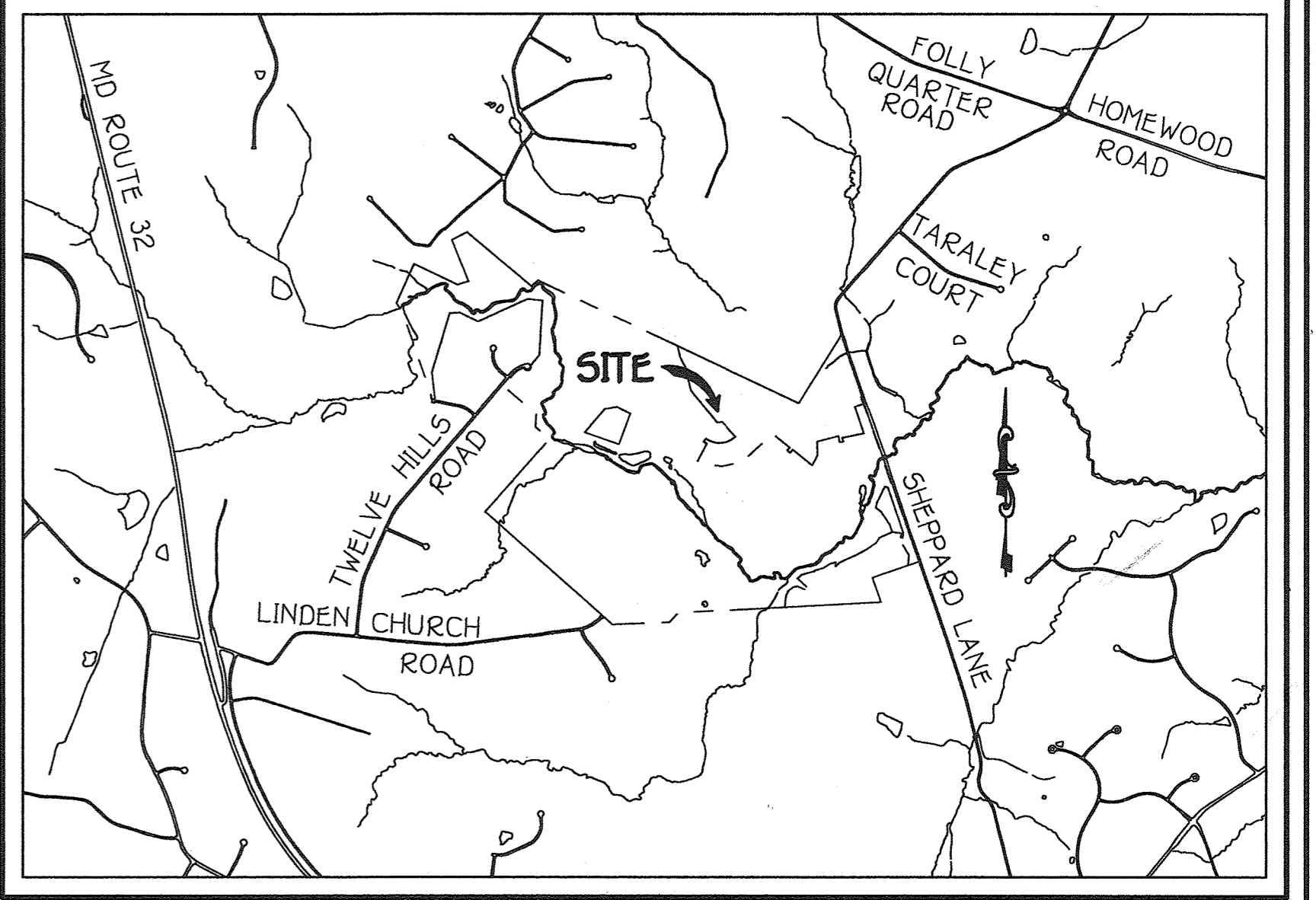
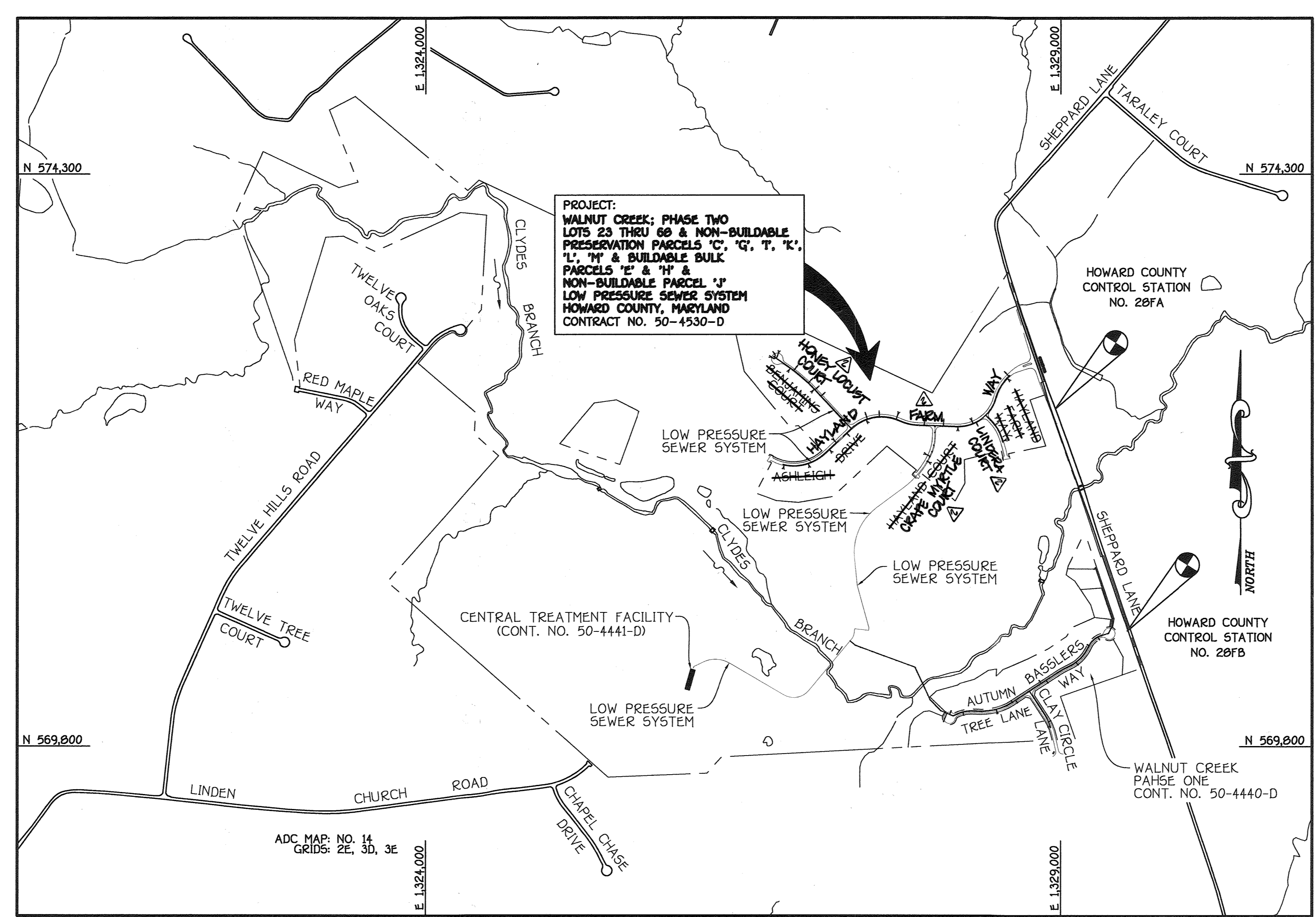


QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
1-1/2" L.P.S.*	1,324 L.F.	1,324 LF	HPPE	HP WATERWORKS
2" L.P.S.*	2,219 L.F.	2,219 LF	HPPE	HP WATERWORKS
3" L.P.S.*	10,090 L.F.	10,090 LF	HPPE	HP WATERWORKS
2" X 1-1/2" TEE	10 EACH	17 EACH	SOH 80	HP WATERWORKS
3" X 1-1/2" TEE	25 EACH	28 EACH	SOH 80	HP WATERWORKS
2" X 2" TEE	3 EACH	—	SOH 80	HP WATERWORKS
3" X 3" TEE	4 EACH	2 EACH	SOH 80	HP WATERWORKS
3" X 2" REDUCER	2 EACH	5 EACH	SOH 80	HP WATERWORKS
1/16 H.B.	3 EACH	1 EACH	HPPE	HP WATERWORKS
1/32 H.B.	3 EACH	1 EACH	HPPE	HP WATERWORKS
SIMPLEX GRINDER PUMP	8 EACH	8 EACH, E-ONE: MODEL: VHS20X100	PREPARED & ASSOC.	
DUPLEX GRINDER PUMP	19 EACH	19 EACH, E-ONE: MODEL: VHS20X100	PREPARED & ASSOC.	
IN-LINE FLUSHING CONN.	11 EACH	11 EACH	—	HP WATERWORKS
CONTINUITY TEST STATION	57 EACH	28 EACH	—	HP WATERWORKS
TERMINAL FLUSHING CONN.	4 EACH	4 EACH	—	HP WATERWORKS
3" PLUG & BUTTRESS	2 EACH	2 EACH	—	HP WATERWORKS

NAME OF UTILITY CONTRACTOR: UTILITIES UNLIMITED
 SURVEY & DRAFTING DIVISION AS-BUILT DATE: FEBRUARY 16, 2010

*L.P.S. DENOTES LOW PRESSURE SEWER



- PART I
GENERAL NOTES
- 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 JULY, 2005 BY FISHER, COLLINS & CARTER, INC.
 - HORIZONTAL AND VERTICAL CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM HAD '83/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 28FA & NO. 28FB. SEE THIS SHEET FOR BENCHMARK INFORMATION.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 2'-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 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 (P) AT THE LOCATIONS 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.
 - THE 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 (CONSTRUCTION SERVICES) 410-850-4620
 - BGE (EMERGENCY) 410-685-1400
 - BUREAU OF UTILITIES 410-313-4900
 - COLONIAL PIPELINE CO 410-795-1390
 - MES UTILITY 1-800-251-7777
 - 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 THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING 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 10.11(A) OF THE HOWARD COUNTY CODE.

TYPE OF BUILDING: RESIDENTIAL: SINGLE FAMILY DETACHED
 NUMBER OF LOTS: 46
 NO. OF WATER HOUSE CONNECTIONS: 0 - PRIVATE ON-LOT WELLS
 NO. OF SEWER HOUSE CONNECTIONS: 46
 DRAINAGE AREA: N/A
 TREATMENT PLANT: COMMUNITY SHARED CENTRAL TREATMENT FACILITY & SHARED SEPTIC DISPOSAL FACILITY ON NON-BUILDABLE BULK PARCEL 'B' - (PHASE ONE)

VICINITY MAP
SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:
5P-06-007 F-08-081

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:
 BASSLER VENTURE, LLC
 SIGNATURE OF DEVELOPER
 10-26-09
 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
 SIGNATURE OF ENGINEER
 10/26/09
 DATE

GP-08-093
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:
 HOWARD SOIL CONSERVATION DISTRICT
 12/1/09
 DATE

APPROVED FOR PUBLIC SEWERAGE COLLECTION SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

B. Wilson for Peter Beilenson
 HOWARD COUNTY HEALTH OFFICER
 11/7/2010
 DATE

CONTRACT NO. 50-4530-D
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

BENCHMARK INFORMATION

B.M.'1 - HOWARD COUNTY CONTROL STATION *28FA NAD '83
 (LOCATED ALONG THE EAST SIDE OF SHEPPARD LANE, APPROX. 4' OFF EDGE OF PAVING BETWEEN CAP POLES 52 & 53)
 N 572456.665
 E 1329597.66
 ELEVATION = 348.296

B.M.'2 - HOWARD COUNTY CONTROL STATION *28FB NAD '83
 (LOCATED ALONG THE WEST SIDE OF SHEPPARD LANE; AT THE ENTRANCE TO THE BASSLER PROPERTY)
 N 570106.899
 E 1329524.63
 ELEVATION = 385.804

DEVELOPER
 HERITAGE LAND DEVELOPMENT
 1950 NORTH AVENUE
 P.O. BOX 492
 LISBON, MD 21765

CONTRACT NO. 50-4530-D
 WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

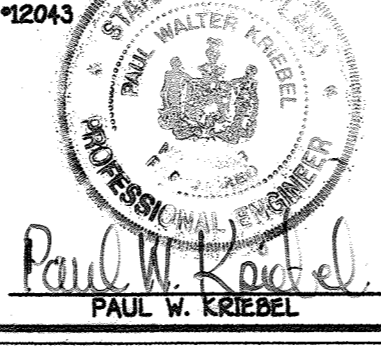
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Chief, Bureau of Utilities
 11/10/09
 DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Chief, Development Engineering Division
 12/1/09
 DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21117
 (410) 461-2999



DESIGNED BY:	B.C.R.		
DRAWN BY:	B.C.R.		
CHECKED BY:	P.W.K.	PCO	"AS-BUILT"
DATE:	OCTOBER, 2009	PEC	REMOVE QUANTITIES AS REQUIRED/REMOVE SIZE OF LATERALS
BY:	NO.		

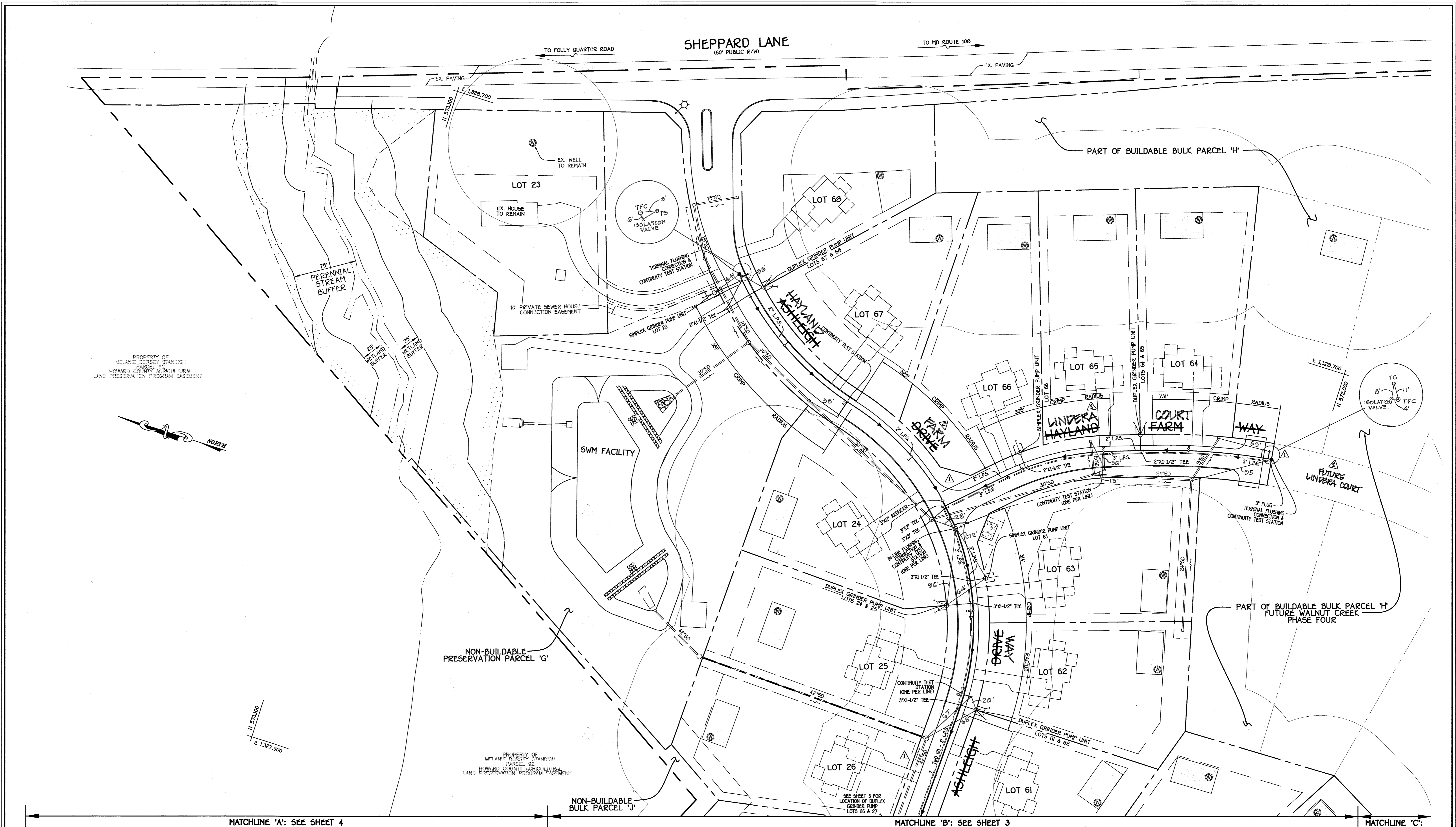
LOW PRESSURE SEWER SYSTEM
 TITLE SHEET

600' SCALE MAP NO. 28 BLOCK NO. 5, 10, 11, 12, 17, 18
 F.C.C. WORK ORDER NO. 4021-3001

FILE NAME: LOW PRESSURE SEWER SYSTEM BASE TITLE

WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' CONTRACT NO. 50-4530-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 15



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

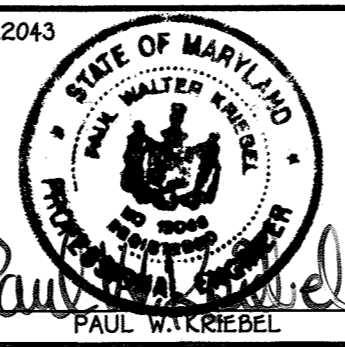
PLAN
SCALE: 1" = 50'

CONTRACT NO. 50-4530-D
WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John C. Chen
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
William J. ...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKWY
ELICOTT CITY, MARYLAND 21042
410-461-2995



DESIGNED BY:	B.C.R.	DATE:	SEPTEMBER, 2012
DRAWN BY:	B.C.R.	BY:	NO.
CHECKED BY:	P.W.K.	DATE:	9-25-12
DATE:	SEPTEMBER, 2012	BY:	NO.
REVISION NUMBER & SIZE OF LOW PRESSURE SEWERS	1 "AS BUILT"	DATE:	9/10/12
REVISION		DATE:	

LOW PRESSURE SEWER SYSTEM PLAN
600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18
F.C.C. WORK ORDER NO. 4001-3001
FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN

WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
CONTRACT NO. 50-4530-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 15

"AS-BUILT": 09/10/12

I:\2014\0401\dwg\PHASE TWO FINALS\0401-3001 Phase 2 Sewer Base Plan (Lots 45) (Redline 1 - June, 2012).dwg, New Plan Sheet 2, 9/25/2012 7:44:40 AM, 1:1

MATCHLINE 'D': SEE SHEET 4

MATCHLINE 'B': SEE SHEET 2

MATCHLINE 'E': SEE SHEET 5

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

PLAN
SCALE: 1" = 50'

NOTE: SEE SHEETS 13 & 14 FOR EROSION & SEDIMENT CONTROL PLAN & SHEET 15 FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS

CONTRACT NO. 50-4530-D
WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
LOW PRESSURE SEWER SYSTEM
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

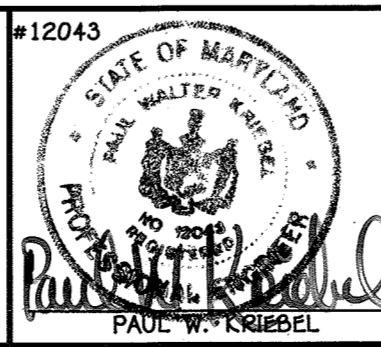
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Sheri C. Green
CHIEF, BUREAU OF UTILITIES

W. J. ...
DATE CHIEF, DEVELOPMENT ENGINEERING DIVISION

10/11/12
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 451-2299



DESIGNED BY:	B.C.R.		
DRAWN BY:	B.C.R.		
CHECKED BY:	P.W.K.	FOC	"AS BUILT"
DATE:	SEPTEMBER, 2012	BY	NO.
		REVISION NUMBER & SIZE OF LOW PRESSURE SEWERS	REVISION

LOW PRESSURE SEWER SYSTEM PLAN	
600' SCALE MAP NO. 28	BLOCK NO. 4, 5, 10, 11, 12, 17 & 18
9-25-12	F.C.C. WORK ORDER NO. 4001-3001
FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN	

WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
CONTRACT NO. 50-4530-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 3 OF 15

"AS BUILT": 02/10/16

1:2024104001.dwg/PHASE TWO/FINALS/04001-3001 Phase 2 Sewer Base Plan (Lots 45) (Redline 1 - June, 2012).djg, New Plan Sheet 3, 9/25/2012 8:54:56 AM, 1:1

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE			
LOT #	LOCATION DIMENSION #1	LOCATION DIMENSION #2	LOCATION DIMENSION #3
23	Could Not Locate		
24	7' To Grinder Pump	10' to GP Service Valve	90' to in-line Flushing MH
25	Could not Locate		
26	7' To Grinder Pump	10' to C/O Lot 27	14' to Verizon Box
27	7' To Grinder Pump	10' to C/O Lot 26	47' In-line Flushing MH
28	7' To Grinder Pump	10' to C/O Lot 29	29' to SD Inlet (Lot 28)
29	7' To Grinder Pump	10' to C/O Lot 28	32' to SD Inlet (Lot 28)
30	5' To Grinder Pump	72' to SD Inlet (Lot 31/31)	55' to SD MH (Lot 29)
31	11' To Grinder Pump	10' to C/O Lot 32	36' to SD MH (Lot 31)
32	11' To Grinder Pump	10' to C/O Lot 31	44' to SD MH (Lot 31)
33	6' To Grinder Pump	8' to C/O Lot 34	39' to In-line Flushing MH

T.S. - TEST STATION
T.F.C. - TERMINAL FLUSHING CONNECTION
I.V. - ISOLATION VALVE
G.P. - GRINDER PUMP
I.F.C. - IN-LINE FLUSHING CONNECTION

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE - CONTINUED			
47	7' To Grinder Pump	11' to C/O Lot 46	59' to In-line Flushing MH
48	9' To Grinder Pump	11' to C/O Lot 49	41' to SD Inlet (Lot 46)
49	8' To Grinder Pump	11' to C/O Lot 48	9' to GP Service Valve
50	7' To Grinder Pump	11' to C/O Lot 51	77' to In-line Flushing MH
51	8' To Grinder Pump	11' to C/O Lot 50	10' to GP Service Valve
52	7' To Grinder Pump	10' to C/O Lot 53	40' to In-line Flushing MH
53	8' To Grinder Pump	10' to C/O Lot 52	36' to In-line Flushing MH
54	5' To Grinder Pump	69' to In-line Flushing MH	54' to Electrical Box
55	7' To Grinder Pump	10' to C/O Lot 56	59' to SD Inlet (Lot 30/31)
56	6' To Grinder Pump	10' to C/O Lot 55	54' to SD Inlet (Lot 30/31)
57	7' To Grinder Pump	11' to C/O Lot 58	25' to SD Inlet (Lot 57)
58	7' To Grinder Pump	11' to C/O Lot 57	32' to SD Inlet (Lot 57)
59	7' To Grinder Pump	10' to C/O Lot 60	10' to Verizon Box
60	7' To Grinder Pump	10' to C/O Lot 59	16' to Verizon Box
61	6' To Grinder Pump	10' to C/O Lot 62	26' to Test Station
62	6' To Grinder Pump	10' to C/O Lot 61	21' to Test Station
63	7' To Grinder Pump	45' to Corner of Bus Pad	70' to GP Lot 24/25
64	6' To Grinder Pump	10' to C/O Lot 65	86' to SD Inlet (Lot 64)
65	7' To Grinder Pump	10' to C/O Lot 64	54' to SD Inlet (Lot 65)
66	7' To Grinder Pump	87' to SD Inlet (Lot 65)	70' to Verizon Box

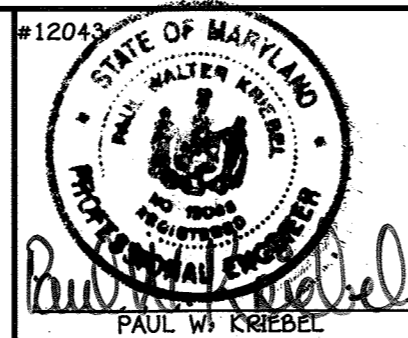
SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE - CONTINUED			
67	7' To Grinder Pump	10' to C/O Lot 68	43' to In-line Flushing MH
68	7' To Grinder Pump	10' to C/O Lot 67	38' to In-line Flushing MH

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE - CONTINUED			
34	5' To Grinder Pump	8' to C/O Lot 33	77' to SD Inlet (Lot 35)
35	4' To Grinder Pump	27' to SD Inlet (Lot 35)	64' to SD MH (Lot 35/36)
36	Could Not Locate		
37	7' To Grinder Pump	9' to C/O Lot 38	49' to SD MH (cut-de-sac)
38	7' To Grinder Pump	9' to C/O Lot 37	60' to Terminal Flushing MH
39	7' To Grinder Pump	46' to GP Lot 38	29' to Test Station
40	8' To Grinder Pump	12' to C/O Lot 41	23' to Test Station
41	8' To Grinder Pump	12' to C/O Lot 40	38' to Terminal Flushing MH
42	7' To Grinder Pump	11' to C/O Lot 42	8' to GP Service Valve
43	8' To Grinder Pump	11' to C/O Lot 43	9' to GP Service Valve
44	6' To Grinder Pump	10' to C/O Lot 45	68' to SD Inlet (Lot 44)
45	7' To Grinder Pump	10' to C/O Lot 44	35' to In-line Flushing MH
46	6' To Grinder Pump	11' to C/O Lot 47	8' to GP Service Valve

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Silvia C. Cunniff
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Michael J. ...
DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL FLYE
ELICOTT CITY, MARYLAND 21116
(410) 451-3999



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: SEPTEMBER, 2012
BY NO. 12043
PAUL W. KREBEL

LOW PRESSURE SEWER SYSTEM PLAN
600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18
F.C.C. WORK ORDER NO. 4001-3001
FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN

WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
CONTRACT NO. 50-4530-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

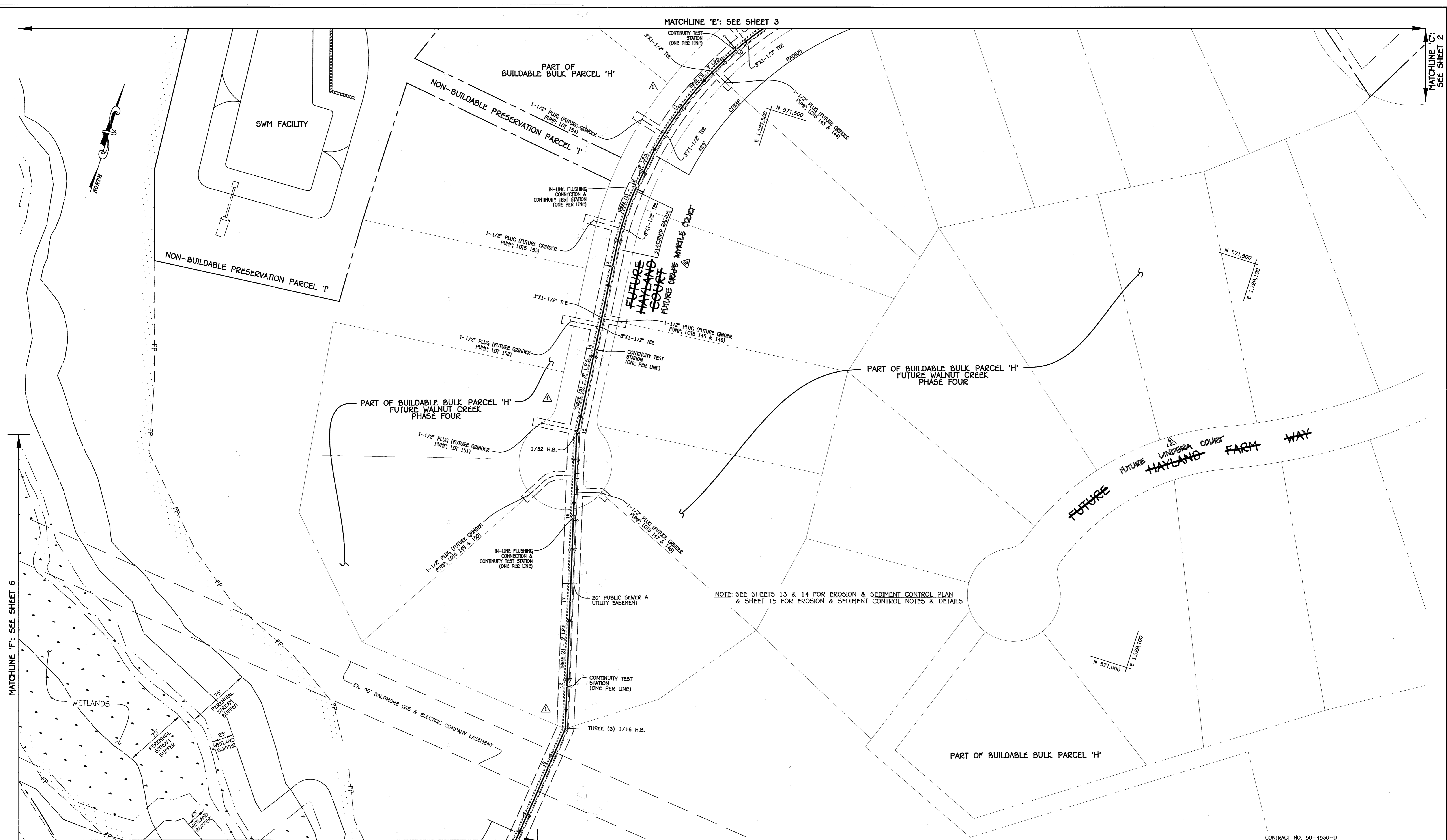
SCALE AS SHOWN
SHEET 4 OF 15

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 4 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

PLAN
SCALE: 1" = 50'

CONTRACT NO. 50-4530-D
WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
LOW PRESSURE SEWER SYSTEM
HOWARD COUNTY, MARYLAND

"AS BUILT" = 02/10/16



NOTE: SEE SHEETS 13 & 14 FOR EROSION & SEDIMENT CONTROL PLAN & SHEET 15 FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 5 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

CONTRACT NO. 50-4530-D
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 60, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

PLAN
 SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION
---	---

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETT CITY, MARYLAND 21042
 (410) 461-2999

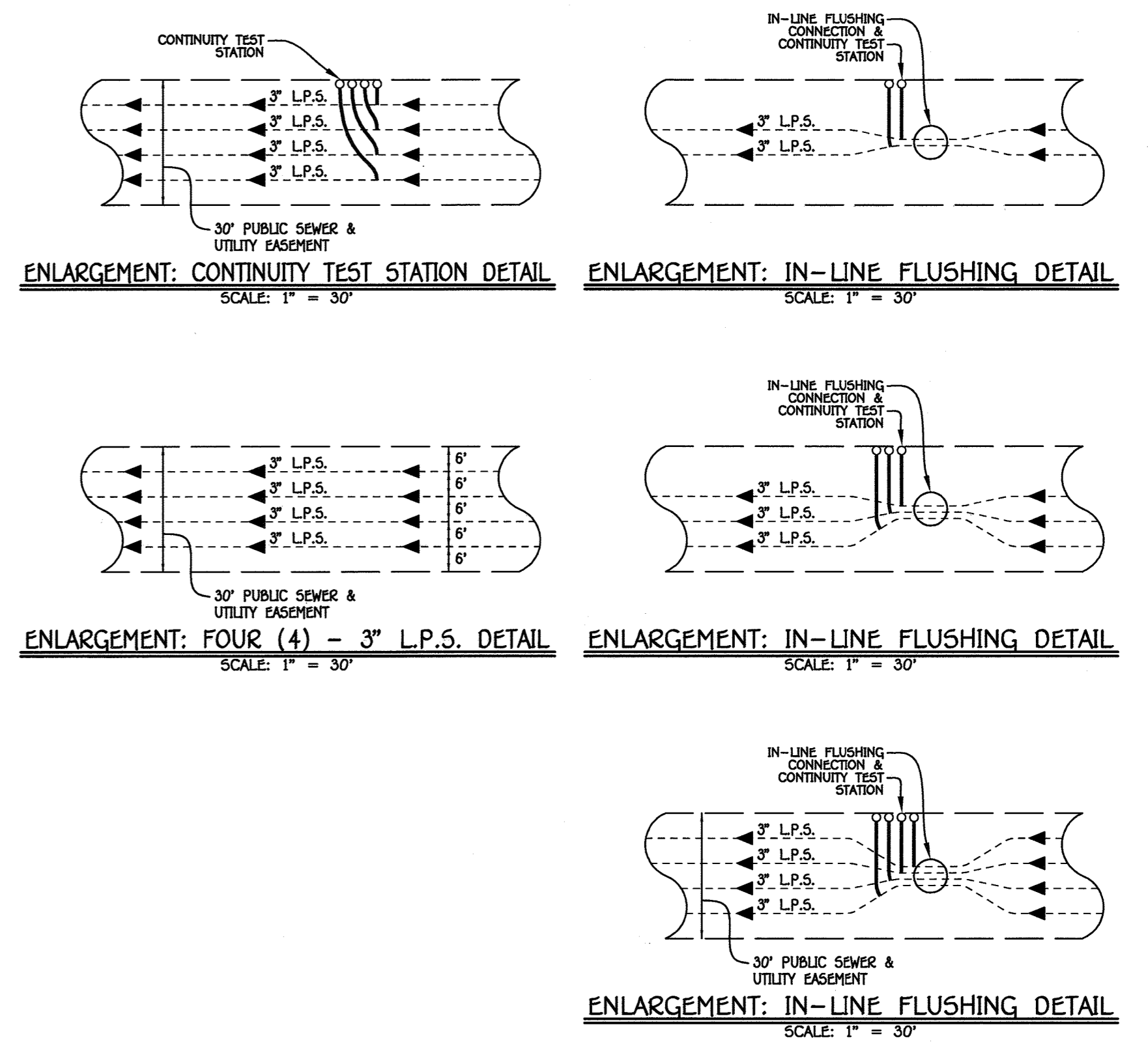
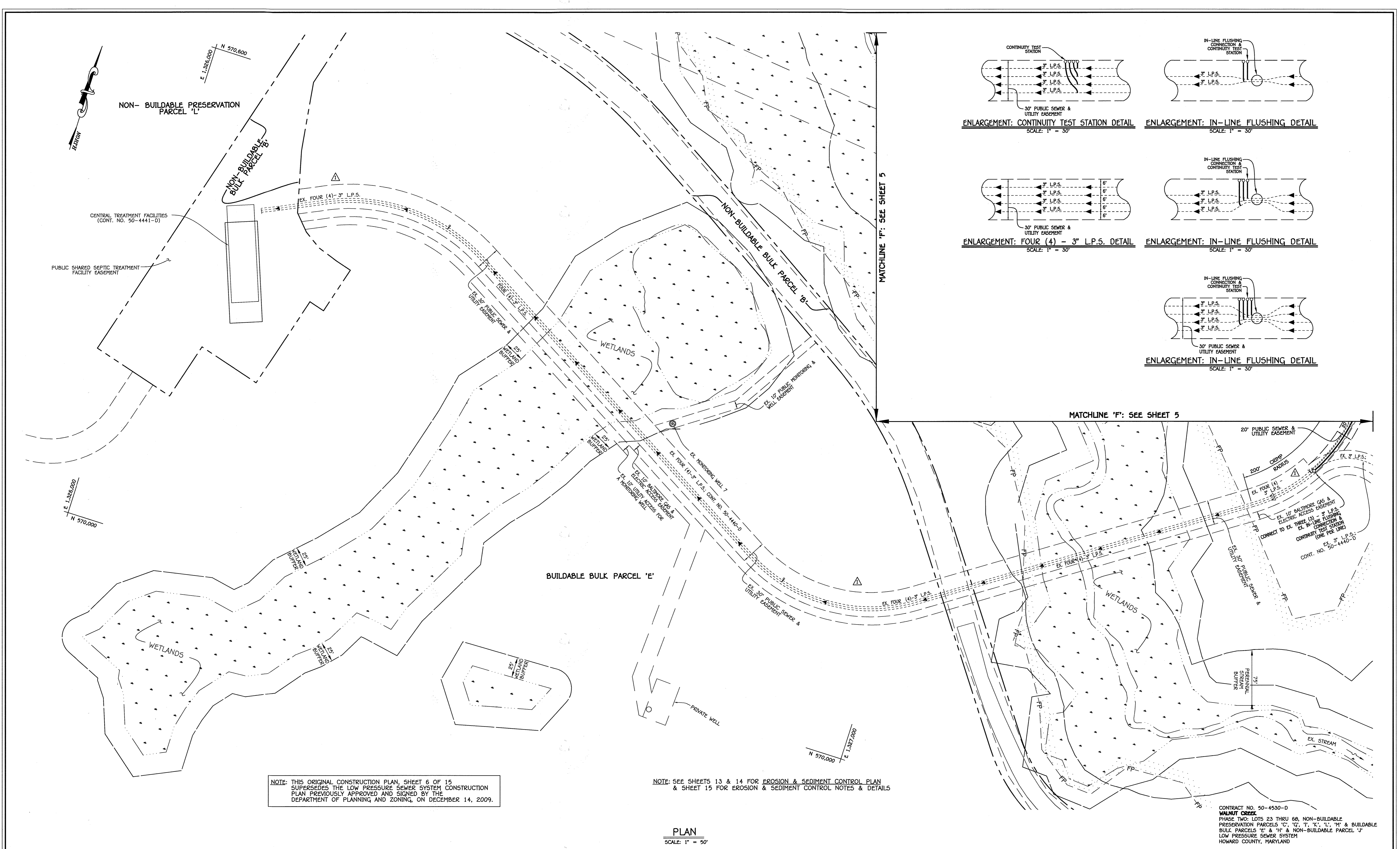


DESIGNED BY:	B.C.R.	
DRAWN BY:	B.C.R.	
CHECKED BY:	P.W.K.	9/16/12
DATE:	SEPTEMBER, 2012	BY NO.
REVISION NUMBER & ALIGNMENT OF LOW PRESSURE SEWERS		REVISION

LOW PRESSURE SEWER SYSTEM PLAN	
600' SCALE MAP NO. 20	BLOCK NO. 4,5,10,11,12,17&18
F.C.C. WORK ORDER NO. 4001-3001	
FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN	

WALNUT CREEK	
PHASE TWO: LOTS 23 THRU 60, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'	
CONTRACT NO. 50-4530-D	
FIFTH ELECTION DISTRICT	
HOWARD COUNTY, MARYLAND	
SCALE AS SHOWN	SHEET 5 OF 15

"AS BUILT": 02/10/16



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 6 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON DECEMBER 14, 2009.

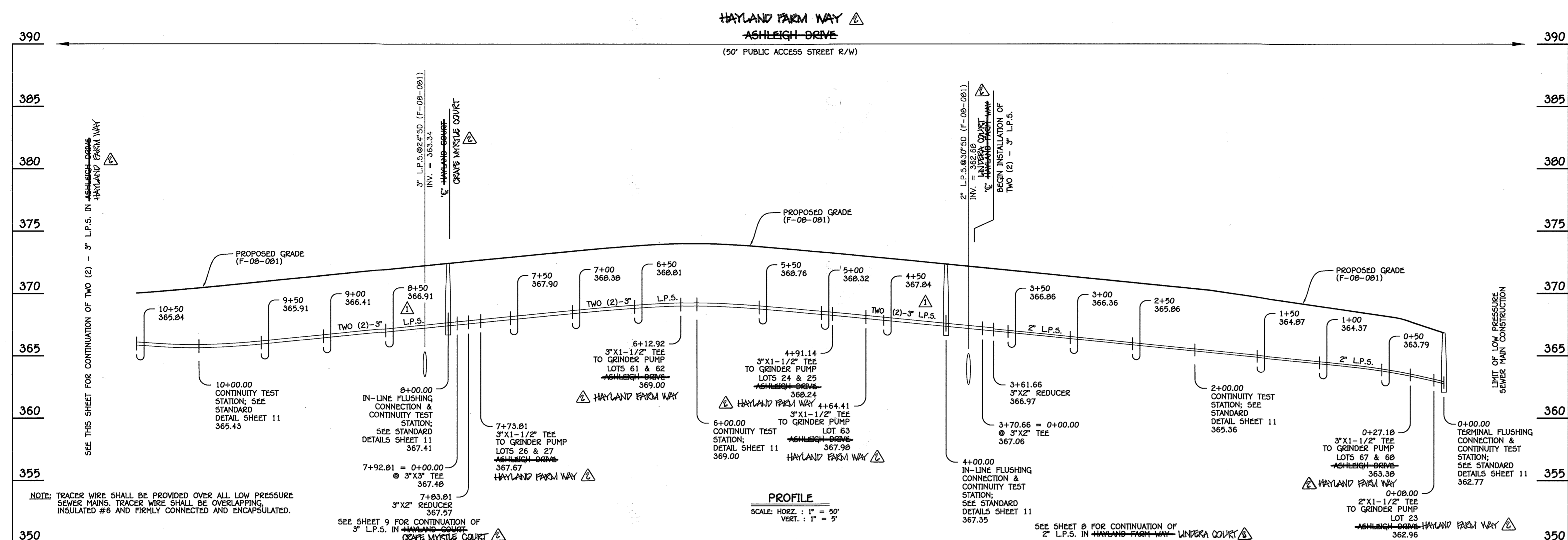
NOTE: SEE SHEETS 13 & 14 FOR EROSION & SEDIMENT CONTROL PLAN & SHEET 15 FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS

PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND 	 FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK ELLEOTT CITY, MARYLAND 21042 (410) 461-3999	 STATE OF MARYLAND DEPARTMENT OF PUBLIC WORKS DIVISION OF PERMITS RECEIVED	DESIGNED BY: B.C.R.	LOW PRESSURE SEWER SYSTEM PLAN	600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18 F.C.C. WORK ORDER NO. 4001-3001 FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN	WALNUT CREEK PHASE TWO: LOTS 23 THRU 60, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
				CHECKED BY: P.W.K. DATE: SEPTEMBER, 2012				REVISION 9-25-12 REVISE ALIGNMENT OF LOW PRESSURE SEWERS / ADD DETAILS

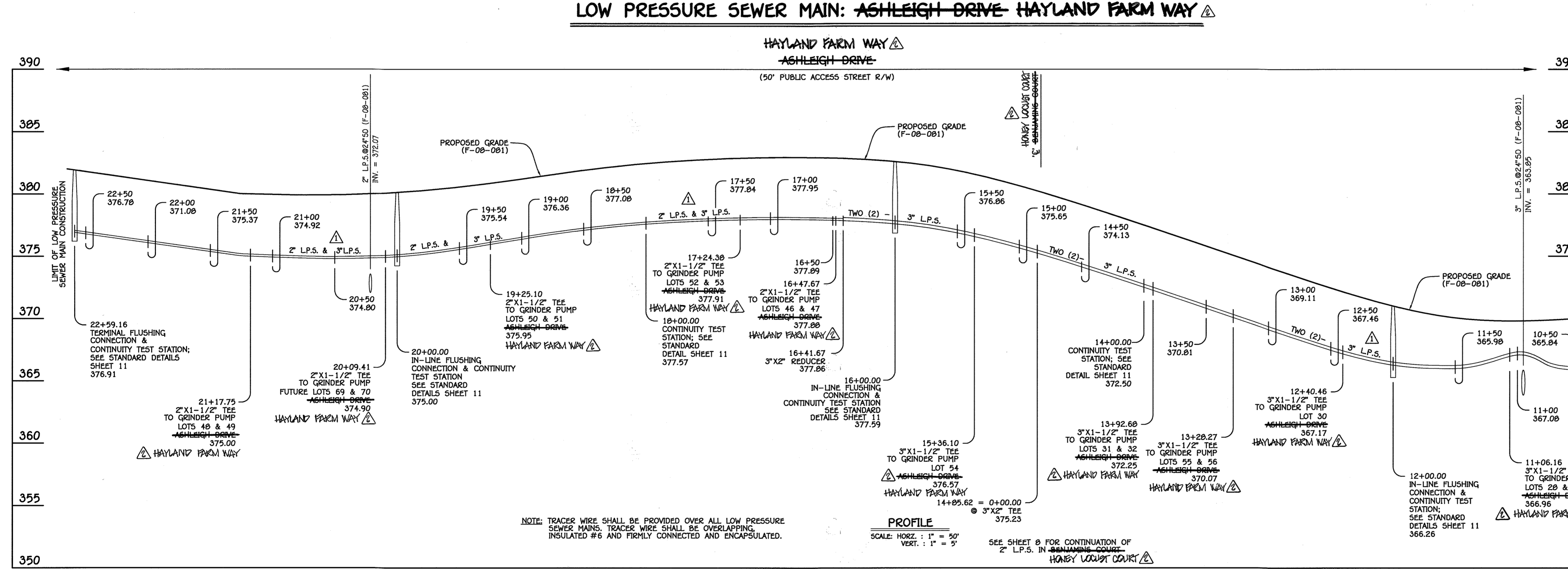
"AS-BUILT" = 02/10/16

I:\2004\04001\dwg\PHASE TWO\FINAL\04001-3001 Phase 2 Sewer Base Plan (Lots 45) - (Redline 1 - June, 2012).dwg, New Plan Sheet 6, 9/25/2012 9:21:18 AM, 1:1



LOW PRESSURE SEWER MAIN TABULATION CHART				
L.P.S. STA.	APPURTENANCE	NORTHING	EASTING	RIM ELEVATION
LOW PRESSURE SEWER MAIN: ASHLEIGH DRIVE HAYLAND FARM WAY				
0+00.00	TERMINAL FLUSHING CONN. & CONTINUITY TEST STATION	572716.89	1328595.57	367.80 *
0+08.00	2" X 1-1/2" TEE	572711.50	1328589.59	367.50 **
0+11.00	PC (CRIMP RADIUS 361')	572709.59	1328587.36	
0+27.18	2" X 1-1/2" TEE	572698.11	1328575.93	
2+00.00	CONTINUITY TEST STATION	572549.65	1328490.75	369.91 **
2+08.52	PRC (CRIMP RADIUS 361')	572541.44	1328488.48	
2+08.52	PRC (CRIMP RADIUS 325')	572541.44	1328488.48	
3+54.27	PT (CRIMP RADIUS 325')	572413.80	1328420.68	
3+61.66	3" X 2" REDUCER	572408.68	1328415.35	
3+70.66	3" X 1-1/2" TEE	572402.45	1328408.66	
3+99.00	PC (CRIMP RADIUS 314')	572382.20	1328388.38	
4+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572382.20	1328387.63	372.35 *
4+64.41	3" X 1-1/2" TEE	572347.34	1328333.61	
4+91.14	3" X 1-1/2" TEE	572336.25	1328309.30	
6+00.00	CONTINUITY TEST STATION	572313.40	1328203.40	373.47 **
6+12.92	3" X 2" TEE	572313.25	1328190.49	
6+22.22	PT (CRIMP RADIUS 314')	572313.42	1328181.18	
7+73.81	3" X 1-1/2" TEE	572319.04	1328029.70	
7+92.81	3" X 3" TEE	572319.74	1328010.71	
8+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572320.01	1328003.53	372.40 *
9+31.28	PC (CRIMP RADIUS 356')	572324.87	1327872.34	
10+00.00	CONTINUITY TEST STATION	572334.01	1327804.34	370.00 **
10+73.76	PRC (CRIMP RADIUS 356')	572358.13	1327734.77	
10+73.76	PRC (CRIMP RADIUS 356')	572358.13	1327734.77	
11+06.16	3" X 1-1/2" TEE	572370.38	1327704.79	
12+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572389.51	1327631.21	371.00 *
12+40.46	3" X 1-1/2" TEE	572390.00	1327572.78	
13+28.27	3" X 1-1/2" TEE	572374.96	1327486.50	
13+92.68	3" X 1-1/2" TEE	572350.39	1327427.06	
14+00.00	CONTINUITY TEST STATION	572346.91	1327420.62	
14+59.62	PT (CRIMP RADIUS 356')	572313.65	1327371.17	
14+85.62	3" X 2" TEE	572295.91	1327352.16	
15+36.15	3" X 1-1/2" TEE	572261.47	1327315.26	
16+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572217.90	1327268.58	382.80 *
16+41.67	3" X 2" REDUCER	572191.51	1327240.31	382.25 **
16+47.67	2" X 1-1/2" TEE	572189.37	1327233.73	
17+24.43	2" X 1-1/2" TEE	572132.99	1327177.63	
17+74.06	PC (CRIMP RADIUS 356')	572099.13	1327141.34	
18+00.00	CONTINUITY TEST STATION	572082.13	1327121.75	
19+25.15	2" X 1-1/2" TEE	572022.18	1327012.63	
20+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572005.77	1326939.74	380.00 *
20+09.46	2" X 1-1/2" TEE	572004.80	1326930.34	379.00 **
21+17.80	2" X 1-1/2" TEE	572011.56	1326822.63	
22+59.16	PT (CRIMP RADIUS 356')	572068.01	1326694.04	
22+59.16	TERMINAL FLUSHING CONN. & CONTINUITY TEST STATION	572068.01	1326694.04	381.91 *
				381.50 **

NOTE: SET ALL HANDBOLES RIMS FLUSH W/EXISTING OR PROPOSED GRADE, AS APPLICABLE.
 * DENOTES IN-LINE FLUSHING CONNECTION RIM ELEVATION
 ** DENOTES CONTINUITY TEST STATION RIM ELEVATION



LOW PRESSURE SEWER MAIN: ASHLEIGH DRIVE HAYLAND FARM WAY

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 7 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

CONTRACT NO. 50-4530-D
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
 LOW PRESSURE SEWER SYSTEM
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Chief, Bureau of Utilities: *William Chen*

Chief, Development Engineering Division: *William Chen*

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETTT CITY, MARYLAND 21042
 (410) 461-2299

Professional Engineer Seal: *William Chen*

DESIGNED BY: B.C.R.

DRAWN BY: B.C.R.

CHECKED BY: P.W.K.

DATE: 9-25-12

SEPTEMBER, 2012

BY NO.

LOW PRESSURE SEWER SYSTEM
 PROFILE & CHART

600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18

F.C.C. WORK ORDER NO. 4901-3001

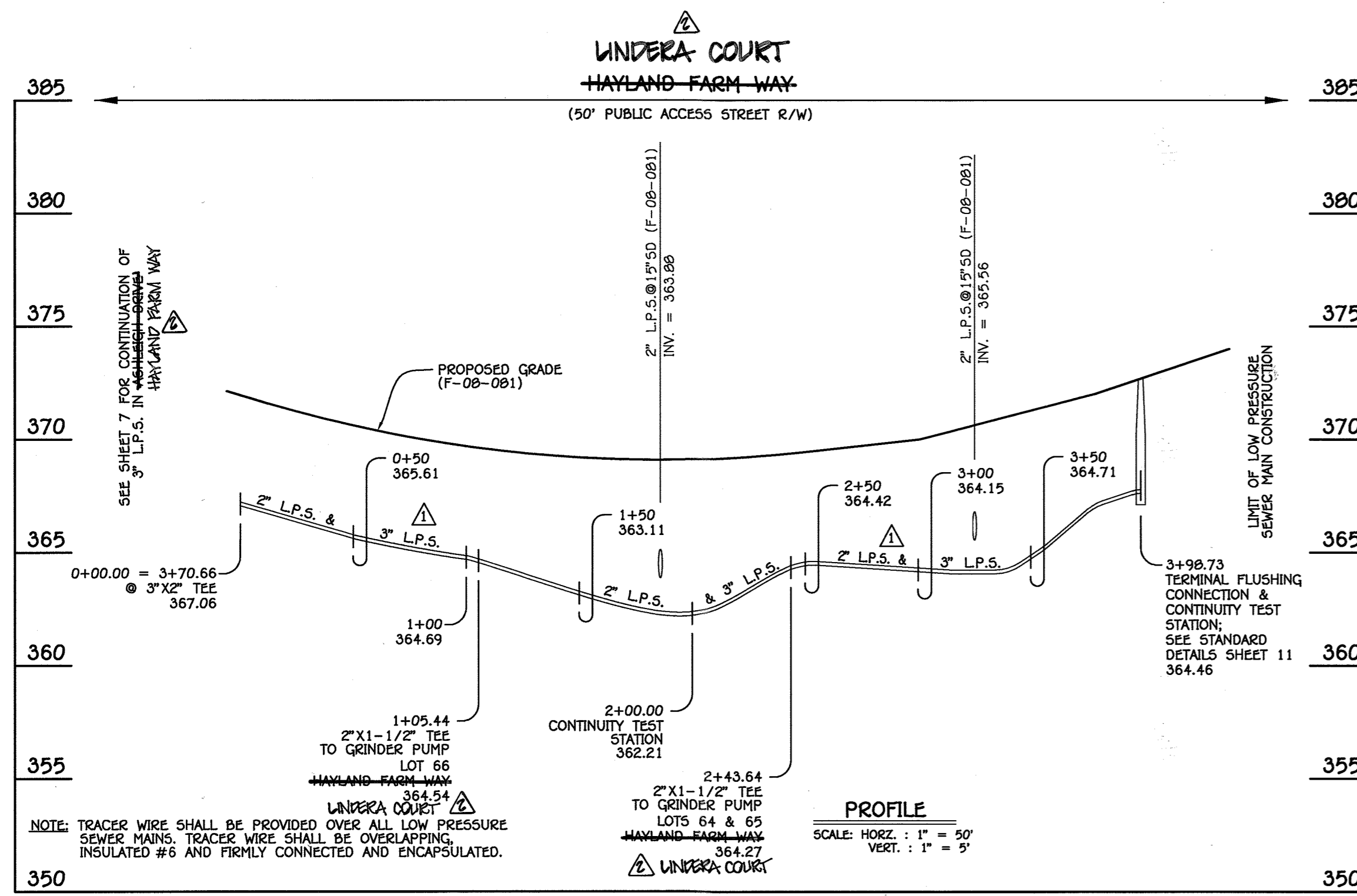
FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN

SCALE AS SHOWN

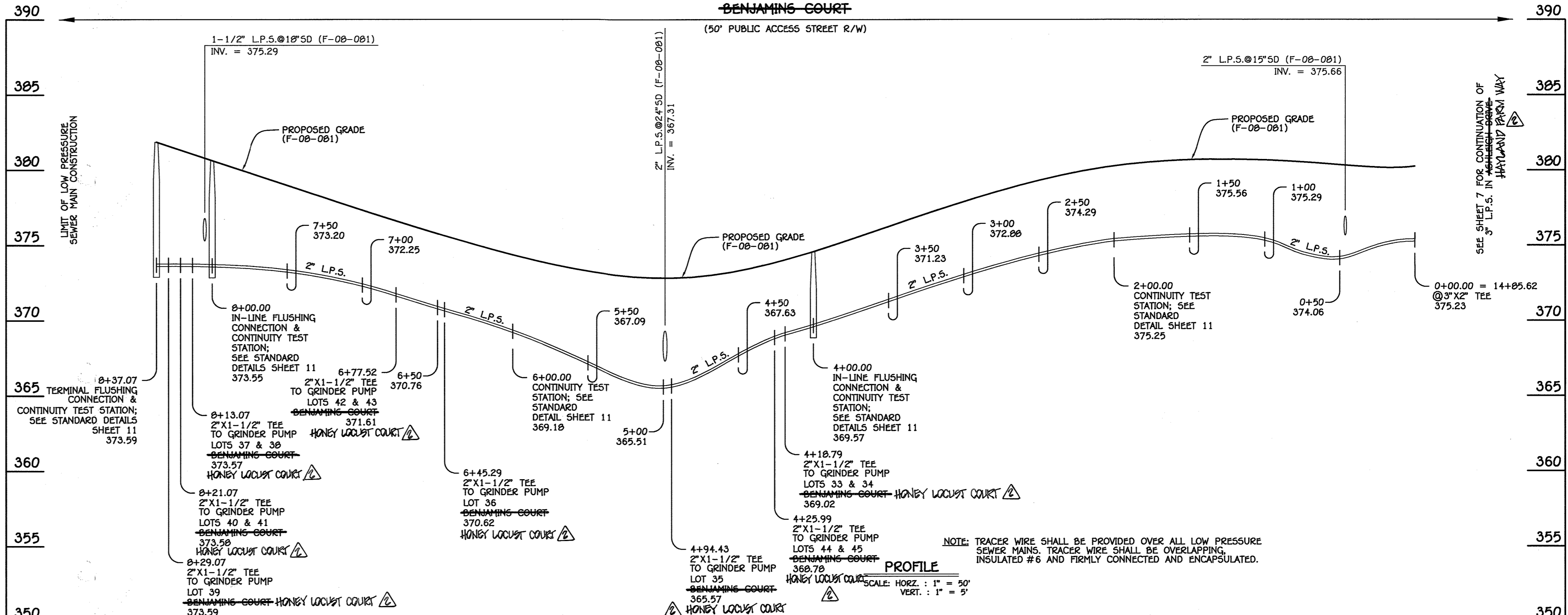
SHEET 7 OF 15

DATE: 02/19/12

I:\2004\0401\0401\PHASE TWO\FINALS\0401-3001 Phase 2 Sewer Base Plan (Lots 45) (Redline 1-3 June, 2012).dwg, New Profile Sheet 7, 9/25/2012 9:32:07 AM, 1:1



LOW PRESSURE SEWER MAIN: HAYLAND FARM WAY LINDER COURT



LOW PRESSURE SEWER MAIN: BENJAMINS COURT HONEY LOCUST COURT

L.P.S. STA.	APPURTENANCE	NORTHING	EASTING	RIM ELEVATION
LOW PRESSURE SEWER MAIN: HAYLAND FARM WAY LINDER COURT				
0+00.00	3' X 2' TEE	572402.45	1328408.86	
0+75.12	PC (CRIMP RADIUS 306')	572348.25	1328460.88	
1+05.44	2' X 1-1/2' TEE	572325.38	1328480.75	
2+08.64	PT (CRIMP RADIUS 306')	572235.09	1328529.73	
2+00.00	CONTINUITY TEST STATION	572198.18	1328542.32	368.25 **
2+43.64	2' X 1-1/2' TEE	572201.97	1328541.03	
3+98.73	TERMINAL FLUSHING CONN. & CONTINUITY TEST STATION	572243.23	1328526.83	372.68 * 372.25 **

NOTE: SET ALL MANHOLE RIMS FLUSH W/EXISTING OR PROPOSED GRADE, AS APPLICABLE.
 * DENOTES IN-LINE FLUSHING CONNECTION RIM ELEVATION
 ** DENOTES CONTINUITY TEST STATION RIM ELEVATION

L.P.S. STA.	APPURTENANCE	NORTHING	EASTING	RIM ELEVATION
LOW PRESSURE SEWER MAIN: BENJAMINS COURT HONEY LOCUST COURT				
0+00.00	3' X 2' TEE	572295.91	1327352.16	
2+00.00	CONTINUITY TEST STATION	572442.11	1327215.68	379.65 **
4+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572588.31	1327079.21	374.57 * 374.10 **
4+18.79	2' X 1-1/2' TEE	572602.05	1327066.39	
4+18.79	PC (CRIMP RADIUS 1,297')	572602.05	1327066.39	
4+25.99	2' X 1-1/2' TEE	572607.30	1327061.46	
4+94.43	2' X 1-1/2' TEE	572695.80	1327013.19	
6+00.00	CONTINUITY TEST STATION	572725.45	1326933.90	374.10 **
6+45.29	2' X 1-1/2' TEE	572753.31	1326898.19	
6+77.52	2' X 1-1/2' TEE	572772.37	1326872.20	
7+37.09	PT (CRIMP RADIUS 1,297')	572806.31	1326822.28	
8+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	572841.67	1326771.22	380.70 * 380.10 **
8+13.07	2' X 1-1/2' TEE	572849.11	1326760.48	
8+21.07	2' X 1-1/2' TEE	572853.67	1326753.90	
8+29.07	2' X 1-1/2' TEE	572858.22	1326747.33	
8+37.07	TERMINAL FLUSHING CONN. & CONTINUITY TEST STATION	572862.78	1326740.75	381.65 * 381.80 **

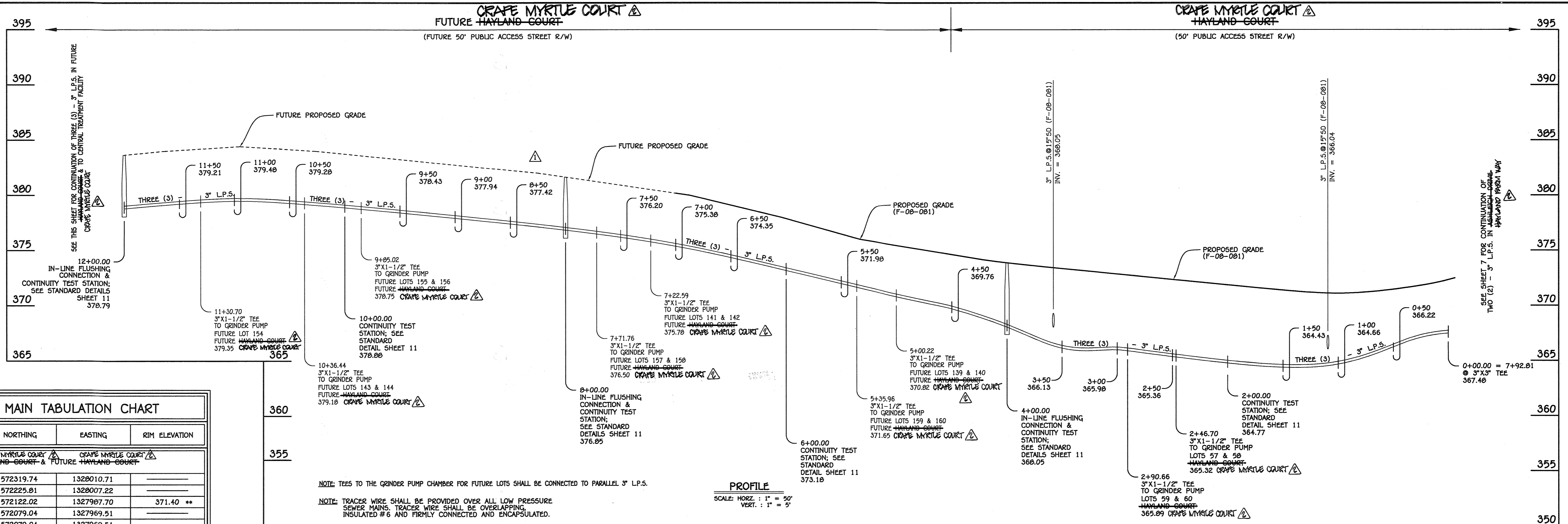
NOTE: SET ALL MANHOLE RIMS FLUSH W/EXISTING OR PROPOSED GRADE, AS APPLICABLE.
 * DENOTES IN-LINE FLUSHING CONNECTION RIM ELEVATION
 ** DENOTES CONTINUITY TEST STATION RIM ELEVATION

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 8 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

CONTRACT NO. 50-4530-D
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELICOTT CITY, MARYLAND 21042 (410) 451-2999	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: SEPTEMBER, 2012	12043 STATE OF MARYLAND PAUL W. KRUEBEL	LOW PRESSURE SEWER SYSTEM PROFILES & CHARTS 600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18 9-25-12 F.C.C. WORK ORDER NO. 4901-3001 FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN	CONTRACT NO. 50-4530-D WALNUT CREEK PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 8 OF 15
---	---	--	--	---	---	--	---------------------------------

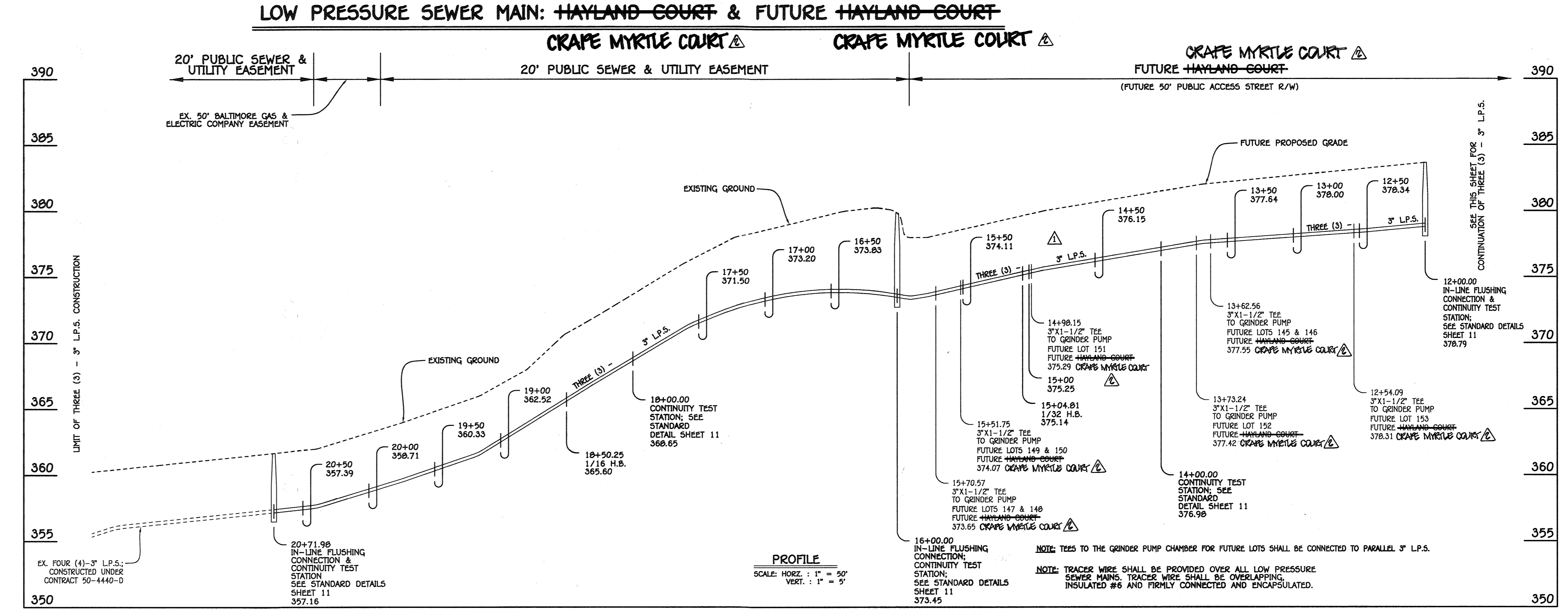
"AS BUILT": 02/10/12



LOW PRESSURE SEWER MAIN TABULATION CHART

L.P.S. STA.	APPURTENANCE	NORTHING	EASTING	RIM ELEVATION
0+00.00	3" X 3" TEE	572319.74	1328010.71	
0+94.00	PC (CRIMP RADIUS 356')	572225.81	1328007.22	
2+00.00	CONTINUITY TEST STATION	572122.02	1327987.70	371.40 **
2+46.70	PCC (CRIMP RADIUS 356')	572079.04	1327969.51	
2+46.70	3" X 1-1/2" TEE	572079.04	1327969.51	
2+46.70	PCC (CRIMP RADIUS 677')	572079.04	1327969.51	
2+90.66	3" X 1-1/2" TEE	572040.38	1327948.59	
4+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	571950.82	1327886.09	373.88 * 373.45 **
4+41.03	PCC (CRIMP RADIUS 677')	571919.99	1327859.03	
4+41.03	PCC (CRIMP RADIUS 671')	571919.99	1327859.03	
5+00.22	3" X 1-1/2" TEE	571877.73	1327817.60	
5+35.96	3" X 1-1/2" TEE	571854.05	1327790.84	
5+76.98	PT (CRIMP RADIUS 671')	571828.67	1327758.63	
6+00.00	CONTINUITY TEST STATION	571814.98	1327740.12	377.60 **
7+22.59	3" X 1-1/2" TEE	571742.08	1327641.55	
7+71.76	3" X 1-1/2" TEE	571712.84	1327602.02	
8+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	571696.05	1327579.32	381.90 * 381.53 **
8+37.59	PC (CRIMP RADIUS 429')	571673.69	1327549.09	
9+85.02	3" X 1-1/2" TEE	571567.58	1327447.80	
10+00.00	CONTINUITY TEST STATION	571554.99	1327439.68	383.53 **
10+36.44	3" X 1-1/2" TEE	571523.25	1327421.80	
11+30.70	3" X 1-1/2" TEE	571435.23	1327388.61	
11+58.48	PT (CRIMP RADIUS 429')	571408.12	1327382.59	
12+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	571367.00	1327375.92	383.65 * 383.38 **
12+06.48	PC (CRIMP RADIUS 314')	571360.58	1327375.92	
12+54.09	3" X 1-1/2" TEE	571313.05	1327374.16	
12+78.95	PT (CRIMP RADIUS 314')	571288.27	1327376.11	
13+62.56	3" X 1-1/2" TEE	571205.07	1327384.34	
13+73.24	3" X 1-1/2" TEE	571194.44	1327385.39	
14+00.00	CONTINUITY TEST STATION	571167.81	1327388.02	381.38 **
14+98.15	3" X 1-1/2" TEE	571070.13	1327397.68	
15+04.81	1/32 H.B.	571063.51	1327398.33	
15+51.75	3" X 1-1/2" TEE	571018.26	1327410.84	
15+70.57	3" X 1-1/2" TEE	571000.13	1327415.85	
16+00.00	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	570971.75	1327423.69	380.70 * 380.70 **
18+00.00	CONTINUITY TEST STATION	570778.98	1327476.95	373.80 **
18+50.25	1/16 H.B.	570730.54	1327490.33	
19+85.30	PC (CRIMP RADIUS 200')	570596.31	1327475.57	
20+71.98	IN-LINE FLUSHING CONN. & CONTINUITY TEST STATION	570514.84	1327448.01	361.66 * 361.66 **

NOTE: SET ALL MANHOLE RIMS FLUSH W/EXISTING OR PROPOSED GRADE, AS APPLICABLE.
 * DENOTES IN-LINE FLUSHING CONNECTION RIM ELEVATION
 ** DENOTES CONTINUITY TEST STATION RIM ELEVATION



LOW PRESSURE SEWER MAIN: FUTURE HAYLAND COURT & TO CENTRAL TREATMENT FACILITY

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 9 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

CONTRACT NO. 50-4530-D
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
 LOW PRESSURE SEWER SYSTEM
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Silvia S. Green
 CHIEF, BUREAU OF UTILITIES

Michael J. ...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL FILE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-3292

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 PAUL W. KRUEGER

DESIGNED BY: B.C.R.
 DRAWN BY: B.C.R.
 CHECKED BY: P.W.K.
 DATE: 9-25-12

REVISION NUMBER & LIMIT OF LOW PRESSURE SEWERS

REVISION

LOW PRESSURE SEWER SYSTEM PROFILES & CHART

600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18
 F.C.C. WORK ORDER NO. 4001-3001

FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN

WALNUT CREEK

PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'

CONTRACT NO. 50-4530-D
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 9 OF 15

"AS BUILT": 02/10/16

NOTES:
 1. 6" x 3000 PSI 28 DAYS
 2. DO NOT EXCEED WEIGHT.

HOWARD COUNTY, MARYLAND
 Department of Public Works

Terminal Flushing Connection
 County Owned Grinder Pump

Detail
E-1.03

Approved: *[Signature]*
 Chief, Bureau of Engineering

ENVIRONMENT ONE MODEL *	STATION VOLUME	CONCRETE VOLUME	BALLAST WEIGHT	PRE-CAST DIA AT 33-1/2" IN HEIGHT
2010-58	17.6 FT'	9.8 FT' (.36 CY)	1500 LBS (1473 LBS)	ø 36 IN
2010-74	22.7 FT'	13.2 FT' (.48 CY)	2000 LBS (1985 LBS)	ø 39-1/2 IN
2010-83	28.6 FT'	17.3 FT' (.63 CY)	2800 LBS (2590 LBS)	ø 42-1/2 IN
2010-124	38.6 FT'	24.3 FT' (.90 CY)	3700 LBS (3642 LBS)	ø 47-1/2 IN
2010-129	40.0 FT'	25.1 FT' (.93 CY)	3800 LBS (3750 LBS)	ø 48 IN
2010-158	49.5 FT'	31.6 FT' (1.17 CY)	4800 LBS (4732 LBS)	ø 52-1/2 IN
2010-160	49.9 FT'	31.8 FT' (1.18 CY)	4800 LBS (4732 LBS)	ø 52-1/2 IN

ENVIRONMENT ONE MODEL *	STATION VOLUME	CONCRETE VOLUME	BALLAST WEIGHT	PRE-CAST DIA AT 28" IN HEIGHT
2014-85	47.5 FT'	28.8 FT' (1.0 CY)	4300 LBS (4285 LBS)	ø 57-1/2 IN
2014-93	49.6 FT'	29.9 FT' (1.1 CY)	4500 LBS (4494 LBS)	ø 58-1/2 IN
2014-129	61.0 FT'	37.6 FT' (1.4 CY)	5700 LBS (5646 LBS)	ø 63-1/2 IN
2014-160	71.0 FT'	44.4 FT' (1.6 CY)	5700 LBS (5664 LBS)	ø 67-1/2 IN

OR APPROVED EQUAL.

HOWARD COUNTY, MARYLAND
 Department of Public Works

Anti-Floatation Collar
 County Owned Grinder Pump

Detail
E-2.01

Approved: *[Signature]*
 Chief, Bureau of Engineering

HOWARD COUNTY, MARYLAND
 Department of Public Works

Backfill
 County Owned Grinder Pump

Detail
E-2.02

Approved: *[Signature]*
 Chief, Bureau of Engineering

HOWARD COUNTY, MARYLAND
 Department of Public Works

PRESSURE SEWER
 Tracer Wire, Conducting Rod & Vault

Detail
S-4.18

Approved: *[Signature]*
 Chief, Bureau of Engineering

IN-LINE PRESSURE CLEANOUT (FLUSHING CONNECTION)
 NO SCALE

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 10 OF 15 SUPERSEDES THE LOW PRESSURE SEWER SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

CONTRACT NO. 50-4530-D
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10672 BALTIMORE NATIONAL PIKE
 ELEIGHT CITY, MARYLAND 21042
 (410) 461-2999

STATE OF MARYLAND
 PAUL W. KRUESEL

DESIGNED BY: B.C.R.
 DRAWN BY: B.C.R.
 CHECKED BY: P.W.K.
 DATE: SEPTEMBER, 2012

REVISION: REVISE DETAILS BASED ON BUREAU OF UTILITIES COMMENTS

DATE: 9-25-12

FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN

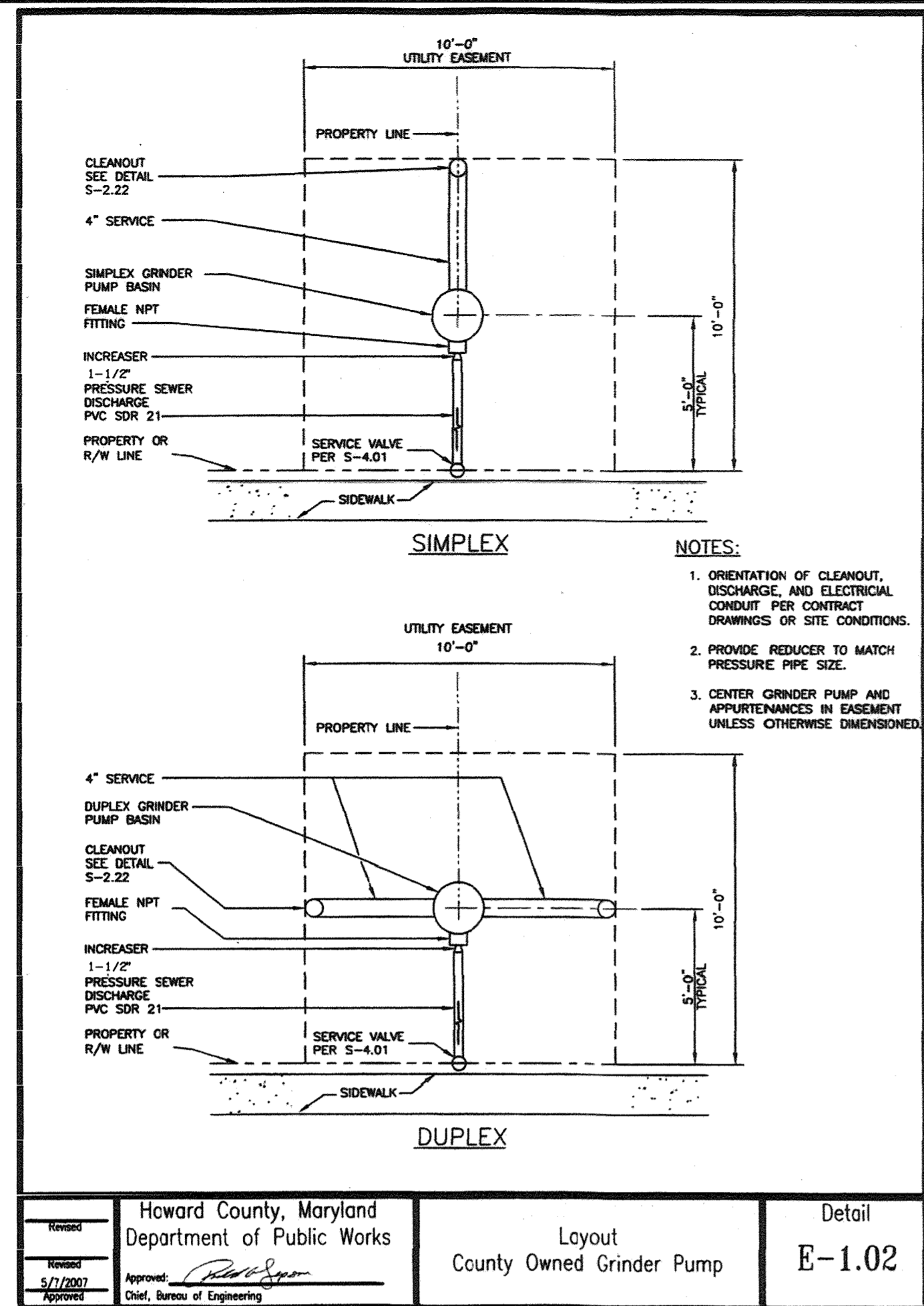
LOW PRESSURE SEWER SYSTEM
DETAILS

600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18
 F.C.C. WORK ORDER NO. 4001-3001

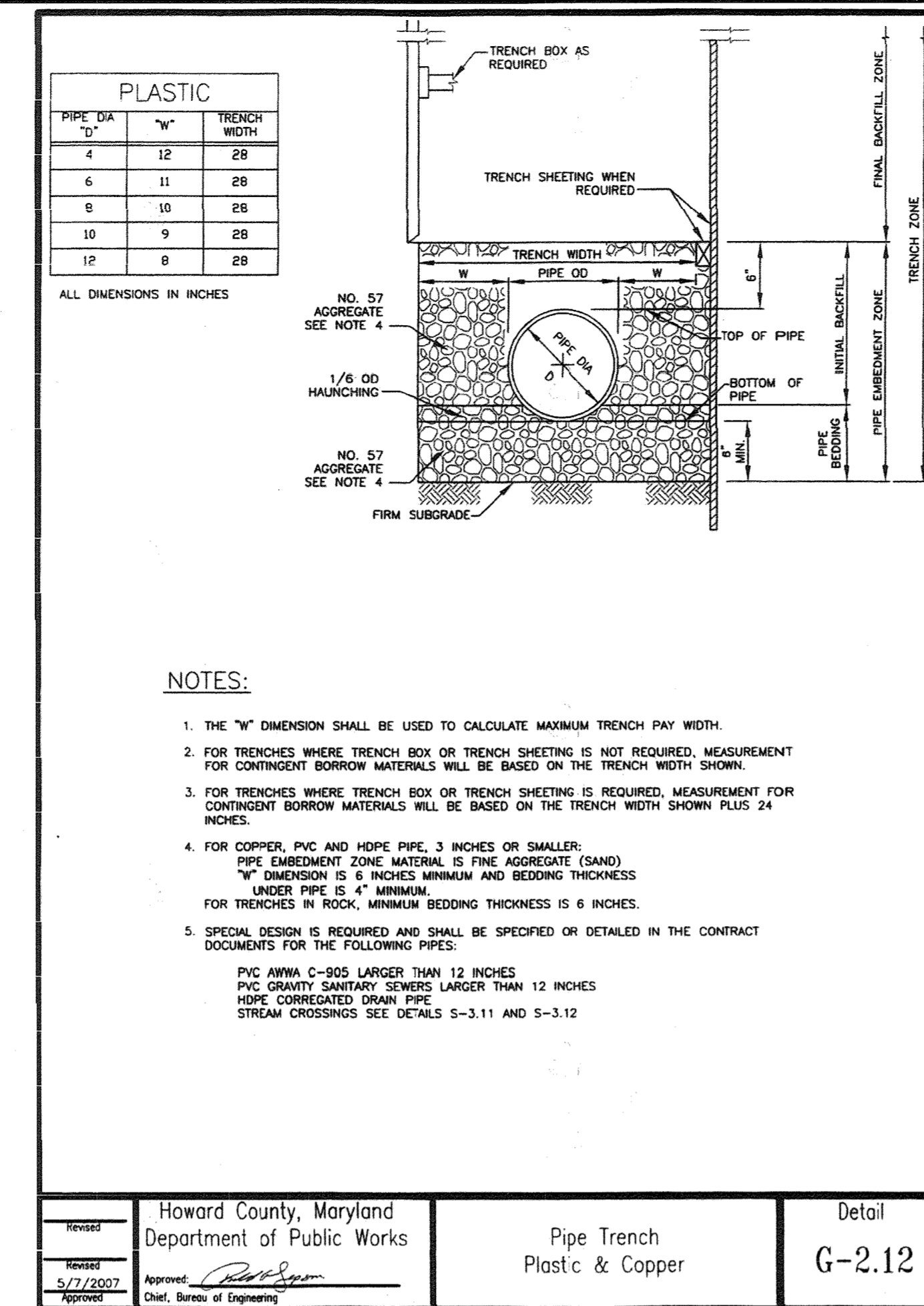
WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' CONTRACT NO. 50-4530-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 10 OF 15

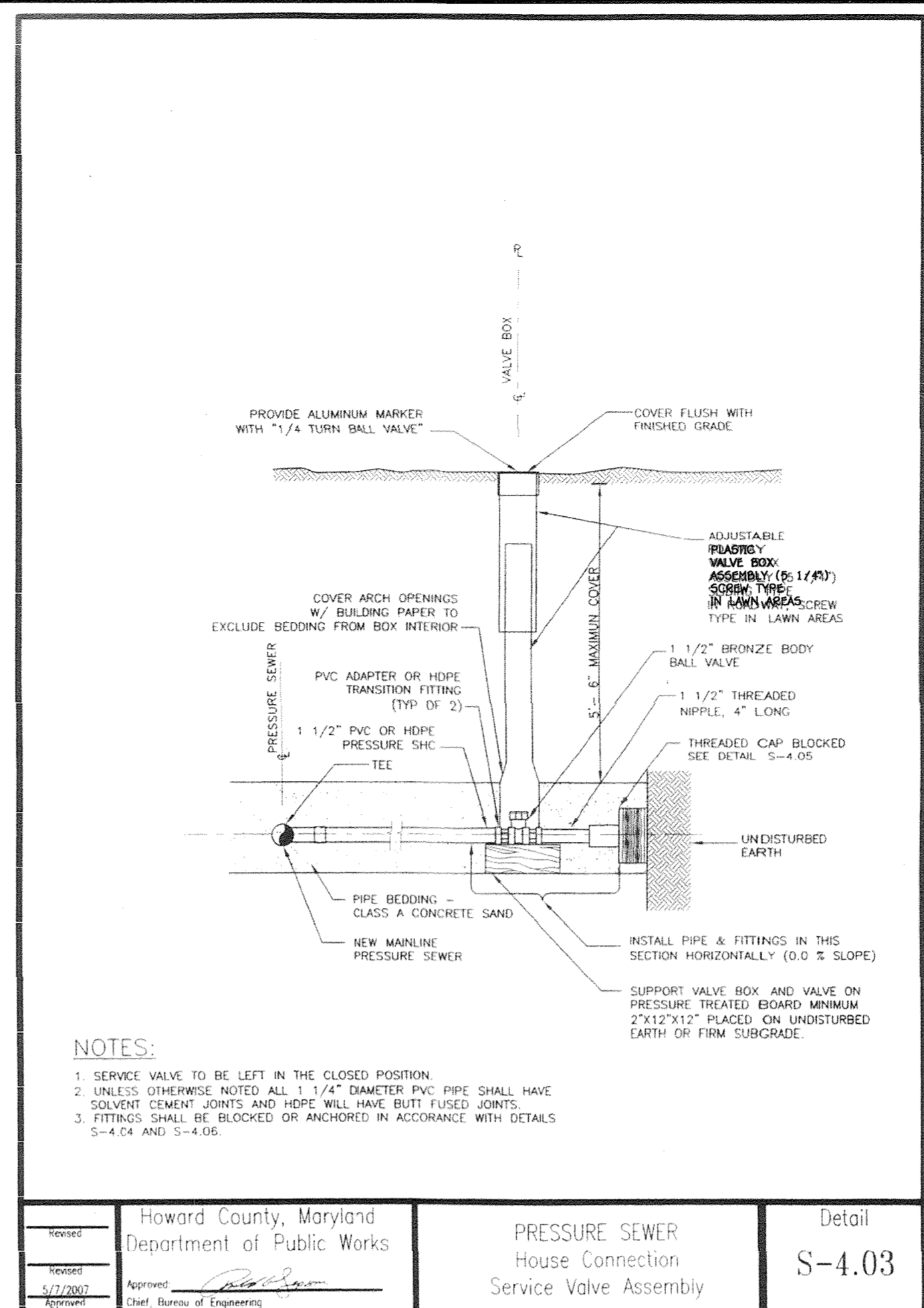
"AS-BUILT" = 02/10/16



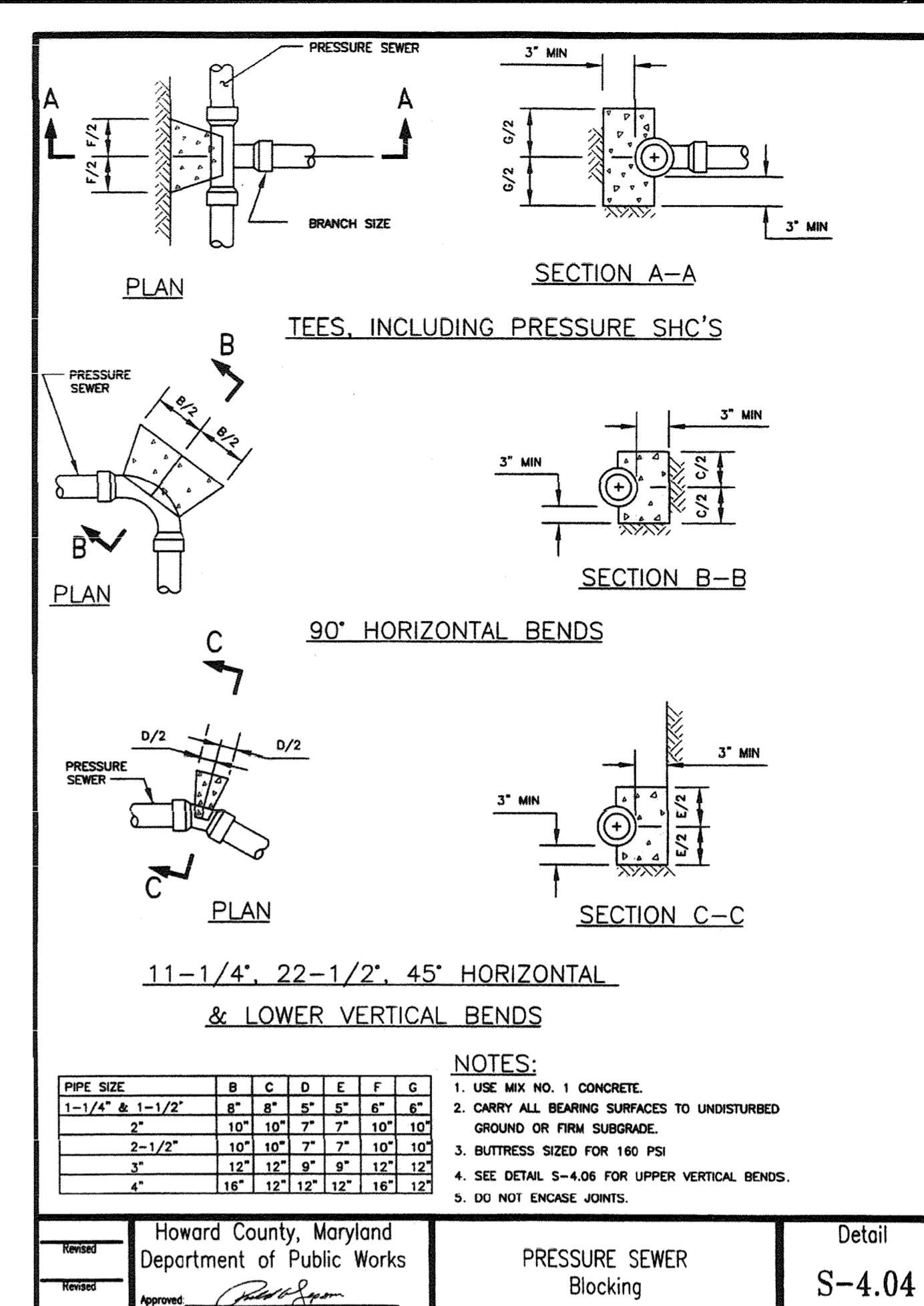
Howard County, Maryland Department of Public Works	Layout County Owned Grinder Pump	Detail E-1.02
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		



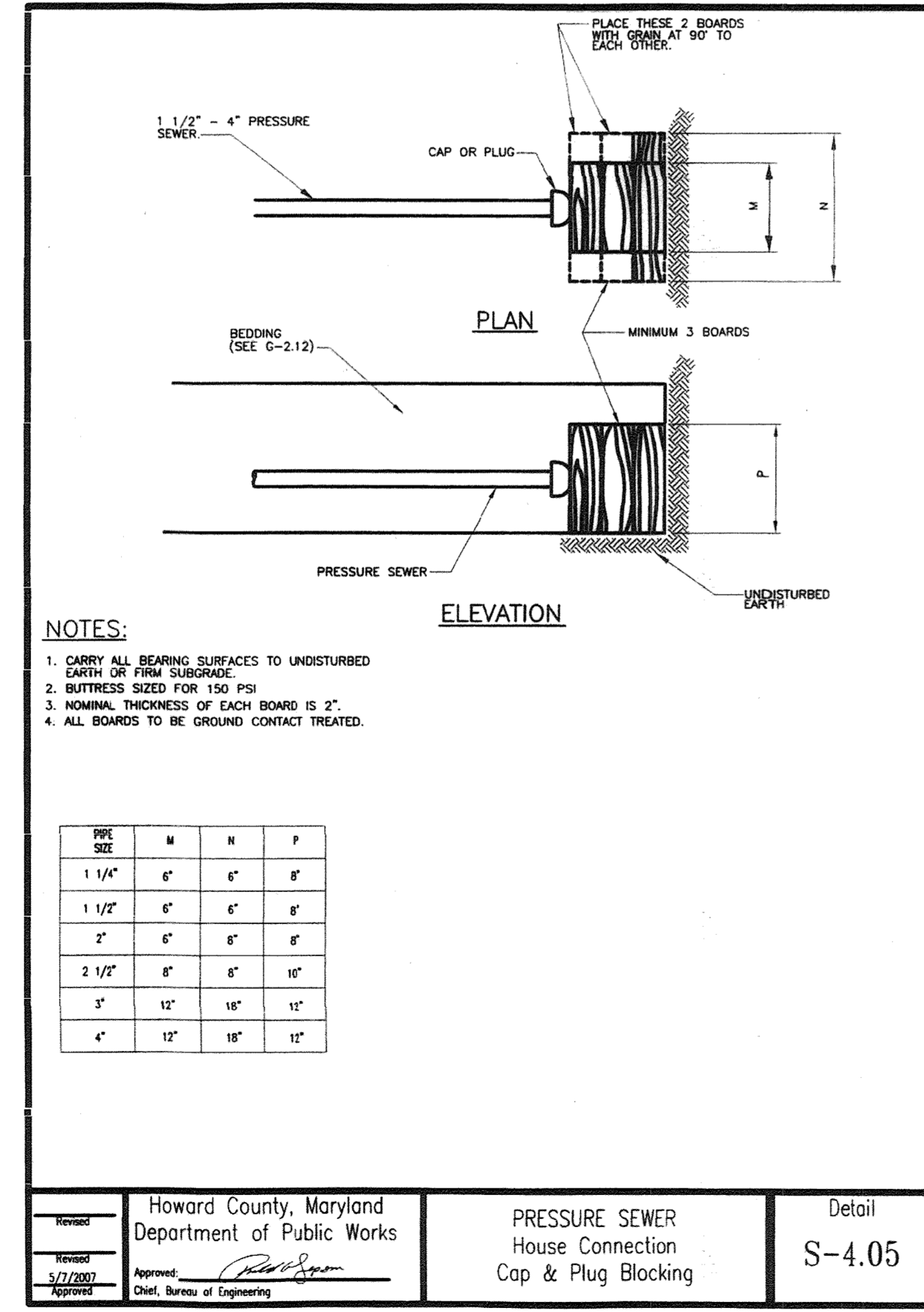
Howard County, Maryland Department of Public Works	Pipe Trench Plastic & Copper	Detail G-2.12
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		



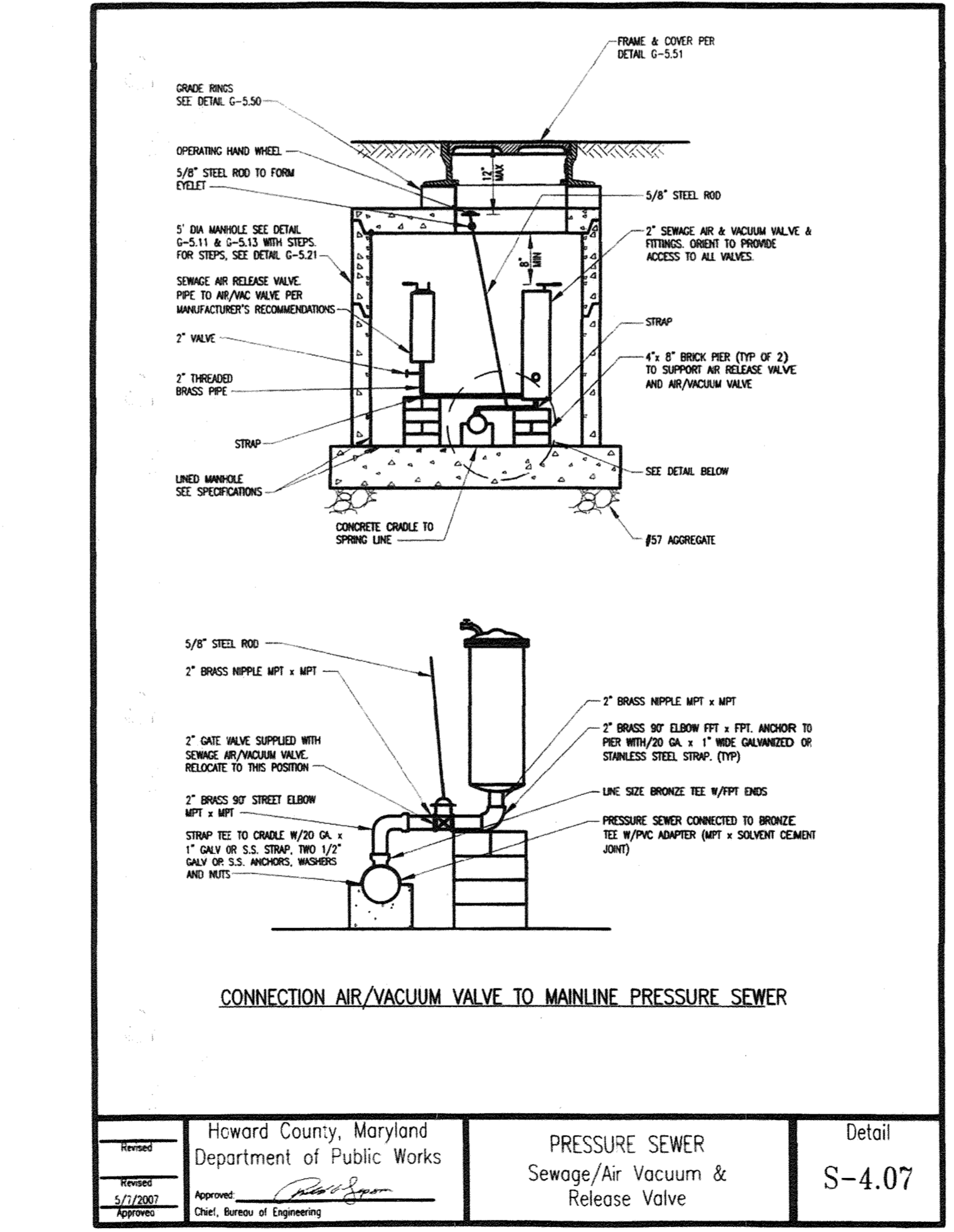
Howard County, Maryland Department of Public Works	PRESSURE SEWER House Connection Service Valve Assembly	Detail S-4.03
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		



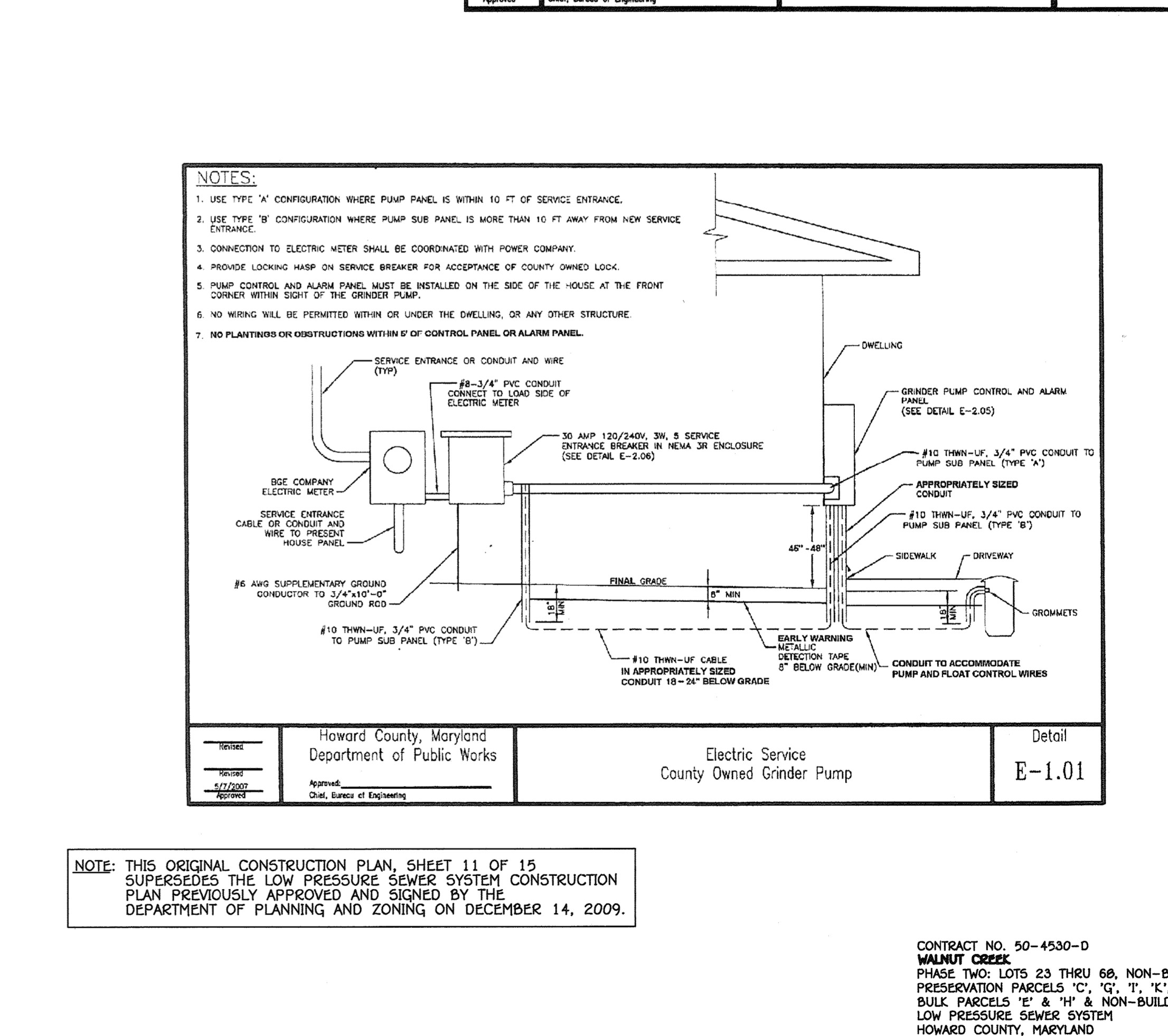
Howard County, Maryland Department of Public Works	PRESSURE SEWER Blocking	Detail S-4.04
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		



Howard County, Maryland Department of Public Works	PRESSURE SEWER House Connection Cap & Plug Blocking	Detail S-4.05
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		



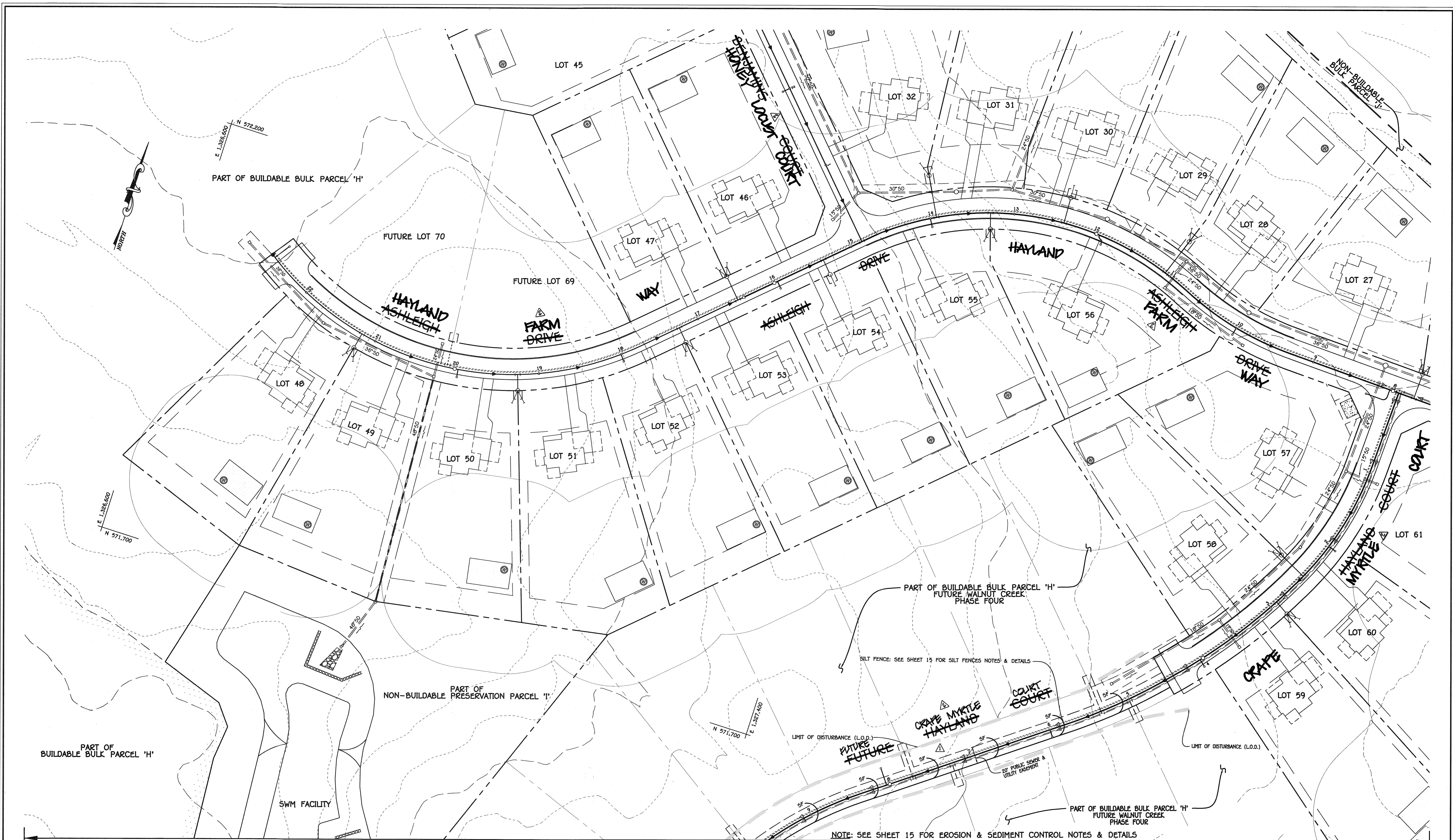
Howard County, Maryland Department of Public Works	PRESSURE SEWER Sewage/Air Vacuum & Release Valve	Detail S-4.07
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		



Howard County, Maryland Department of Public Works	Electric Service County Owned Grinder Pump	Detail E-1.01
Approved: <i>[Signature]</i> 5/7/2007 Chief, Bureau of Engineering		

CONTRACT NO. 50-4530-D
WALNUT CREEK
PHASE TWO: LOTS 23 THRU 66, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
LOW PRESSURE SEWER SYSTEM
HOWARD COUNTY, MARYLAND

"AS-BUILT" : 02/10/16



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 13 OF 15 SUPERSEDES THE LOW PRESSURE SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

MATCHLINE 'A': SEE SHEET 14

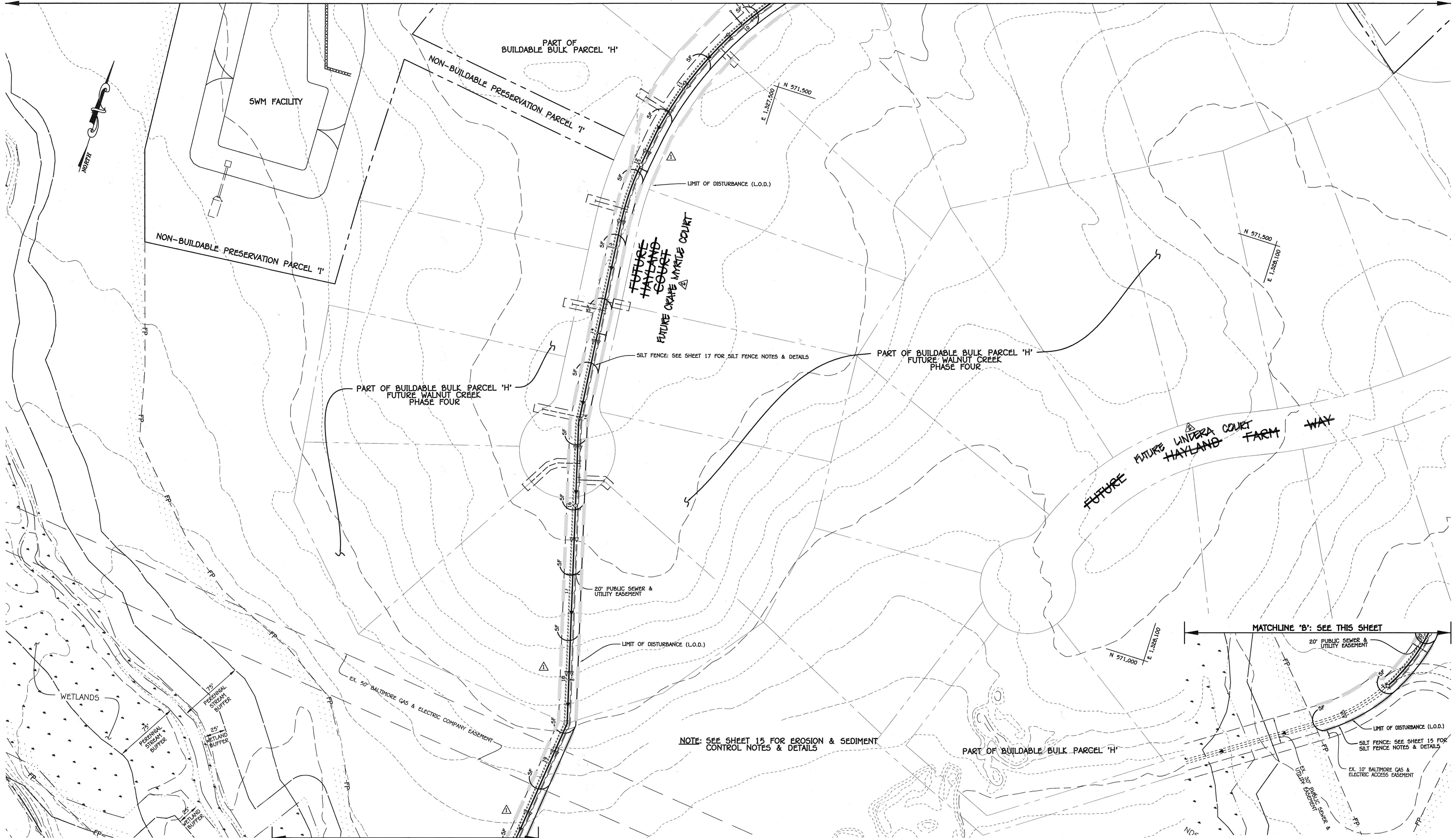
NOTE: SEE SHEET 15 FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS

CONTRACT NO. 50-4530-D
 WALNUT CREEK
 PHASE TWO: LOTS 23 THRU 60, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
 LOW PRESSURE SEWER SYSTEM
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities 10/15/12	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Date Chief, Development Engineering Division 10/16/12	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLESTOWN CITY, MARYLAND 21142 (410) 461-2999	#12043 STATE OF MARYLAND PAUL W. KRIEDEL	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.R. DATE: SEPTEMBER, 2012 BY: NO.	EROSION & SEDIMENT CONTROL PLAN 600' SCALE MAP NO. 28 BLOCK NO. 4,5,10,11,12,17&18 F.C.C. WORK ORDER NO. 4001-3001 FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN	WALNUT CREEK PHASE TWO: LOTS 23 THRU 60, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' CONTRACT NO. 50-4530-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 13 OF 15
---	--	---	--	---	--	---

"AS BUILT" : 02/10/16

MATCHLINE 'A': SEE SHEET 13



PART OF BUILDABLE BULK PARCEL 'H' FUTURE WALNUT CREEK PHASE FOUR

PART OF BUILDABLE BULK PARCEL 'H' FUTURE WALNUT CREEK PHASE FOUR

FUTURE LINDERA COURT HAYLAND FARM WAY

NOTE: SEE SHEET 15 FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS

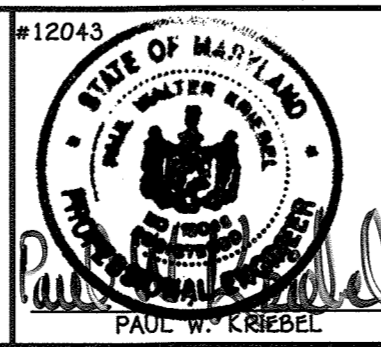
NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 14 OF 15 SUPERSEDES THE LOW PRESSURE SYSTEM CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 14, 2009.

CONTRACT NO. 50-4530-D
WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J' LOW PRESSURE SEWER SYSTEM HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461 - 2920



DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	SEPTEMBER, 2012
BY:	NO.
REVISION:	

EROSION & SEDIMENT CONTROL PLAN	
600' SCALE MAP NO. 28	BLOCK NO. 4,5,10,11,12,17&18
F.C.C. WORK ORDER NO. 4001-3001	
FILE NAME: LOW PRESSURE SEWER SYSTEM BASE PLAN	

WALNUT CREEK
PHASE TWO: LOTS 23 THRU 68, NON-BUILDABLE PRESERVATION PARCELS 'C', 'G', 'I', 'K', 'L', 'M' & BUILDABLE BULK PARCELS 'E' & 'H' & NON-BUILDABLE PARCEL 'J'
CONTRACT NO. 50-4530-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 14 OF 15

"AS BUILT" : 02/10/16

I:\2009\04001\dwg\PHASE TWO FINALS\04001-3001 Phase 2 Sewer Base Plan (Lots 45) (Redline 1 - June, 2012).dwg, New SED Sheet 14, 9/25/2012 11:05:52 AM, 1:1

