


GUILFORD ROAD SEWER MAIN EXTENSION HOWARD COUNTY, MARYLAND

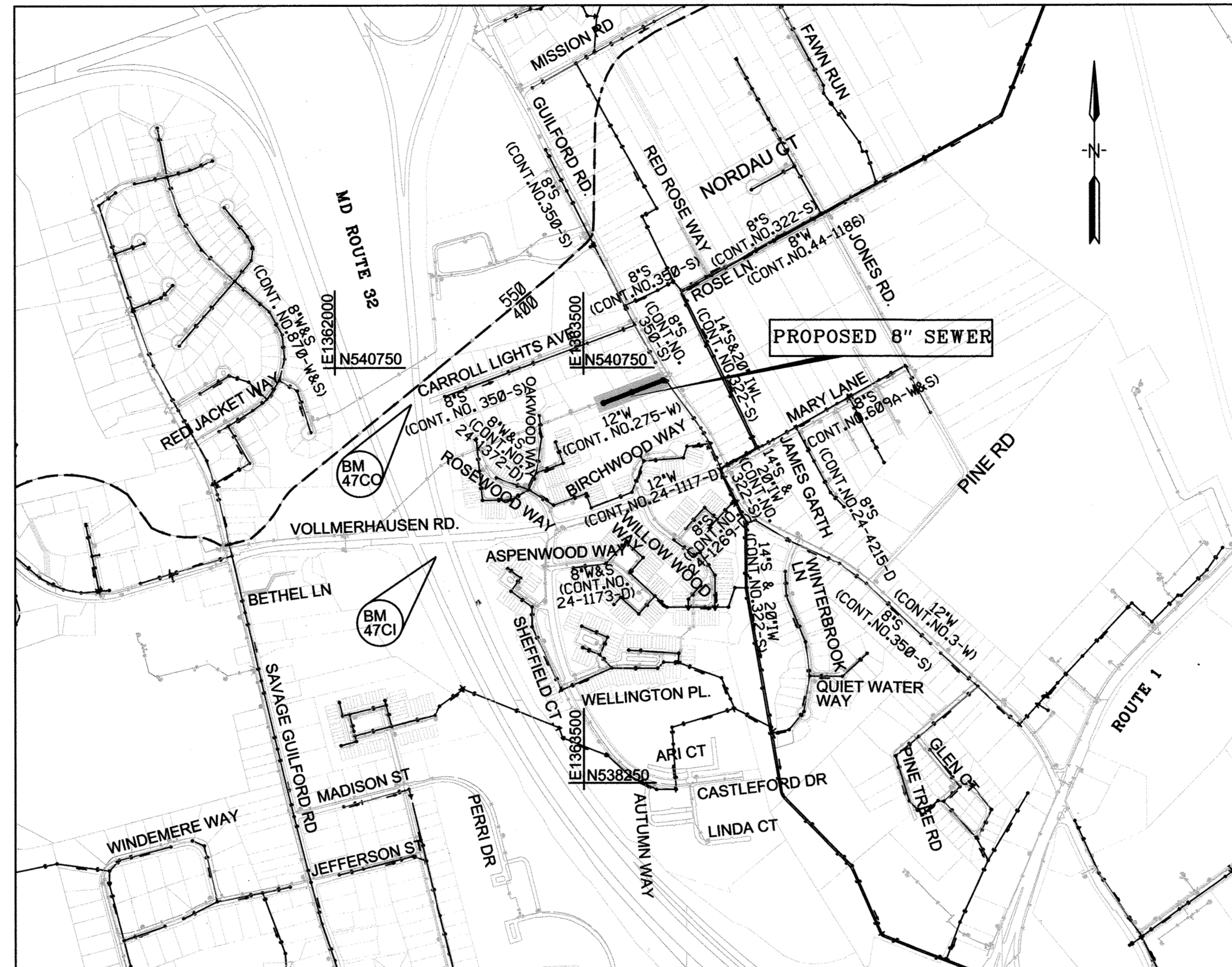
DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT No. S-6698

CONTRACT No. 20-4666

GENERAL NOTES

1. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR EXPENSE.
2. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED IN DECEMBER 2009 BY KCI TECHNOLOGIES, INC.
3. HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD83/2007 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 47C0 AND 47C1. ALL VERTICAL CONTROLS ARE BASED ON NAVD88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE IRON BARS.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON PLANS.
5. 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 OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL UTILITY POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
6. 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.
7. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL  AT THE LOCATION OF THE TEST PITS. 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.
8. 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
BG&E (CONTRACTOR SERVICES).....410-850-4620
BG&E - (EMERGENCY).....410-685-1400
BUREAU OF UTILITIES (DPW).....410-313-4900
VERIZON.....1-800-743-0033 / 410-224-9210
COLONIAL PIPELINE CO.....410-795-1390
MISS UTILITY.....1-800-257-7777
STATE HIGHWAY ADMINISTRATION.....410-531-5533
9. 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.
10. 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.
11. 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 WATER/SEWER 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.



LOCATION MAP

SCALE: 1" = 600'

TYPE OF BUILDING: RESIDENTIAL/ COMMERCIAL
NUMBER OF PARCELS: 4
NUMBER OF SEWER HOUSE CONNECTIONS: 4
DRAINAGE AREA: LITTLE PATUXENT

HOWARD COUNTY GEODETIC SURVEY CONTROL
THE HORIZONTAL AND VERTICAL DATUM BASED ON GLOBAL POSITIONING SATELLITE OBSERVATIONS FROM THE FOLLOWING HOWARD COUNTY SURVEY CONTROL POINTS:
NAD83 (2007) (HORIZONTAL)
NAVD88 (VERTICAL)

47C0	N 540529.70	47C1	N 539613.69
	E 1362460.51		E 1362608.40
	ELEV.285.69		ELEV.260.91

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.

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

John K. Whittier
APPROVED DATE 5/18/10
HOWARD SOIL CONSERVATION DISTRICT

ENGINEER'S CERTIFICATION

"I/WE 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.

Guihua Wang
GUIHUA WANG
KCI TECHNOLOGIES
936 RIDGEBROOK RD.
SPARKS, MD 21152
DATE 5/12/2010

INDEX OF SHEETS	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	8" SEWER PLAN AND PROFILE
3	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
















QUANTITIES				
ITEM	UNIT	ESTIMATE	AS-BUILT	MATERIAL SUPPLIER
8" SEWER	L.F.	461.404	394'	NORTH AMERICAN/WATERWORKS
4' DIA PRECAST MH	EA.	3	3 EA.	ATLANTIC PRODUCTS/SAME
4" SHC	L.F.	70'	114'	NORTH AMERICAN/WATERWORKS

NAME OF UTILITY CONTRACTOR: HIGHLAND TURF INCORPORATED (H.T.I.)

CHECKBOX
AS-BUILT DATE:
SURVEY AND DRAFTING DIVISION

RESTORATION SCHEDULE		
LOCATION	DISTANCE	TYPE
EASEMENT	461'	ASPHALT

LEGEND

-  DECIDUOUS TREE
-  CONIFEROUS TREE
-  PLANTING AREA
-  TRAVERSE POINT
-  SEWER MAIN
-  MANHOLE
-  SEWER HOUSE CONNECTION
-  EXISTING FIRE HYDRANT
-  EXISTING VALVE
-  EXISTING WATER MAIN
-  EXISTING GAS MAIN
-  EXISTING OVERHEAD SERVICE
-  EXISTING SEWER MAIN
-  LIMIT OF DISTURBANCE
-  SILT FENCE

SEWER NOTES

12. ALL SEWER MAINS SHALL BE PVC UNLESS OTHERWISE NOTED.
13. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
14. FORCE MAINS SHALL BE D.I.P. ONLY
15. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
16. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
17. HOUSE(S) WITH THE SYMBOL "C.N.S" INDICATES THAT CELLAR CANNOT BE SERVED.
18. THE CONTRACTOR SHALL PROVIDE SURVEY CONSTRUCTION STAKEOUT FOR ALL NECESSARY LINES, GRADES AND ELEVATION OF THE PROPOSED FACILITIES.

AS-BUILT
DATE 10/4/2010

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 AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Paul J. Epsom
BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
DATE 5/21/10

PROFESSIONAL CERTIFICATION. 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.: 31363 EXPIRATION DATE: 1/10/2012

PLOTED: 10:06 AM on Wednesday, May 12, 2010
BY: Guihua Wang
FILE: M:\2007\01071378.22\Drawings\0107137822-TITLE.dgn

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Michael J. Lewis 5/27/10
DIRECTOR OF PUBLIC WORKS DATE

Paul J. Epsom 5/21/10
CHIEF, BUREAU OF ENGINEERING DATE

John C. Kern 5/25/10
CHIEF, BUREAU OF UTILITIES DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE (410) 316-7800
FAX (410) 316-7833
WWW.KCI.COM

STATE OF MARYLAND
GUILFORD ROAD
NO. 31363
PROFESSIONAL ENGINEER

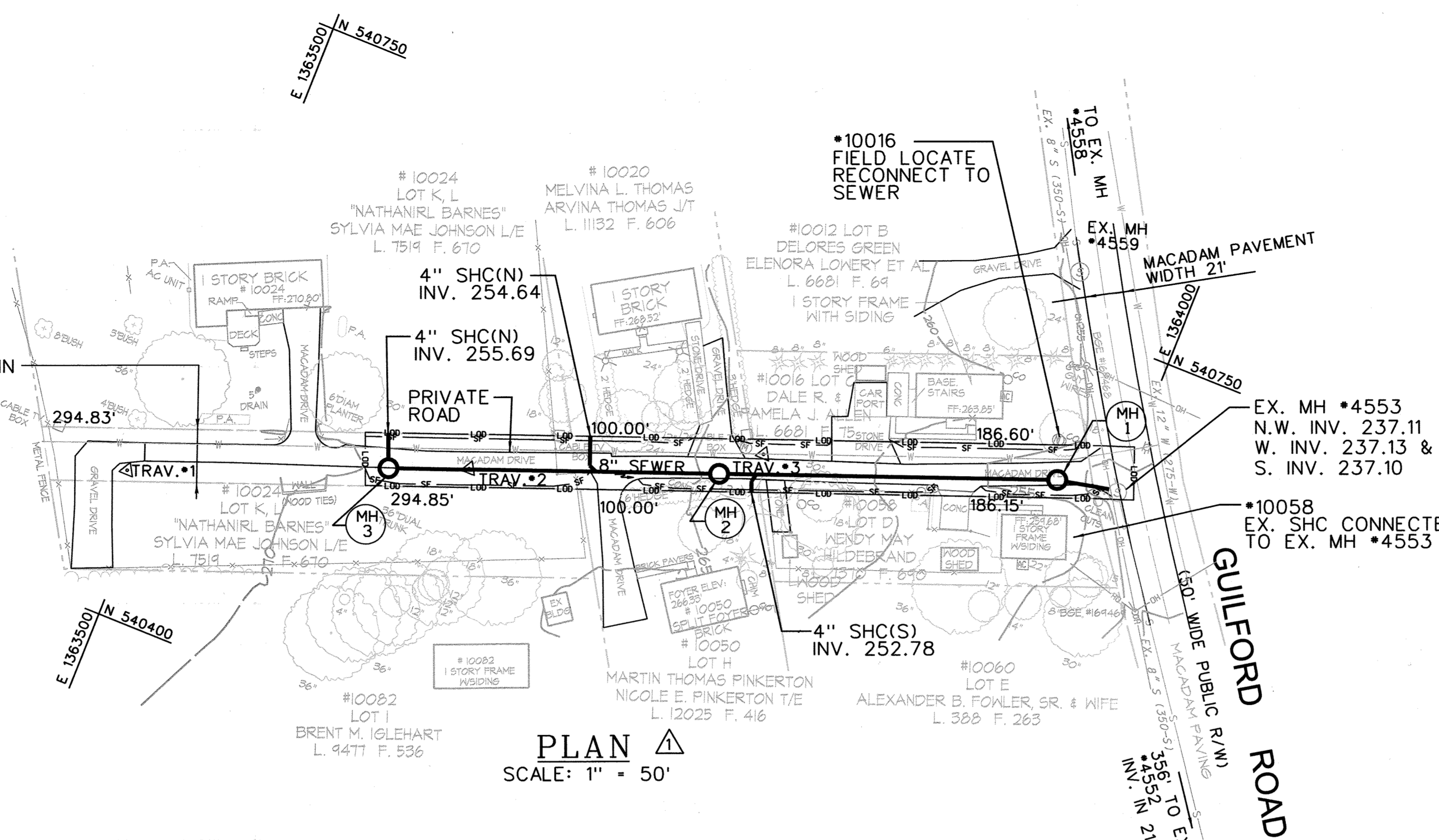
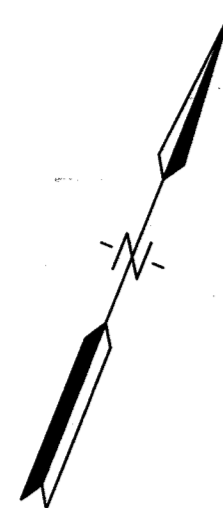
DES: GW			
DRN: CK			
CHK: TW			
DATE: MAY 2010	BY	NO.	REVISION
			10-4-10

TITLE SHEET

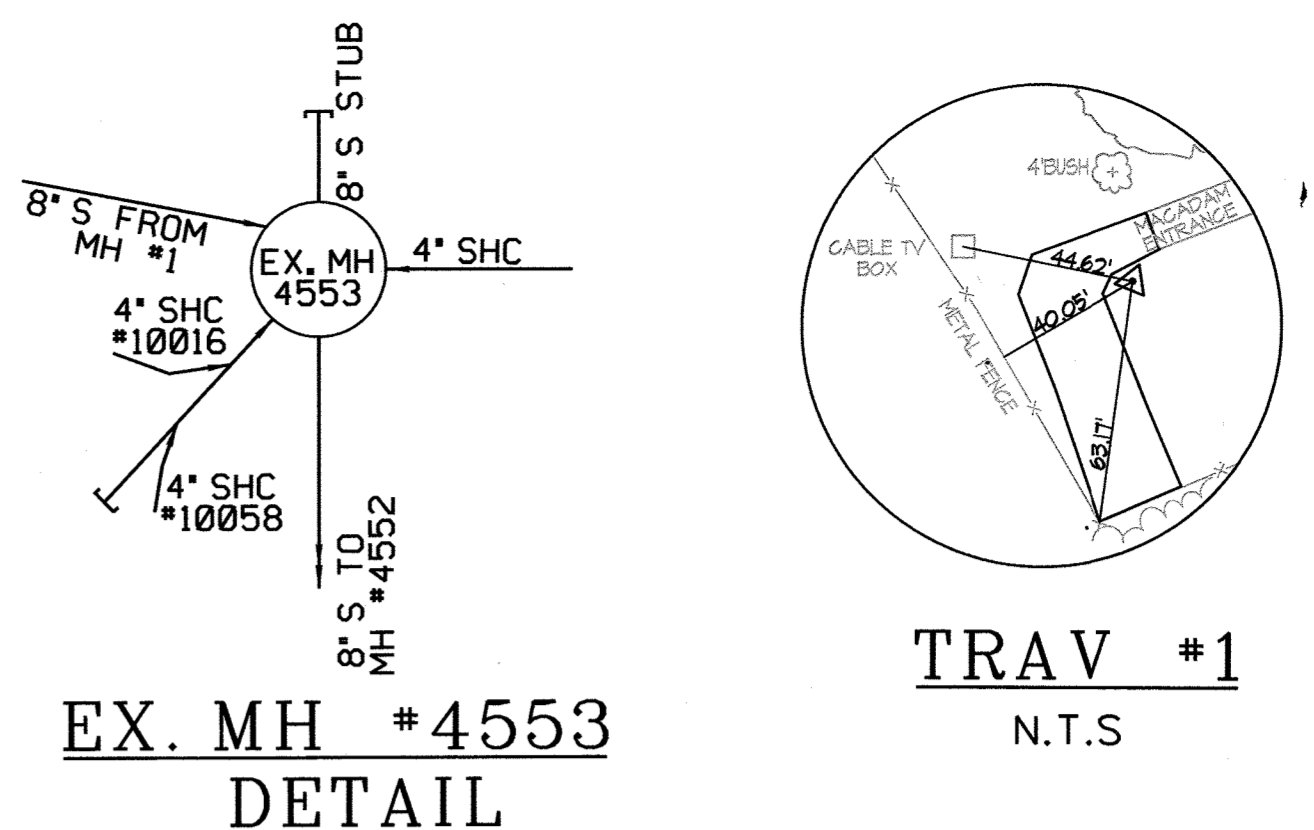
600' SCALE MAP NO. 47 BLOCK NO. 6

GUILFORD ROAD
SEWER MAIN EXTENSION
CAPITAL PROJECT No. S-6698
CONTRACT No. 20-4666
ELECTION DISTRICT NO. 6TH HOWARD COUNTY, MD

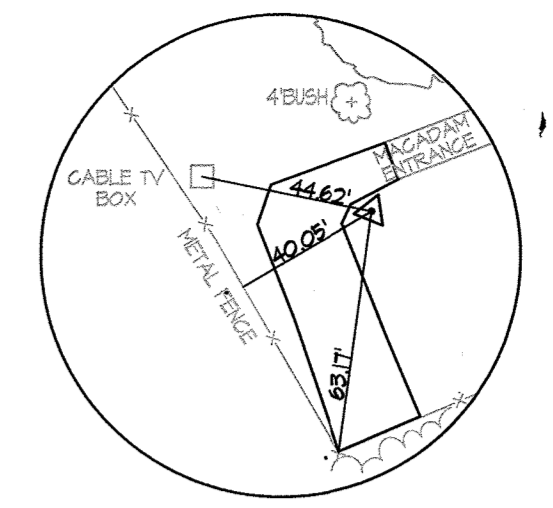
SCALE AS SHOWN
SHEET 1 OF 3



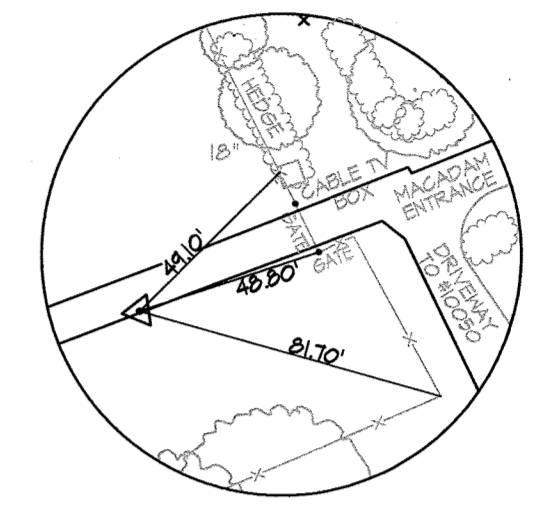
PLAN Δ
SCALE: 1" = 50'



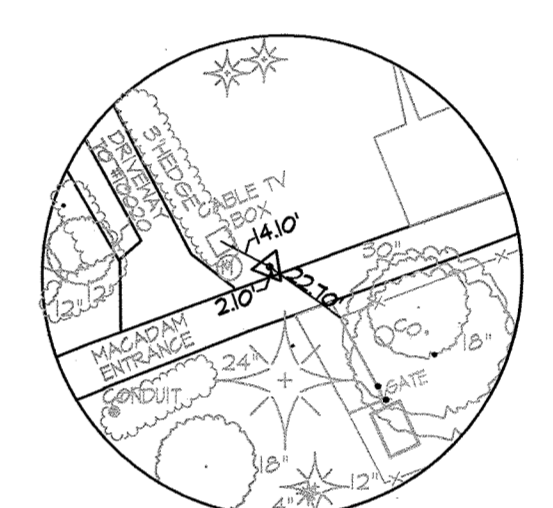
EX. MH #4553
DETAIL



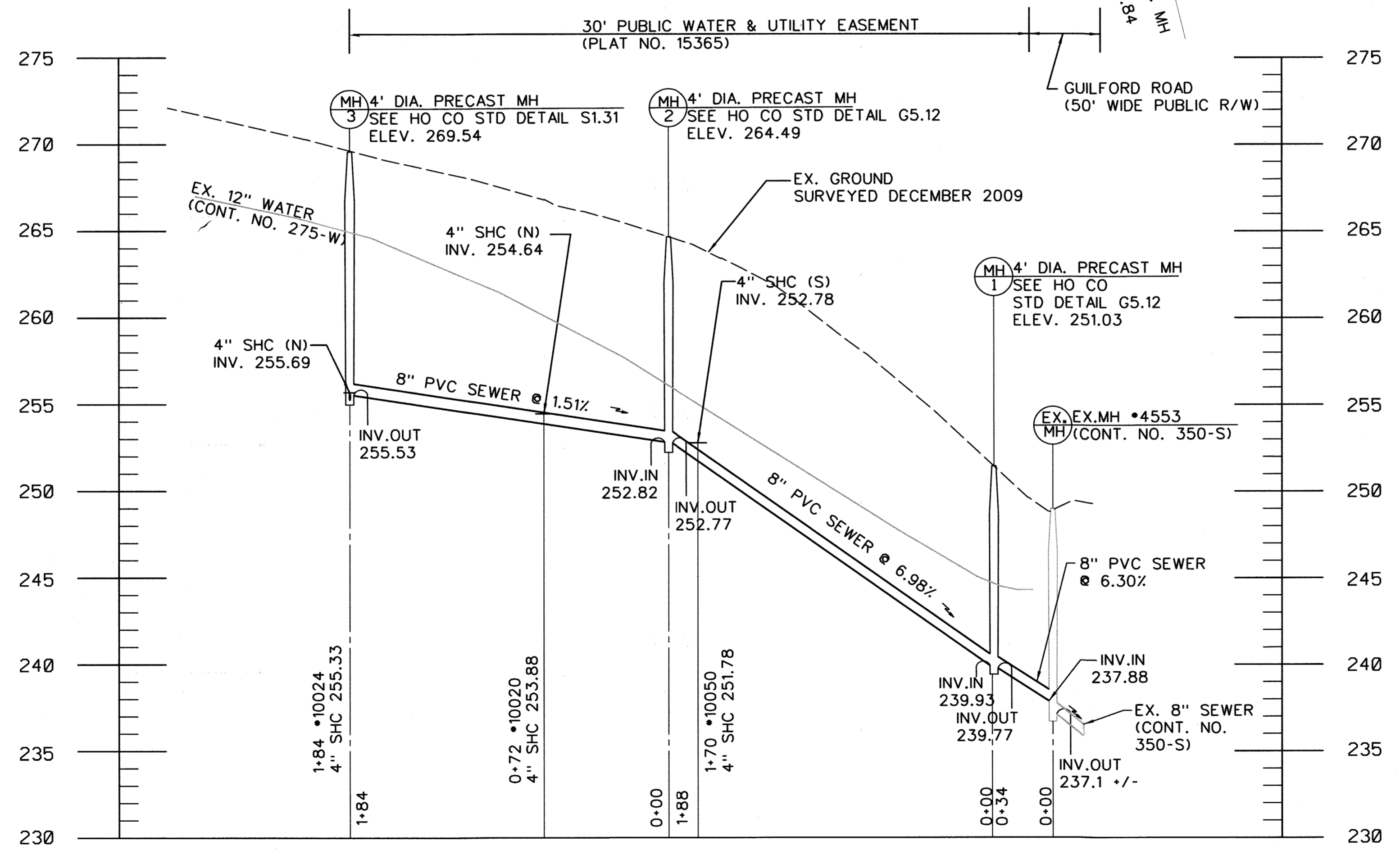
TRAV #1
N.T.S.



TRAV #2
N.T.S.



TRAV #3
N.T.S.



PROFILE Δ
SCALE: HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

- PLAN NOTES**
- SEE HOWARD COUNTY STD DETAIL G-2.12 FOR PIPE TRENCH.
 - FULL WIDTH PAVEMENT REPAIR REQUIRED WITHIN LIMITS OF DISTURBANCE. PROVIDE P-2 PAVING SECTION AS SHOWN IN STD. DETAIL R-2.01(CBR=4).

TRAVERSE COORDINATE SCHEDULE				
NUMBER	DESCRIPTION	NORTHING	EASTING	ELEVATION
TRAV.#1	REBAR & CAP	540479.93	1363484.95	272.82
TRAV.#2	PK NAIL	540551.53	1363660.99	268.76
TRAV.#3	REBAR & CAP	540619.73	1363810.15	263.69

SANITARY SEWER STAKEOUT COORDINATES SCHEDULE		
NUMBER	NORTHING	EASTING
MH #1	540672.39	1363980.44
MH #2	540667.29	1363967.00
MH #3	540536.04	1363621.62

PROFESSIONAL CERTIFICATION. 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.: 21383 EXPIRATION DATE: 1/16/2012

AS BUILT REPLACEMENT SHEET

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 1/25/11
DIRECTOR OF PUBLIC WORKS

[Signature] 1/25/11
CHIEF, BUREAU OF UTILITIES

[Signature] 1/21/11
CHIEF, BUREAU OF ENGINEERING

[Signature] 1/21/11
CHIEF, UTILITY DESIGN DIVISION

ENGINEERS
PLANNERS
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STATE OF MARYLAND
GUILFORD ROAD
PROFESSIONAL ENGINEER

DES: GW			
DRN: CK			
CHK: TW			
DATE: MAY 2010	BY: GW	NO. Δ	AS BUILT
		REVISION	DATE

**8" SEWER
PLAN & PROFILE**

600' SCALE MAP NO. 47 BLOCK NO. 6

**GUILFORD ROAD
SEWER MAIN EXTENSION**

CAPITAL PROJECT No. S-6698
CONTRACT No. 20-4666

ELECTION DISTRICT NO. 6TH HOWARD COUNTY, MD

SCALE AS SHOWN
SHEET 2 OF 3

PLOTTED: 08:42 AM on Wednesday, January 19, 2011
 BY: Guihua Wang, Division: P042, W-W-W-Solid Waste, GMA Emp
 FILE: M:\2007\01071718.22\Drawings\as built\0107171822-c-01 plan.dgn

