QUANTITIES

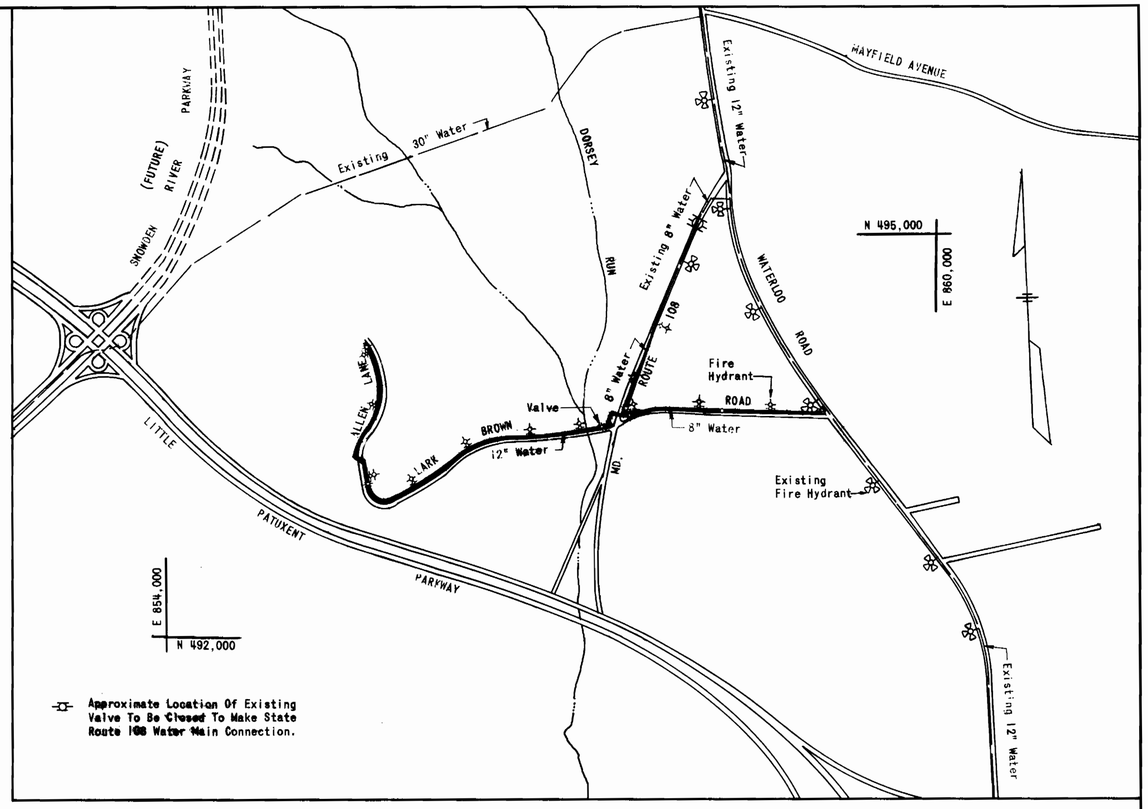
ITEM DESCRIPTION	SIZE	ESTIMATED QUANTITY	AS-BUILT QUANTITY
Water Main	6"	80 L.F.	68 L.F.
Water Main	8"	2390 L.F.	2326 L.F.
Water Main	12"	3640 L.F.	3621 L.F.
Fire Hydrants	6"	12 Each	12 ea.
Bored & Jacked Sleeve Beneath State Road	16"	47 L.F.	47 L.F.
Air Valve Manhole	-	2 Each	2 ea.
Water House Service Lines	3/4" 1"	240 L.F. 130 L.F.	515 L.F. 51 L.F.
Curb Service Box, Cover And Curb Stop	-	86 Each	26 ea.

GENERAL NOTES

1. For All Standard Details, See Standards Bound In Specifications.
2. The Contractor Shall Locate Existing Utilities In Advance Of Construction Operations In The Vicinity Of Proposed Utilities.
3. The Contractor Shall Notify The Following Utilities Or Agencies At Least Five (5) Days Before Starting Work Shown On These Plans:

   State Highway Administration - 531-5533
   Baltimore Gas And Electric Company - Underground Electric Distribution Engineering - "Damage Control" - 234-5691
   Baltimore Gas And Electric Company - Underground Gas Distribution Engineering - 559-0100
   Chesapeake And Potomac Telephone Co. - 725-9976
   American Telephone And Telegraph - Cable Location Division - 301-393-3553
   Colonial Pipeline Company - 781-4641
   Miss Utility - 393-3648

4. Approximate Locations Of Existing Mains Are Shown. The Contractor Shall Take All Necessary Precautions To Protect Existing Utilities And Services And Maintain Uninterrupted Supply. Any Damage Incurred To A Utility Shall Be Immediately Reported To The Utility Owner. Such Damage Shall Be Repaired As Directed By The Utility Owner, At No Additional Cost To Howard County.
5. The Contractor Shall 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 Operations.
6. Clear All Existing Utilities By A Minimum Of 6" Vertical. Clear All Poles 2'-0" Horizontal Minimum Or Tunnel As Required.
7. Trees And Shrubbery Shall Be Protected From Damage To The Maximum Extent. Trees Located Within The Construction Strips Are Not To Be Removed Or Damaged By Contractor.
8. All Horizontal Controls Are Based On Maryland State Plane Coordinate System.
9. All Vertical Controls Are Based On Maryland State Datum.
10. Elevations Shown To Right Of Profile Stationing Are Invert @ Elevations Of Proposed Water Main.
11. Proposed Water Mains Shall Have 3.5 Feet Minimum Cover, Measured From Existing Grade Unless Otherwise Shown On Contract Drawing Profiles.
12. "Bury Lines" 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 Shall Be Compacted In Accordance With Section 5-15 Of The Standard Specifications. The Cost Of Strapping Fire Hydrants And Valves To Be Included In The Unit Bid Price For Furnishing And Installing Fire Hydrants.
13. All Fittings Shall Be Buttressed With Concrete In Accordance With Standard Details Unless Otherwise Noted In Special Provisions Or On The Contract Drawings.
14. All Water Mains To Be C.I.P., D.I.P., Or A.C.P. Unless Otherwise Noted.



LOCATION PLAN

Scale: 1" = 600'

LARK BROWN ROAD WATER MAINS

CONTRACT NO. 671-W
CAPITAL PROJECT NO. W-4-8061

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

RALPH E. MARQUISS

CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Fredenberg 5/26/78 — DIRECTOR OF PUBLIC WORKS / DATE W O Gilbert 5-23-78 — CHIEF-BUREAU OF ENGINEERING / DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN LOCATION PLAN	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 1 OF 7	SCALE AS SHOWN

475-02

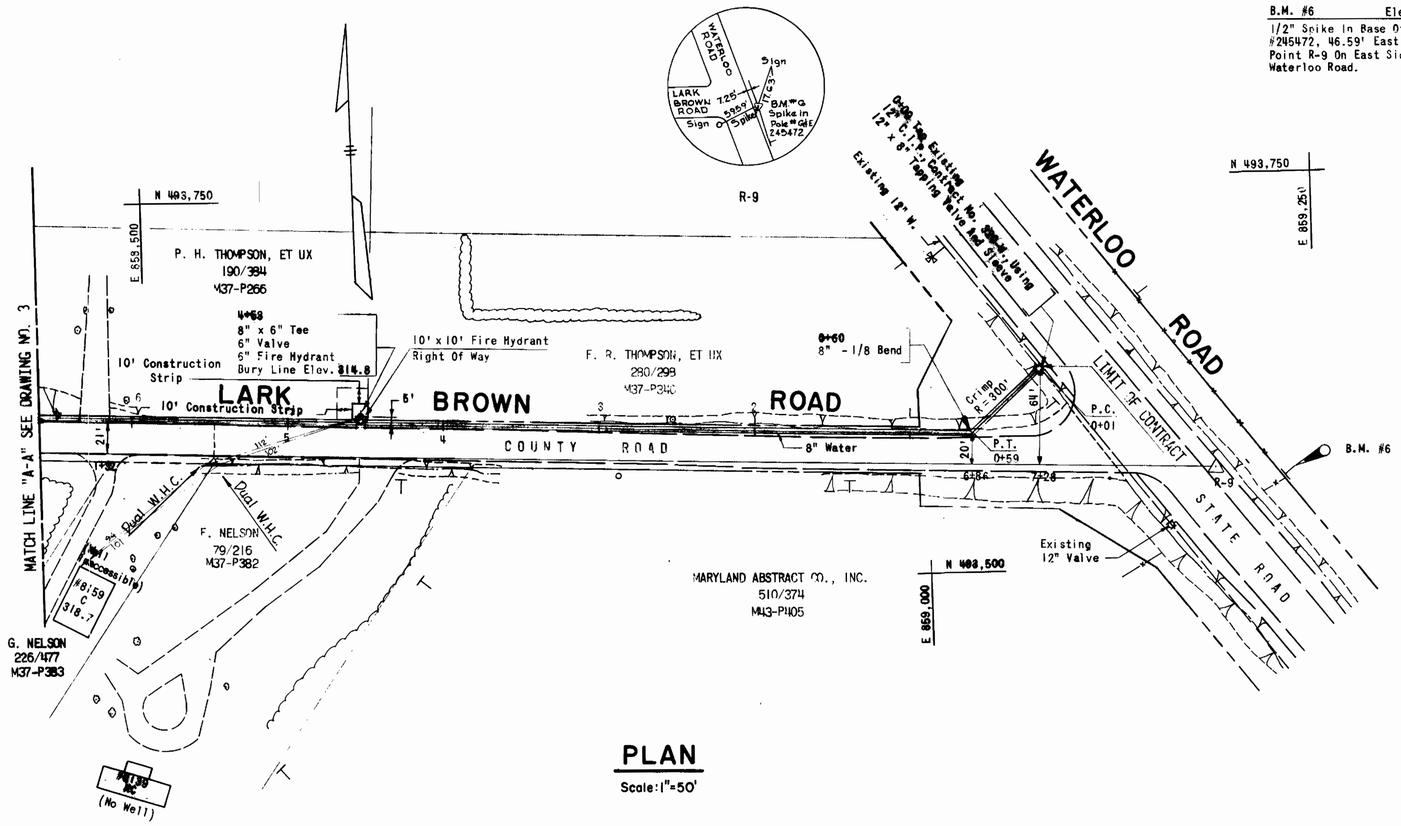
FEBRUARY 1, 1978
AS BUILT 3/17/80 MW.

1 IE BALTIMORE 17 8193 IMPERIAL 58727+

BENCH MARK

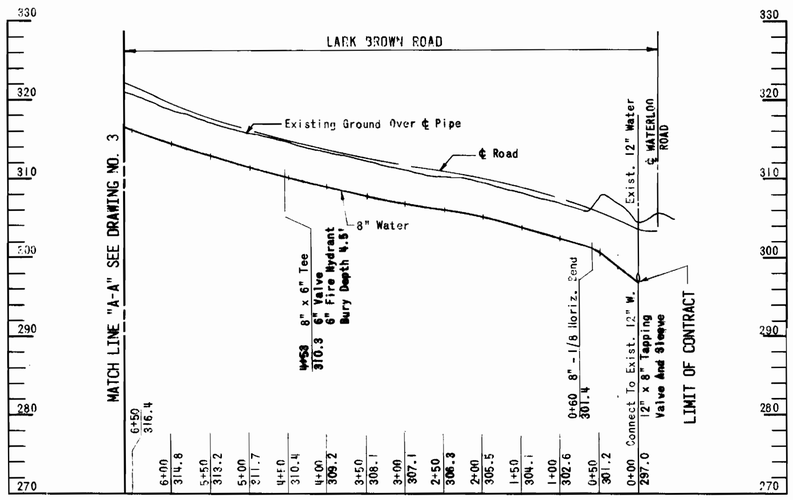
B.M. #6 Elev. 300.66

1/2" Spike In Base Of G&E Pole #245472, 46.59' East Of Traverse Point R-9 On East Side Of Waterloo Road.



PLAN

Scale: 1"=50'



PROFILE

Scale: Horiz. 1"=100'
Vert. 1"=10'

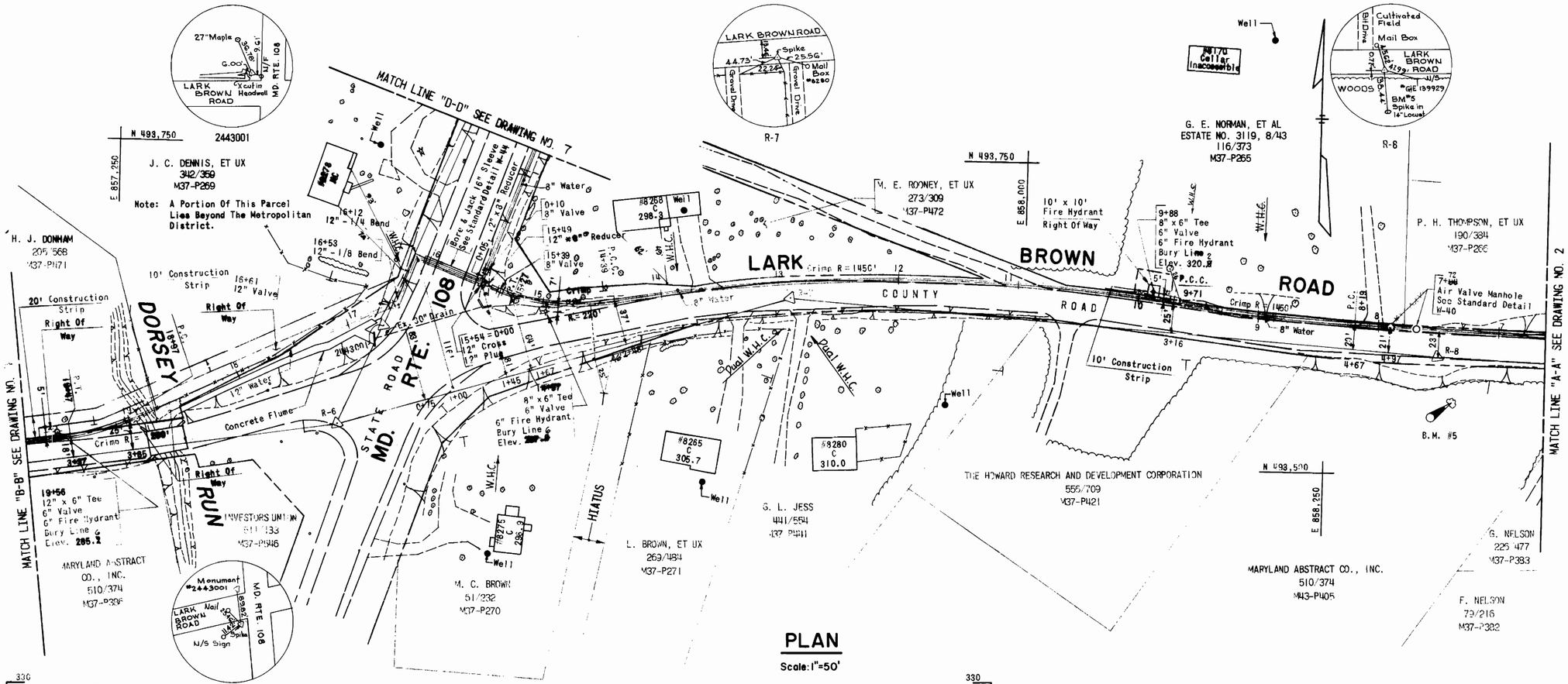
RALPH E. MARQUISS

CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Brendlinger 5/26/78 — DIRECTOR OF PUBLIC WORKS DATE W O Talbert 5-23-78 — CHIEF-BUREAU OF ENGINEERING DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN PLAN AND PROFILE	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 2 OF 7	SCALE AS SHOWN

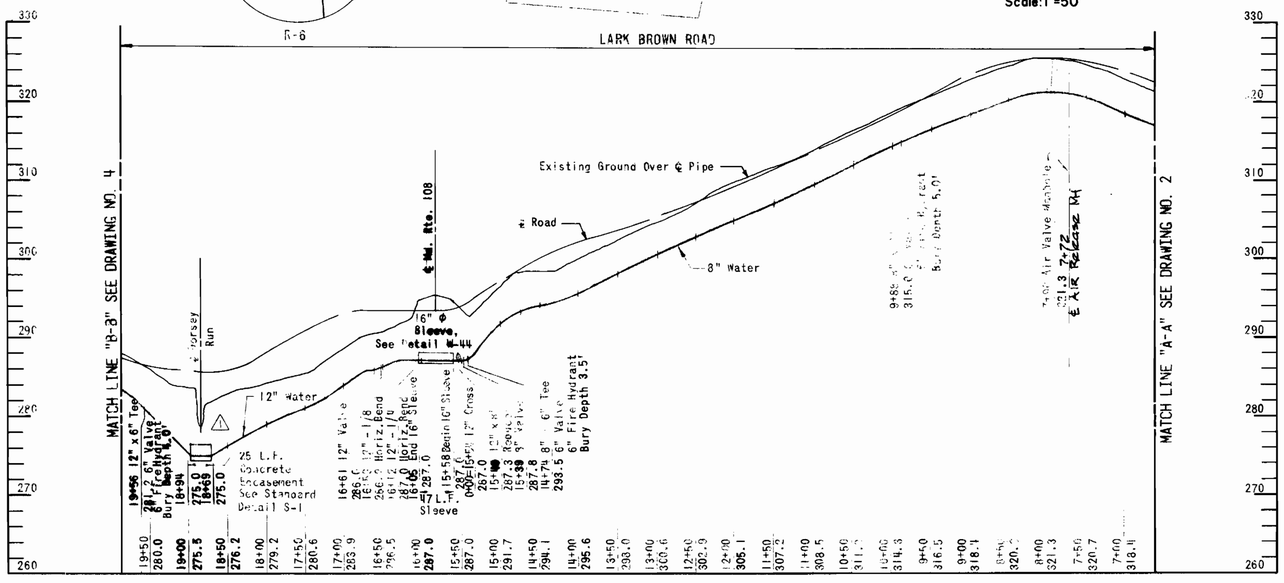
475-02

FEBRUARY 1, 1978
AS BUILT 3/17/80 MW.



PLAN

Scale: 1"=50'



PROFILE

Scale: Horiz. 1"=100' Vert. 1"=10'

BENCH MARK

B.M. #5 Elev. 329.05

1/2" Spike In Base Of 14" Locust 38.44' Southeast Of Traverse Point R-8 On South Side Of Lark Brown Road.

RALPH E. MARQUISS

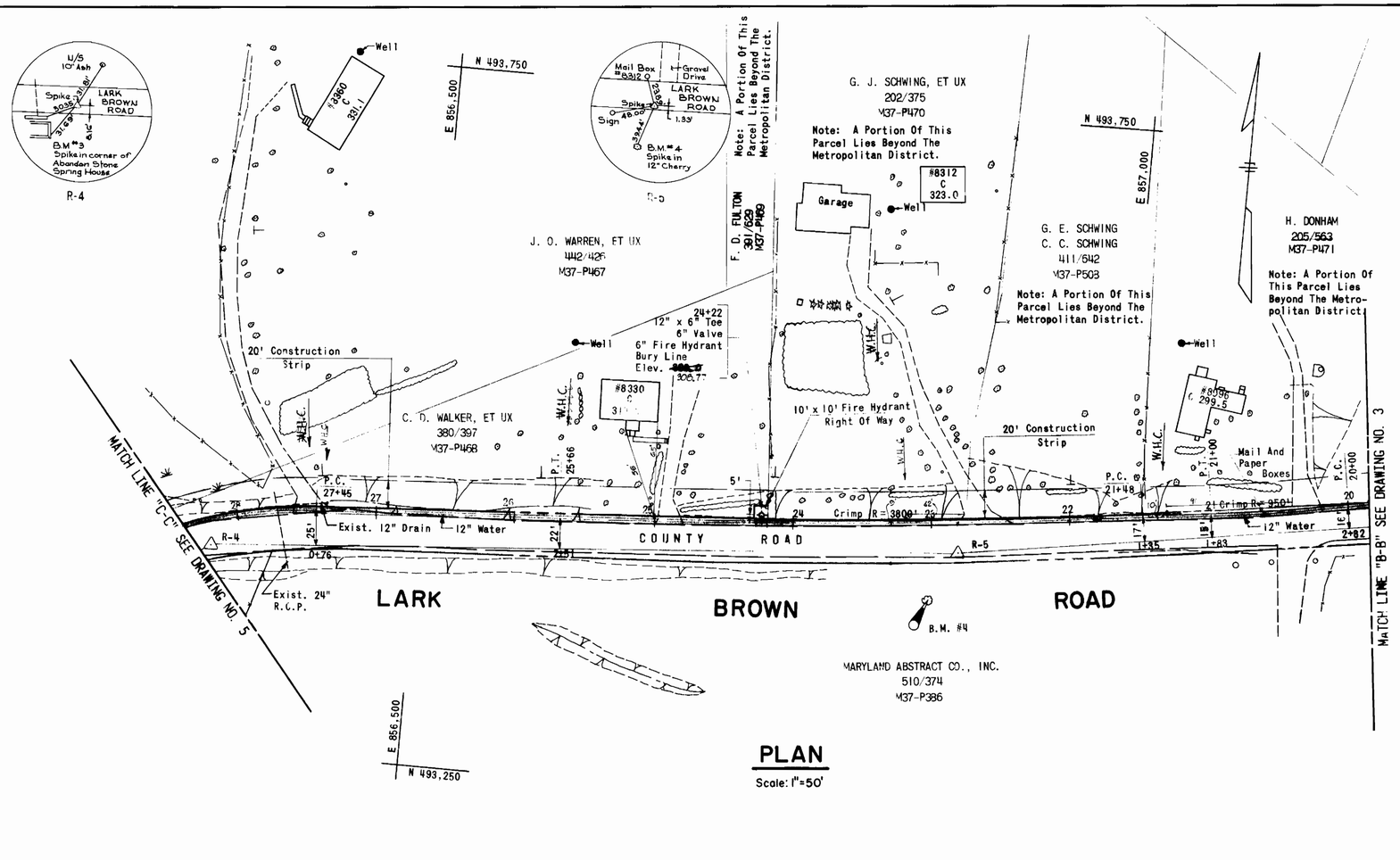
CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Freudenberger 5/26/78 — DIRECTOR OF PUBLIC WORKS / DATE W O Filbert 5-23-78 — CHIEF-BUREAU OF ENGINEERING / DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN PLAN AND PROFILE	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 3 OF 7	SCALE AS SHOWN

475-02

FEBRUARY 1, 1978

AS BUILT 3/18/80 M.W.



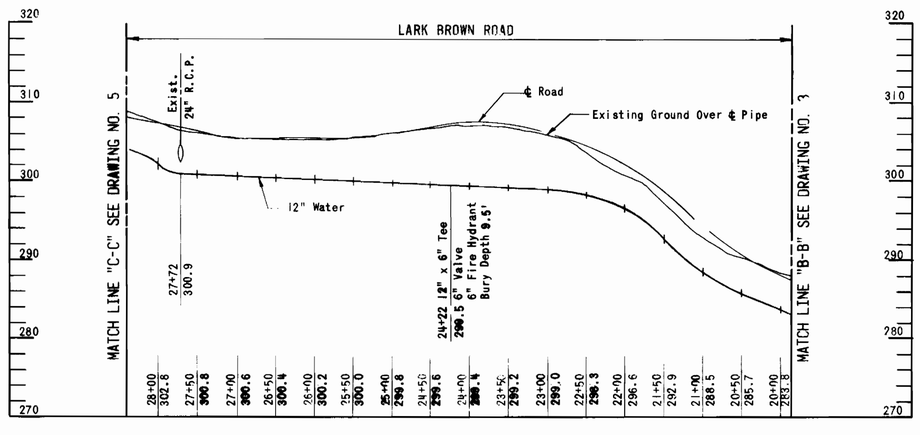
PLAN

Scale: 1"=50'

BENCH MARK

B.M. #4 Elev. 306.46

1/2" Spike In Base Of 12" Cherry Tree 39.44' Southwest Of Traverse Point R-5 On South Side Of Lark Brown Road.



PROFILE

Scale: Horiz. 1"=100' Vert. 1"=10'

RALPH E. MARQUISS
Md. #3381

CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

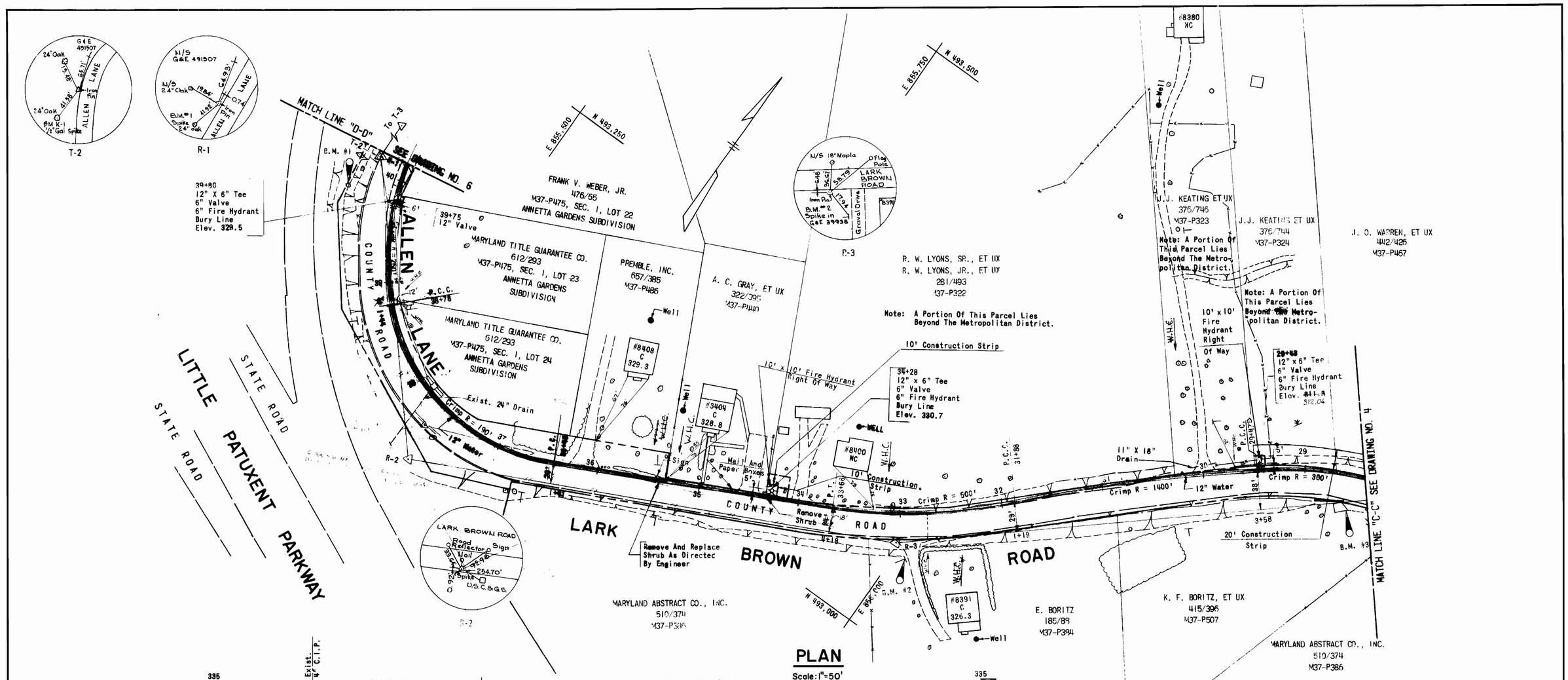
RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Freudenberger 5/26/78 — DIRECTOR OF PUBLIC WORKS DATE W O Filbert 5-23-78 — CHIEF-BUREAU OF ENGINEERING DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN PLAN AND PROFILE	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 4 OF 7	SCALE AS SHOWN

475-02

FEBRUARY 1, 1978

AS BUILT 3/18/80 MW

G&E BALTIMORE 17 8133 IMPERIAL MC2114



BENCH MARKS

B.M. #1 Elev. 331.86
1/2" Spike In Base Of 24" Oak 41.9' Southwest Of Traverse Point R-1 On West Side Of Allen Lane.

B.M. #2 Elev. 330.36
1/2" Spike In Base Of G&E Pole #39938, 17.94' Southeast Of Traverse Point R-3 On South Side Of Lark Brown Road.

B.M. #3 Elev. 307.14
1/2" Spike In Corner Of Abandoned Springhouse 31.69' Southwest Of Traverse Point R-4 On South Side Of Lark Brown Road.

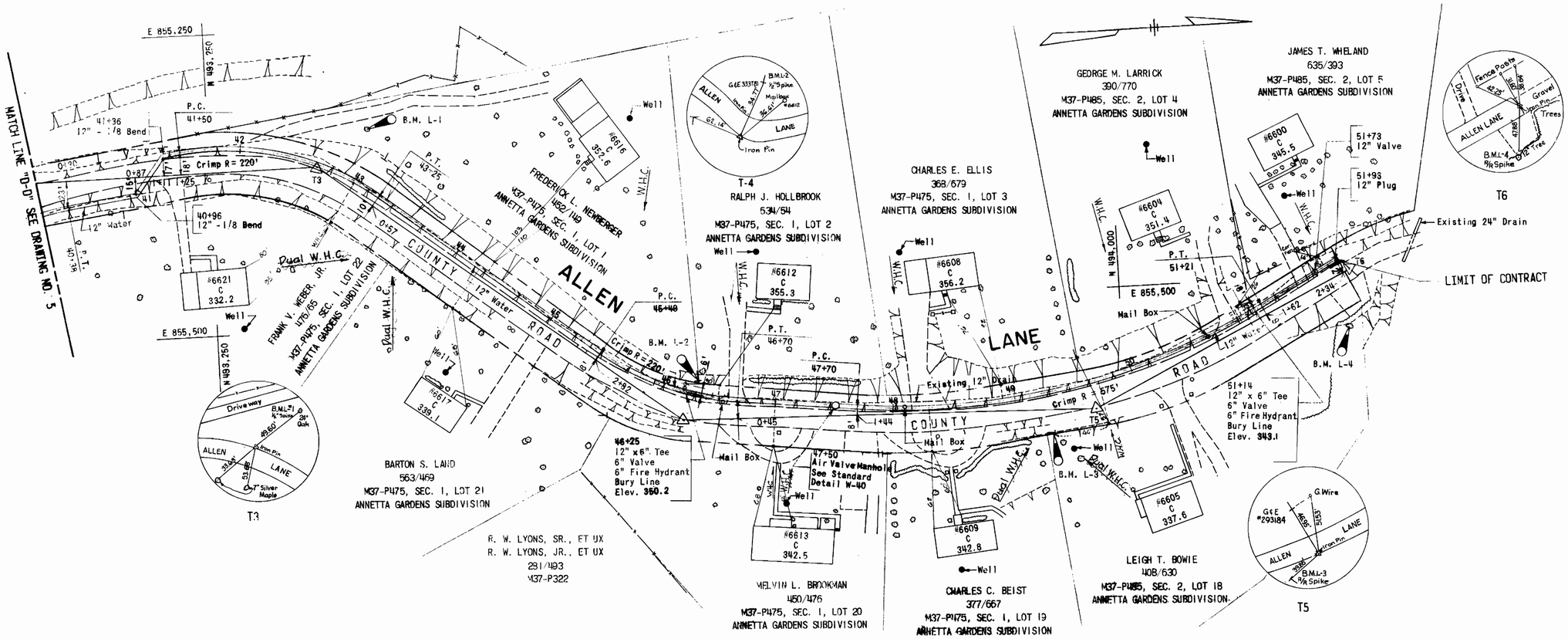
CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

RALPH E. MARQUISS
Lic. # 3381

RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Fruendenberger 5/26/78 DIRECTOR OF PUBLIC WORKS DATE — W O Lilbert 5-23-78 CHIEF-BUREAU OF ENGINEERING DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN PLAN AND PROFILE	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 5 OF 7	SCALE AS SHOWN

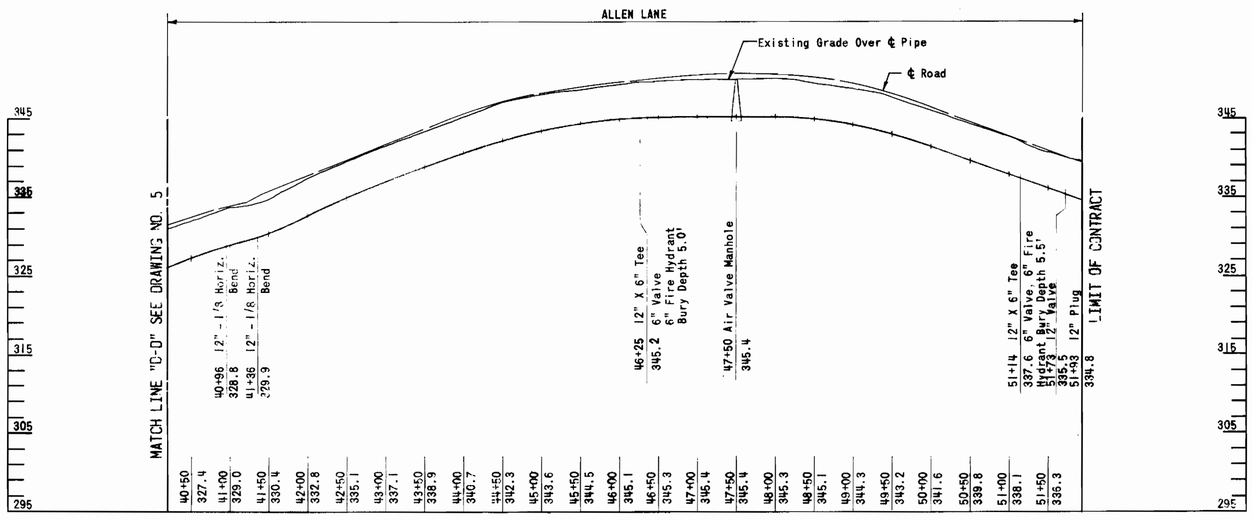
475-02

FEBRUARY 1, 1977
As Built 3/18/80



PLAN

Scale: 1" = 50'



PROFILE

Scale: Horiz. 1" = 100'
Vert. 1" = 10'

BENCH MARKS

B.M. L-1 — Elev. 343.48
1/2" Galvanized Spike In 24" Oak 0.7' Above Ground, 49.60' Northwest Of Traverse Point T3 On West Side Of Allen Lane.

B.M. L-2 — Elev. 352.10
1/2" Galvanized Spike In G&E Pole #333781 Flush With Ground, 34.77' Northwest Of Traverse Point T4 On West Side Of Allen Lane.

B.M. L-3 — Elev. 348.93
Railroad Spike In Base Of Pole, No Number 39.85' Southeast Of Traverse Point T5 On East Side Of Allen Lane.

B.M. L-4 — Elev. 340.22
Railroad Spike In 12" Tree 1.82' Above Ground, 47.88' East Of Traverse Point T6 On East Side Of Allen Lane.

RALPH E. MARQUISS
MD # 3381

CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

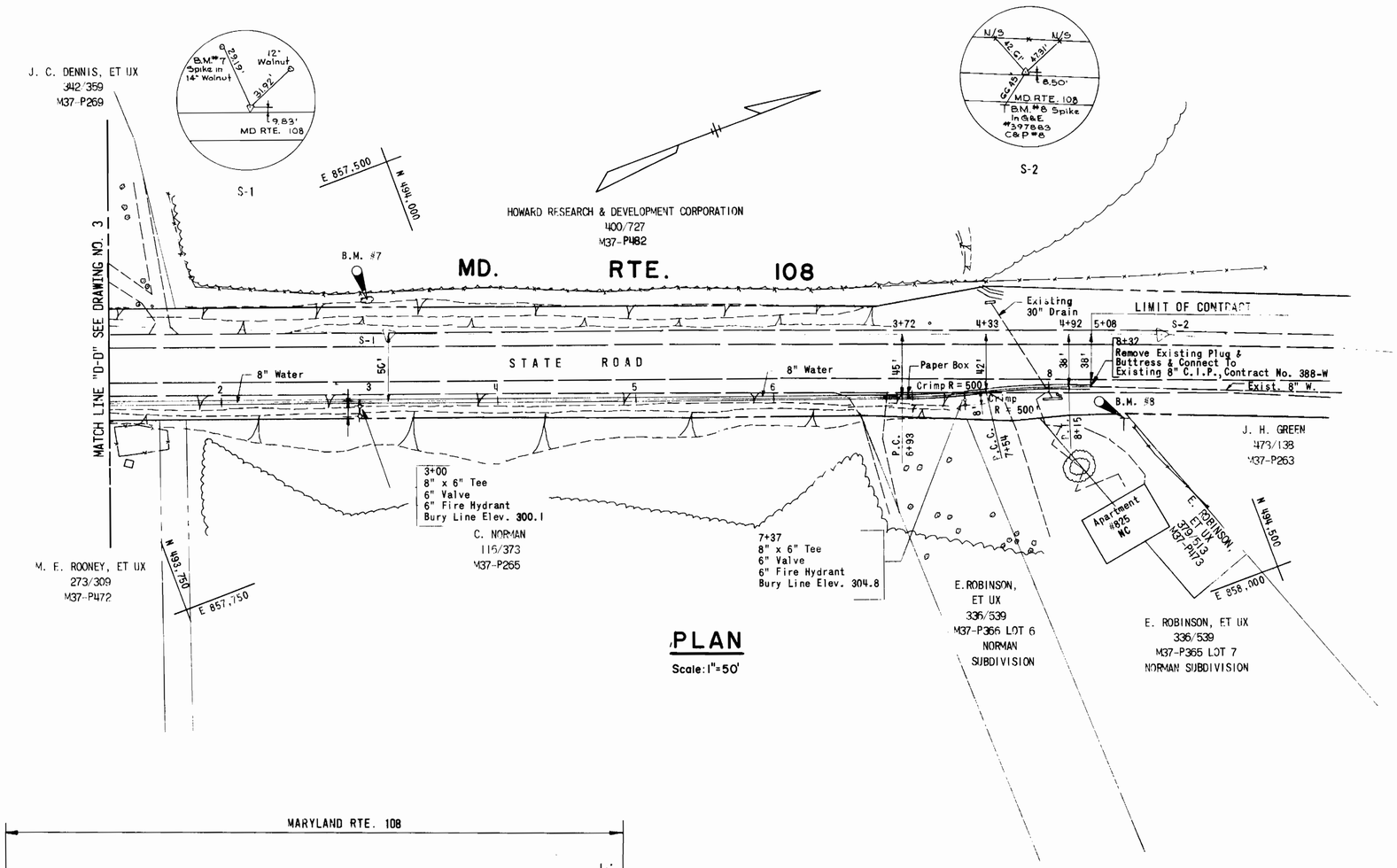
RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Fredericksen 5/26/78 — DIRECTOR OF PUBLIC WORKS / DATE W O Gilbert 5-23-78 — CHIEF-BUREAU OF ENGINEERING / DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN PLAN AND PROFILE	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 6 OF 7	SCALE AS SHOWN

475-02

NOV 1, 1978

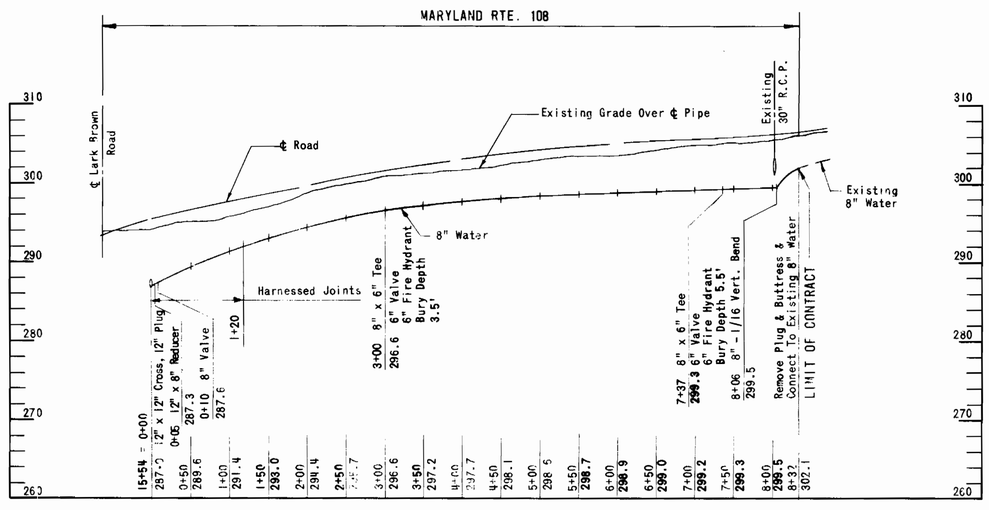
AS BUILT 3/18/80

E&E BALTIMORE 17 5193 IMPERIAL MC2114



PLAN

Scale: 1"=50'



PROFILE

Scale: Horiz. 1"=100'
Vert. 1"=10'

BENCH MARKS

B.M. #7 Elev. 305.01

1/2" Spike In Base Of 14" Walnut 29.19' West Of Traverse Point S-1 On West Side Of Maryland Route 108

B.M. #8 Elev. 307.10

1/2" Spike In Base Of G&E Pole #397883, C&P #8, 66.45' Southeast Of Traverse Point S-2 On East Side Of Maryland Route 108

NOTES

1. Harness All Pipe And Fittings Along Maryland Route 108 From Station 0+00 Thru 1+20 Inclusive, Or To Nearest Joint Beyond Station 1+20 Including Plug In Cross Fitting.
2. Future Extension By Others Of 12" Water Southward From Cross Fitting Along Maryland Route 108 Will Require Harnessing To Counteract Thrust Resulting From 12" x 8" Reducer.

CONTRACT NO. 671-W
LARK BROWN ROAD WATER MAINS
SIXTH ELECTION DISTRICT
PROJECT NO. W-4-8061

RALPH E. MARQUISS
Reg. #3351

RUMMEL, KLEPPER & KAHL CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Richard E. Freudenberger 5/26/78 — DIRECTOR OF PUBLIC WORKS / DATE W O Filbert 5-23-78 — CHIEF-BUREAU OF ENGINEERING DATE	CONTRACT NO. 671-W CAPITAL PROJECT NO. W-4-8061	WATER MAIN PLAN AND PROFILE	LARK BROWN ROAD SIXTH ELECTION DISTRICT	DRAWING NO. 7 OF 7	SCALE AS SHOWN

475-02

FEBRUARY 1, 1978

AS BUILT 3/18/80