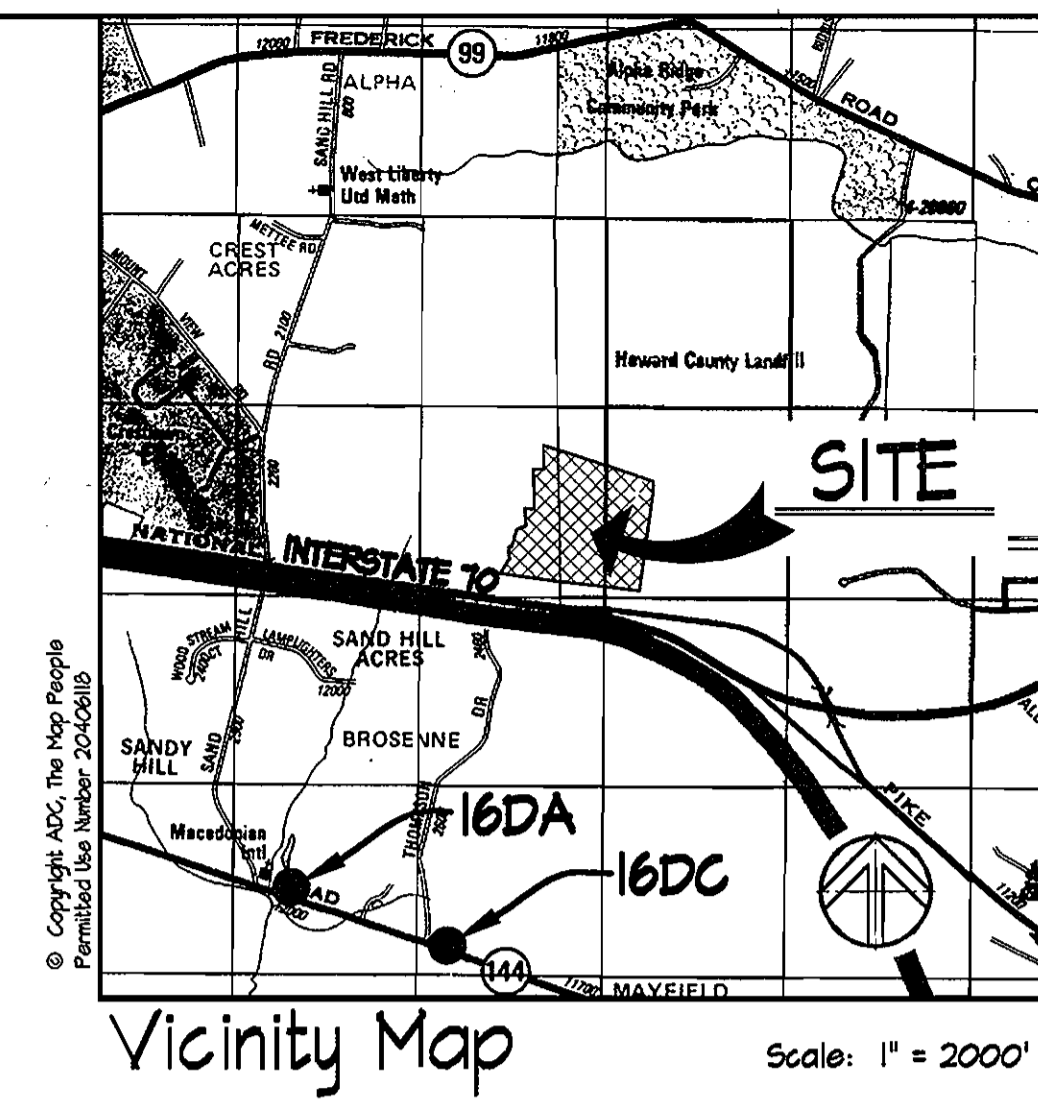


CONTRACT No. 44-4405-D

PUBLIC SAFETY TRAINING CENTER

PARCEL 253



GENERAL WATER NOTES

DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

- PART I**
- 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.
 - The existing topography was obtained from a flown aerial survey taken with 2 foot contour intervals on March 30, 2005 performed by Hartford Aerial Survey.
 - 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. 16DA and 16DC. All vertical controls are based on NAVD '88.
 - 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 the 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.
 - When test pits have been made on existing utilities, they are noted by the symbol 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	1-800-252-4193
BGE (Construction Services)	410-850-4620
BGE (Emergency)	410-781-4268
Bureau of Utilities	410-313-4400
Colonial Pipeline Co.	410-745-1940
Miss Utility	1-800-257-7777
State Highway Administration	410-531-5533
Verizon	1-800-743-0033/410-224-4210
 - 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.
 - 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) 319-7450 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 18.11(a) of the Howard County Code.

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

WATER CODE: K-02
SEWER CODE: Private - Holding Tank
TEST GRADIENT: .880
WATER ZONE: T30

OWNER:
Howard County
Department of Public Works
3450 Courthouse Drive
Ellicott City, Maryland 21043
Phone (410) 319-2100

BENCHMARKS

MONUMENT	NORTHING	EASTING	ELEVATION	HORIZ. DATUM	VERT. DATUM
16DA	549712.91	1832382.00	416.674	NAD83(91)	NASVD21
16DC	549045.51	1833461.17	529.506	NAD83(91)	NASVD21

TYPE OF BUILDING: POLICE/FIRE/RESCUE TRAINING FACILITY

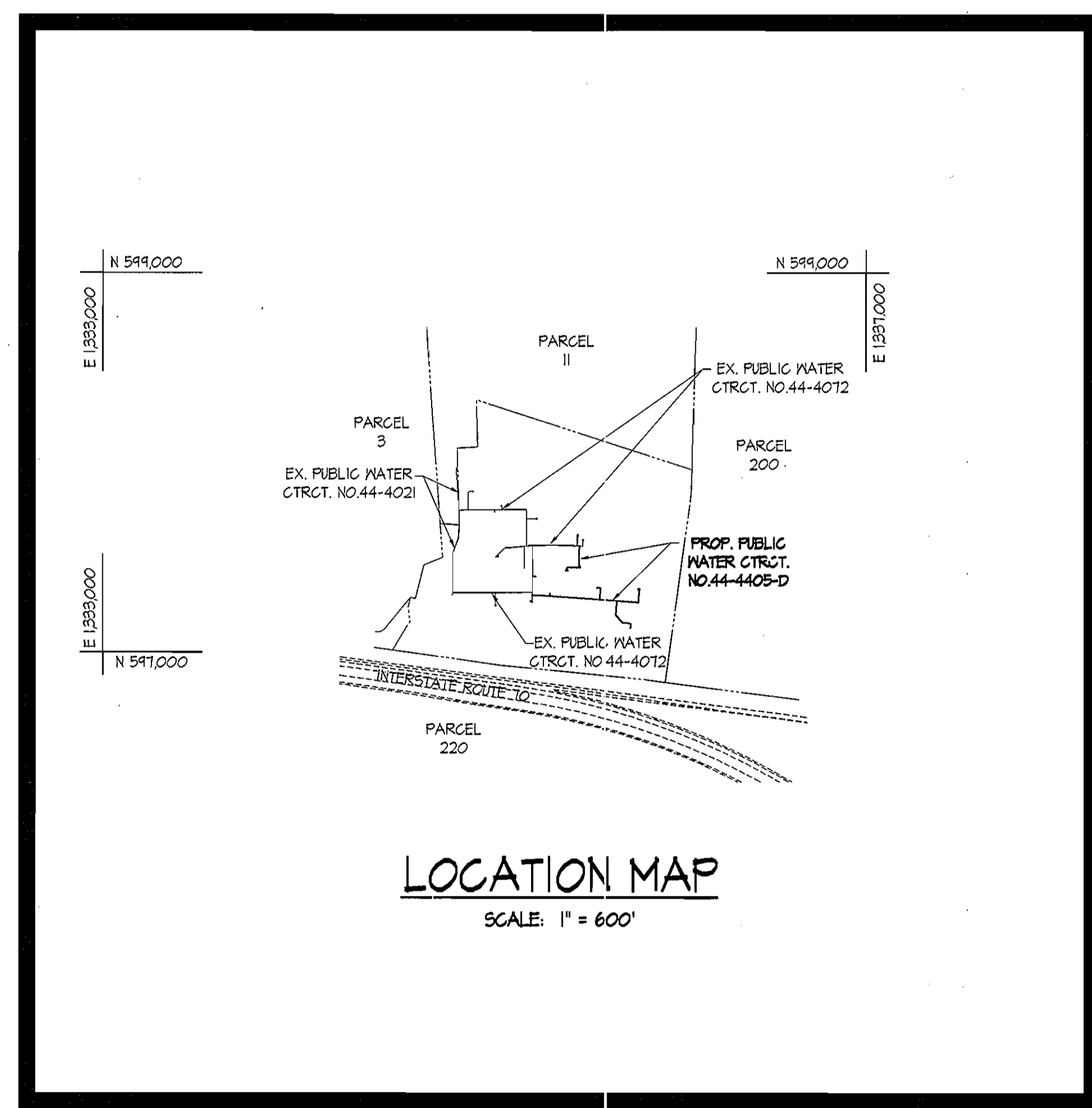
NUMBER OF UNITS: 4 PROP. BLDGS. (6 ADDITIONAL STRUCTURES)

NUMBER OF S.H.C.s: 3

NUMBER OF W.H.C.s: 4

DRAINAGE AREA: LITTLE PATUXENT

TREATMENT PLANT: N/A



QUANTITIES

ITEM	ESTIMATED QUANTITY	QUANTITY	TYPE	MANUFACTURER/SUPPLIER
6" WATER MAIN	11 L.F.	19	D.I.P.	GRIPPIN PIPE
8" WATER MAIN	261 L.F.	807.5	D.I.P.	"
FIRE HYDRANT	1 EA.	1	"	KENNEDY
1 1/2" DRAIN	1 EA.	1	BRASS	CERRO COPPER
8" VALVE	1 EA.	2	RSGV	KENNEDY
6" VALVE	"	1	"	"
4" VALVE	"	2	"	"
2" VALVE	"	1	BALL V.	"
8"x8" TEE	"	1	IRON	TYLER
8"x4" TEE	"	1	"	"
8"x4" TEE	"	2	"	"
8"x2" TEE	"	1	"	"
8"x8" TAPPING SLEEVE	"	1	"	"
1 1/2" WATERHOUSE CONN.	"	"	"	"
2"	"	9	COPPER	CERRO COPPER
4"	"	18	D.I.P.	GRIPPIN PIPE

NAME OF UTILITY CONTRACTOR: DIXIE CONSTRUCTION

SURVEY AND DRAWING DIV. AS-BUILT DATE

- PART II WATER**
- All water mains shall be D.I.P. Class 52 unless otherwise noted.
 - Tops of all water mains shall have a minimum of 3'-6" of cover unless otherwise noted.
 - Valves adjacent to trees shall be strapped to trees.
 - 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 installed in accordance with Standard Details. The soil around the fire hydrant shall be compacted in accordance with Section 1000 and Section 1005 of the Standard Specifications.
 - The contractor shall not operate any water main valves on the existing water system.

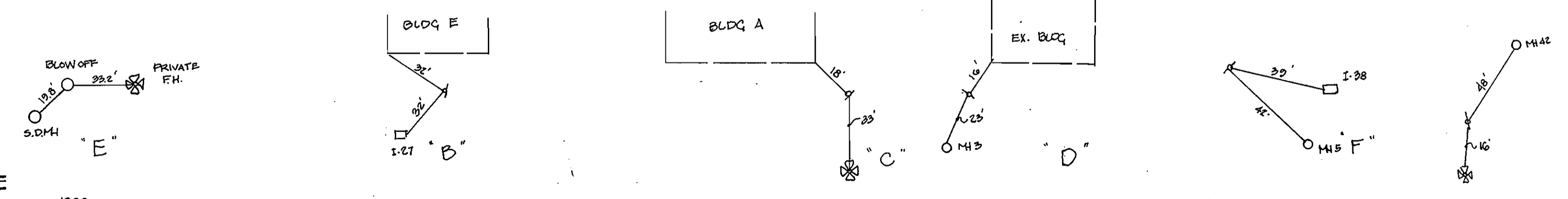
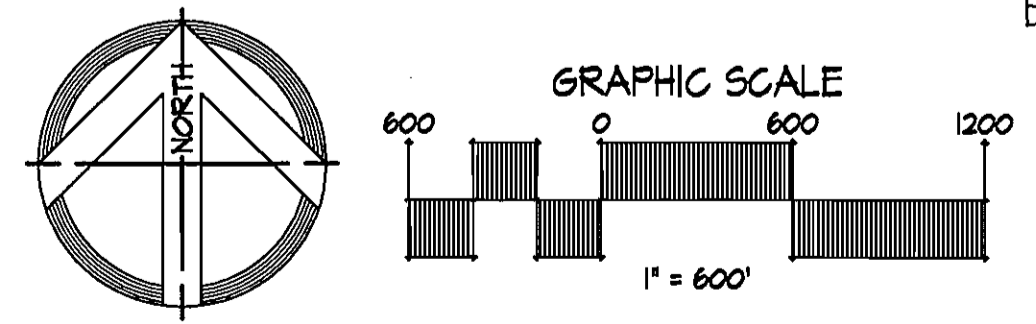
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

[Signature] 10/24/06 DATE

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

[Signature] 10/24/06 DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND ROAD CONSTRUCTION PLAN SDP-06-110



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 10-18-06 DATE

CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature] 10/24/06 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

SITE RESOURCES, INC.
LAND PLANNING / SITE DESIGN
14315 Jarrettville Pike Phoenix, Maryland 21131
Phone: 410.683.3388 Fax: 410.683.3389

DES:	KPR				
DRN:	AM				
CHK:	REMARK				
DATE:	10/11/06				
BY:	K01	1	AS-BUILT DATA SHOWN	11/30/07	
NO.:					
REVISION:					
DATE:					

Cover Sheet

600' SCALE MAP NO. 16 BLOCK NO. 2 / B

Phase II Improvements: four buildings, eight training props and associated infrastructure

PUBLIC SAFETY TRAINING CENTER

at Alpha Ridge Landfill, Capital Project No. C-0182, Howard County, Maryland
Water Contract No. 44-4405-D

SCALE: 1"=100'

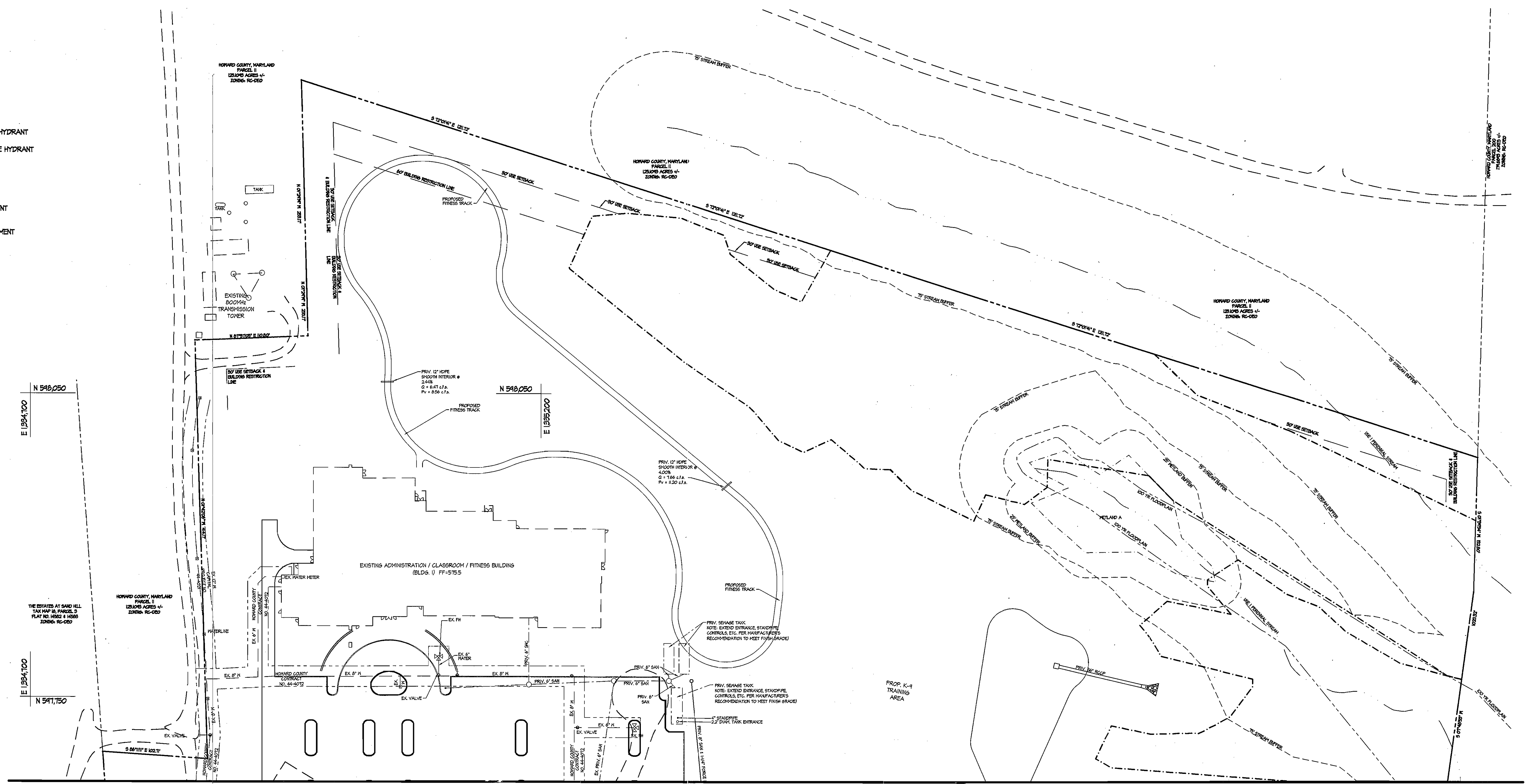
SHEET 1 OF 4

PARCEL #253
GRID No. 2/B, TAX MAP No. 16
3rd Election District

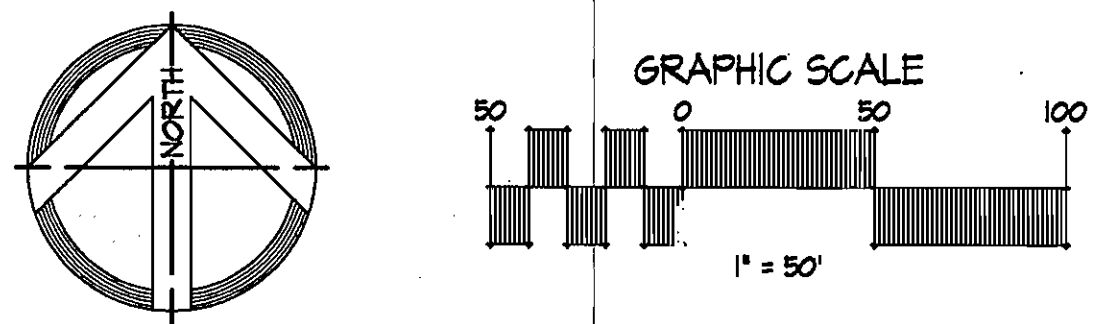
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LEGEND - WATER PLAN

- PROPERTY LINE
- EXISTING ROADS
- PROPOSED ROADS
- EX. PRIV. 15" SD ----- EXISTING STORMDRAINS
- PRIV. 24" RCCP ----- PROPOSED STORMDRAINS
- EX. PRIV. SAN ----- EXISTING SANITARY SEWER
- PRIV. 8" SAN ----- PROPOSED SANITARY SEWER
- EX. 4" W ----- EXISTING WATER
- PROP. PUB. 4" WATER ----- PROPOSED WATER
- EXISTING GAS
- PROPOSED GAS
- EXISTING STREAM
- EXISTING BUILDINGS
- PROPOSED BUILDINGS
- EXISTING FIRE HYDRANT (PAINTED ORANGE)
- PROPOSED PUBLIC FIRE HYDRANT (PAINTED ORANGE)
- PROPOSED PRIVATE FIRE HYDRANT (PAINTED GREEN)
- EXISTING FOREST CONSERVATION EASEMENT
- EXISTING UTILITY EASEMENT
- PROPOSED UTILITY EASEMENT



MATCHLINE, SEE SHEET 3 OF 4



DEPARTMENT OF
PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. J. ...
CHIEF, BUREAU OF UTILITIES

10-10-06
DATE

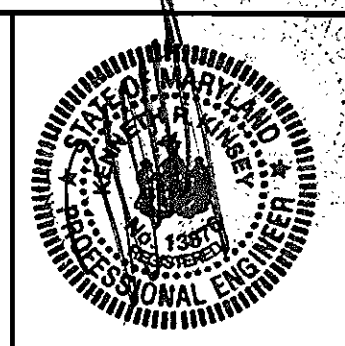
DEPARTMENT OF
PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

10/10/06
DATE

SITE RESOURCES, INC.
LAND PLANNING / SITE DESIGN
14315 Jarrattville Pike Phoenix, Maryland 21131
Phone: 410.683.3388 Fax: 410.683.3389

...
DATE



DES: KPR					
DRN: AM					
CHK: REM/KRK					
DATE 10/11/06	BY	NO.	REVISION	DATE	

Water Contract Drawing

600' SCALE MAP NO. 16 BLOCK NO. 2 / 8

Phase II Improvements: four buildings, eight training props and associated infrastructure
PUBLIC SAFETY TRAINING CENTER
at Alpha Ridge Landfill, Capital Project No. C-0182, Howard County, Maryland
Water Contract No. 44-4405-D

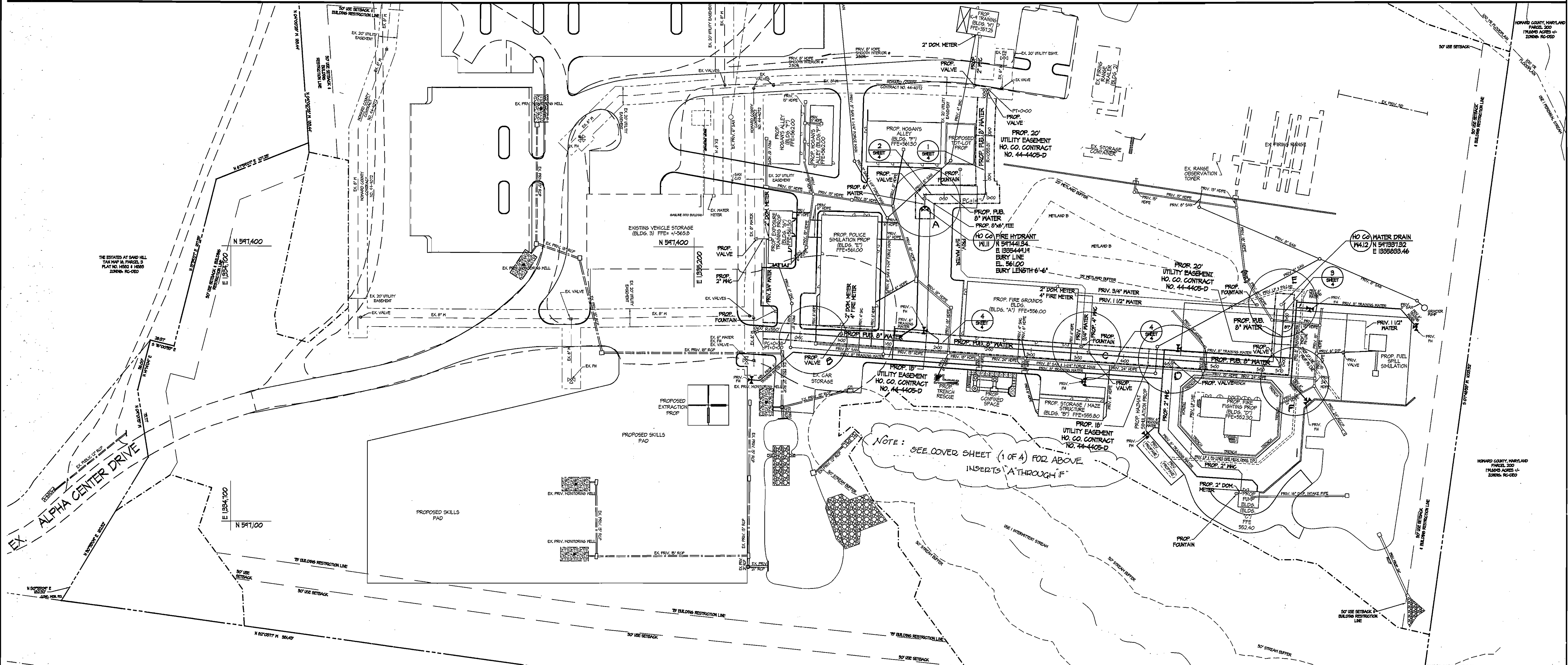
PARCEL #258
GRID No. 2/B, TAX MAP No. 16
3rd Election District

WI.01

SCALE:
1"=50'

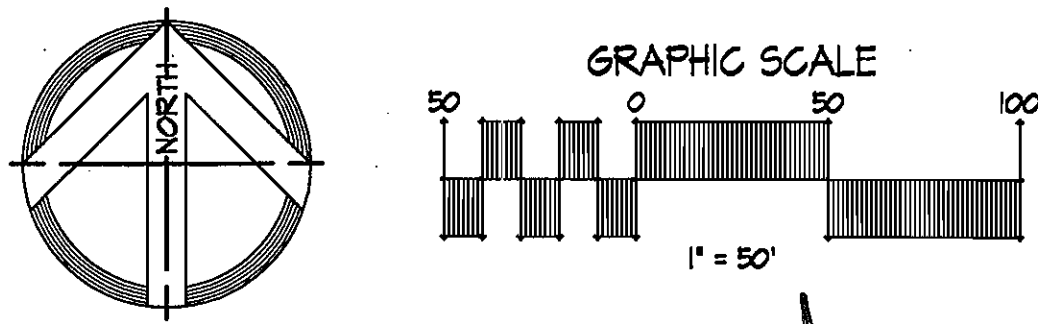
SHEET
2 OF 4

Z:\030183\HowardCo PublicSafetyChange\WI.01_Water_Plan.dwg, 10/20/06 10:59:22 AM, Copyright, Site Resources, Inc.



LEGEND - WATER PLAN

- PROPERTY LINE
- EXISTING ROADS
- PROPOSED ROADS
- EX. PRIV. 15" SD
- PRIV. 24" RSCP
- EX. PRIV. SAN
- PRIV. 8" SAN
- EX. 4" W
- PROP. PUB. 4" WATER
- EXISTING GAS
- PROPOSED GAS
- EXISTING STREAM
- EXISTING BUILDINGS
- PROPOSED BUILDINGS
- EXISTING FIRE HYDRANT (PAINTED ORANGE)
- PROPOSED PUBLIC FIRE HYDRANT (PAINTED ORANGE)
- PROPOSED PRIVATE FIRE HYDRANT (PAINTED GREEN)
- EXISTING FOREST CONSERVATION EASEMENT
- EXISTING UTILITY EASEMENT
- PROPOSED UTILITY EASEMENT



NOTE: ALL FITTINGS SHALL BE BUTTRESSED ACCORDING TO HOWARD COUNTY SPECIFICATIONS.

WATER CURVE DATA

MAIN #	CURVE BEGIN	RADIUS	ARC LENGTH	CHORD LENGTH	CURVE END
1	N 541519.33 E 1335511.30	1055.81'	114.71'	114.72'	N 541450.65 E 1335514.99
5	N 541308.21 E 1335264.45	550'	38.16'	38.15'	N 541306.50 E 1335302.56

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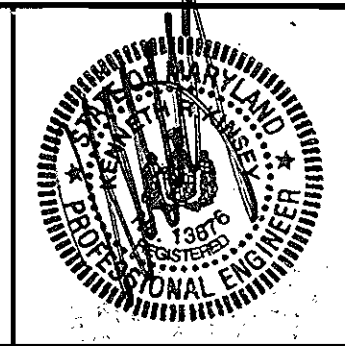
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION

SITE RESOURCES, INC.
LAND PLANNING / SITE DESIGN
14315 Jarrettsville Pike Phoenix, Maryland 21131
Phone: 410.683.3388 Fax: 410.683.3389



DES: KPR			
DRN: AM			
CHK: REM/KRK			
DATE: 10/11/06	K01	AS-BUILT DATA SHOWN	1/20/07
BY: NO.	REVISION	DATE	

Water Contract Drawing

600' SCALE MAP NO. 16 BLOCK NO. 2 / 8

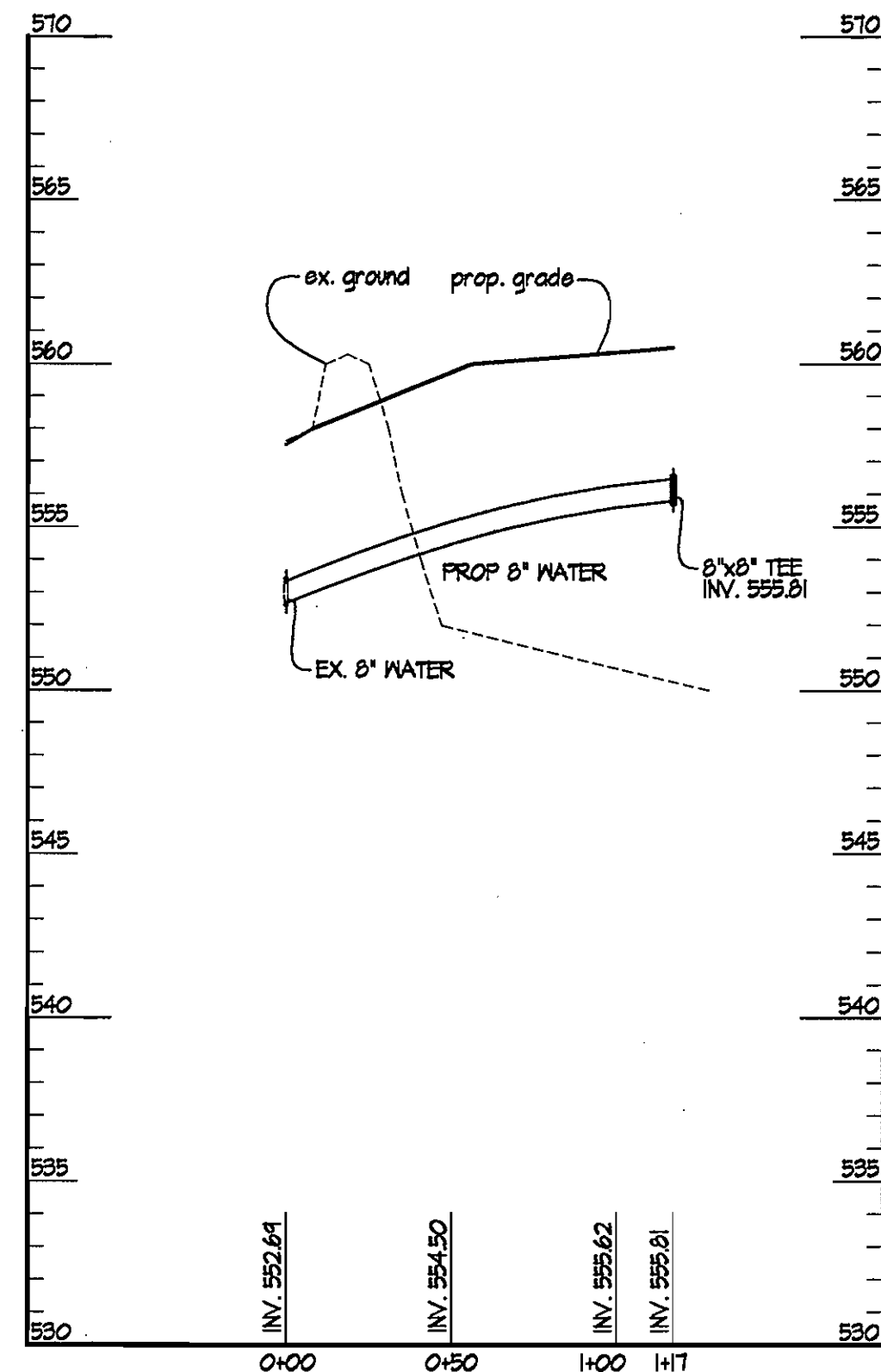
Phase II Improvements: four buildings, eight training props and associated infrastructure
PUBLIC SAFETY TRAINING CENTER
at Alpha Ridge Landfill, Capital Project No. C-0182, Howard County, Maryland
Water Contract No. 44-4405-D

PARCEL #253
GRID No. 2/8, TAX MAP No. 16
3rd Election District

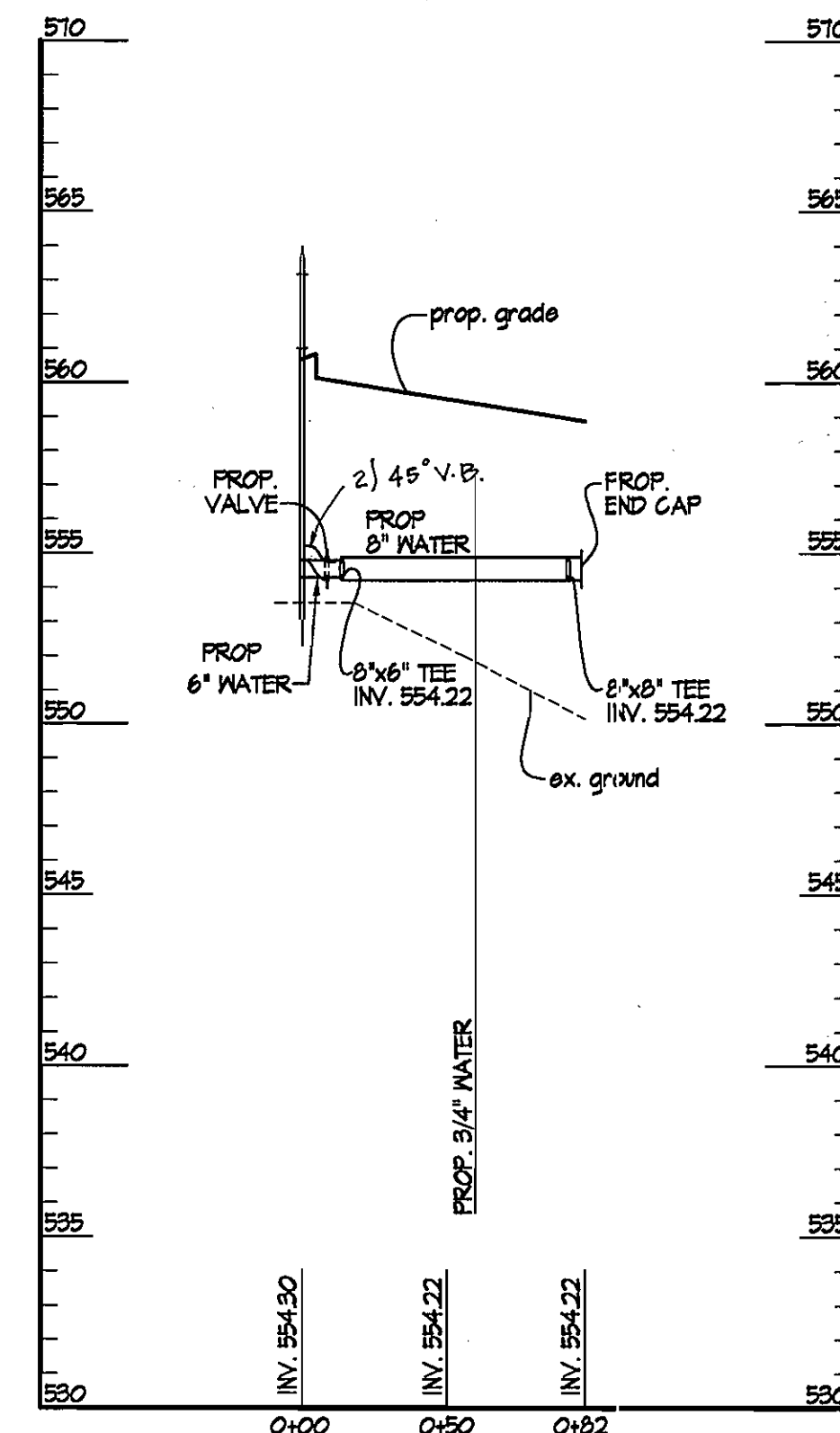
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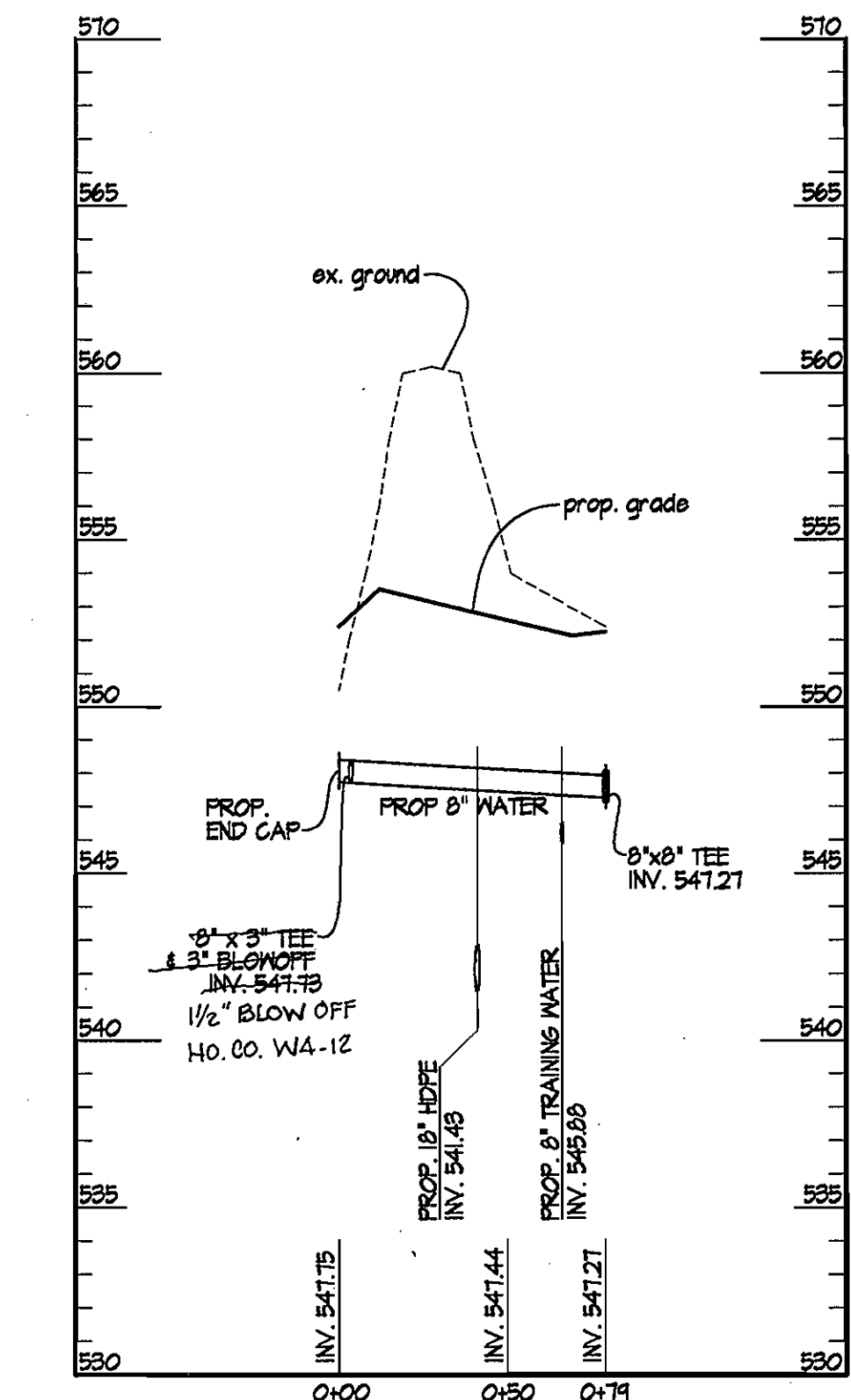
SHEET 3 OF 4



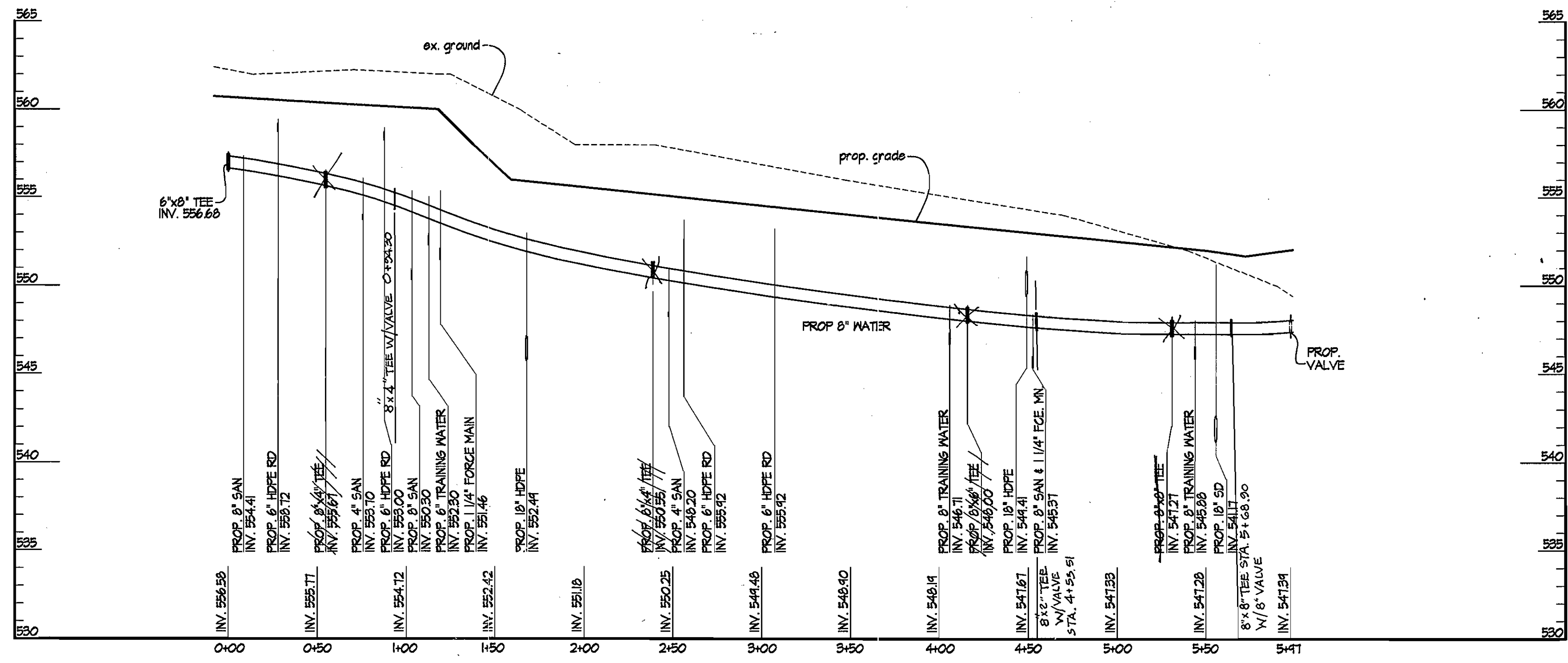
1 PROFILE
 SCALES: HORIZ. 1" = 50'
 VERT. 1" = 5'



2 PROFILE
 SCALES: HORIZ. 1" = 50'
 VERT. 1" = 5'



3 PROFILE
 SCALES: HORIZ. 1" = 50'
 VERT. 1" = 5'



4 PROFILE
 SCALES: HORIZ. 1" = 50'
 VERT. 1" = 5'

- NOTES:**
- ALL FILL LOCATIONS SHALL BE COMPACTED TO 95% FILL PER AASHTO STANDARD T-100.
 - ALL 8" PIPE JOINTS PLACED IN FILL AREAS SHALL BE MECHANICALLY RESTRAINED.

2:0003183-HowardCo.PubSecSafetyCivEngW1.03_Water_Plan_Profile.dwg, 10/25/06 10:59:41 AM - Copyright, Site Resources, Inc.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION	SITE RESOURCES, INC. LAND PLANNING / SITE DESIGN 14315 Jarrettsville Pike Phoenix, Maryland 21131 Phone: 410.683.3388 Fax: 410.683.3389	DES: KPR DRN: AM CHK: REM/KRK DATE: 10/11/06	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	REVISION	DATE							Water Contract Profiles 600' SCALE MAP NO. 16 BLOCK NO. 2 / 8	Phase II Improvements: four buildings, eight training props and associated infrastructure PUBLIC SAFETY TRAINING CENTER at Alpha Ridge Landfill, Capital Project No. C-0182, Howard County, Maryland Water Contract No. 44-4403-D <small>PARCEL #253 GRID No. 2/8, TAX MAP No. 16 3rd Election District</small>	WI.03 SCALE: AS SHOWN SHEET 4 OF 4
NO.	REVISION	DATE														