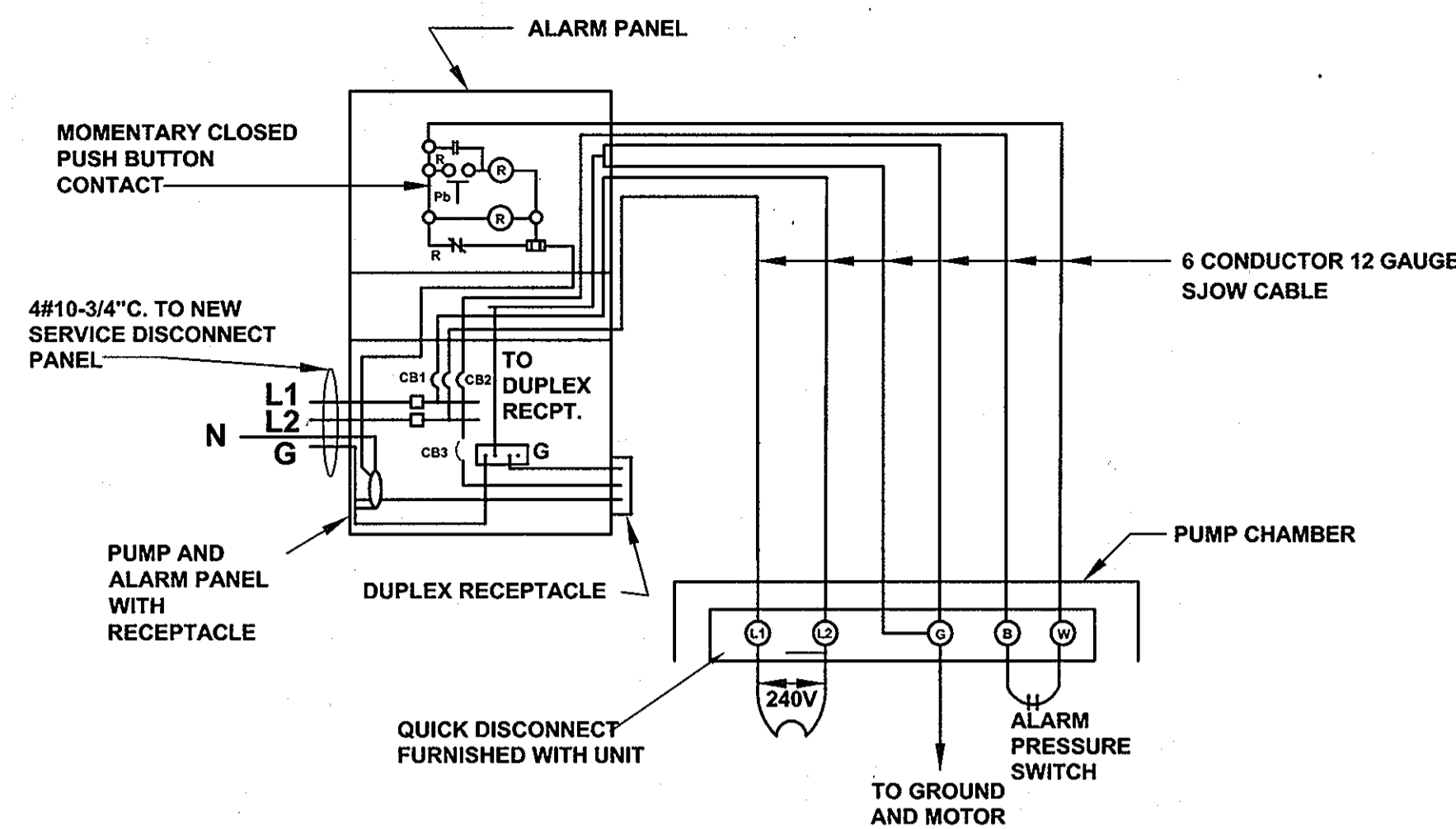
GRINDER PUMP CONTROL & ALARM PANEL
NOT TO SCALE



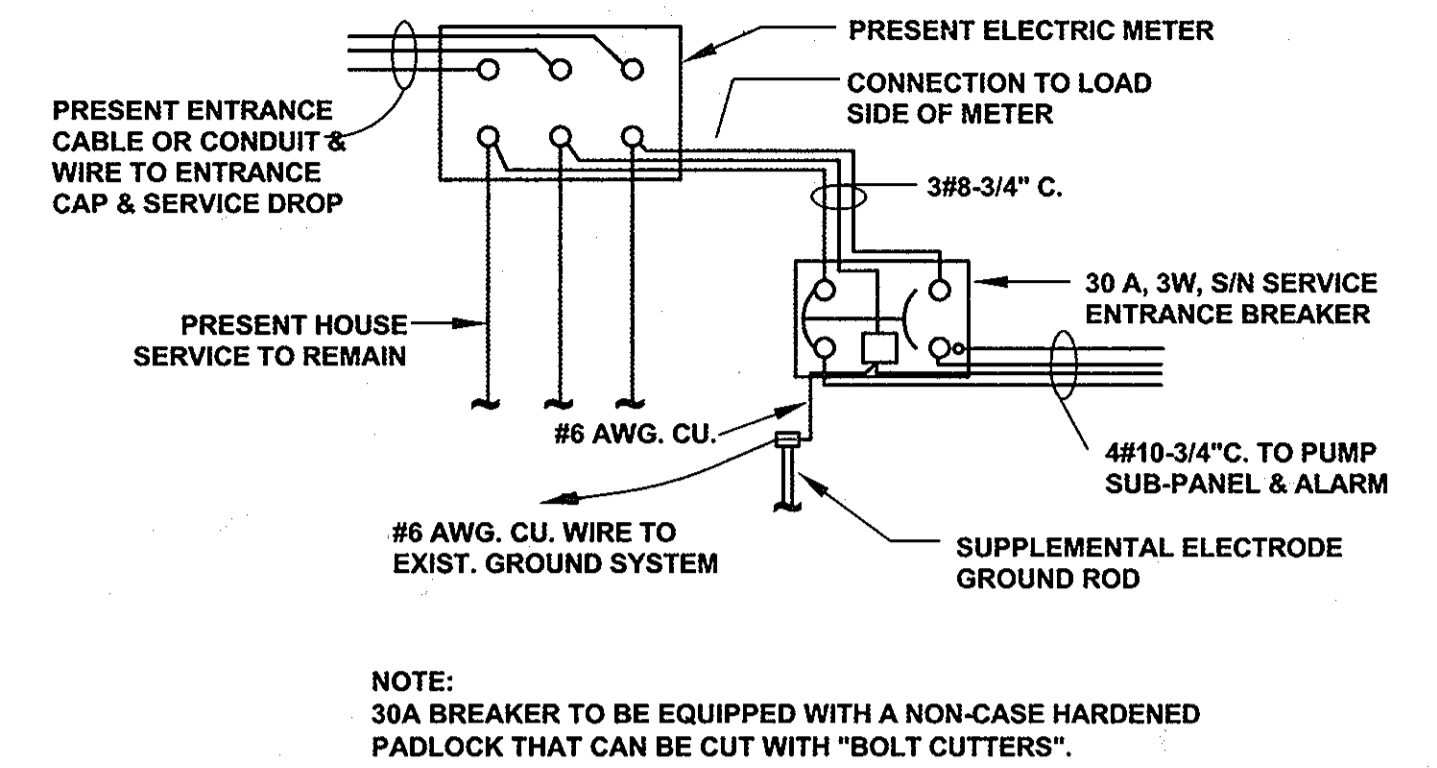
DUPLEX ENVIRONMENT ONE GRINDER PUMP
NOT TO SCALE



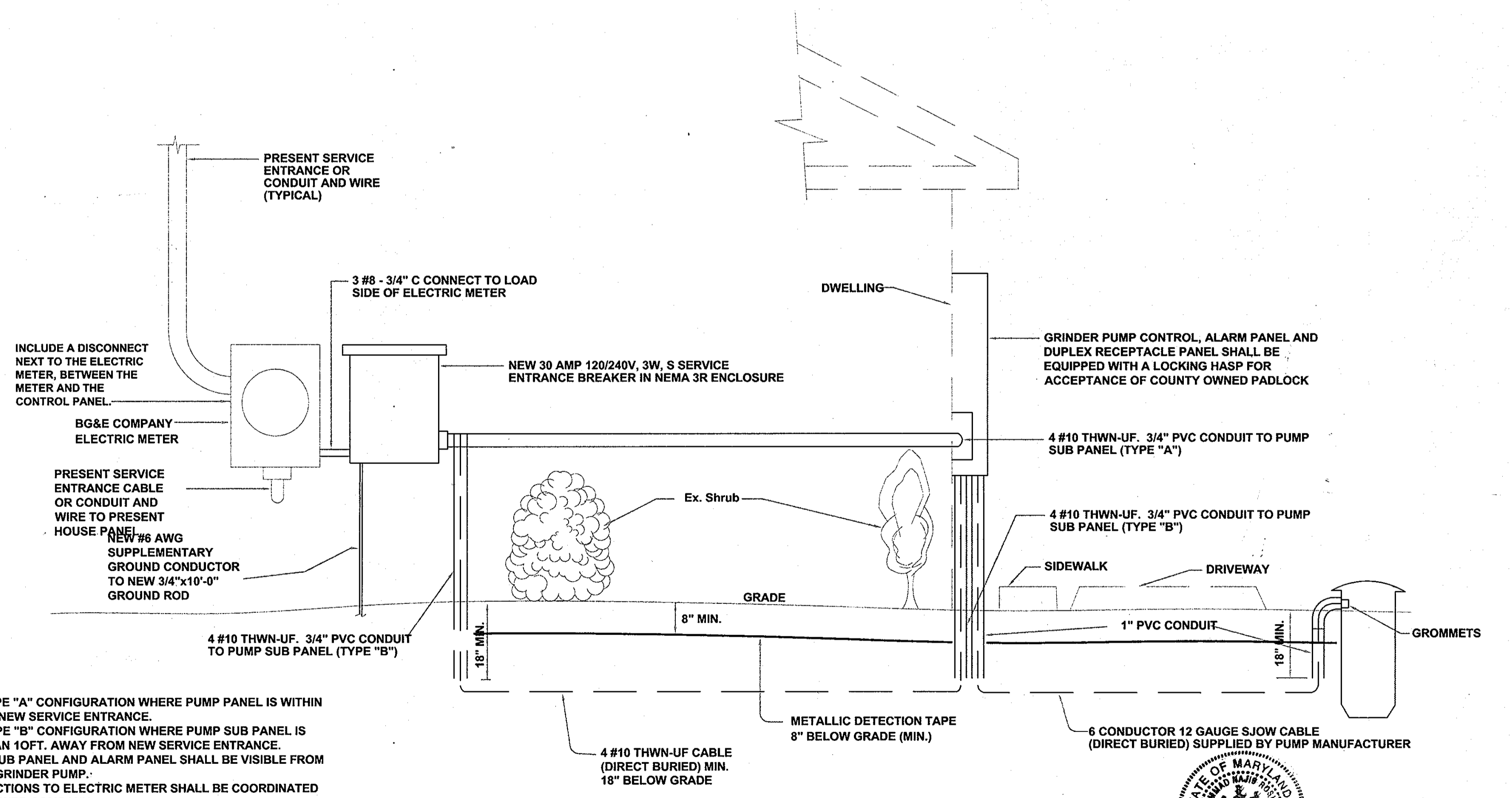
DUPLEX ENVIRONMENT ONE GRINDER PUMP
NOT TO SCALE



SEWAGE GRINDER PUMP WIRING DIAGRAM (240 v) TYPICAL EACH PUMP UNIT
NOT TO SCALE



NEW SERVICE ENTRANCE WIRING DIAGRAM
NOT TO SCALE



TYPICAL GRINDER PUMP ELECTRIC POWER
NOT TO SCALE

1. USE TYPE "A" CONFIGURATION WHERE PUMP PANEL IS WITHIN 10 FT. OF NEW SERVICE ENTRANCE.
2. USE TYPE "B" CONFIGURATION WHERE PUMP SUB PANEL IS MORE THAN 10FT. AWAY FROM NEW SERVICE ENTRANCE.
3. PUMP SUB PANEL AND ALARM PANEL SHALL BE VISIBLE FROM SEWAGE GRINDER PUMP.
4. CONNECTIONS TO ELECTRIC METER SHALL BE COORDINATED WITH POWER COMPANY.
5. ALL PVC CONDUIT SHALL TERMINATE 18" BELOW GROUND.
6. PROVIDE LOCKING HASP ON SERVICE BREAKER FOR ACCEPTANCE OF COUNTY OWNED LOCK.
7. CONTROL PANEL MUST BE DIRECT WIRED FROM ELECTRICAL SERVICE BOX (BG&E'S).
8. PROVIDE SEALING BOX 6" BELOW CONTROL PANEL ON HOUSE IN LINE WITH CONDUIT; SEAL WITH CHICO WATERTIGHT SEALANT TO CREATE VAPOR LOCK.

APPROVED FOR PRIVATE WATER AND PUBLIC SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Robert J. Wade
HOWARD COUNTY HEALTH OFFICER
DATE: 6/25/06

HOWARD SOIL CONSERVATIONS DISTRICT:
RENEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE
DATE:

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT
DATE:

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS PER F-05-29.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. Bauman
CHIEF, BUREAU OF UTILITIES
DATE: 7-5-06

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE:

MICRONE

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DRN: B.T.D., N.V.S.					
CHK: R.M.S.					
DATE: MAY., 2006	BY	No.	REVISION	DATE	
DETAILS					JOB No. C1050045

FULTON RIDGE SHARED SEPTIC SYSTEM

AS-BUILT

LOTS 1 - 14
CONTRACT # 50-4293-D
TAX MAP NO. 41 - GRID NO. 13 - PARCEL 2
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 9

PLOTTED: Jun 20, 2006 - 5:10pm

CADD FILE: C:\1050045 - Fulton Ridge Septic.dwg\Shared Septic Design\Details.dwg Tab: 9 OF 9