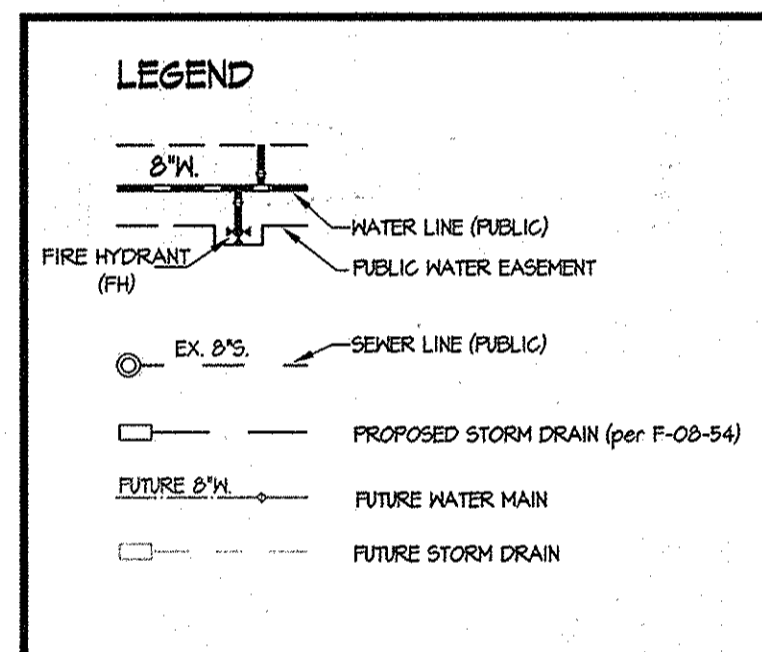


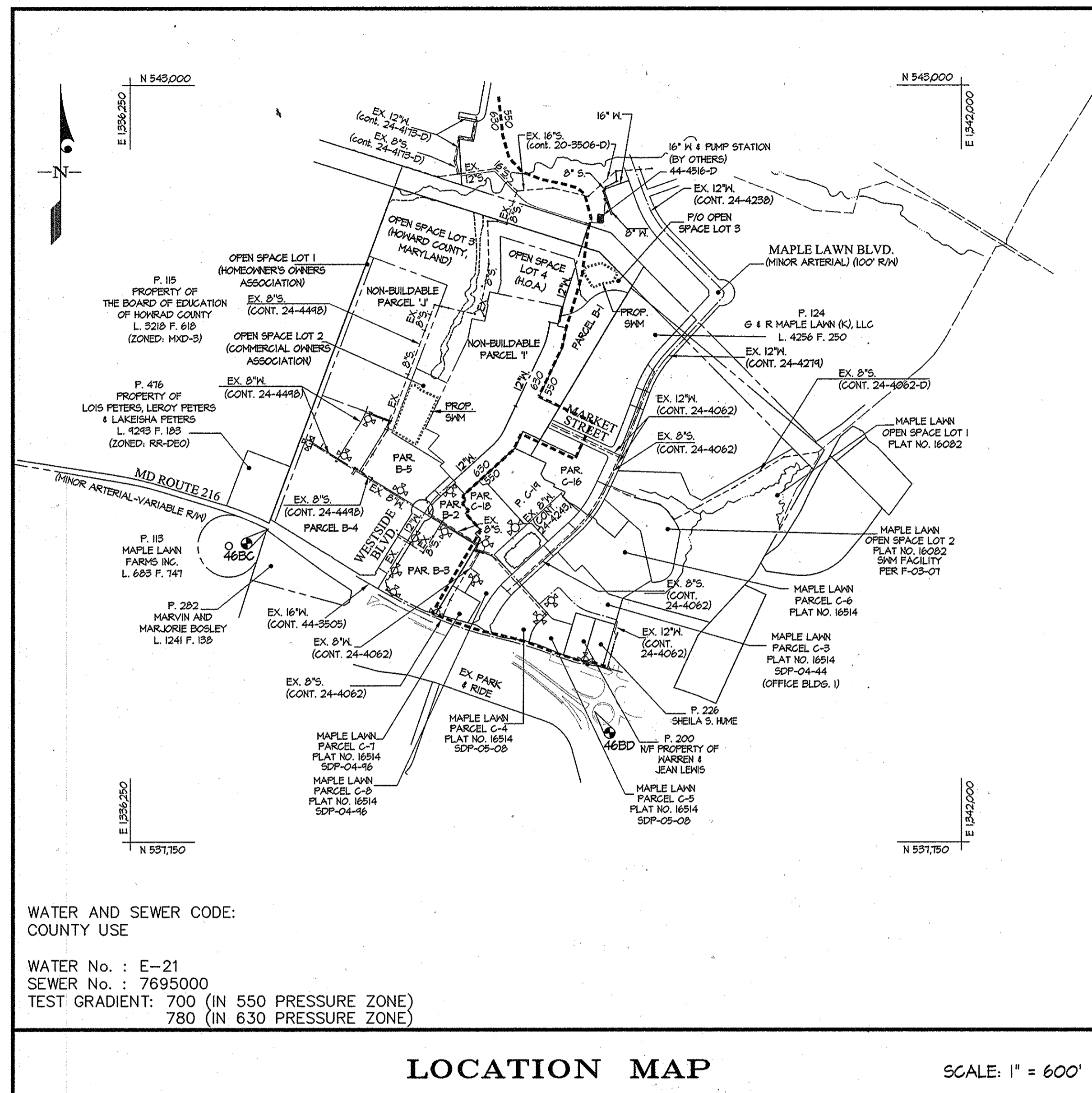
QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
16" WATER MAIN	310 L.F.	310	CL54	GRIFFIN PIPE PROD.
12" WATER MAIN	2096 L.F.	2096	"	"
8" WATER MAIN	140 L.F.	120	"	"
16"x8" REDUCER	1 EA.	1	M3	SIGMA
16"x16" TEE	2 EA.	2	"	"
16"x12" TEE	1 EA.	1	"	"
16"x12" REDUCER	2 EA.	2	"	"
16" 1/8" HB	4 EA.	4	"	"
16" 1/16" HB	2 EA.	2	"	"
16" 1/32" HB	1 EA.	1	"	"
12"x8" TEE	1 EA.	1	"	"
12"x8" REDUCER	1 EA.	1	"	"
12"x8" CROSS	1 EA.	1	"	"
12"x12" TEE	1 EA.	1	"	"
12" 1/8" HB	3 EA.	3	"	"
8" SEWER MAIN (UP TO 12' DEEP)	117 L.F.	117	SDR-35	DIAMOND PLASTICS
8" SEWER MAIN (12'-16' DEEP)	240 L.F.	240	"	"
6" SEWER P.V.C.	10 L.F.	10	"	"
4" SEWER MANHOLE	4 EA.	4	PRE-CAST	CONTRACTORS PRECAST CORP.
4" SHC	84 L.F.	85	SDR-35	DIAMOND
16" GATE VALVE	4 EA.	4	GATE	KENNEDY VALVE
12" GATE VALVE	7 EA.	7	"	"
16" GATE VALVE	3 EA.	3	"	"

NAME OF UTILITY CONTRACTOR: GAINES & CO.

SURVEY AND DRAFTING DIV. CHECKBOX: AS-BUILT DATE:



SHEET INDEX	
1 - TITLE SHEET	
2 - WATER EXTENSION PLAN & PROFILE	
3 - WATER & SEWER EXTENSION PLAN & WATER PROFILE	
4 - WATER AND SEWER EXTENSION PROFILE	

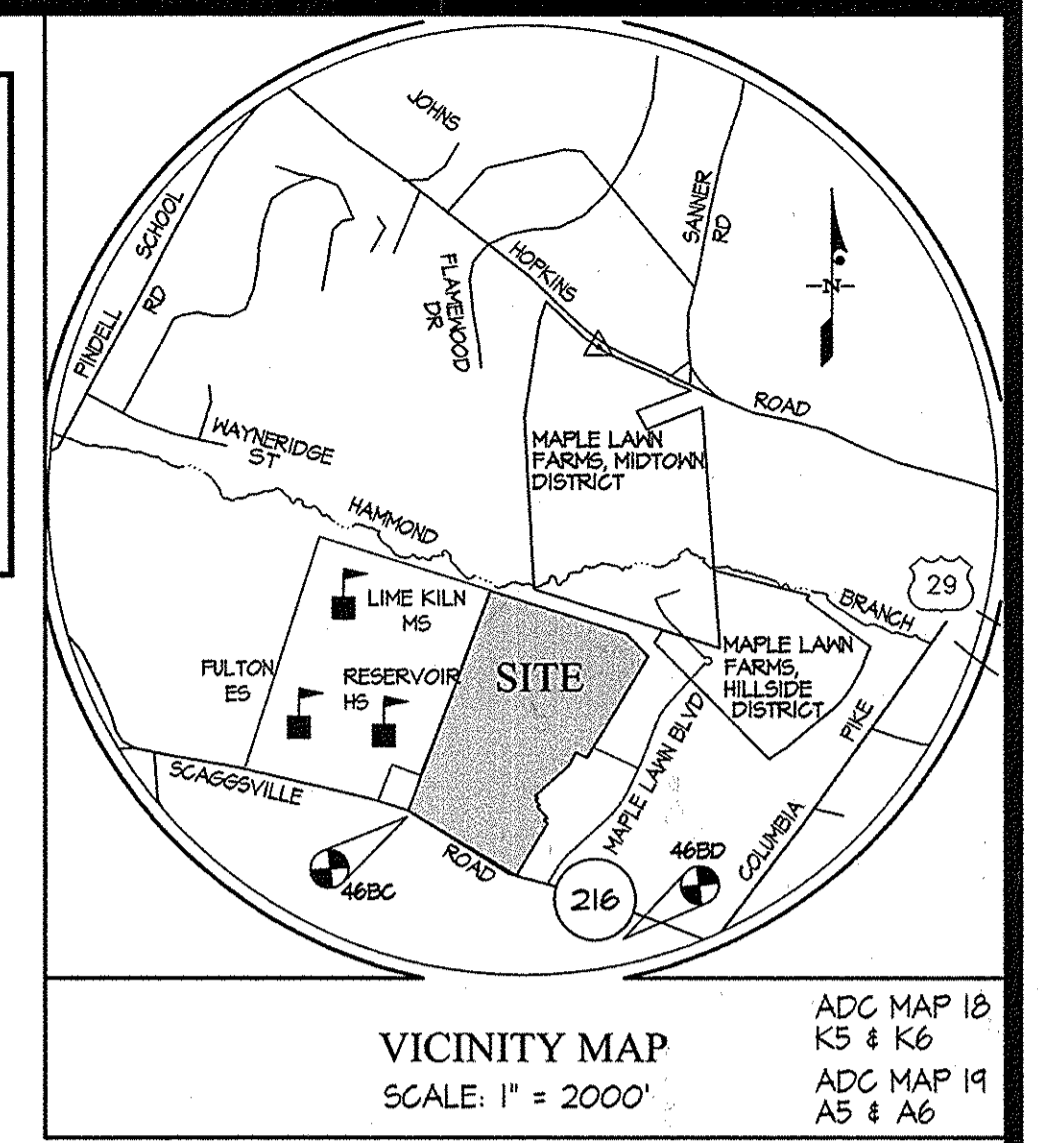


WATER AND SEWER CODE: COUNTY USE  
 WATER No. : E-21  
 SEWER No. : 7695000  
 TEST GRADIENT: 700 (IN 550 PRESSURE ZONE)  
 780 (IN 630 PRESSURE ZONE)

LOCATION MAP SCALE: 1" = 600'

TYPE OF BUILDING	0
NUMBER OF UNITS	0
NUMBER OF S.H.C.'s	5
NUMBER OF W.H.C.'s	2
AREA OF COMMERCIAL LOT/PARCEL	90.43 AC.
SEWER SHED	LITTLE PATUXENT
PUMPING STATION	N/A

BENCHMARKS	
46BC	ELEV. = 471.16 N = 534425.15 E = 1391205.71
46BD	ELEV. = 481.17 N = 535656.76 E = 1394461.55



VICINITY MAP SCALE: 1" = 2000'

- 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.
  - TOPOGRAPHY INDICATED HAS TAKEN FROM AERIAL TOPOGRAPHY PREPARED DURING MARCH 1997 BY 3D1.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS No. 46BC AND No. 46BD. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE STANDARD DISCS ON CONCRETE MONUMENTS.
  - 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 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF 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 DRAWING, 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  $\odot$  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 ON THESE PLANS:
    - AT&T
    - BGE (CONTRACTOR SERVICES)
    - EDGE (UNDER GROUND DAMAGE CONTROL)
    - BUREAU OF UTILITIES
    - COLONIAL PIPELINE CO.
    - MISS UTILITY
    - STATE HIGHWAY ADMINISTRATION
    - 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 AREA STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  - THE 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 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 DPM REQUIREMENTS PER SECTION 10.114(g) OF THE HOWARD COUNTY CODE.
- PART II - WATER**
- ALL MAINS SHALL BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
  - 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 RESTRAINED AND BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
  - FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.
- PART III - SEWER**
- 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 THE 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
  - 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 THE DRAWINGS.
  - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THE CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS & WITH ROAD DRAWINGS F-08-55; DRAWINGS FOR SEDIMENT & EROSION CONTROL.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

SIGNATURE: *[Signature]* DATE: 9-30-08

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED: *[Signature]* DATE: 9-30-08

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

Chief, Bureau of Utilities

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

Chief, Development Engineering Division

GLW GUTSCHICK LITTLE & WEBER, P.A.  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20886  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4166

DATE: SEPT. 2008  
 G.L.W. No. 06081

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975  
 EXP. DATE: MAY 26, 2010

*[Signature]*

REV.	DATE	DESCRIPTION
1	01-19-05	REVISE NUMBER OF WH'S TO REFLECT WH'S INSTALLED FOR FUTURE OPEN SPACE LOTS.
2	4-7-05	AS-BUILT DATA ADDED
3	2-5-08	ADDED VALVE QUANTITIES TO QUANTITIES TABLE

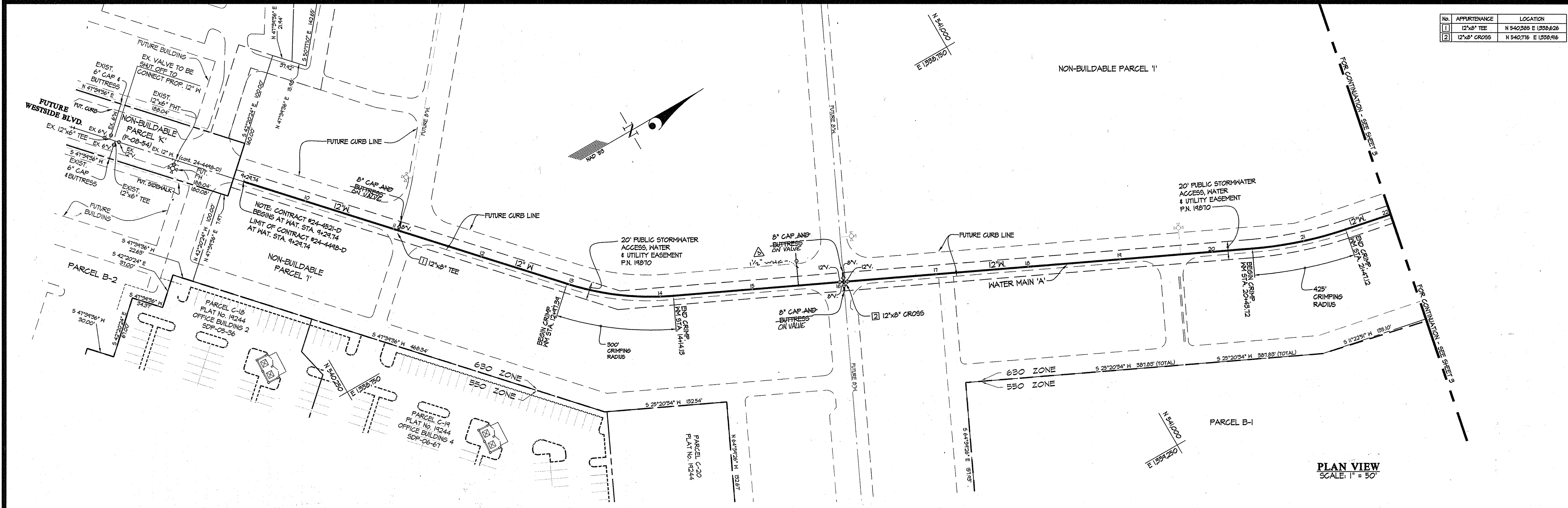
TITLE SHEET  
 600' SCALE MAP NO. 41/46 BLOCK NO. 21(41)/3(46)

MAPLE LAWN FARMS  
 CONTRACT No. 24-4521-D  
 WESTSIDE DISTRICT - AREA 1  
 PARCELS B-1 THROUGH B-5, OPEN SPACE LOTS 1 THROUGH 4 AND NON-BUILDABLE PARCELS 'I', 'J', & 'K'  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 5

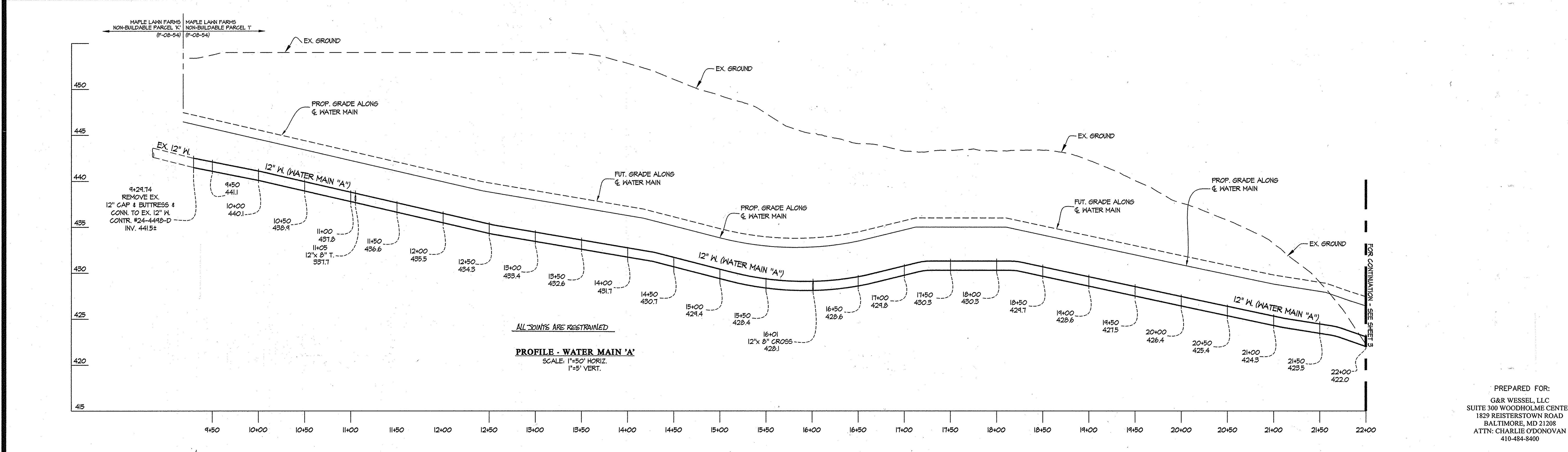
SCALE: AS SHOWN  
 SHEET 1 OF 4

PREPARED FOR:  
 G&R WESSEL, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: CHARLIE ODONOVAN  
 410-484-8400

No.	APPURTENANCE	LOCATION
1	12" TEE	N 540.888 E 1358.626
2	12" X 8" CROSS	N 540.716 E 1358.916



PLAN VIEW  
SCALE: 1" = 50'



PROFILE - WATER MAIN 'A'  
SCALE: 1"=50' HORIZ.  
1"=5' VERT.

PREPARED FOR:  
G&R WESSEL, LLC  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: CHARLIE ODONOVAN  
410-484-8400

DEPARTMENT OF  
PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Shale C. Coon*  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF  
PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20886  
TEL: 301-421-4024 BAL: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

DATE  
SEPT.  
2008

G.L.W. No.  
06081

PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE PLANS  
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. 12975  
EXP. DATE: MAY 28, 2010

*[Signature]*

REV.	BY	NO.	REVISION	DATE
1	AK	1	added when own sta. 16+50 for future open space lot	01.19.10
2	AK	1	AS-BUILT DATA ADDED	4/7/09

**WATER EXTENSION PLAN & PROFILE**

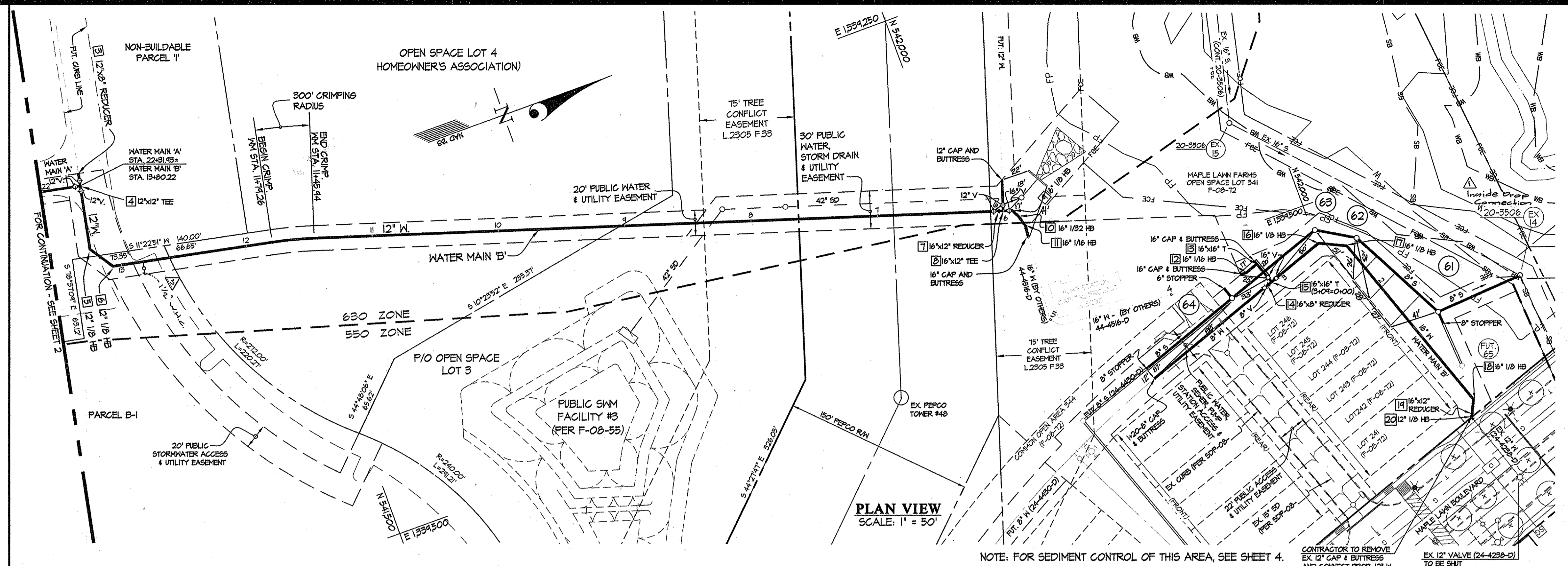
600' SCALE MAP NO. 41/46 BLOCK NO. 21(41)/3(46)

**MAPLE LAWN FARMS**  
CONTRACT No. 24-451-D  
WESTSIDE DISTRICT - AREA 1  
PARCELS B-1 THROUGH B-5, OPEN SPACE LOTS 1  
THROUGH 4 AND NON-BUILDABLE PARCELS 'I', 'J', & 'K'  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 5

SCALE  
AS SHOWN

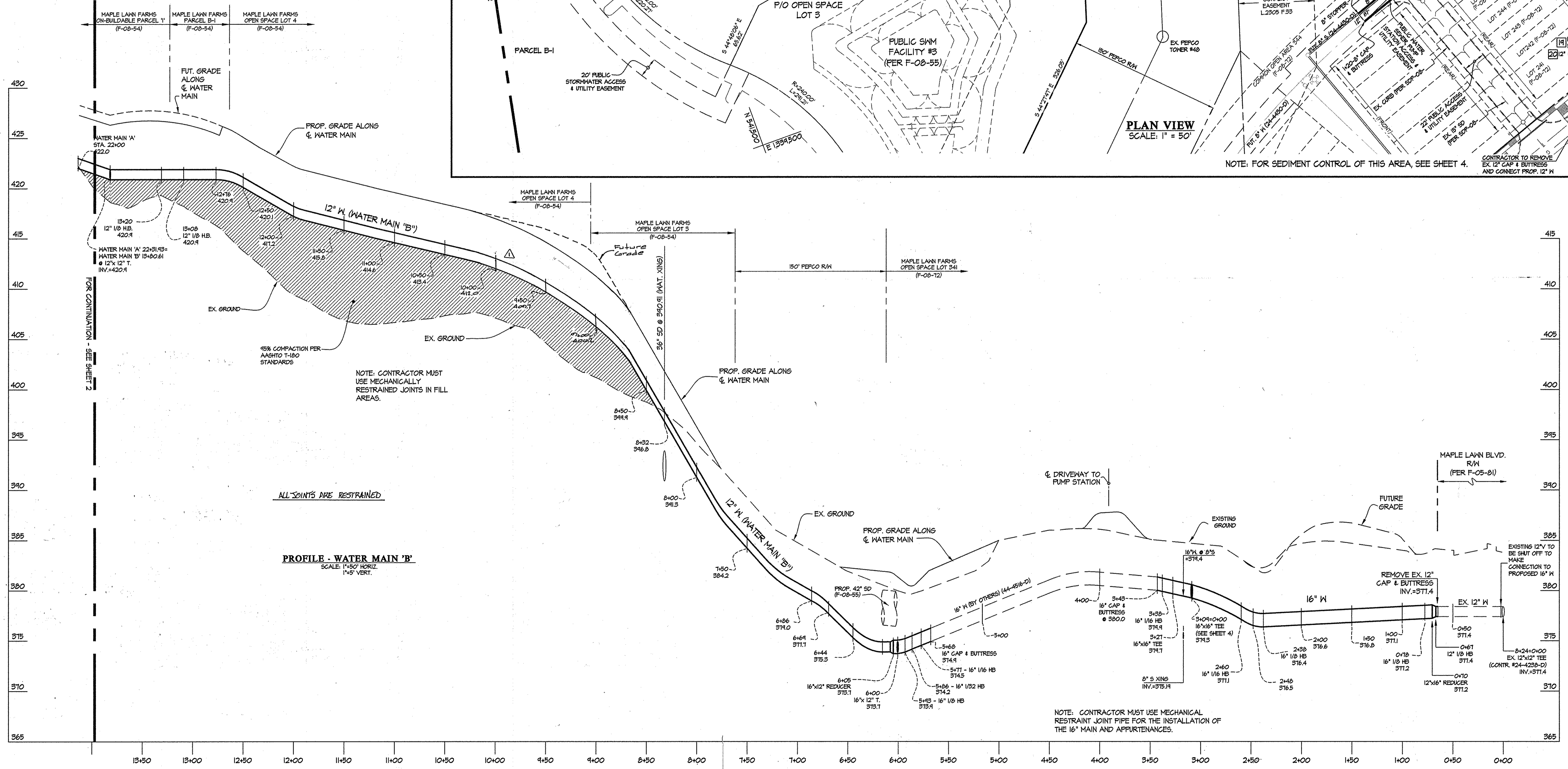
SHEET  
2 OF 4

No.	APPURTENANCE	LOCATION
1	12"x12" REDUCER	N 541394 E 1394146
2	12"x12" TEE	N 541391 E 1394154
3	12" 1/2" HB	N 541341 E 1394204
4	12" 1/2" HB	N 541394 E 1394223
5	16"x12" REDUCER	N 542036 E 1394421
6	16"x12" TEE	N 542036 E 1394423
7	16" 1/2" HB	N 542046 E 1394429
8	16" 1/2" HB	N 542046 E 1394431
9	16" 1/2" HB	N 542200 E 1394440
10	16" 1/2" HB	N 542200 E 1394439
11	16"x16" TEE	N 542210 E 1394431
12	16"x16" TEE	N 542212 E 1394430
13	16" 1/2" HB	N 542262 E 1394542
14	16" 1/2" HB	N 542262 E 1394542
15	16" 1/2" HB	N 542335 E 1394641
16	16"x12" REDUCER	N 542330 E 1394101
17	12" 1/2" HB	N 542328 E 1394103



PLAN VIEW  
SCALE: 1" = 50'

NOTE: FOR SEDIMENT CONTROL OF THIS AREA, SEE SHEET 4.  
CONTRACTOR TO REMOVE EX. 12" CAP & BUTTRESS AND CONNECT PROP. 12" W TO BE SHUT  
EX. 12" VALVE (24-4238-D) TO BE SHUT



PROFILE - WATER MAIN 'B'  
SCALE: 1"=50' HORIZ.  
1"=5' VERT.

NOTE: CONTRACTOR MUST USE MECHANICALLY RESTRAINED JOINTS IN FILL AREAS.

NOTE: CONTRACTOR MUST USE MECHANICAL RESTRAINT JOINT PIPE FOR THE INSTALLATION OF THE 16" MAIN AND APPURTENANCES.

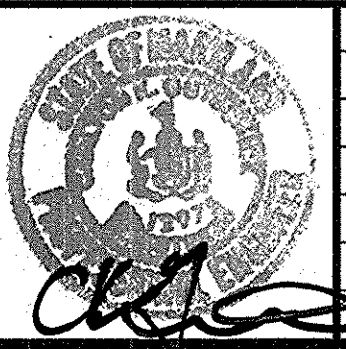
PREPARED FOR:  
G&R WESSEL, LLC  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: CHARLIE ODOVONAN  
410-484-8400

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
Steve C. Coan  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
DATE: 10/14/10  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

GLWGUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
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BURTONSVILLE, MARYLAND 20886  
TEL: 301-421-4024 BALT: 410-880-1820 DC: 301-989-2524 FAX: 301-421-4186

DATE: SEPT. 2008  
PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE PLANS 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. 12975  
EXP. DATE: MAY 28, 2010



NO.	REVISION	DATE
1	added when comments to be for future open space lot	01.19.10
2	AS BUILT DATA ADDED	4.7.09
3	REV. 12" WATER PROFILE PER FIELD CHANGE & CALLED EX. 12" W TO BE SHUT OFF TO BE SHUT OFF TO BE SHUT OFF	2.5.09

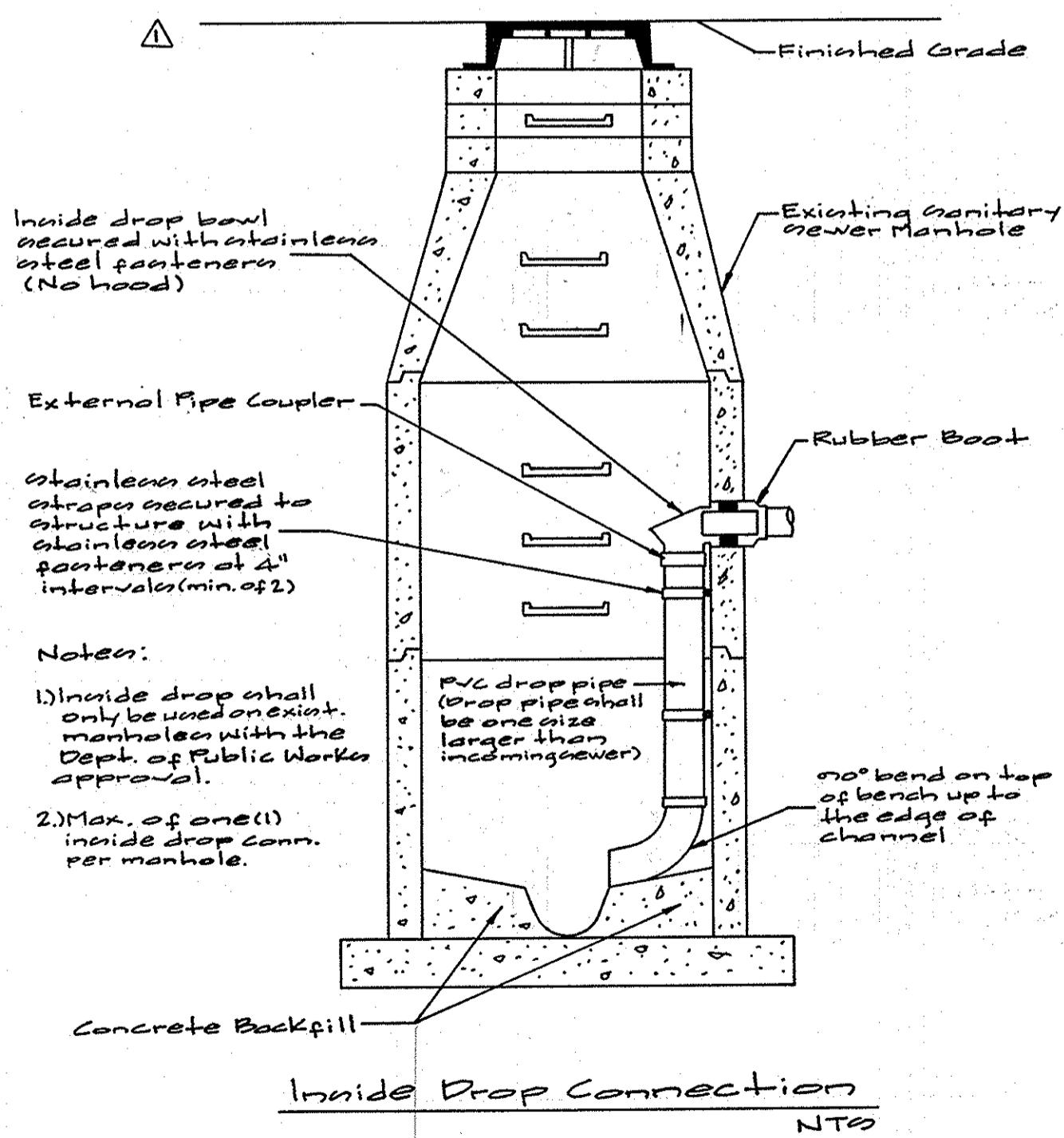
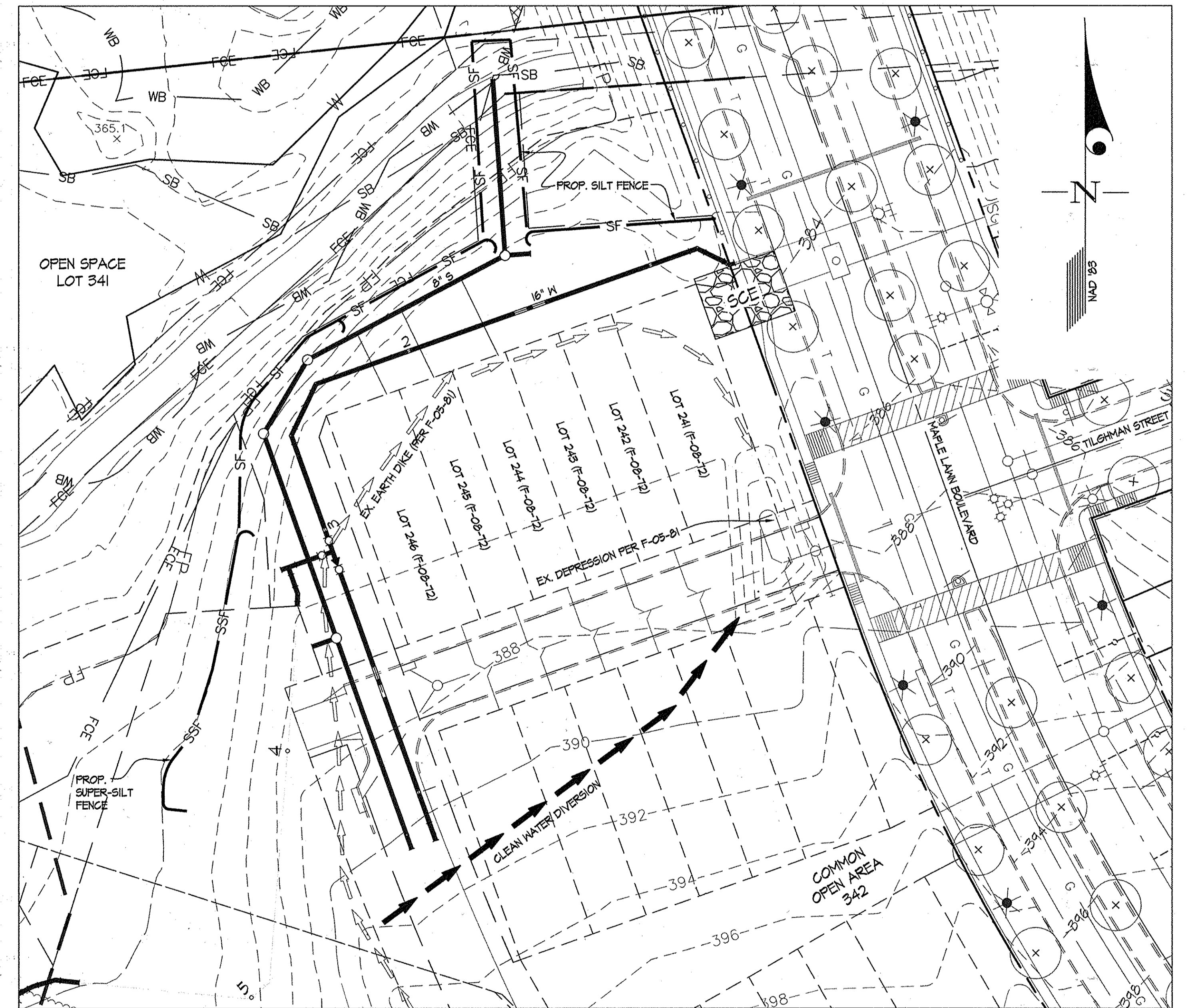
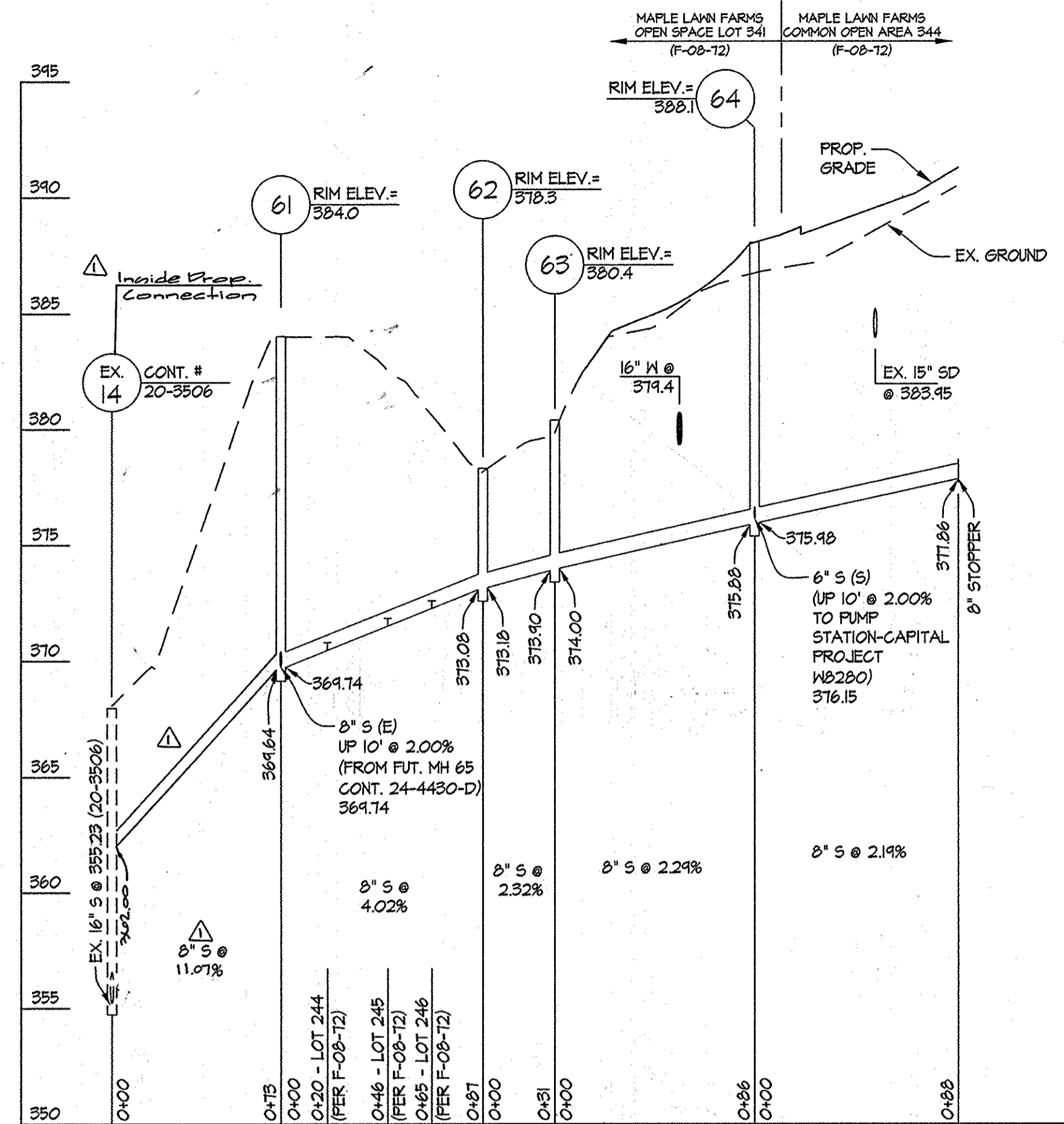
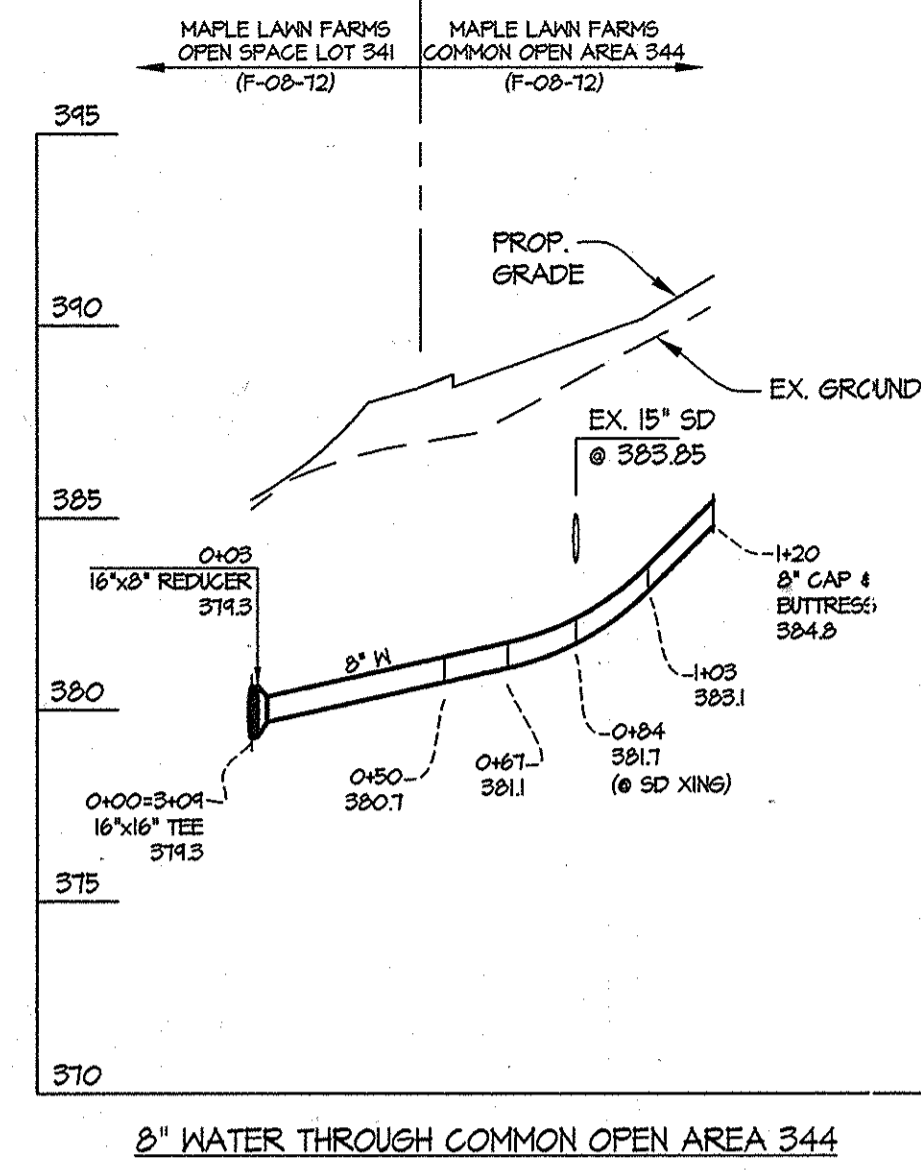
WATER & SEWER EXTENSION PLAN & WATER PROFILE  
600' SCALE MAP NO. 41/46 BLOCK NO. 21(41)/3(46)

MAPLE LAWN FARMS  
CONTRACT No. 24-4521-D  
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HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 5

SCALE: AS SHOWN  
SHEET: 3 OF 4

AS-BUILT INFORMATION

UNIT #	LENGTH	TO	UNIT #	LENGTH	TO	UNIT #	LENGTH	TO



**LEGEND**

- - - 380 EX. CONTOUR
- SF PROPOSED SILT FENCE
- SSF PROPOSED SUPER SILT FENCE
- → → PROPOSED CLEANWATER DIVERSION
- EX. EARTH DIKE (PER F-05-B1)
- ⊠ STABILIZED CONSTRUCTION ENTRANCE

**SEDIMENT CONTROL**  
 16" W (STA. 0+00 THRU 3+27) & SEWER MHS 61 THRU 64  
 SCALE: 1"=30'

PREPARED FOR:  
 G&R WESSEL, LLC  
 SUITE 300 WOODHOLME CENTER  
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 BALTIMORE, MD 21208  
 ATTN: CHARLIE O'DONOVAN  
 410-484-8400

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*Steve Cohen*  
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

*John B...*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

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DATE SEPT. 2008

G.L.W. No. 06081

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 EXP. DATE: MAY 26, 2010

NO.	REVISION	DATE
1	REVISED TO ADD REVISIONS TO AN INSIDE DROPPING & SILENT INSIDE CONNECTION DETAIL	2-5-09

**WATER AND SEWER EXTENSION PROFILES**

600' SCALE MAP NO. 41/46 BLOCK NO. 21(41)/3(46)

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 CONTRACT No. 24-451-D  
 WESTSIDE DISTRICT - AREA 1  
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 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 5

SCALE AS SHOWN  
 SHEET 4 OF 4