

BENCH MARKS:

F.C.C. BM "K-2" ELEV. 363.75
 REBAR SET IN LOT 12 @ SOUTHEAST CORNER OF INTERSECTION OF TWIN CEDARS COURT AND HUNTERS WAY IN SECTION 2 - AREA 2 OF WARFIELD'S RANGE (SEE VICINITY MAP).
 F.C.C. BM "K-3" ELEV. 342.32
 REBAR SET IN LOT 6 ON NORTHEAST OF HUNTERS WAY IN SECTION 2 AREA 2 OF WARFIELD'S RANGE

SEWER HOUSE CONNECTION
 INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	ELEVATIONS
EX. MH 5 TO EX. MH 6		
2+08 LT.	LOT 31	337.46
3+00 RT.	(LOT 28) DUAL	336.30
3+00 LT.	(LOT 28) SHC	336.72
EX. MH 6 TO EX. MH 7		
0+53 LT.	LOT 33	336.50
EX. MH 7	LOT 34	328.24

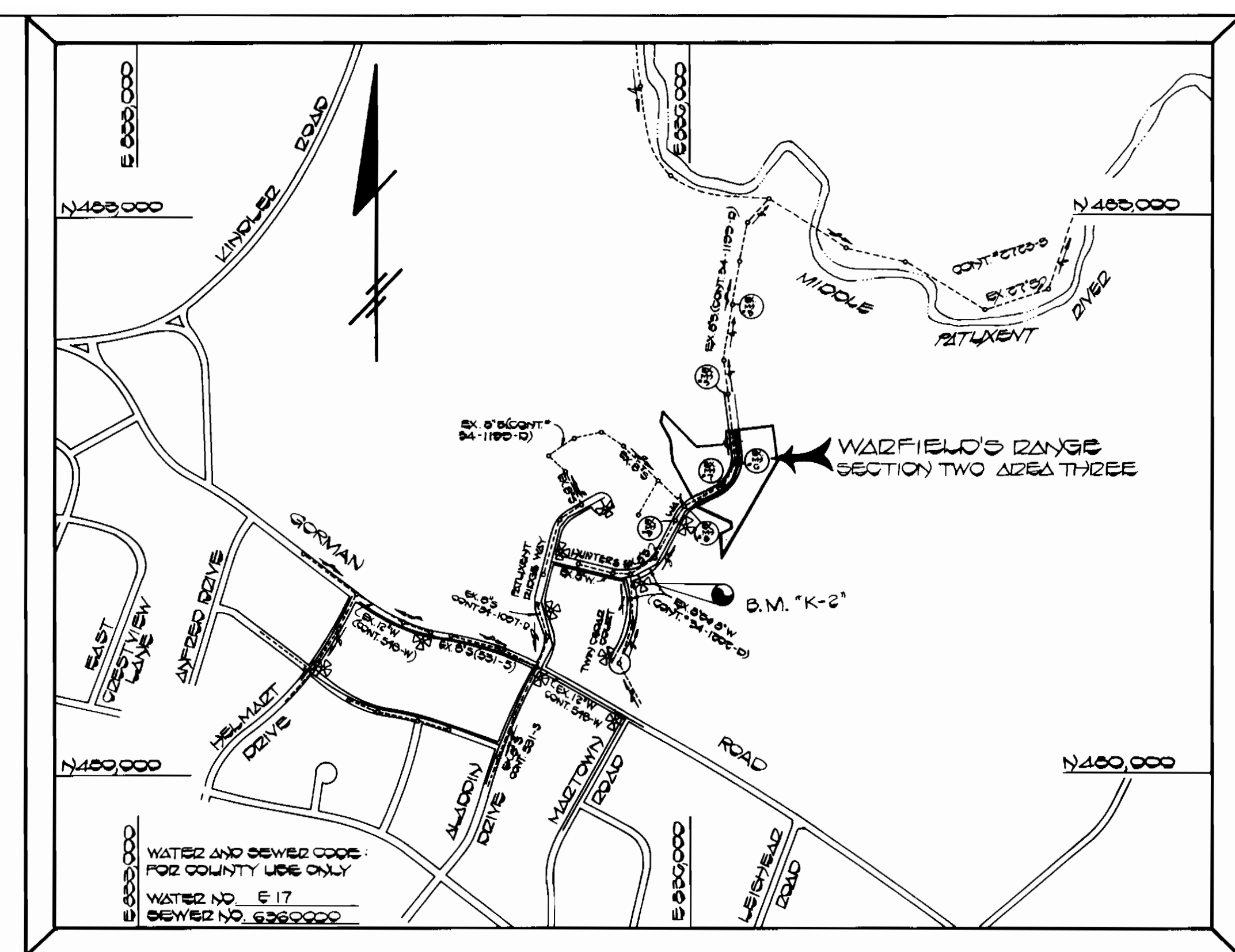
NOTE:
 THE CONTRACTOR SHALL CONSTRUCT DROP SEWER HOUSE CONNECTIONS PER STANDARD DETAIL 5.2.12 UTILIZING EXISTING TEES FOR LOTS 2, 3, 4 AND 5 WHICH WERE INSTALLED UNDER CONTRACT # 34-1122-D.

NOTES:
 CONTRACTOR SHALL RESET EXISTING FRAMES AND COVERS AT EX. MH #6 AND #7.

MANHOLE TABULATION

M/H NO.	± RD. STA.	DIST.	RIM	SLOPE	AS BUILT RIM ELEV.
EX. MH #6	12+30	7' LT	316.72	+3.0%	346.67
EX. MH #7	11+53	11' LT	340.26	+4.0%	340.21

PLAN
 SCALE: 1"=50'



VICINITY MAP
 SCALE 1"=600'

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 BASED 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 TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITIES 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 POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 BALTIMORE GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES: 561-2585
 BALTIMORE GAS & ELECTRIC COMPANY - UNDER GROUND DAMAGE CONTROL: 234-5621
 BALTIMORE GAS & ELECTRIC COMPANY - TROUBLE SHOOTING: 298-9013
 MISS UTILITY: 1-559-0100
 CHESAPEAKE & POTOMAC TELEPHONE COMPANY: 725-9976
 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 OPERATIONS.
- ALL SEWER MAINS SHALL BE: C.S.P.X., R.C.S.P., V.C.P.X. OR A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BURY 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 DETAIL SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING. (STD. DETAIL W 3.21)
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G 5.51.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS STANDARD DETAIL G 5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.
- 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. 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 [] AT THE LOCATION OF THE TEST PIT. 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.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS PROVIDED FOR ON THE DRAWINGS.
- FOR ALL WATER HOUSE CONNECTIONS, UTILIZE FLARE COPPER FITTINGS.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 15 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 85-75.

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION SERVICE DATE: 4-16-86

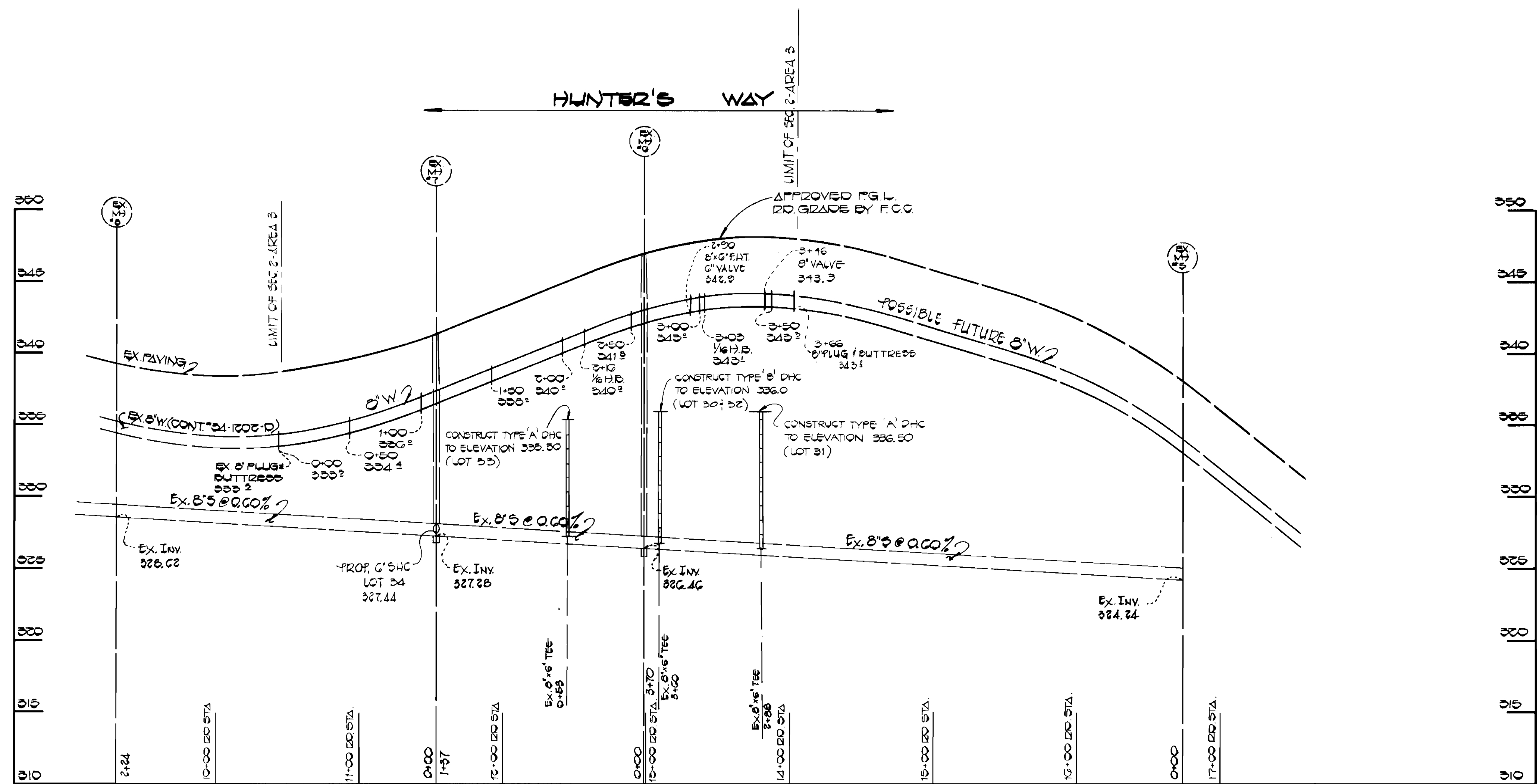
THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT
 APPROVED: [Signature] DATE: 4/16/86

QUANTITIES

ITEM	EST'D	AS BUILT	SUPPLIED
6" WATER	306 LF	306 LF	GRIFFIN/CL 52
6" WASTE	12 LF	12 LF	GRIFFIN/CL 52
PIPE TIE	1 EA	1 EA	METAL U.S. PIPE
3/4" W/TC	20 LF	20 LF	ROUSSEL METALS
1" W/TC	20 LF	20 LF	"
6" VALVE (PH)	1 EA	1 EA	U.S. PIPE & FURNACE
6" SEWER	102 LF	102 LF	3-M. SDR-35 PVC
6" VALVE	1 EA	1 EA	U.S. PIPE / METAL

CONTRACT NO. 34-1469-D
 WARFIELD'S RANGE SECTION TWO AREA THREE
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] DATE: 4-18-86 [Signature] DATE: 4-17-86	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 [Signature] DATE: 2/17/86	DES: T.A.F. DRN: J.O. CHK: T.A.F. DATE: 2/17/86	PLAN WATER & SEWER MAINS	WARFIELD'S RANGE SECTION TWO AREA THREE CONTRACT NO. 34-1469-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 2
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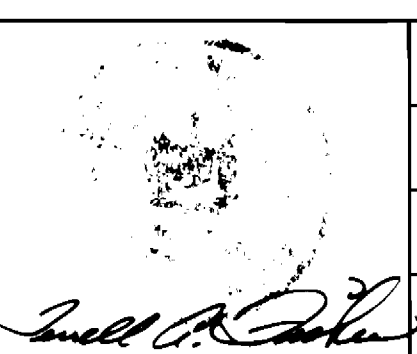
PROFILES
 SCALE: HOR.: 1" = 50'
 VER.: 1" = 5'

CONTRACT NO. 34-1469-D
 WARFIELD'S RANGE
 SECTION TWO AREA THREE
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS: Robert H. Beisinger
 DATE: 4-17-86
 CHIEF, BUREAU OF UTILITIES

CHIEF, BUREAU OF ENGINEERING: [Signature]
 DATE: 4-18-86
 CHIEF, LAND DEVELOPMENT DIVISION: [Signature]
 DATE: 4-18-86

FISHER, COLLINS, AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043



DES: T.A.F.					
DRN: T.A.F.					
CHK: T.A.F.					
DATE: 2/17/86	BY:	NO.:	REVISION:	DATE:	

PROFILES
 WATER & SEWER MAINS
 600' SCALE MAP NO. 26 BLOCK NO. 16

WARFIELD'S RANGE
 SECTION TWO AREA THREE
 CONTRACT NO. 34-1469-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 2