

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		SUPPLIER
		QUANTITIES	TYPE	
8" S. CL. 52 D.I.P.	505 L.F.	504 L.F.		TYTOM JOINT
8" S. PVC	30 L.F.	29 L.F.		NORTH AMERICAN PIPE
4" S. PVC	135 L.F.	135 L.F.		NORTH AMERICAN PIPE
CLEAN-OUT	8 EACH	8 EACH		HORNE CONCRETE
MANHOLE	4 EACH	4 EACH		CONTRACTORS PRECAST
8" W. C900 PVC	245 L.F.	250 L.F.		NORTH AMERICAN PIPE
6" W. C900 PVC	225 L.F.	209 L.F.		NORTH AMERICAN PIPE
1-1/2" W.H.C.	110 EACH	108		CAMBRIDGE LEE INC.
1/32" H.B.	2 EACH	1		STAR PRODUCTS
8" VALVE	1 EACH	1		KENNEDY VALVE
6" VALVE	1 EACH	1		KENNEDY VALVE
8" X 8" TAPPING SLAVE	1 EACH	1		FORD METER BOXES
8" X 6" TEE	1 EACH	1		STAR PRODUCTS
8" TAPPING VALVE	1 EACH	1		KENNEDY VALVE
CONTINUITY TEST SWIRN	1 EACH	1		HORNE CONCRETE
FIRE HYDRANT	1 EACH	1		KENNEDY VALVE
SINGLE OUTSIDE METER SETTING	8 EACH	8		
6" PLUG & BUTTRESS	1 EACH	1		STAR PRODUCTS

NAME OF UTILITY CONTRACTOR: **SEH EXCAVATING CONTRACTORS INC.**  
 SURVEY & DRAFTING DIVISION AS-BUILT DATE:

**BENCHMARK INFORMATION**

B.M.#1 - HOWARD COUNTY CONTROL STATION #3500 - HORIZONTAL - (NAD '83)  
 (ALONG GREAT STAR DRIVE WHERE THE EASTBOUND RAMP TO MD RT 32 TURNS OFF TO THE EAST, 52' NORTHEAST OF A BELL MANHOLE ALONG GREAT STAR DRIVE, 36.4' NORTH OF THE CORNER OF A CHAIN LINK FENCE, 10.5' NORTHWEST OF AN ELECTRIC BOX, AND 55' WEST OF A LIGHT POLE ALONG THE EASTBOUND RAMP TO MD RT 32 FROM GREAT STAR DRIVE.)  
 N 556,936.5472  
 E 1,333,705.5622  
 ELEVATION = 44.21 - VERTICAL - (NAVD '86)

B.M.#2 - HOWARD COUNTY CONTROL STATION #3500 - HORIZONTAL - (NAD '83)  
 (LOCATED 7.3' EAST OF THE FACE OF CURB ALONG GREAT STAR DRIVE, 45.9' NORTH OF A LIGHT POLE NORTHEAST OF THE INTERSECTION OF GREAT STAR DRIVE AND SUMMER SUNRISE DRIVE, 21' NORTHWEST OF AN OAK TREE, AND 18' SOUTHWEST OF AN OAK TREE.)  
 N 557,696.1674  
 E 1,333,974.5506  
 ELEVATION = 40.94 - VERTICAL - (NAVD '86)

PRIVATE WELL & PRIVATE SEPTIC SYSTEM CHART				
PARCEL NO.	ADDRESS	OWNER	ABANDON WELL	ABANDON SEPTIC
66	6301 TROTTER ROAD	JACQUELINE RANA REVOCABLE TRUST	YES	YES

NOTE: WATER METERS WILL NOT BE RELEASED BY HOWARD COUNTY TO ANY NEW BUILDING UNTIL THE EXISTING WELLS AND SEPTIC SYSTEMS HAVE BEEN ABANDONED IN ACCORDANCE WITH HOWARD COUNTY HEALTH DEPARTMENT REGULATIONS AND THE EXISTING BUILDINGS ARE CONNECTED TO THE PUBLIC WATER AND SEWER MAINS.

**DEVELOPER'S CERTIFICATION**

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

**Paul W. Kriebel**, FOR: **RIVER HILL OVERLOOK, LLC** 10-21-14  
 SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATION**

I HEREBY 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 SOIL CONSERVATION DISTRICT.

**Paul W. Kriebel**, FOR: **RIVER HILL OVERLOOK, LLC** 10-21-14  
 SIGNATURE OF ENGINEER DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 508 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THESE PLANS.

**Paul W. Kriebel**, FOR: **RIVER HILL OVERLOOK, LLC** 10-21-14  
 SIGNATURE OF DEVELOPER DATE

GP-14-030

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

APPROVED: **John Roberts** 11/6/14  
 HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

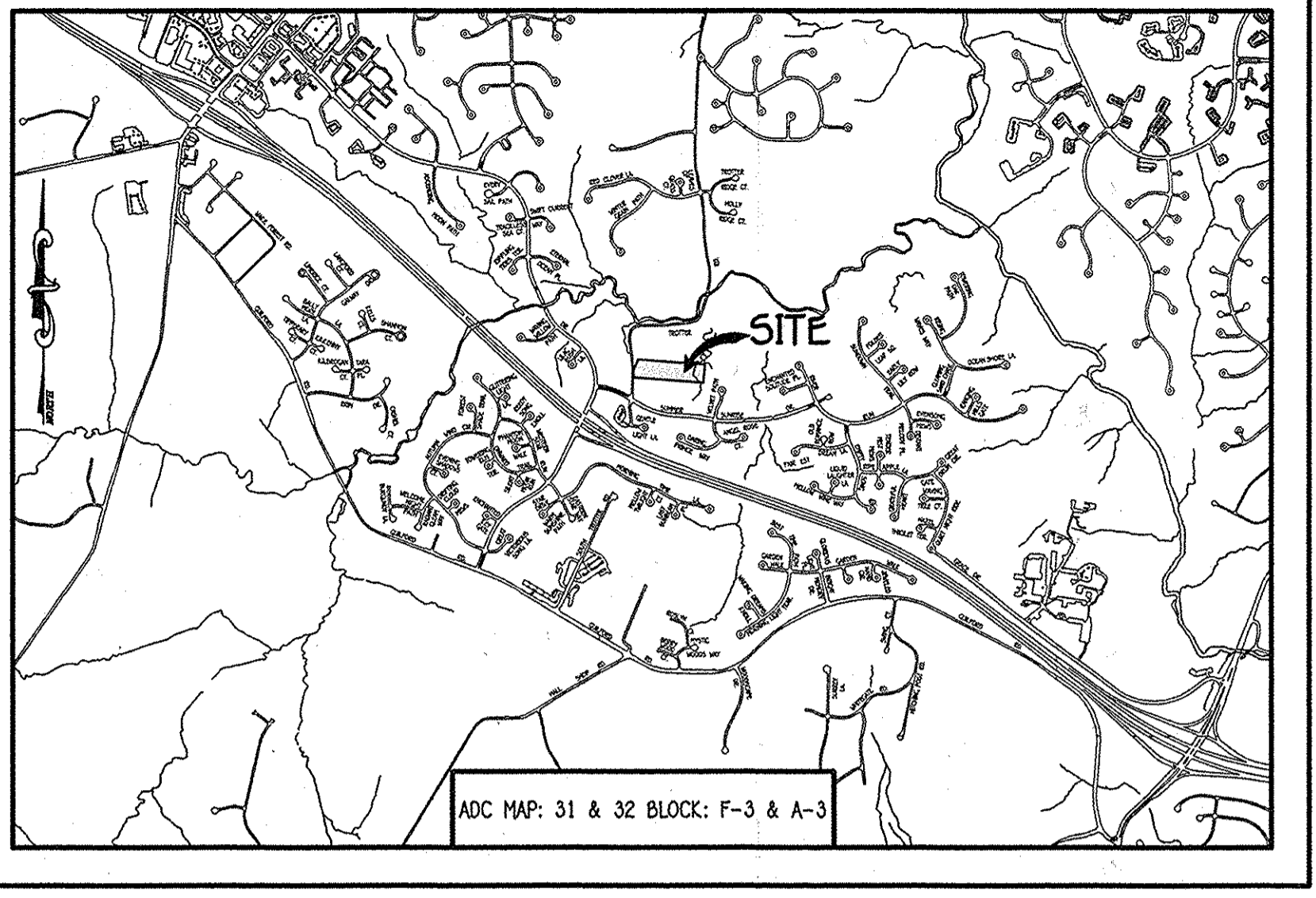
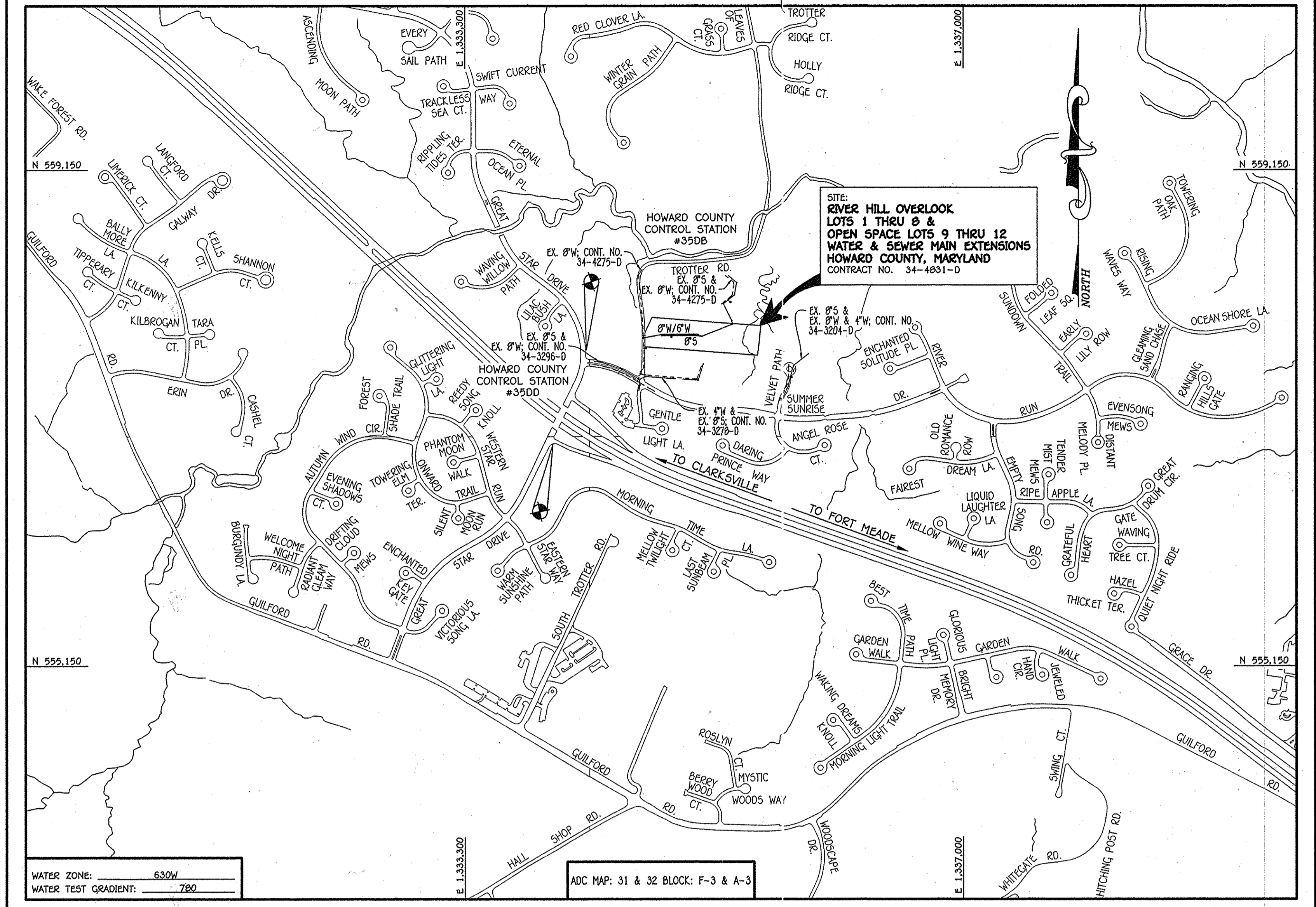
LEGEND	
SYMBOL	DESCRIPTION
---	EX. WATER MAIN
---	EX. SEWER MAIN
○	EX. SEWER MANHOLE
○	EX. WATER, SEWER & UTILITY EASEMENT
⊙	EX. FIRE HYDRANT
○	EX. VALVE
—	PROP. WATER MAIN
—	PROP. SEWER MAIN
○	PROP. SEWER MANHOLE
○	PROP. WATER, SEWER & UTILITY EASEMENT
---	PROP. W.H.C.
---	PROP. S.H.C.
⊙	PROP. FIRE HYDRANT
○	PROP. VALVE

TYPE OF BUILDING:	RESIDENTIAL: SINGLE FAMILY DETACHED
NUMBER OF PARCELS:	2
NO. OF WATER HOUSE CONNECTIONS:	8
NO. OF SEWER HOUSE CONNECTIONS:	8
SEWER SHED:	MIDDLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WASTEWATER RECLAMATION PLANT SAVAGE, MARYLAND

**LOCATION MAP**

SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:  
 F-15-010 (RECORD PLAT)  
 SDP-15-



**GENERAL NOTES**

SCALE: 1" = 2000'

- PART A:**
- APPROXIMATE LOCATIONS 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.
  - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT AUGUST, 2013 BY FISHER, COLLINS & CARTER, INC.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS:
  - ALL PIPE ELEVATIONS SHOWN ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 3508 & NO. 3500.
  - ALL VERTICAL CONTROLS ARE BASED ON NAVD '86. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS.
  - OTHER NOTES:
  - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OR POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
  - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (⊙) AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED IN THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN OUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
  - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
- |                              |                               |
|------------------------------|-------------------------------|
| ATAI                         | 1-800-252-1133                |
| BCE (CONTRACTOR SERVICES)    | 410-637-8713                  |
| BCE (EMERGENCY)              | 410-685-0123                  |
| BUREAU OF UTILITIES          | 410-313-4900                  |
| COLONIAL PIPELINE            | 410-755-1290                  |
| MISS UTILITY                 | 1-800-257-7777                |
| STATE HIGHWAY ADMINISTRATION | 410-531-5533                  |
| VEECON                       | 1-800-745-0035 / 410-224-9210 |
- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE ANNA C900 PVC, DE-18.
  - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
  - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
  - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND PVC WATER MAINS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL.
  - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.11 OF THE ANNA STANDARD SPECIFICATIONS SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVE.
  - UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.
  - PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE INSERTION LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT THE SPIGOT INTO THE BELL OF PVC PIPE.
  - ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED, UNLESS HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEPS ARE PERMITTED. THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20 FOOT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
  - PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREES (1 1/2-DEGREE ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM 200 PSI HEATING. THE REQUIREMENTS OF ANNA C900, SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTIFIED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL.
  - FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, OR-18 MEETING THE REQUIREMENTS OF ANNA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DE-18 OR EQUAL.
  - WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF ANNA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSERT DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE SPIGOTS OR PLAIN ENDS INTO THE PUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 5-DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 HIGH-STOP, AS MANUFACTURED BY EBA BORN, INC. OR APPROVED EQUAL.
  - TO ACCOMMODATE A SPRINKLER SYSTEM, ALL RESIDENTIAL DWELLING UNITS SHALL HAVE A 1-1/2" WATER HOUSE CONNECTION WITH A 1" OUTSIDE METER SETTING. STD. DET. W-3.2a.
- PART C: SEWER MAIN GENERAL NOTES**
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
  - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
  - FORCE MAINS SHALL BE D.I.P. ONLY.
  - MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
  - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL Q5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  - HOUSES) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

**John Roberts** 10/21/14  
 CHIEF, BUREAU OF UTILITIES DATE

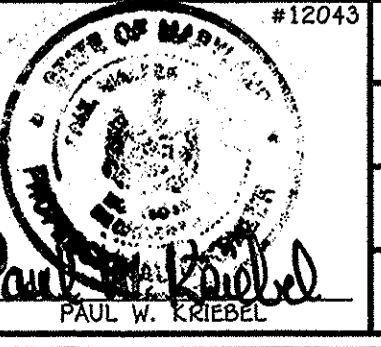
DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

**Paul W. Kriebel** 11-14-14  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21142  
 (410) 461-2995

**Paul W. Kriebel**  
 PAUL W. KRIEBEL



DESIGNED BY: B.C.R.  
 DRAWN BY: B.C.R.  
 CHECKED BY: P.W.K.  
 DATE: OCTOBER, 2014 BY NO. REVISION

**OWNER**  
 JACQUELINE RANA REVOCABLE TRUST  
 6301 TROTTER ROAD  
 CLARKSVILLE, MARYLAND 21029  
 410-583-5380

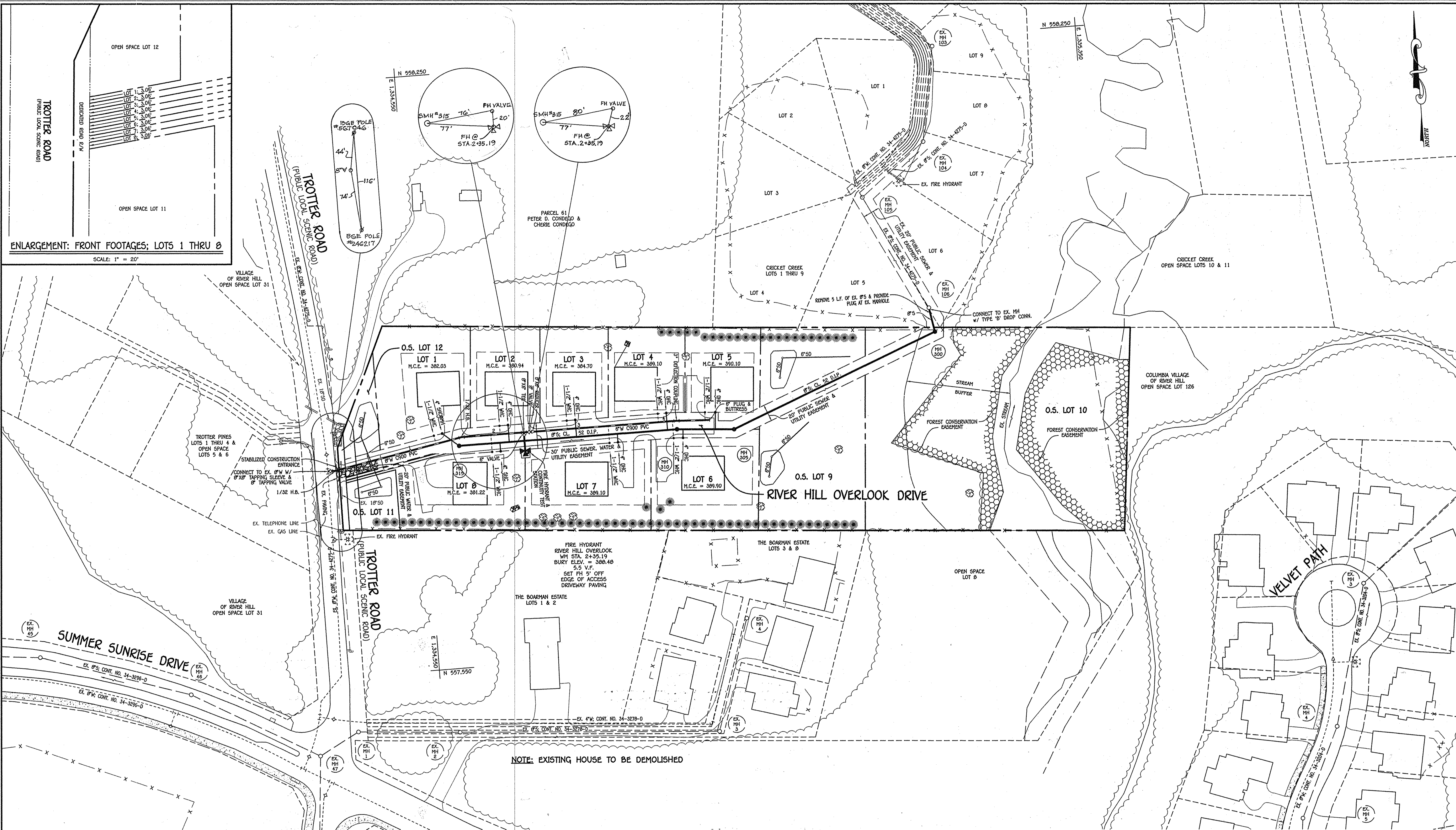
**DEVELOPER**  
 RIVER HILL OVERLOOK, LLC  
 5034 DORSEY HALL DRIVE  
 ELLICOTT CITY, MARYLAND 21042  
 410-740-0522

ATTN: CHRISTOPHER B. EMERY, TRUSTEE & YASHINI NATASHA GAJEWSKI, TRUSTEE  
 ATTN: DOUG DIERINGER & RICHARD DEMMITT

SCALE: 1" = 50'

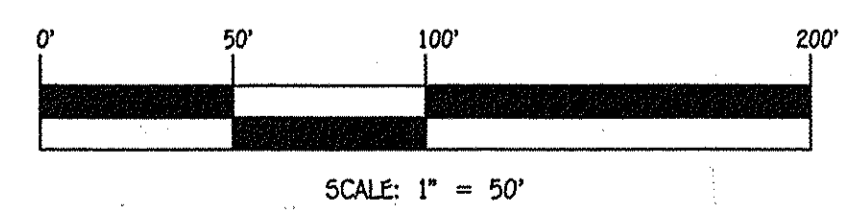
**RIVER HILL OVERLOOK**  
 LOTS 1 THRU 8 &  
 OPEN SPACE LOTS 9 THRU 12  
 WATER & SEWER MAIN EXTENSIONS  
 CONTRACT NO. 34-4831-D  
 FIFTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 5



ENLARGEMENT: FRONT FOOTAGES; LOTS 1 THRU 8  
SCALE: 1" = 20'

PLAN  
SCALE: 1" = 50'

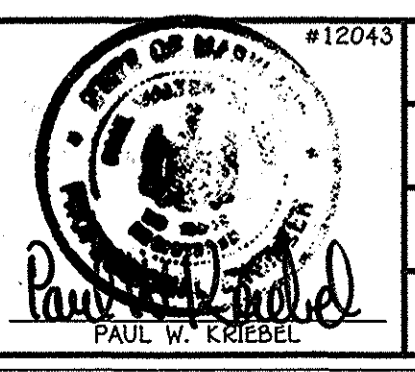


CONTRACT NO. 34-4831-D  
RIVER HILL OVERLOOK  
LOTS 1 THRU 8 &  
OPEN SPACE LOTS 9 THRU 12  
WATER & SEWER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Steve C. Green* 10/21/14  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
*Chad Edmister* 11-14-14  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.  
**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 461-2299



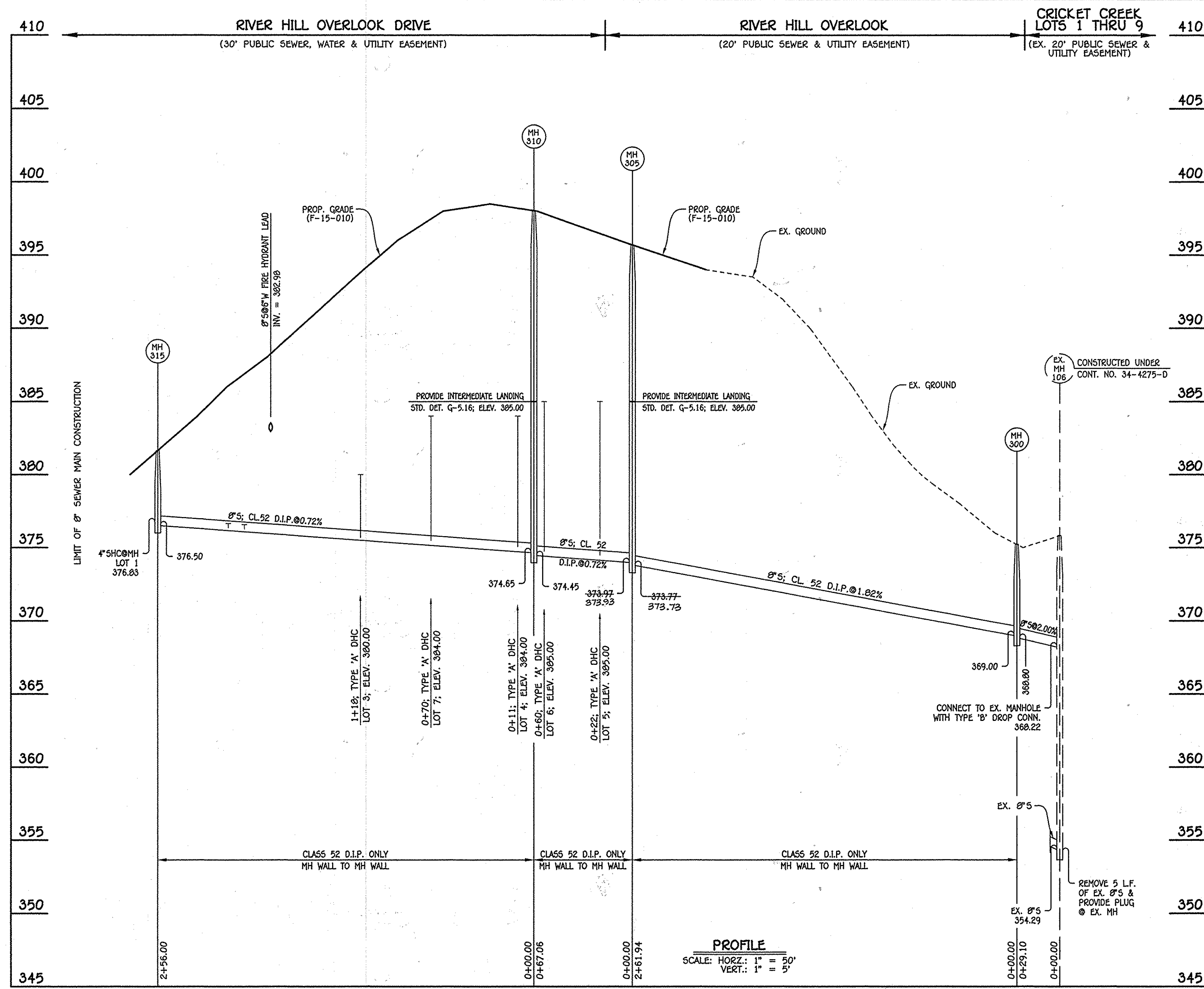
DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	OCTOBER, 2014
BY NO.	
REVISION	
DATE	

WATER & SEWER MAIN EXTENSIONS  
PLAN  
ENLARGEMENT: FRONT FOOTAGE  
DETAIL  
600' SCALE MAP NO. 35 BLOCK NO. 8  
F.C.C. WORK ORDER NO. 09040-3004  
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

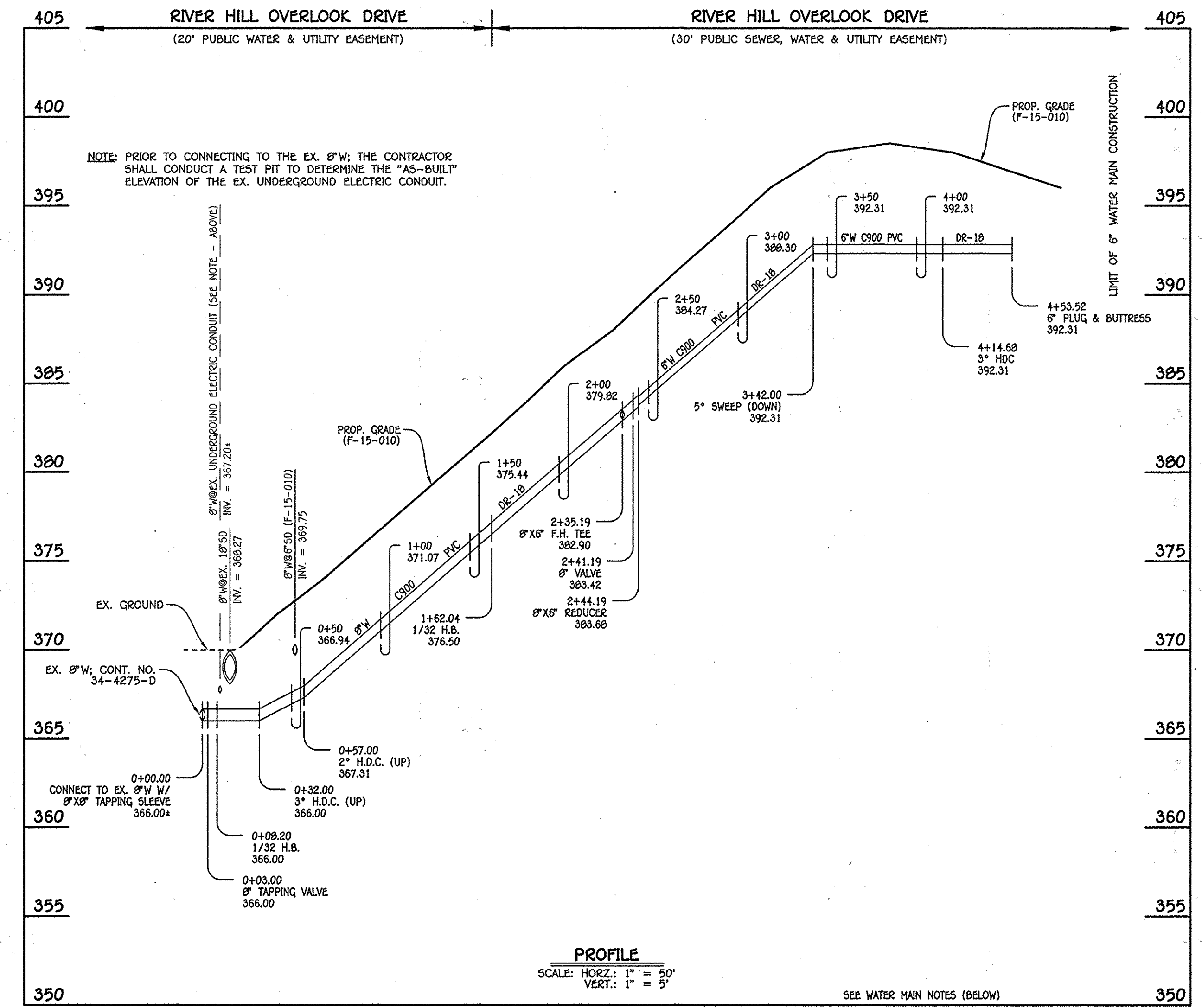
RIVER HILL OVERLOOK  
LOTS 1 THRU 8 &  
OPEN SPACE LOTS 9 THRU 12  
WATER & SEWER MAIN EXTENSIONS  
CONTRACT NO. 34-4831-D  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 2 OF 5

I:\2009\09040\09040.dwg (09040-3003 Water and Sewer Contract Plan.dwg, 10/21/2014, 2:48:51 PM)



8" SEWER MAIN: RIVER HILL OVERLOOK DRIVE - LOTS 1 THRU 8



6" / 6" WATER MAIN: RIVER HILL OVERLOOK DRIVE - LOTS 1 THRU 8

NO.	NORTHING	EASTING	RIM ELEVATION
300	557903.51	1335159.32	375.22
305	557806.65	1334915.94	395.70
310	557811.67	1334849.07	398.03
315	557811.44	1334993.07	381.64

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

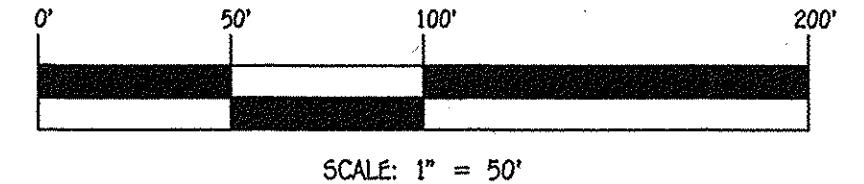
MAIN TO CLEANOUT 4" PVC	LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
23'	1		SHC TO SMH 315 - 34'	SHC TO WHC 8 - 73'
20'	2		SHC TO SMH 315 - 53'	SHC TO FHT - 42'
20'	3		SHC TO FHT - 60'	SHC TO WHC 7 - 57'
20'	4		SHC TO SHC 7 - 59'	SHC TO SMH 310 - 29'
20'	5		SHC TO SMH 310 - 39'	SHC TO SMH 305 - 42'
10'	6		SHC TO SMH 311 - 11'	SHC TO SMH 305 - 73'
10'	7		SHC TO WHC 3 - 57'	SHC TO SMH 310 - 81'
10'	8		SHC TO SMH 315 - 39'	SHC TO FHT - 39'

W.M. STA.	APPURTENANCE	NORTHING	EASTING
0+00.00	8" x 6" TAPPING SLEEVE	557793.18	1334437.37
0+03.00	8" TAPPING VALVE	557793.18	1334440.37
0+08.20	1/32 H.B.	557793.18	1334445.57
1+62.04	1/32 H.B.	557821.44	1334596.80
2+35.19	8" x 6" F.H. TEE	557821.51	1334669.94
2+41.19	8" VALVE	557821.51	1334675.94
2+44.19	8" x 6" REDUCER	557821.52	1334678.94
4+14.68	3" HOC	557821.67	1334849.44
4+53.52	6" PLUG & BUTTRESS	521819.65	1334888.22

- WATER MAIN NOTES:
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
  2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
  3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
  4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

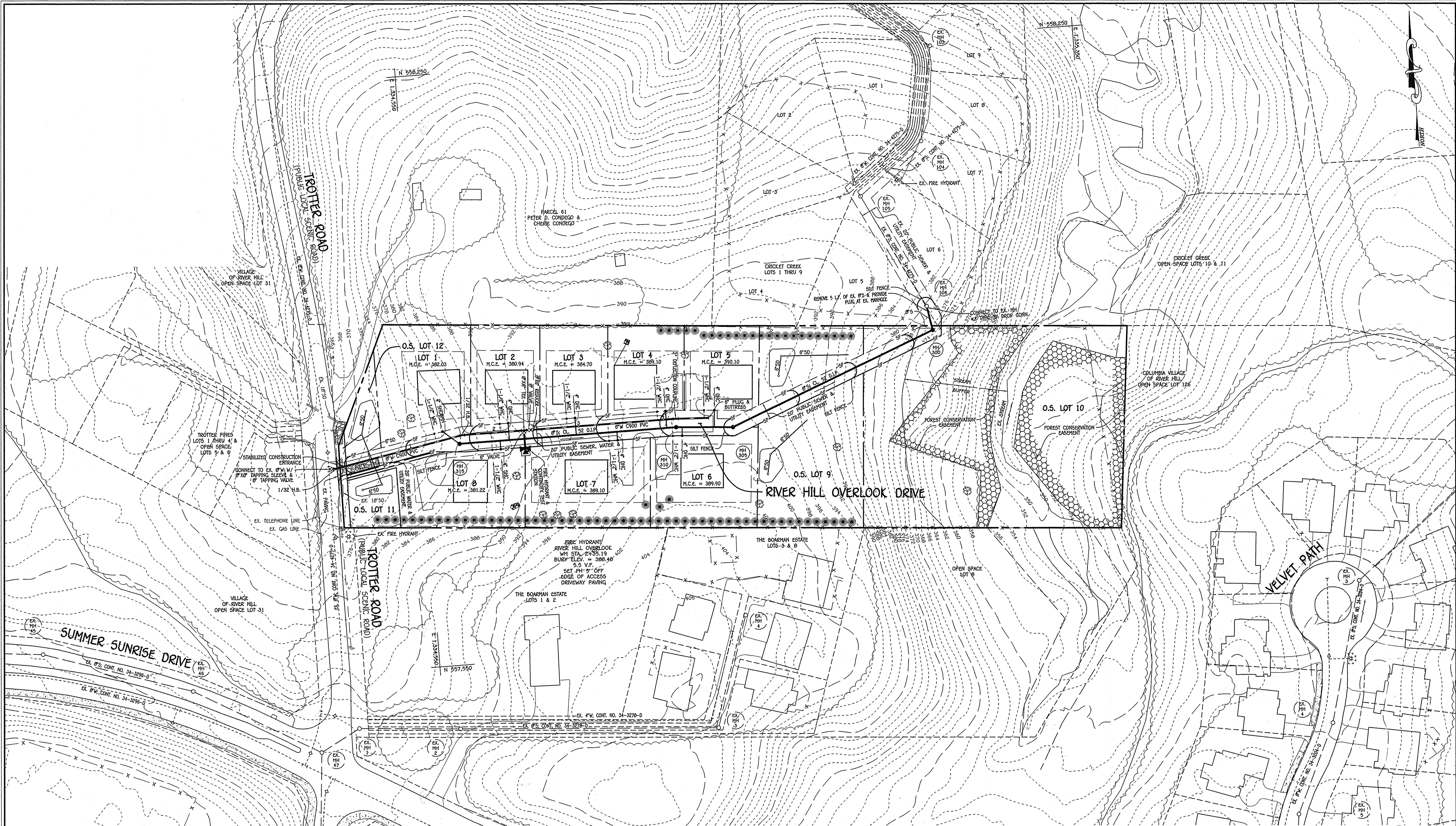
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.
MH 305 TO MH 310					
0+22 RT.	5 (DHC)	385.00	385.40	390.10	392.00
0+60 LT.	6 (DHC)	385.00	385.20	389.90	394.00
MH 310 TO MH 315					
0+11 RT.	4 (DHC)	384.00	384.40	389.10	393.00
0+70 LT.	7 (DHC)	384.00	384.20	389.10	394.00
1+18 RT.	3 (DHC)	380.00	380.40	384.70	388.00
1+97 RT.	2	376.24	376.64	380.94	382.00
2+08 LT.	8	376.32	376.52	381.22	378.30
①MH 315 RT.	1	376.83	377.33	382.03	378.00

MAIN TO METER 1/2" COPPER	LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
18'	1		WHC TO SMH 315 - 34'	WHC TO WHC 8 - 73'
9'	2		WHC TO SMH 315 - 53'	WHC TO FHT - 42'
10'	3		WHC TO FHT - 60'	WHC TO WHC 7 - 57'
10'	4		WHC TO SHC 7 - 59'	WHC TO SMH 310 - 29'
9'	5		WHC TO SMH 310 - 39'	WHC TO SMH 305 - 42'
17'	6		WHC TO SMH 311 - 11'	WHC TO SMH 305 - 73'
19'	7		WHC TO WHC 3 - 57'	WHC TO SMH 310 - 81'
20'	8		WHC TO SMH 315 - 39'	WHC TO FHT - 39'



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES <i>[Signature]</i>	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION <i>[Signature]</i>	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A ONLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE 12/31/16. <b>FISHER, COLLINS &amp; CARTER, INC.</b> CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21114 (410) 461-2895	#12043 DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: OCTOBER, 2014	<b>WATER &amp; SEWER MAIN EXTENSIONS PROFILES, CHARTS &amp; TABLES</b> 600' SCALE MAP NO. 35 BLOCK NO. 8 F.C.C. WORK ORDER NO. 09040-3004 FILE NAME: WATER & SEWER MAIN EXTENSION PLAN	<b>RIVER HILL OVERLOOK LOTS 1 THRU 8 &amp; OPEN SPACE LOTS 9 THRU 12 WATER &amp; SEWER MAIN EXTENSIONS</b> CONTRACT NO. 34-4831-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 5
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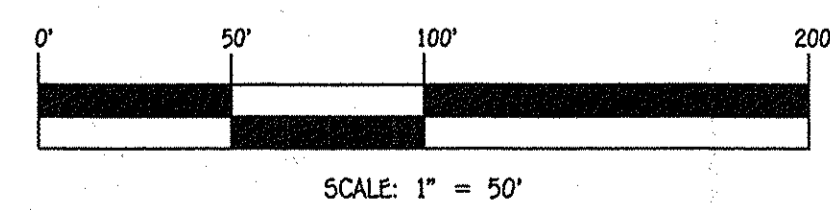
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NOTE: SEE SHEET 5 FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS

PLAN

SCALE: 1" = 50'



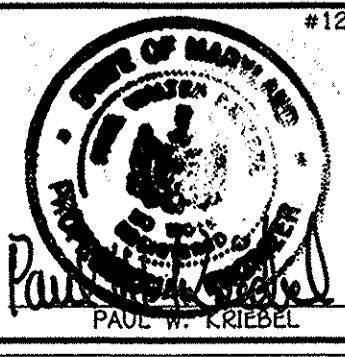
SCALE: 1" = 50'

CONTRACT NO. 34-4831-D  
 RIVER HILL OVERLOOK  
 LOTS 1 THRU 8 &  
 OPEN SPACE LOTS 9 THRU 12  
 WATER & SEWER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 10/15/14

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 11-14-14

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 182943 EXPIRATION DATE IS 7/16/16.  
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE - 1072 BALTIMORE NATIONAL PLACE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2255



DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	OCTOBER, 2014
BY NO.	
REVISION	

SEDIMENT & EROSION CONTROL PLAN	
600' SCALE MAP NO. 35	BLOCK NO. 8
F.C.C. WORK ORDER NO. 09040-3004	
FILE NAME:	WATER & SEWER MAIN EXTENSION PLAN

RIVER HILL OVERLOOK  
 LOTS 1 THRU 8 &  
 OPEN SPACE LOTS 9 THRU 12  
 WATER & SEWER MAIN EXTENSIONS  
 CONTRACT NO. 34-4831-D  
 FIFTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 4 OF 5

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