

**SHEET INDEX**

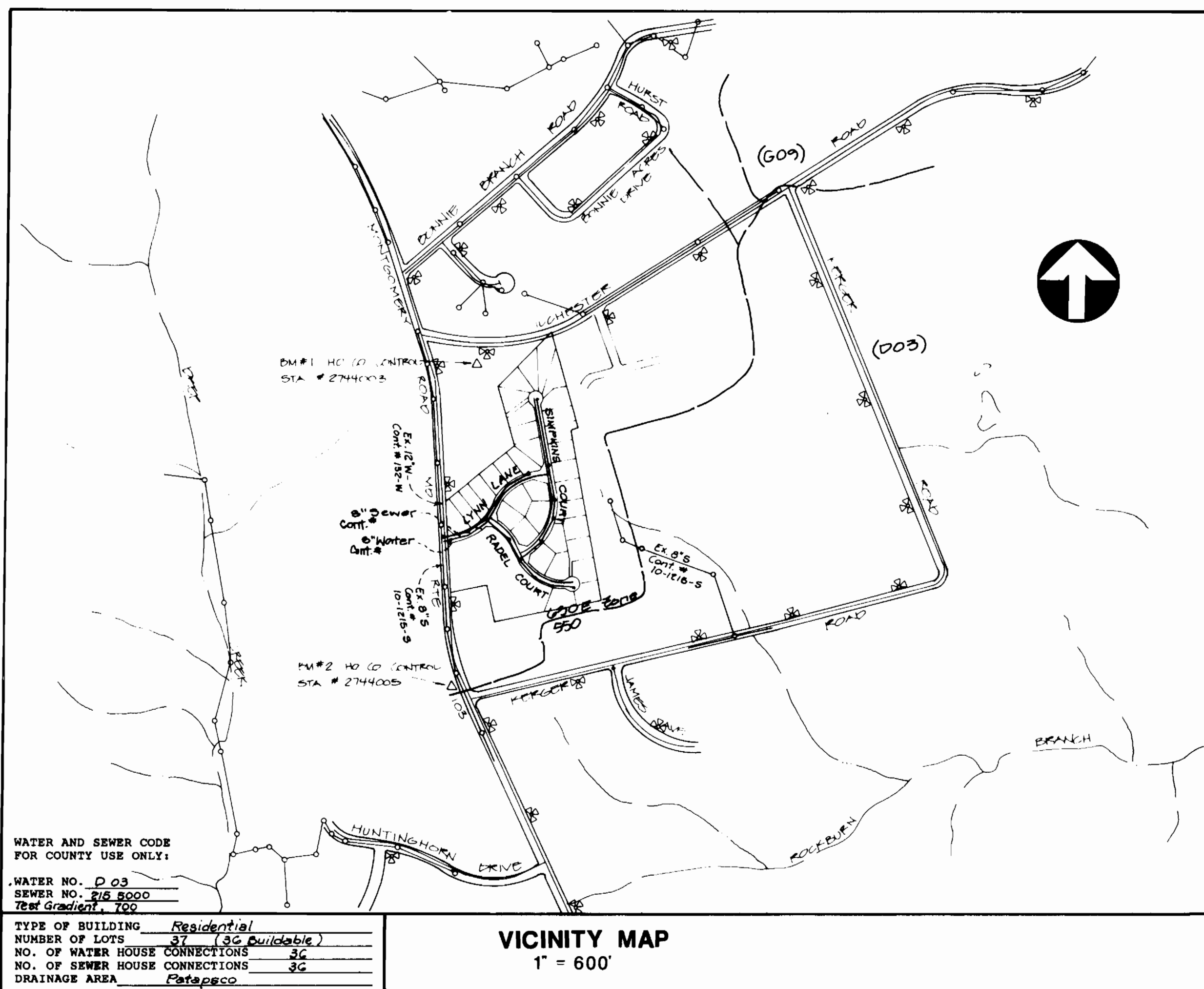
SHEET NO.	TITLE
1	Title Sheet
2	Plan Sheet
3	Profile Sheet

**BENCHMARKS**

BM#1	HOWARD COUNTY CONTROL STATION 2744003 ELEV. 489.218, CONC. MON. AT SURFACE ON HILL IN POWER LINES BETWEEN ILLCHESTER RD & MONTGOMERY RD.
BM#2	HOWARD COUNTY CONTROL STATION 2744005 ELEV. 419.625, 3/4" REBAR 0.6 BELOW SURFACE 10'± W. EDGE OF ROUTE 103 & 80'± N. OF E. OF KERGER RD.

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	
			TYPE	SUPPLIER
8" Water	1,815 LF	1760	VECON JOINT DUCTILE IRON PIPE 24"	GRIFFIN PIPE PRODUCTS
6" Water	855 LF	848	" " " " "	" " " "
3/4" WHC	1,166 LF	1049	SOFT COPPER TUBING	MUELLER METALS
6" Valve	7 Units	7	REG. SERVO D.R. GATE VALVE	MUELLER CO.
6" Valve (Resilient)	1 Unit	1	" " " "	" " " "
8" G Reducer	2 Units	2	W3 COMPACT DUCTILE IRON REDUCER	GRIFFIN PIPE PRODUCTS
Fire Hydrants	5 Units	5	5" FIRE HYDRANT	MUELLER CO.
6" F.H. Valve	5 Units	5	6" F.H. VALVE	" " " "
8" Sewer	2,139 LF		PVC 36" S.D. 33	JM MANUFACTURING
8" Sewer (Cl. Fr.)	481 LF		PVC 36" S.D. 33	GRIFFIN PIPE PRODUCTS
4" SHC	1,006 LF	1092	PVC 36" S.D. 33	JM MANUFACTURING
Manholes	21 Units	21	" " " "	" " " "

NAME OF UTILITY CONTRACTOR: CONSOLIDATED CONSTRUCTION SERVICES  
SURVEY & DRAFTING DIVISION AS-BUILT DATE:



**GENERAL NOTES**

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6" CLEAR ALL POLES BY 2'-0" MINIMUM OR TOWER AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) FEET IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
  - STATE HIGHWAY ADMINISTRATION 531-5533
  - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE 685-0123
  - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE 685-0123
  - ENGINEERING - "DAMAGE CONTROL" 234-5611
  - "MISS UTILITY" 1-559-0100
  - CHESAPEAKE & POTOMAC (C & P) TELEPHONE COMPANY 725-9976
  - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION 393-3533
  - COLONIAL PIPELINE COMPANY 795-1390
  - BUREAU OF UTILITIES HOWARD COUNTY 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE.
- ALL WATER MAINS TO BE D.I.P. CLASS 52.
- TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TREES.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY ALL LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X. OR PVC UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED M.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVER. STANDARD DETAIL G. 5.52 WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE, STANDARD DETAIL G. 5.41.
- HOUSE(S) WITH THE SYMBOL "C.H.S." INDICATES THAT CELLAR CAN NOT BE SERVED.
- RESURFACE MONTGOMERY ROAD WITH A 1-1/2" BITUMINOUS PAVING OVERLAY. SEE ABBEYFIELD ESTATES ROAD CONSTRUCTION DRAWINGS ( ) FOR DETAILS.

# ABBNEYFIELD ESTATES

## WATER AND SEWER MAIN EXTENSIONS

### 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT No. 14-3371-D DEPARTMENT OF PUBLIC WORKS

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

APPROVED: *John R. Pluton* 4/23/94  
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-94-99.

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
*Patricia Egle* 4/23/94  
U.S. SOIL CONSERVATION SERVICE DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Oliver M. Ingram* 4/23/94  
Director of Public Works, Admin Date

*Robert J. Sawyer* 11-18-94  
Chief, Bureau of Utilities Date

*W. R. ...* 4/23/94  
Chief, Bureau of Engineering Date

*...* 4/23/94  
Chief, Land Development Division Date

LAVELLE & ASSOCIATES INCORPORATED  
CIVIL ENGINEERS • LAND PLANNERS • LAND SURVEYORS

10 NORTH JEFFERSON STREET  
OFFICE: (301) 831-4510 SUITE 203 FAX: (301) 695-9766  
(301) 695-9722 FREDERICK, MARYLAND 21701



OWNER/DEVELOPER  
THE PCH CORPORATION  
13200 SKY WAY  
ELLCOTT CITY, MD. 21043  
(410) 651-6677

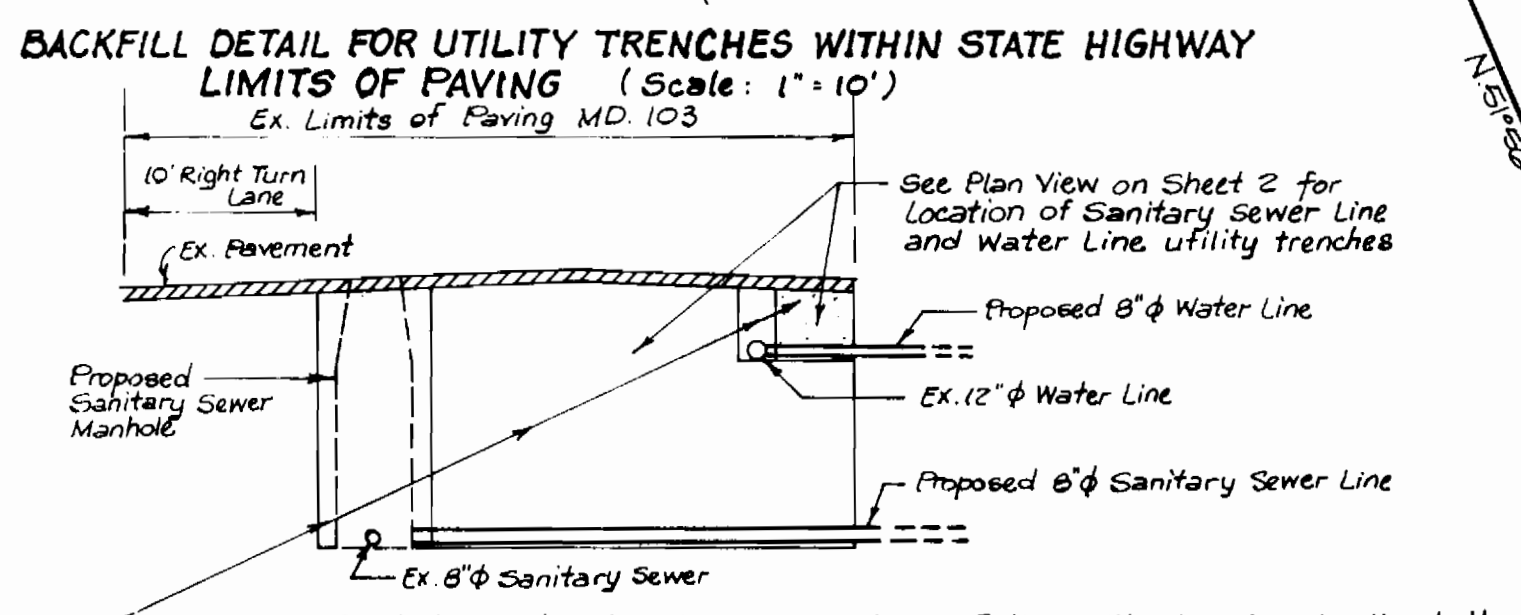
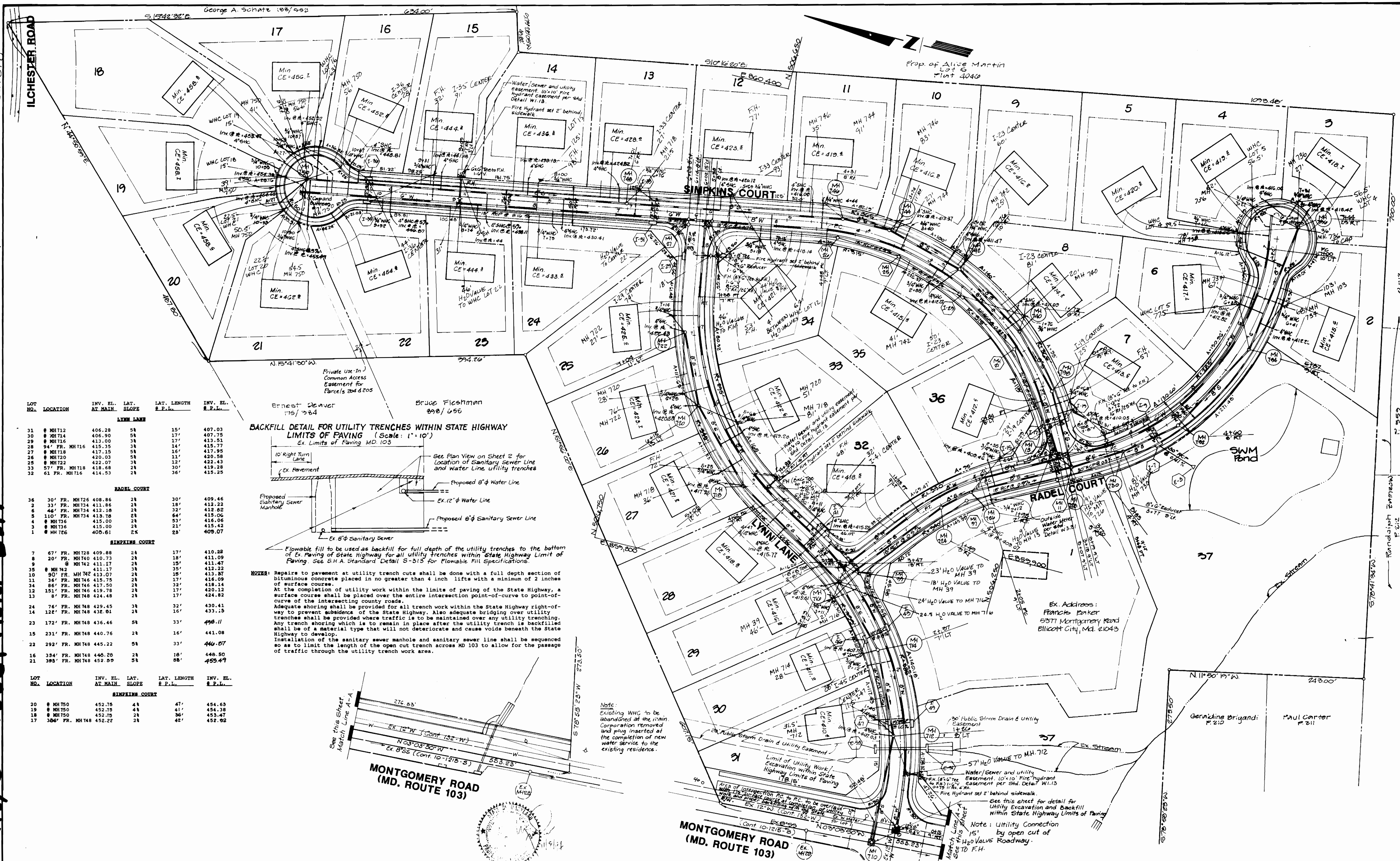
TITLE SHEET  
ABBNEYFIELD ESTATES  
TAX MAP 31 PARCELS 206, 208 & 209  
1st. ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT No. 14-3371-D

SHEET 1 OF 3

600' Scale Map No. 31 Block No. 15, 20 & 21

AS-BUILT

AS-BUILTS  
ws/2 Abbeyfield Est.  
3371



Flowable fill to be used as backfill for full depth of the utility trenches to the bottom of Ex. Paving of State Highway for all utility trenches within State Highway Limit of Paving. See S.H.A. Standard Detail S-313 for Flowable Fill Specifications.

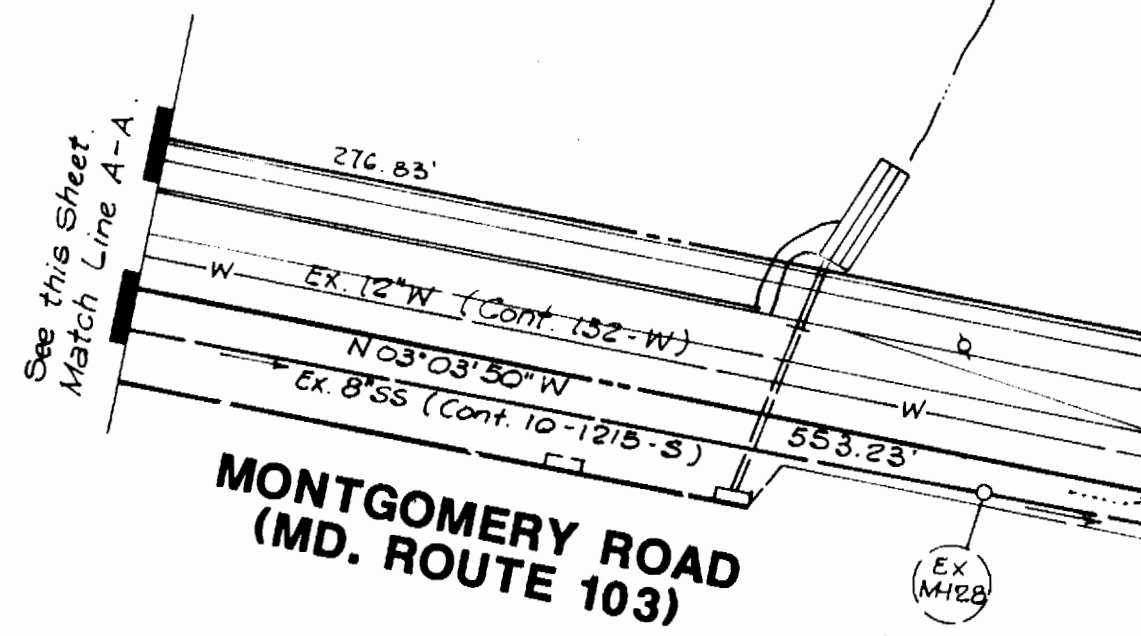
NOTES: Repairs to pavement at utility trench cuts shall be done with a full depth section of bituminous concrete placed in no greater than 4 inch lifts with a minimum of 2 inches of surface course.

At the completion of utility work within the limits of paving of the State Highway, a surface course shall be placed over the entire intersection point-of-curve to point-of-curve of the intersecting county roads.

Adequate shoring shall be provided for all trench work within the State Highway right-of-way to prevent subsidence of the State Highway. Also adequate bridging over utility trenches shall be provided where traffic is to be maintained over any utility trenching. Any trench shoring which is to remain in place after the utility trench is backfilled shall be of a material type that will not deteriorate and cause voids beneath the State Highway to develop.

Installation of the sanitary sewer manhole and sanitary sewer line shall be sequenced so as to limit the length of the open cut trench across MD 103 to allow for the passage of traffic through the utility trench work area.

LOT NO.	LOCATION	INV. EL. AT MAIN	LAT. SLOPE	LAT. LENGTH # P.L.	INV. EL. @ P.L.
<b>LYNN LANE</b>					
31	MH 712	406.28	5%	15'	407.03
30	MH 714	406.90	5%	17'	413.51
29	MH 716	413.00	3%	17'	415.77
28	94' FR. MH 716	415.35	3%	14'	417.95
27	MH 718	417.15	5%	14'	417.95
26	MH 720	420.03	5%	11'	420.58
25	MH 722	422.07	3%	12'	422.43
24	57' FR. MH 718	418.68	2%	30'	419.28
23	61' FR. MH 716	414.53	2%	36'	415.25
<b>RADEL COURT</b>					
36	30' FR. MH 726	408.86	2%	30'	409.46
2	33' FR. MH 734	411.86	2%	18'	412.22
6	44' FR. MH 734	412.18	2%	32'	412.82
5	110' FR. MH 734	413.78	2%	64'	415.06
4	MH 736	415.00	2%	53'	416.06
3	MH 736	415.00	2%	21'	415.42
1	MH 726	408.61	2%	28'	409.07
<b>SIMPSON COURT</b>					
7	67' FR. MH 728	409.88	2%	17'	410.22
8	20' FR. MH 740	410.73	2%	18'	411.09
9	MH 742	411.17	2%	19'	411.47
10	MH 742	411.17	2%	35'	412.22
11	90' FR. MH 742	413.07	2%	15'	413.87
13	36' FR. MH 746	415.75	2%	17'	416.09
34	86' FR. MH 746	417.50	2%	32'	418.14
12	151' FR. MH 746	419.78	2%	17'	420.12
13	8' FR. MH 748	424.48	2%	17'	424.82
24	74' FR. MH 748	429.45	3%	32'	430.41
14	122' FR. MH 748	432.01	2%	16'	433.15
23	172' FR. MH 748	436.46	5%	33'	438.11
15	231' FR. MH 748	440.76	2%	16'	441.08
22	292' FR. MH 748	445.22	5%	33'	448.07
16	354' FR. MH 748	448.28	2%	18'	448.50
21	393' FR. MH 748	452.59	2%	28'	453.47
<b>SIMPSON COURT</b>					
20	MH 750	452.75	4%	47'	454.63
19	MH 750	452.75	4%	41'	454.38
18	MH 750	452.75	2%	36'	453.47
17	386' FR. MH 748	452.22	2%	42'	452.92



Note: Existing WHC to be abandoned at the main corporation removed and plug inserted at the completion of new water service to the existing residence.



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature] DATE: 11-18-94  
Chief, Bureau of Utilities: [Signature] DATE: 11/21/94

Chief, Bureau of Engineering: [Signature] DATE: 11/21/94  
Chief, Land Development Division: [Signature] DATE: 11/21/94

**LAVELLE & ASSOCIATES, INCORPORATED**  
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DES:	
DRN:	
CHK:	
DATE:	
BY NO.	
REVISION	
DATE	

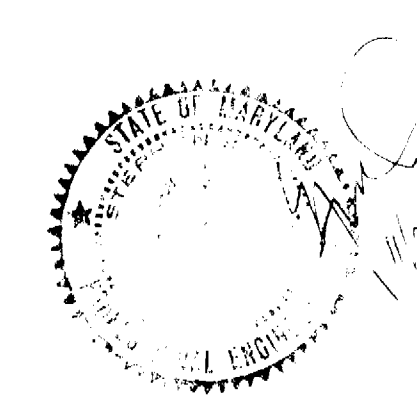
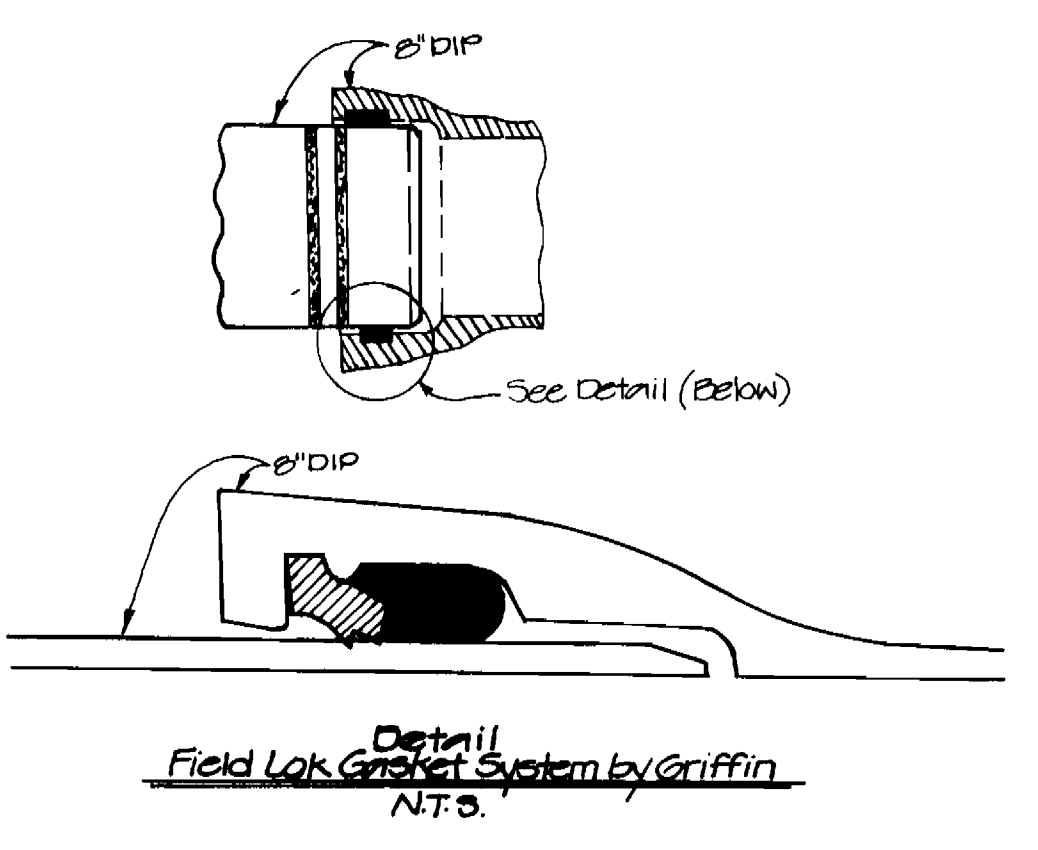
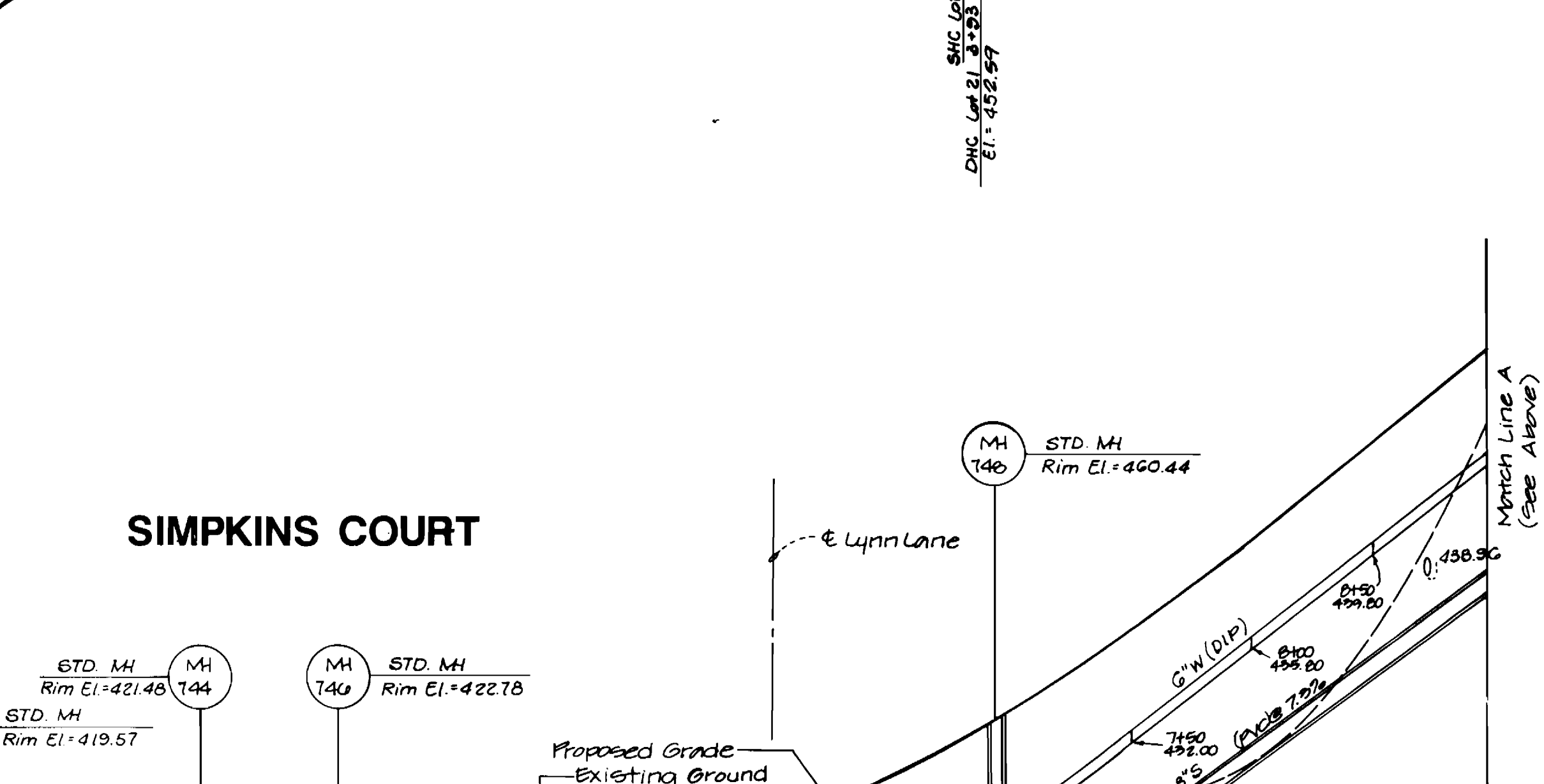
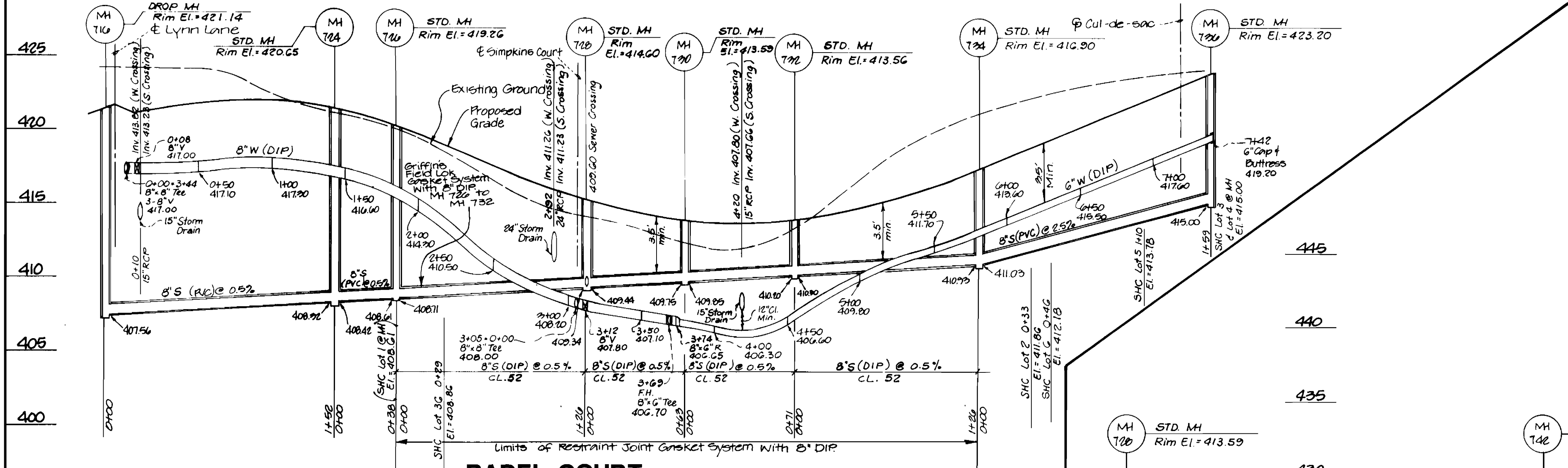
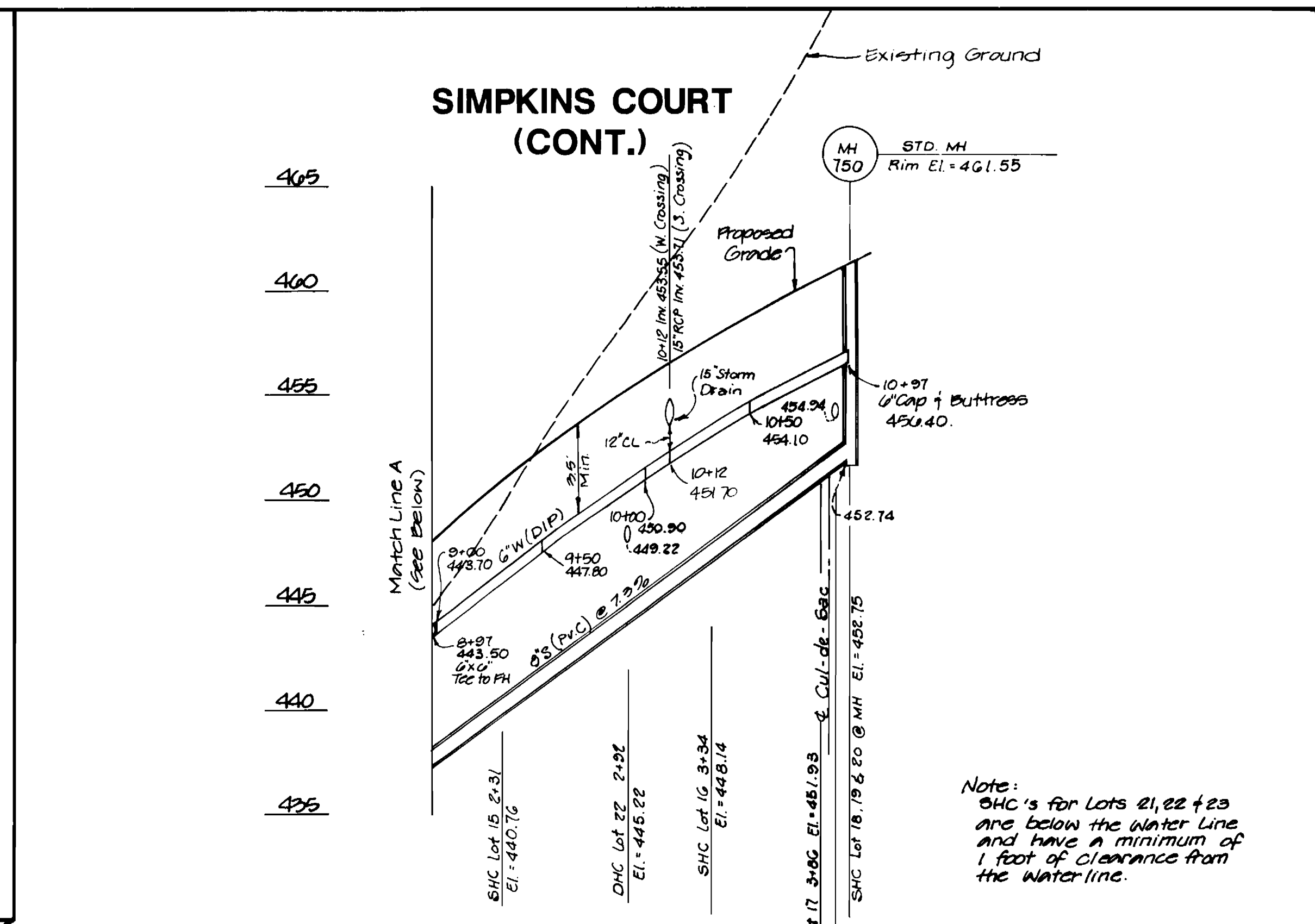
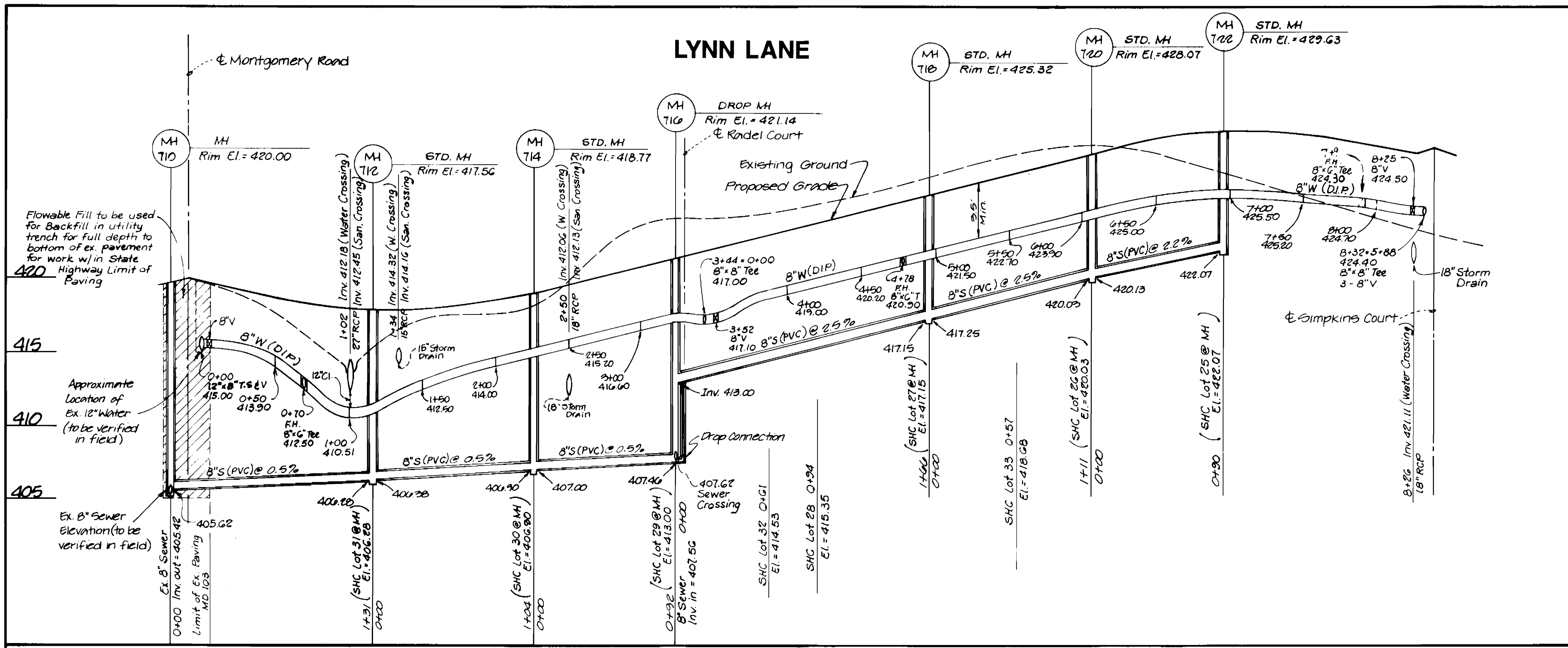
PLAN SHEET  
WATER AND SEWER MAINS  
CONTRACT No. 14-3371-D  
600' SCALE MAP NO. 31 BLOCK NO. 15, 20 & 21

**ABBNEYFIELD ESTATES**  
TAX MAP 31 PARCELS 206, 208 & 209  
1st. ELECTION DISTRICT AS-BUILTS  
HOWARD COUNTY, MARYLAND

SCALE  
1" = 50'  
SHEET  
2 OF 3

3371 ws/3 Abbeyfield Est.

AS-BUILTS



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*John M. Ryan* 11/2/94  
Director of Public Works Date  
Chief, Bureau of Engineering

*Robert R. Berman* 11/2/94  
Chief, Bureau of Utilities Date  
Chief, Land Development Division

**LAVELE & ASSOCIATES, INCORPORATED**  
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REV	1	Remove casing for sewer main - Add Griffin Field Lok gasket detail	01/11/95
DRN			
CHK			
DATE			
BY	NR	Revision	DATE

CONTRACT No. 14-3371-D

Scale Map No. 31 Block No. 15, 20 & 21

**ABBAYFIELD ESTATES**  
TAX MAP 31 PARCELS 206, 208 & 209  
1st. ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

Scale:  
Vert: 1" = 5'  
Hori: 1" = 50'

Sheet  
**3 of 3**

AS-BUILTS