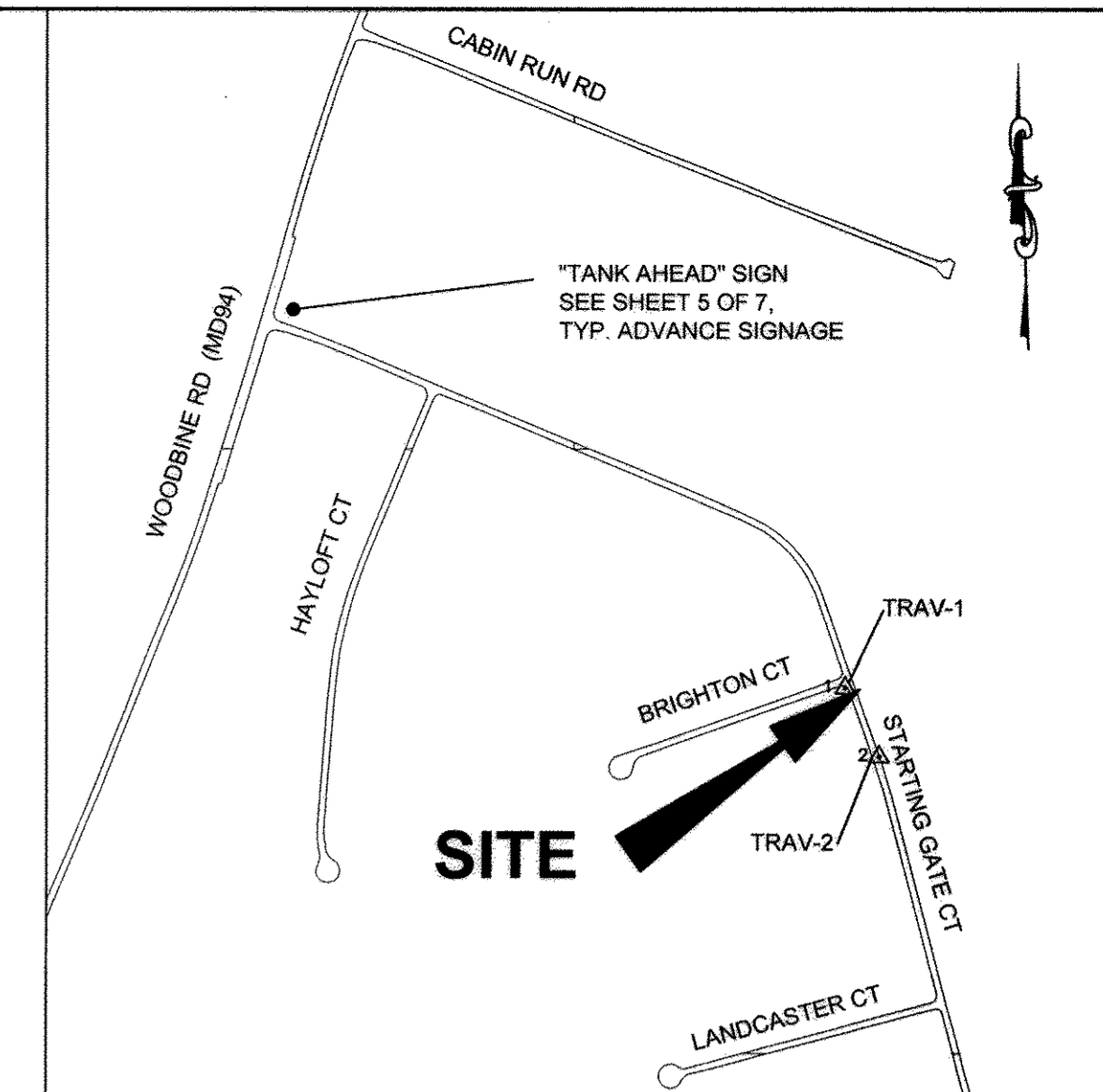


PROFILE A-A
SCALE: HORIZ - 1" = 5'-0"
VERT. - 1" = 5'-0"



SITE LOCATION MAP
SCALE: 1" = 600'

ADC MAP REFERENCE: HOWARD COUNTY MAP 4811 GRID B4

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S. TRAVERSE POINTS:

NORTHING	EASTING	ELEV
1301	593130.88	590.64
13GA	594658.96	591.46

NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

NOTES:

- FOR GENERAL TANK INSTALLATION, PIPING, SPECIFICATIONS, AND DETAILS REFER TO SHEETS 1-7 OF 7, INCLUSIVE.
- ALL TREES AND PLANTINGS INTERFERING WITH EXCAVATION SHALL BE REMOVED REPLACED WITH VIABLE TREES OF SIMILAR SPECIES. TREES AND PLANTINGS THAT ARE NOT CALLED OUT ON THE PLANS AND NEED TO BE REMOVED FOR CONSTRUCTION SHALL BE IDENTIFIED TO THE HOWARD COUNTY INSPECTOR PRIOR TO REMOVAL.
- THE CONTRACTOR SHALL TAKE ALL REASONABLE MEANS POSSIBLE TO PROTECT EXISTING TREES AND PLANTINGS WITHIN THE CONSTRUCTION AREA, AND SHALL REPLACE IN KIND THOSE DAMAGED OR REMOVED DURING CONSTRUCTION.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, DATED MAY 7, 2007.
- CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL STAGING AREAS TO BE USED DURING CONSTRUCTION.
- THERE SHALL BE NO STOCKPILING OF EXCAVATED MATERIAL ON THE WORK SITE.
- ALL SURVEY STAKEOUT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL TANK EXCAVATIONS MUST MEET OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL USE JERSEY BARRIERS TO PROTECT THE EXCAVATION. (SEE DETAIL MD 104.01-23B)(11:1 MAX TAPER)
- USE MD 104.06-18 FOR WORKZONE SIGNING.
- USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
- ROAD WORK 1500ft. SIGN CAN BE ELIMINATED WHEN THE LENGTH OF ROAD IS LESS THAN 1500ft.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH HOWARD COUNTY TRAFFIC CONTROL MANAGER FOR THE APPROVAL OF MOT PLANS.

STAKEOUT TABLE

DESC	NORTHING	EASTING	ELEV
TRAV 1	591959.84	1279524.14	501.76
TRAV 2	591731.86	1279636.64	508.71
BORING B-01	591981.46	1279574.50	503.26
BORING B-02	591990.76	1279600.91	503.84
NW CORNER ASPHALT PULLOFF	592007.89	1279536.65	502.36
NE CORNER ASPHALT PULLOFF	592002.54	1279551.32	502.00
SW CORNER ASPHALT PULLOFF	591936.98	1279561.84	502.00
SE CORNER ASPHALT PULLOFF	591950.79	1279569.94	501.75
S CORNER DRIVEWAY APRON	591960.46	1279575.62	501.75
SE CORNER DRIVEWAY	591976.17	1279619.26	501.75
NE CORNER DRIVEWAY	591987.46	1279615.20	501.75
N CORNER DRIVEWAY APRON	591971.76	1279571.56	501.75
N END POINT DRIVEWAY APRON	591975.60	1279561.02	501.75
NW CORNER CONCRETE SLAB	591986.04	1279575.46	503.17
NE CORNER CONCRETE SLAB	591992.68	1279594.32	503.17
SW CORNER CONCRETE SLAB	591978.50	1279578.12	503.17
SE CORNER CONCRETE SLAB	591985.14	1279596.98	503.17
CENTER OF TANK MANWAY	591985.25	1279585.27	503.17
NORTH END RCP STORM DRAIN	592005.89	1279548.03	500.17
SOUTH END RCP STORM DRAIN	591945.78	1279569.32	499.21
STORM DRAIN INLET	591951.44	1279567.30	503.20

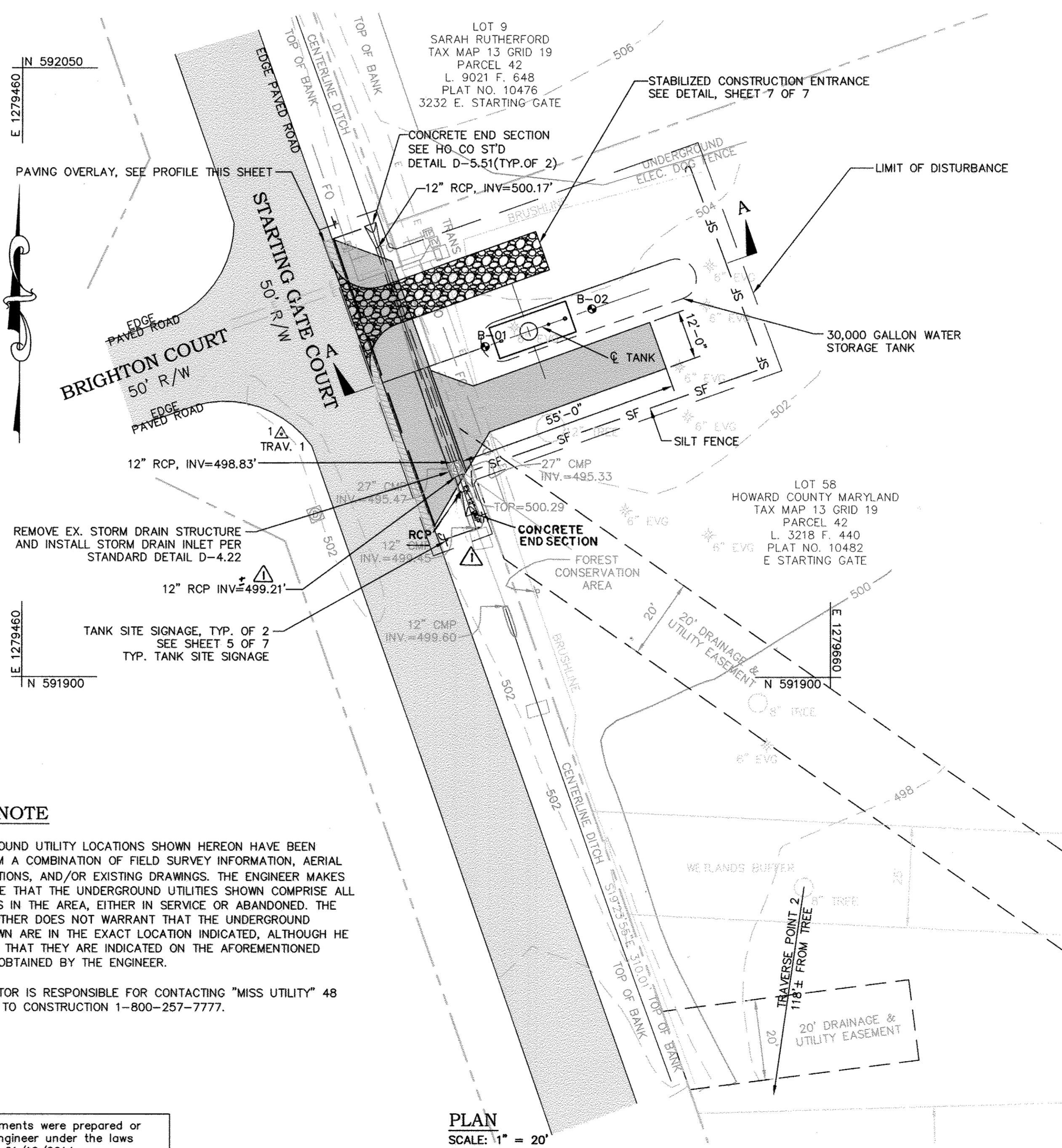
SITE ANALYSIS:

TOTAL AREA OF SITE	0.141	ACRES
AREA TO BE ROOFED OR PAVED	0.141	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.02	ACRES
TOTAL CUT	451	CU. YDS.
TOTAL FILL	451	CU. YDS.

OFFSITE WASTE/BORROW AREA LOCATION CONTRACTOR COORDINATE

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MANUFACTURER
MOBILIZATION / DEMOBILIZATION	LS	1	1	TANK DIRECT
30,000 GALLON END DRAFT WATER STORAGE TANK, COMPLETE IN PLACE, WITH PIPING CONNECTIONS PER TABLE 1, SHEET 5 OF 7	EA	1	1	XERXES COMPANY
ASPHALT PAVING (FULL DEPTH), P-6	SF	790	790	AGPARROTT/H.T.I. CONTRACTORS
ASPHALT PAVING (MILL AND OVERLAY)	SF	150	150	AGPARROTT/H.T.I. CONTRACTORS
CONCRETE SLAB	SF	160	160	J M V CONCRETE
CLEARING AND GRUBBING	LS	1	1	TANK DIRECT
SIGN, SITE IDENTIFICATION	EA	2	2	N.A.
SIGN, ADVANCE	EA	1	1	N.A.
SILT FENCE	LF	160	160	S M C ENVIRONMENTAL
SITE RESTORATION	SF	6142	6142	H.T.I. CONTRACTORS
12" REINFORCED CONCRETE PIPE	LF	64	64	CONCRETE PIPE & PRECAST
PRECAST STORM DRAIN INLET, COMPLETE IN PLACE, WITH FRAME AND INLET GRATE PER STANDARD DETAIL D-4.22	EA	1	1	GILLESPIE PRECAST
CONCRETE END SECTION, COMPLETE IN PLACE PER STANDARD DETAIL D-5.51	EA	2	2	CONCRETE PIPE & PRECAST
TRAFFIC CONTROL	LS	1	1	TANK DIRECT
NAME OF UTILITY CONTRACTOR: H.T.I. CONTRACTORS				
CHECKBOX				
AS-BUILT DATE				
SURVEY AND DRAFTING DIVISION				



PLAN
SCALE: 1" = 20'

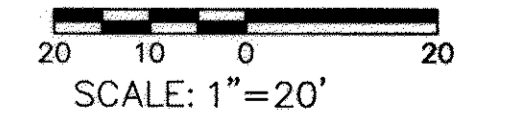
UTILITY NOTE

THE UNDERGROUND UTILITY LOCATIONS SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF FIELD SURVEY INFORMATION, AERIAL SURVEY LOCATIONS, AND/OR EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE INDICATED ON THE AFOREMENTIONED INFORMATION OBTAINED BY THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48 HOURS PRIOR TO CONSTRUCTION 1-800-257-7777.

PROFESSIONAL CERTIFICATION. I hereby certify that these documents 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. 31363, Expiration Date 01/16/2014.

GRAPHIC SCALE



AS-BUILT
DATE 5/17/2013

KCI TECHNOLOGIES PROJECT No.: 01-07137823

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 12/23/11
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 12/21/11
ACT. CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 12/21/11
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 12/21/11
ACT. CHIEF, UTILITY DESIGN DIVISION DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES

936 Ridgebrook Road
Sparks, MD 21152
PHONE: (410) 316-7800
FAX: (410) 316-7817
WWW.KCI.COM

STATE OF MARYLAND
QUINTILLA WALKER
PROFESSIONAL ENGINEER
No. 31363
12/19/11

DES:	EDK		
DRN:	EDK		
CHK:	GW		
DATE:	12/2011		
BY:	NO.	AS BUILT	5-17-13
REVISION			

STARTING GATE COURT

DATE: 600' SCALE MAP NO. 13 BLOCK NO. 19

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

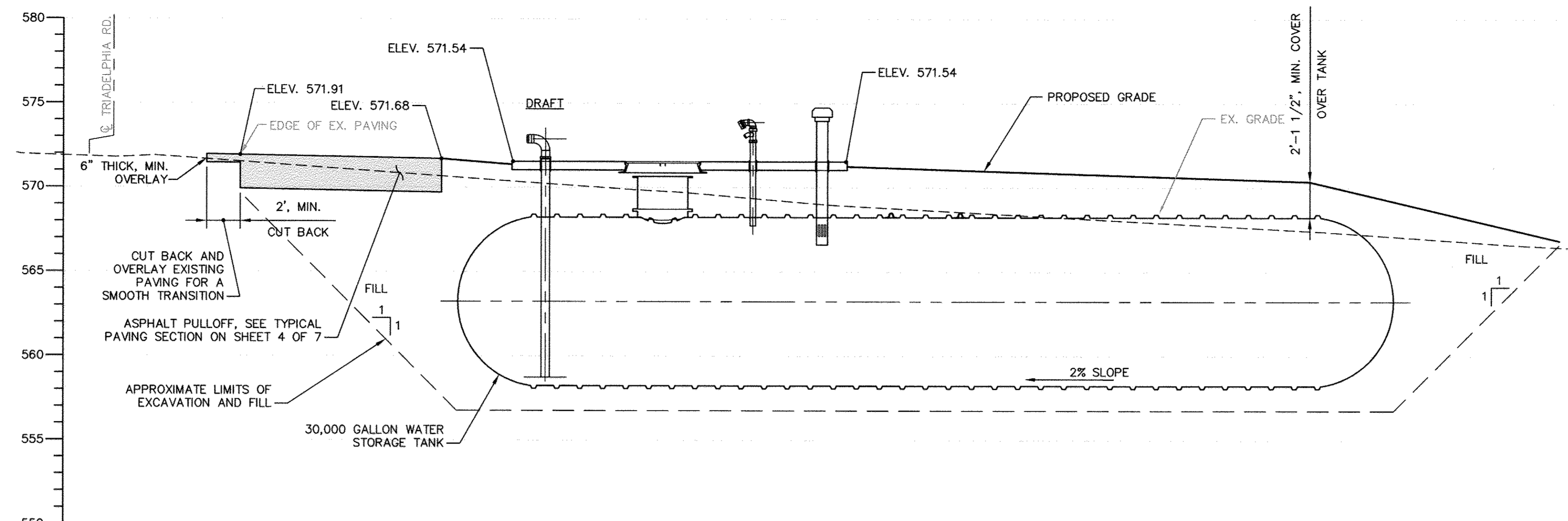
CAPITAL PROJECT No. F-5972
CONTRACT No. 65-4733

ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND

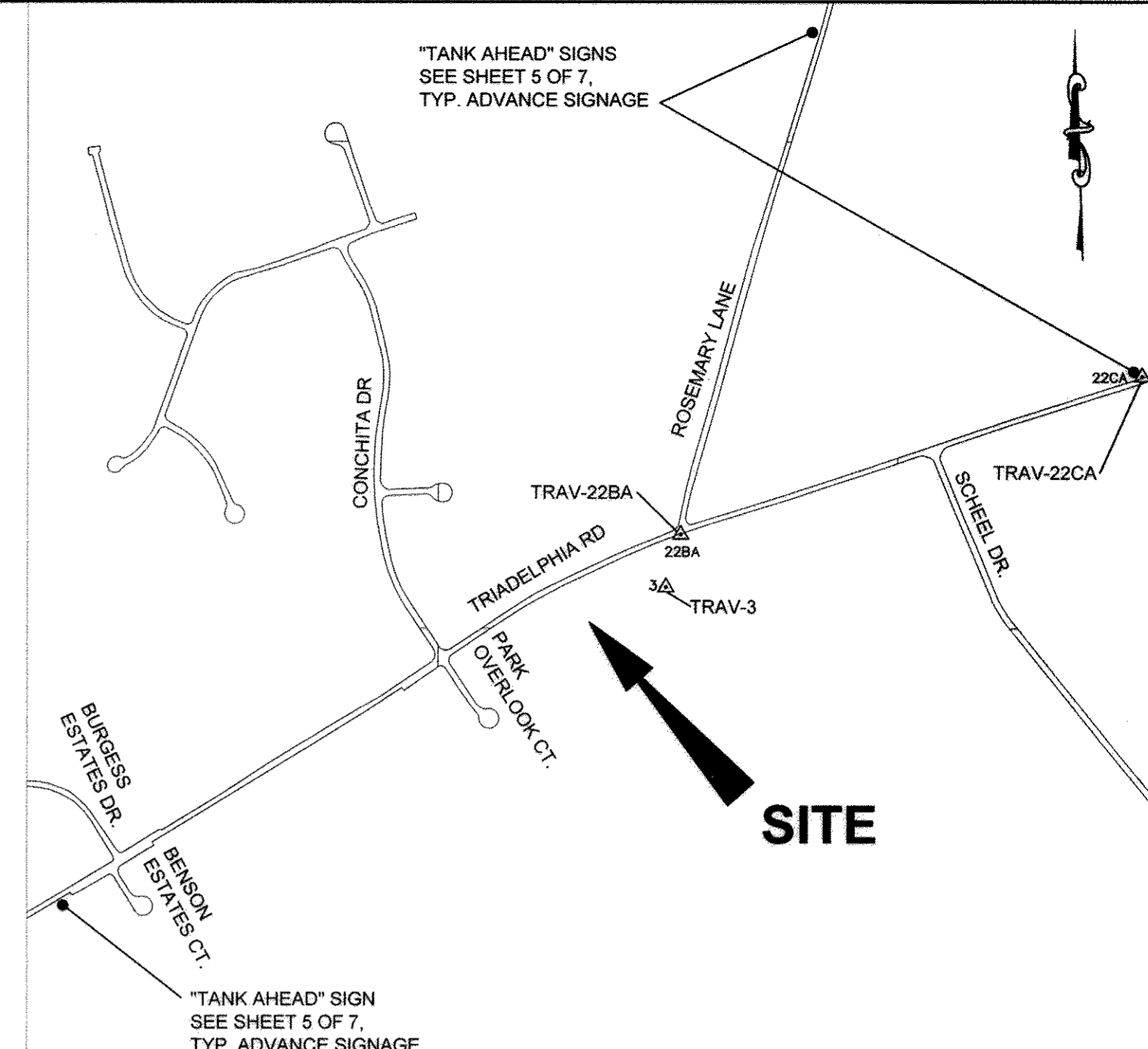
SCALE AS SHOWN
SHEET RT17

NOTES:

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- USE MD 104.06-18 FOR WORKZONE SIGNING.
- USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
- ROAD WORK 1500R. SIGN CAN BE ELIMINATED WHEN THE LENGTH OF ROAD IS LESS THAN 1500R.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH HOWARD COUNTY TRAFFIC CONTROL MANAGER FOR THE APPROVAL OF MOT PLANS.



PROFILE A-A
SCALE: HORIZ - 1" = 5'-0"
VERT. - 1" = 5'-0"



SITE LOCATION MAP
SCALE: 1" = 600'

ADC MAP REFERENCE: HOWARD COUNTY MAP 4813 GRID FZ

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S. TRAVERSE POINTS:

	NORTHING	EASTING	ELEV.
22BA	585134.83	1323322.68	576.01
22CA	585783.35	1325230.61	574.10

NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

UTILITY NOTE

THE UNDERGROUND UTILITY LOCATIONS SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF FIELD SURVEY INFORMATION, AERIAL SURVEY LOCATIONS, AND/OR EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE INDICATED ON THE AFOREMENTIONED INFORMATION OBTAINED BY THE ENGINEER.

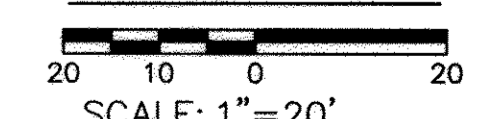
THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48 HOURS PRIOR TO CONSTRUCTION 1-800-257-7777.

THE CONTRACTOR SHALL BEWARE OF THE OVERHEAD ELECTRIC LINES THAT ARE WITHIN THE SITE SO AS NOT TO COME IN CONTACT WITH SAID LINES WITH ANY EQUIPMENT USED.

SITE ANALYSIS:

TOTAL AREA OF SITE	0.170	ACRES
AREA DISTURBED	0.170	ACRES
AREA TO BE ROOFED OR PAVED	0.053	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.117	ACRES
TOTAL CUT	451	CU. YDS.
TOTAL FILL	563	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	CONTRACTOR COORDINATE	

GRAPHIC SCALE



AS-BUILT
DATE 5/17/2013

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MANUFACTURER
MOBILIZATION / DEMOBILIZATION	LS	1	1	TANK DIRECT
30,000 GALLON END DRAFT WATER STORAGE TANK, COMPLETE IN PLACE, WITH PIPING CONNECTIONS PER TABLE 1, SHEET 5 OF 7	EA	1	1	XERXES COMPANY
ASPHALT PAVING (FULL DEPTH)	SF	2177	2177	AG PARROTT/H.T.I. CONTRACTORS
ASPHALT PAVING (MILL AND OVERLAY)	SF	185	185	H.T.I. CONTRACTORS
CONCRETE SLAB	SF	160	160	JMY CONCRETE
CLEARING AND GRUBBING	LS	1	1	TANK DIRECT
SIGN, SITE IDENTIFICATION	EA	2	2	NA.
SIGN, SITE ADVANCE	EA	3	3	NA.
SILT FENCE	LF	250	250	SMC ENVIRONMENTAL
SITE RESTORATION	SF	7444	7444	H.T.I. CONTRACTORS
TRAFFIC CONTROL	LS	1	1	TANK DIRECT

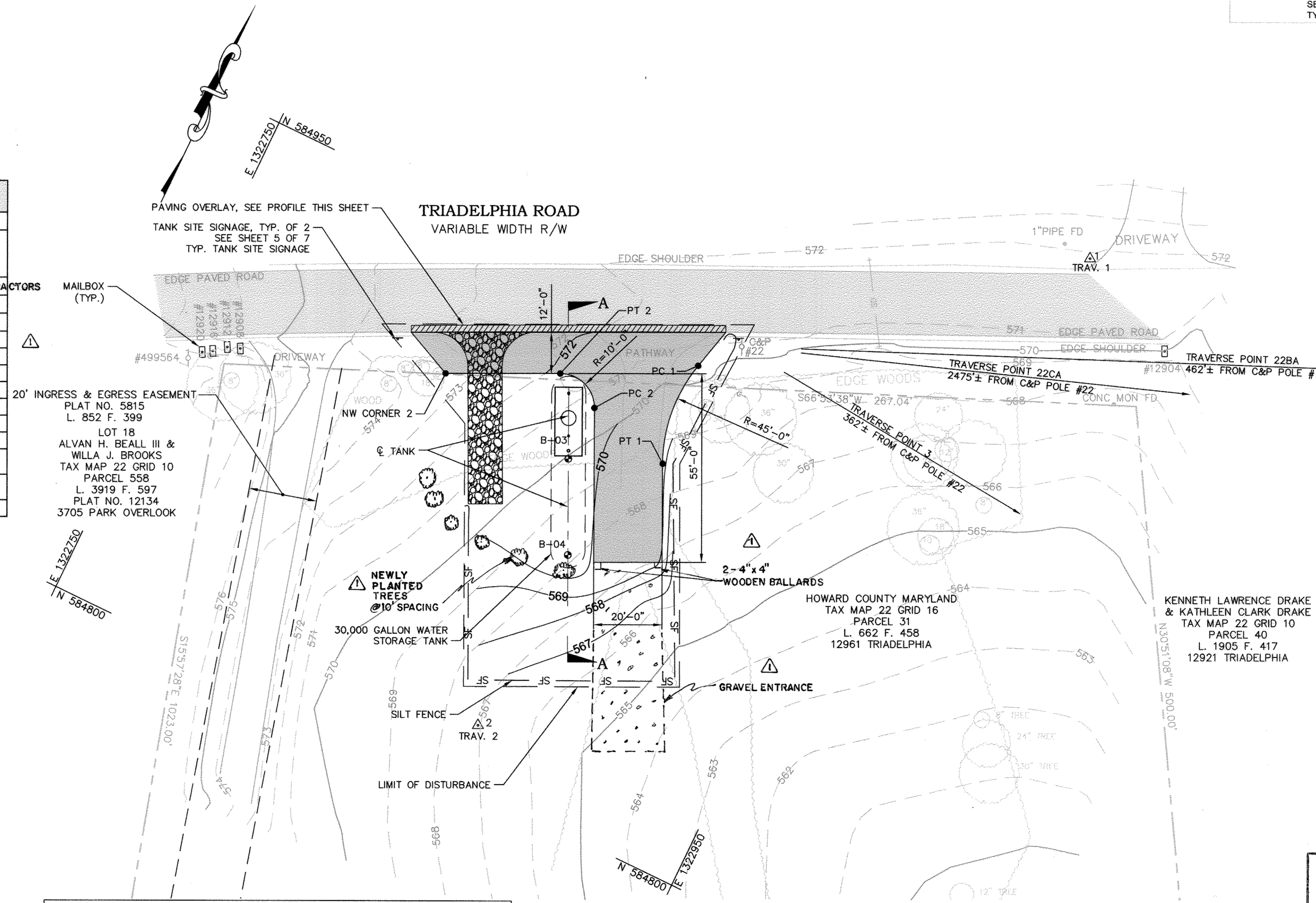
NAME OF UTILITY CONTRACTOR: H.T.I. CONTRACTORS.

CHECKBOX	AS-BUILT DATE
<input type="checkbox"/>	

SURVEY AND DRAFTING DIVISION

STAKEOUT TABLE

DESC	NORTHING	EASTING	ELEV
TRAV 1	585017.55	1322980.82	571.64
TRAV 2	584817.30	1322878.81	566.84
TRAV 22BA	585134.83	1323322.68	506.00
TRAV 22CA	585783.35	1325230.61	574.09
TRAV 3	584917.94	1323261.71	559.26
BORING B-03	584898.71	1322868.81	569.93
BORING B-04	584873.43	1322880.85	568.15
NW CORNER ASPHALT PULLOFF	584911.94	1322811.40	573.33
NE CORNER ASPHALT PULLOFF	584951.92	1322894.25	571.40
PC 1 ASPHALT DRIVE	584939.58	1322891.18	570.40
PT 1 ASPHALT DRIVE	584909.36	1322894.25	569.70
SE CORNER ASPHALT DRIVE	584883.49	1322906.59	569.00
SW CORNER ASPHALT DRIVE	584874.79	1322888.58	569.94
PC 2 ASPHALT DRIVE	584915.37	1322869.22	570.90
PT 2 ASPHALT DRIVE	584920.07	1322855.85	571.70
NW CORNER 2 ASPHALT DRIVE	584905.50	1322825.65	573.25
NW CORNER CONCRETE SLAB	584915.83	1322856.22	571.54
NE CORNER CONCRETE SLAB	584919.27	1322863.44	571.54
SE CORNER CONCRETE SLAB	584897.77	1322864.82	571.54
SW CORNER CONCRETE SLAB	584901.21	1322872.05	571.54
CENTER OF TANK MANWAY	584909.43	1322863.70	571.54



PROFESSIONAL CERTIFICATION. I hereby certify that these documents 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. 31363, Expiration Date 01/16/2014.

PLAN
SCALE: 1" = 20'

KCI TECHNOLOGIES PROJECT No.: 01-07137823

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

12/21/11
DIRECTOR OF PUBLIC WORKS DATE
ACT. CHIEF, BUREAU OF ENGINEERING DATE

12/21/11
CHIEF, BUREAU OF UTILITIES DATE
ACT. CHIEF, UTILITY DESIGN DIVISION DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES

936 Ralston Road
Sparks, MD 21152
Phone: (410) 316-7800
Fax: (410) 316-7817
www.kci.com

STATE OF MARYLAND
PROFESSIONAL ENGINEER
No. 31363
Expiration Date 01/16/2014

DES:	EDK		
DRN:	EDK		
CHK:	GW		
DATE:	12/2011		
LFN	AS BUILT		5-17-13
BY	NO.	REVISION	DATE

BENSON BRANCH PARK

600' SCALE MAP NO. 22 BLOCK NO. 10

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

CAPITAL PROJECT No. F-5972
CONTRACT No. 65-4733

ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET RT18

STAKEOUT TABLE

DESC	NORTHING	EASTING	ELEV
TRAV 1	543970.32	1333614.05	417.88
TRAV 2	544316.77	1333834.32	432.35
BORING B-11	544083.11	1333687.75	420.49
BORING B-12	544058.77	1333673.89	419.97
NW CORNER ASPHALT PULLOFF	544113.42	1333681.88	421.75
NE CORNER ASPHALT PULLOFF	544098.79	1333687.37	421.20
SW CORNER ASPHALT PULLOFF	544048.24	1333644.78	419.95
SE CORNER ASPHALT PULLOFF	544051.00	1333660.15	419.85
NW CORNER CONCRETE SLAB	544087.97	1333685.91	421.64
NE CORNER CONCRETE SLAB	544084.01	1333692.86	421.64
SW CORNER CONCRETE SLAB	544070.59	1333676.02	421.64
SE CORNER CONCRETE SLAB	544066.63	1333682.97	421.64
CENTER OF TANK MANWAY	544075.13	1333683.20	421.64

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MANUFACTURER
MOBILIZATION / DEMOBILIZATION	LS	1	1	TANK DIRECT
30,000 GALLON CENTER DRAFT WATER STORAGE TANK, COMPLETE IN PLACE, WITH PIPING CONNECTIONS PER TABLE 1, SHEET 5 OF 7	EA.	1	1	XERXES COMPANY
ASPHALT PAVING (FULL DEPTH)	SF	780	780	AGPARROTT/H.T.I. CONTRACTORS
ASPHALT PAVING (MILL AND OVERLAY)	SF	150	150	H.T.I. CONTRACTORS
CONCRETE SLAB	SF	160	160	J.M.V. CONCRETE
SIGN, SITE IDENTIFICATION	EA	2	2	NA.
SIGN, ADVANCE	EA	2	2	NA.
SILT FENCE	LF	280	280	SMC ENVIRONMENTAL
SITE RESTORATION	SF	12200	12200	H.T.I. CONTRACTORS
TRAFFIC CONTROL	LS	1	1	TANK DIRECT
NAME OF UTILITY CONTRACTOR: H.T.I. CONTRACTORS				
CHECKBOX				
AS-BUILT DATE				
SURVEY AND DRAFTING DIVISION				

NOTES:

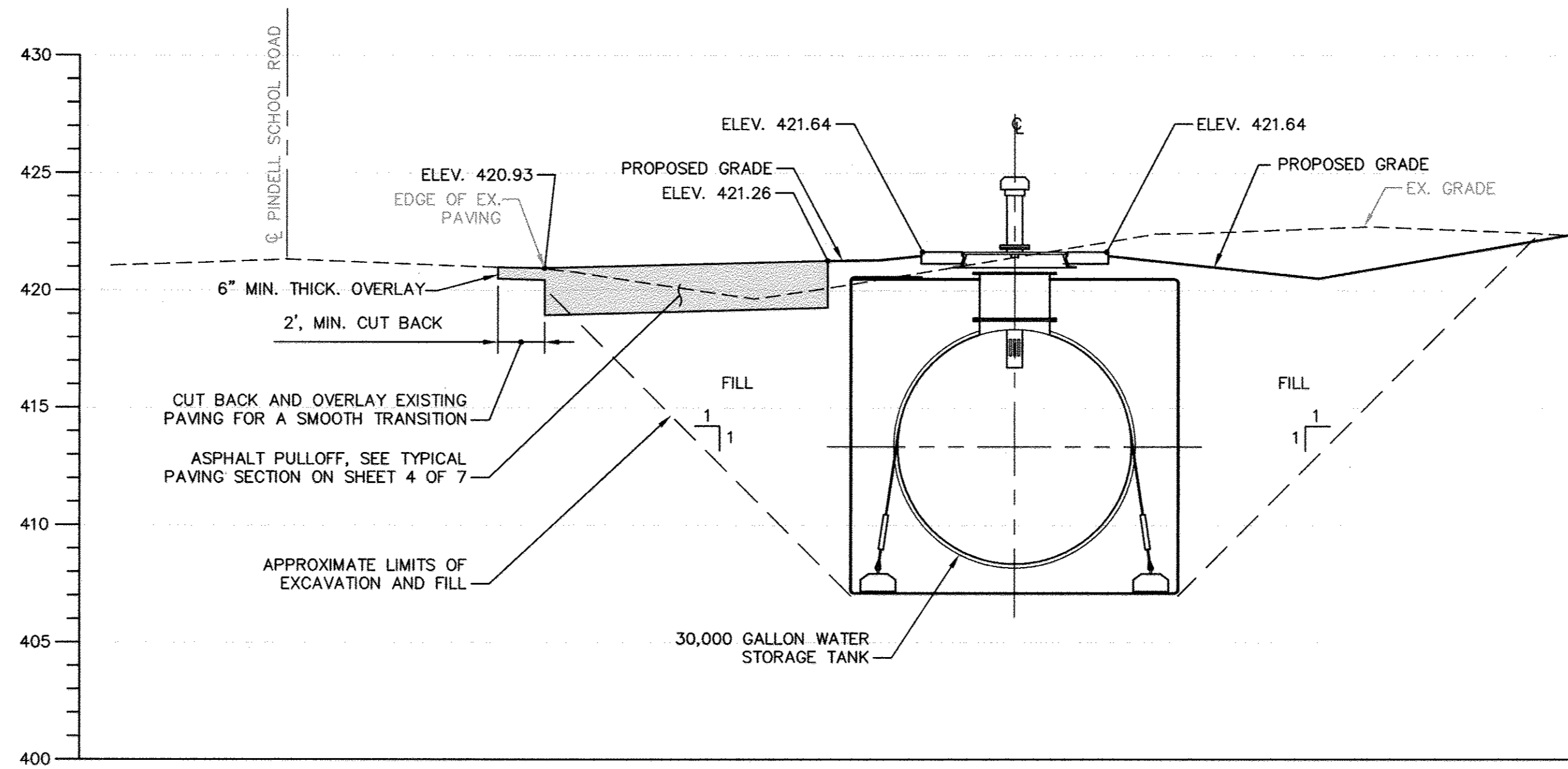
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- USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
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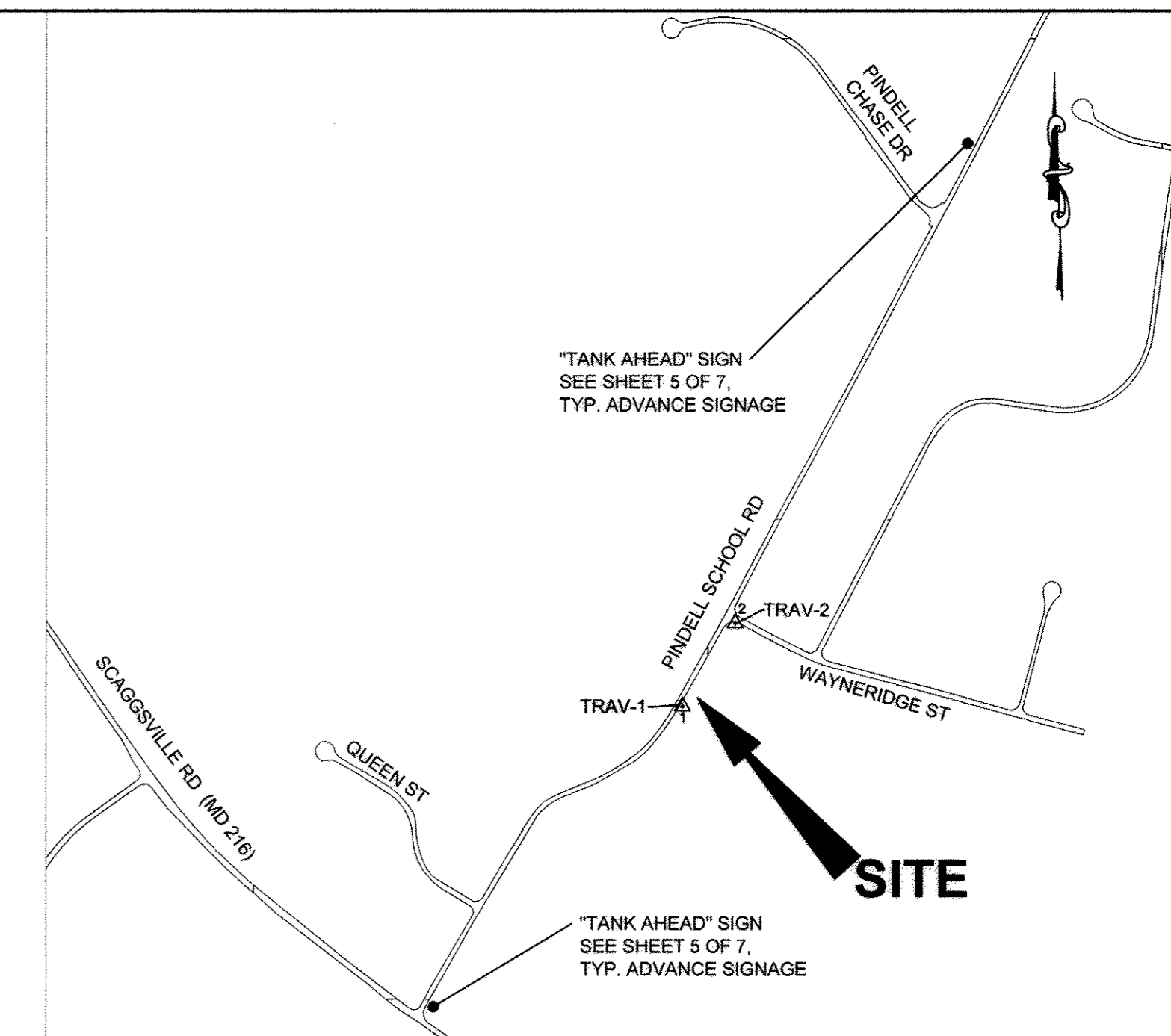
THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48 HOURS PRIOR TO CONSTRUCTION 1-800-257-7777.

PROFESSIONAL CERTIFICATION. I hereby certify that these documents 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. 31363, Expiration Date 01/16/2014.



PROFILE A-A

SCALE: HORIZ - 1" = 5'-0"
VERT. - 1" = 5'-0"



SITE LOCATION MAP

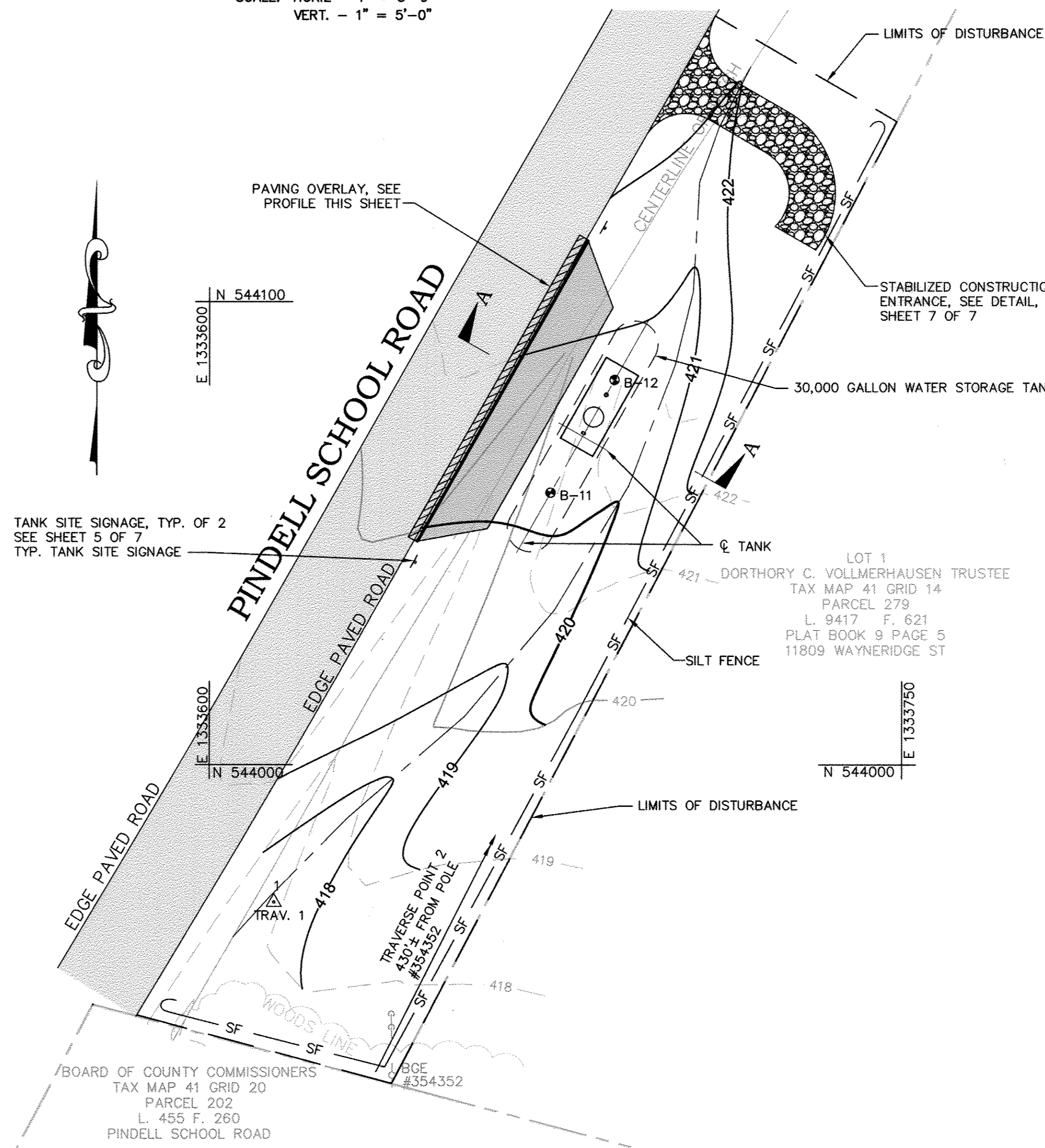
SCALE: 1" = 600'
ADC MAP REFERENCE: HOWARD COUNTY MAP 5052 GRID CS

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S. TRAVERSE POINTS:

	NORTHING	EASTING	ELEV
41DA	546930.86	1335137.92	488.39
41DB	545635.05	1334511.97	471.42

NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM



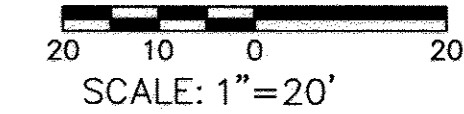
PLAN

SCALE: 1" = 20'

SITE ANALYSIS:

TOTAL AREA OF SITE	0.28	ACRES
AREA DISTURBED	0.28	ACRES
AREA TO BE ROOFED OR PAVED	0.02	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.26	ACRES
TOTAL CUT	570	CU. YDS.
TOTAL FILL	451	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	CONTRACTOR COORDINATE	

GRAPHIC SCALE



AS-BUILT
DATE 5/17/2013

KCI TECHNOLOGIES PROJECT No.: 01-07137823

User: kci\jackson
M:\2007\0107137823\Drawings\VP25 PINDELL SCHOOL ROAD.dwg
Dec 18, 2011 - 10:14am

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 12/22/11
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 12/22/11
ACT. CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 12/22/11
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 12/22/11
ACT. CHIEF, UTILITY DESIGN DIVISION DATE

KCI TECHNOLOGIES

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Sparks, MD 21152
PHONE: (410) 316-7800
FAX: (410) 316-7817
www.kci.com

STATE OF MARYLAND
PUNJIVA WANG
PROFESSIONAL ENGINEER
NO. 31363
12/19/11

DES:	EDK
DRN:	KFJ
CHK:	GW
DATE:	12/20/11
LFN	AS BUILT
BY	NO.
REVISION	
DATE	5-17-13

PINDELL SCHOOL ROAD

600' SCALE MAP NO.	41	BLOCK NO.	14
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UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

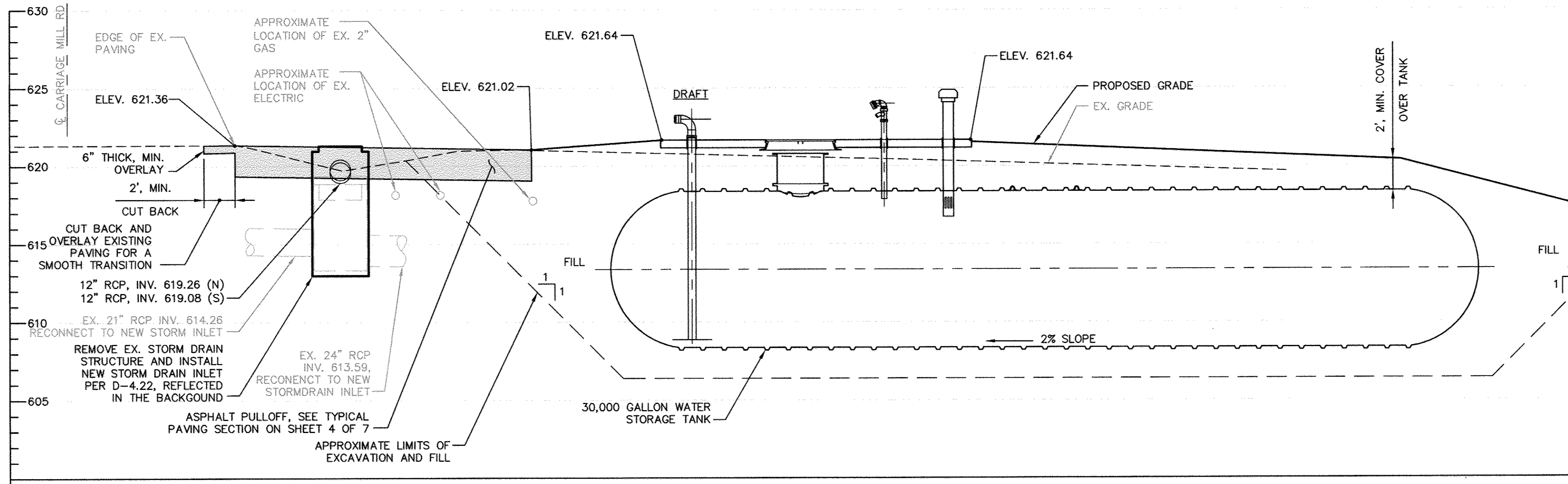
CAPITAL PROJECT No. F-5972
CONTRACT No. 65-4733

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

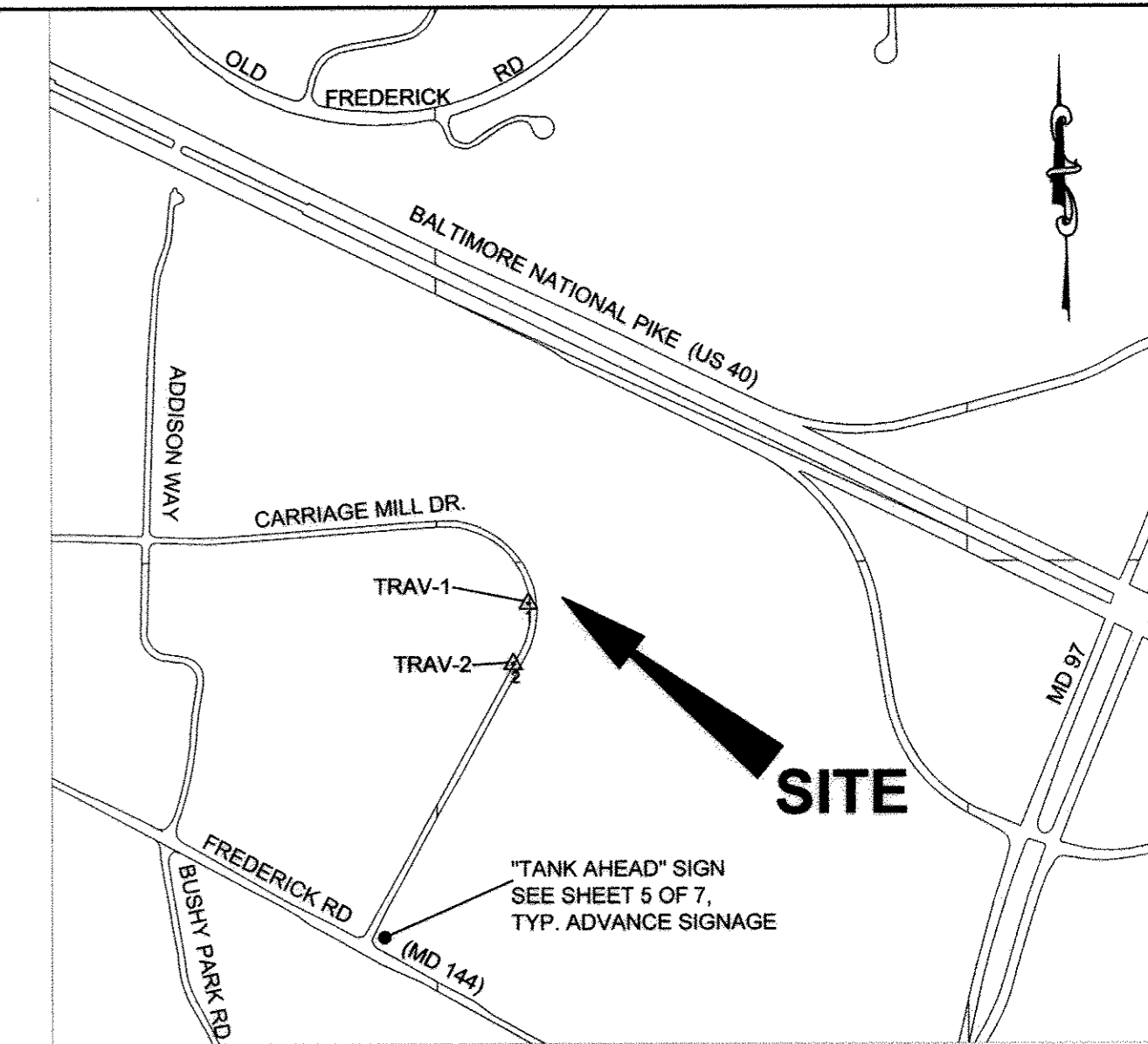
SCALE AS SHOWN
SHEET RT25

STAKEOUT TABLE

DESC	NORTHING	EASTING	ELEV
TRAV 1	604600.43	1305547.70	620.98
TRAV 2	604386.08	1305492.73	625.42
BORING B-05	604601.73	1305606.20	620.82
BORING B-06	604603.75	1305634.13	619.79
NW CORNER ASPHALT PULLOFF	604645.36	1305565.07	621.25
NE CORNER ASPHALT PULLOFF	604628.16	1305589.39	621.00
SW CORNER ASPHALT PULLOFF	604553.22	1305573.15	622.00
SE CORNER ASPHALT PULLOFF	604573.33	1305593.73	621.80
NW CORNER CONCRETE SLAB	604605.24	1305599.35	621.64
NE CORNER CONCRETE SLAB	604606.69	1305619.30	621.64
SW CORNER CONCRETE SLAB	604597.26	1305599.93	621.64
SE CORNER CONCRETE SLAB	604598.71	1305619.87	621.64
CENTER OF TANK MANWAY	604601.90	1305608.61	621.64
NORTH END RCP STORM DRAIN	604640.38	1305573.32	619.72
SOUTH END RCP STORM DRAIN	604557.34	1305579.58	620.60
STORM DRAIN INLET	604620.72	1305577.91	621.20



PROFILE A-A
SCALE: HORIZ - 1" = 5'-0"
VERT. - 1" = 5'-0"



SITE LOCATION MAP
SCALE: 1" = 600'

ADC MAP REFERENCE: HOWARD COUNTY MAP 4692 GRID G8

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MANUFACTURER
MOBILIZATION / DEMOBILIZATION	LS	1	1	TANK DIRECT
30,000 GALLON END DRAFT WATER STORAGE TANK, COMPLETE IN PLACE, WITH PIPING CONNECTIONS PER TABLE 1, SHEET 5 OF 7	EA	1	1	XERXES COMPANY
ASPHALT PAVING (FULL DEPTH)	SF	1470	1470	A.G. PARROTT/H.T.I. CONTRACTORS
ASPHALT PAVING (MILL AND OVERLAY)	SF	185	185	A.G. PARROTT/H.T.I. CONTRACTORS
CONCRETE SLAB	SF	160	160	JMV CONCRETE
CLEARING AND GRUBBING	LS	1	1	TANK DIRECT
SIGN, SITE IDENTIFICATION	EA	2	2	NA.
SIGN, ADVANCE	EA	1	1	NA.
SILT FENCE	LF	280	280	SMC ENVIRONMENTAL
SITE RESTORATION	SF	7266	7266	H.T.I. CONTRACTORS
12" REINFORCED CONCRETE PIPE	LF	80	80	CONCRETE PIPE & PRECAST
PRECAST STORMDRAIN INLET, COMPLETE IN PLACE, WITH FRAME AND INLET GRATE PER STANDARD DETAIL D-4.22	EA	1	1	GILLESPIE PRECAST
CONCRETE END SECTION, COMPLETE IN PLACE PER STANDARD DETAIL D-5.51	EA	2	2	CONCRETE PIPE & PRECAST
TRAFFIC CONTROL	LS	1	1	TANK DIRECT
NAME OF UTILITY CONTRACTOR:	H.T.I. CONTRACTORS			

SITE ANALYSIS:

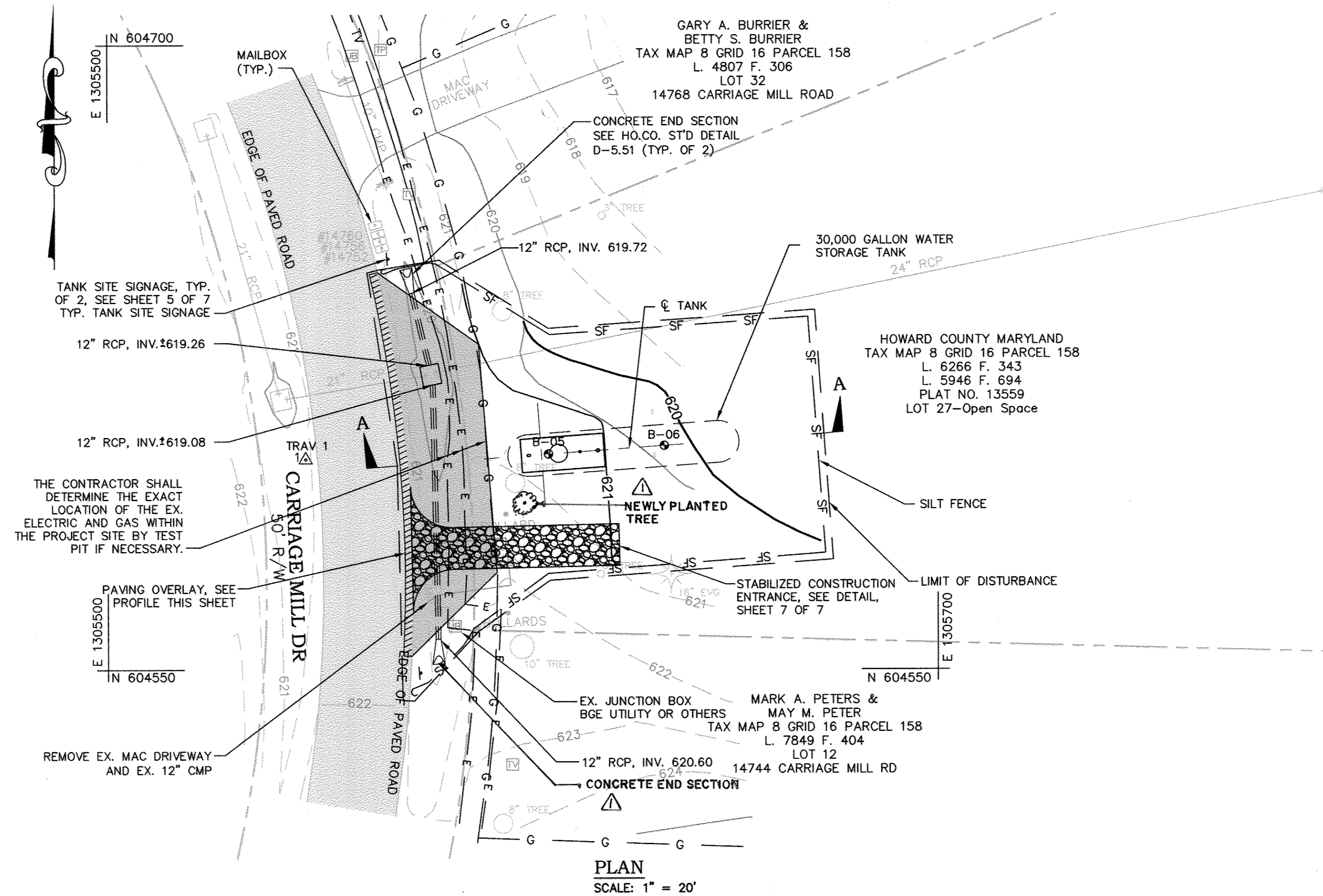
TOTAL AREA OF SITE	0.166	ACRES
AREA DISTURBED	0.166	ACRES
AREA TO BE ROOFED OR PAVED	0.037	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.129	ACRES
TOTAL CUT	451	CU. YDS.
TOTAL FILL	478	CU. YDS.

OFFSITE WASTE/BORROW AREA LOCATION: CONTRACTOR COORDINATE

UTILITY NOTE

THE UNDERGROUND UTILITY LOCATIONS SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF FIELD SURVEY INFORMATION, AERIAL SURVEY LOCATIONS, AND/OR EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE INDICATED ON THE AFOREMENTIONED INFORMATION OBTAINED BY THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48 HOURS PRIOR TO CONSTRUCTION 1-800-257-7777.



PLAN
SCALE: 1" = 20'

HORIZONTAL & VERTICAL CONTROL

THE HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON GPS OBSERVATIONS FROM THE FOLLOWING N.G.S. TRAVERSE POINTS:

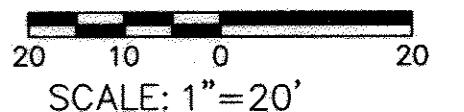
	NORTHING	EASTING	ELEV
08HC	603767.21	1304300.38	645.82
08HA	604769.63	1302045.26	620.99

NAD 1983/91 (HORIZONTAL) NAVD 88 (VERTICAL) DATUM

NOTES:

- FOR GENERAL TANK INSTALLATION, PIPING, SPECIFICATIONS, AND DETAILS REFER TO SHEETS 1-7 OF 7, INCLUSIVE.
- ALL TREES AND PLANTINGS INTERFERING WITH EXCAVATION SHALL BE REMOVED REPLACED WITH VIABLE TREES OF SIMILAR SPECIES. TREES AND PLANTINGS THAT ARE NOT CALLED OUT ON THE PLANS AND NEED TO BE REMOVED FOR CONSTRUCTION SHALL BE IDENTIFIED TO THE HOWARD COUNTY INSPECTOR PRIOR TO REMOVAL.
- THE CONTRACTOR SHALL TAKE ALL REASONABLE MEANS POSSIBLE TO PROTECT EXISTING TREES AND PLANTINGS WITHIN THE CONSTRUCTION AREA, AND SHALL REPLACE IN KIND THOSE DAMAGED OR REMOVED DURING CONSTRUCTION.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, DATED MAY 7, 2007.
- CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL STAGING AREAS TO BE USED DURING CONSTRUCTION.
- THERE SHALL BE NO STOCKPILING OF EXCAVATED MATERIAL ON THE WORK SITE.
- ALL SURVEY STAKEOUT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL TANK EXCAVATIONS MUST MEET OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL USE JERSEY BARRIERS TO PROTECT THE EXCAVATION. (SEE DETAIL MD 104.01-23B)(11:1 MAX TAPER)
- USE MD 104.06-18 FOR WORKZONE SIGNING.
- USE MD 104.01-71 FOR CRASH CUSHION DETAIL. USE 30mph AS DESIGN SPEED.
- ROAD WORK 1500FT. SIGN CAN BE ELIMINATED WHEN THE LENGTH OF ROAD IS LESS THAN 1500FT.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A MEETING WITH HOWARD COUNTY TRAFFIC CONTROL MANAGER FOR THE APPROVAL OF MOT PLANS.

GRAPHIC SCALE



AS-BUILT
DATE 5/17/2013

PROFESSIONAL CERTIFICATION. I hereby certify that these documents 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. 31363, Expiration Date 01/16/2014.

KCI TECHNOLOGIES PROJECT NO.: 01-07137823

Dec 20, 2011 - 11:35am User: lewin.jackson M:\2007\0107137823\Drawings\PT70 CARRIAGE MILL DRIVE.dwg

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 12/21/11
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 12/21/11
ACT. CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 12/21/11
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 12/21/11
ACT. CHIEF, UTILITY DESIGN DIVISION DATE

KCI TECHNOLOGIES

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

936 Rafterbrook Road
Sparks, MD 21152
Phone: (410) 316-7800
Fax: (410) 316-7817
www.kci.com

STATE OF MARYLAND
GUYA WALKER
PROFESSIONAL ENGINEER
NO. 31363
2/19/11

DES:	EDK		
DRN:	EDK		
CHK:	GW		
DATE:	12/2011		
BY:			
NO.:			
REVISION:			
DATE:			

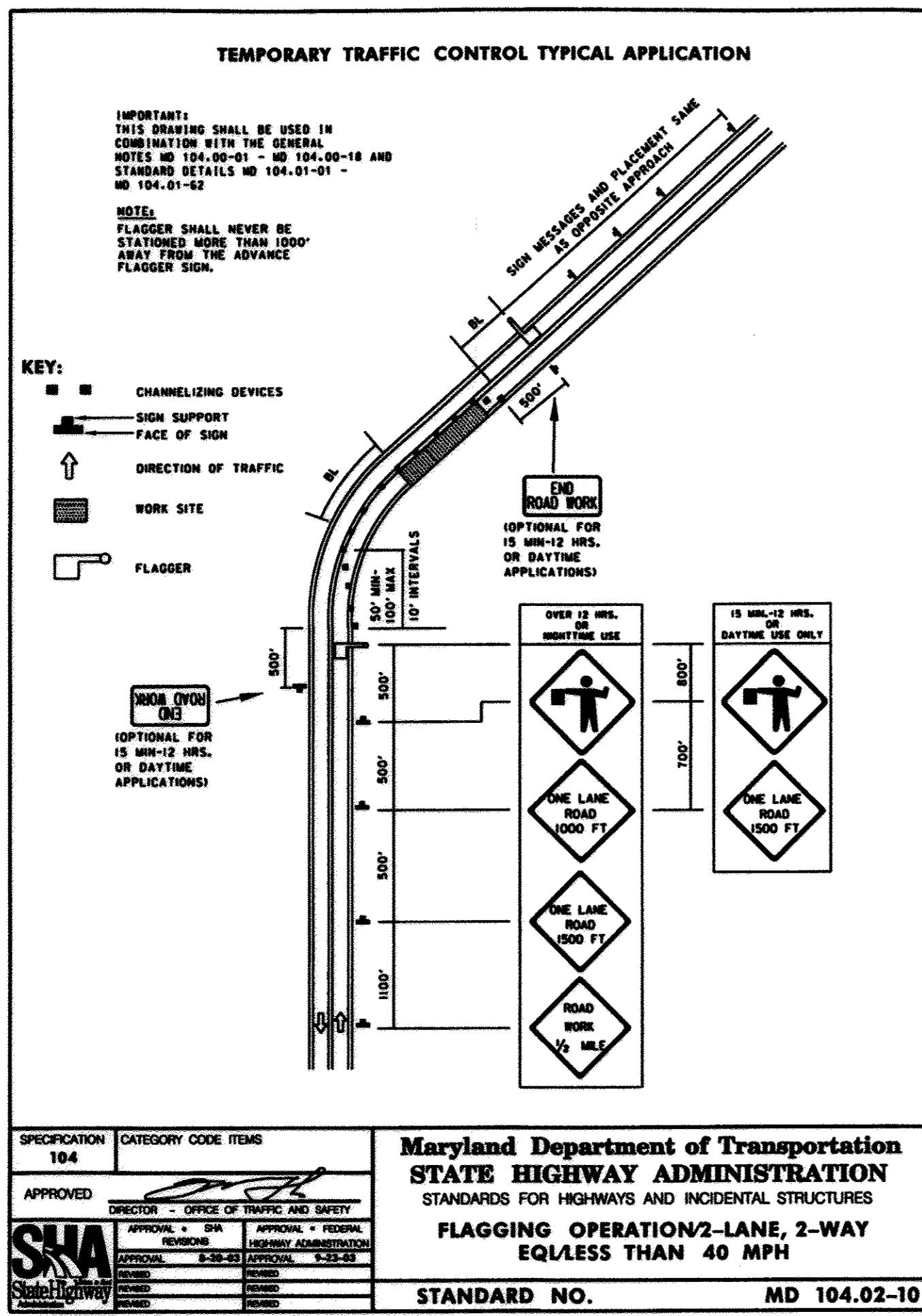
LFN	AS BUILT	5-17-13
BY		
NO.		
REVISION		
DATE		
600' SCALE MAP NO.	8	BLOCK NO. 16

UNDERGROUND WATER STORAGE TANKS FOR FIRE SUPPRESSION

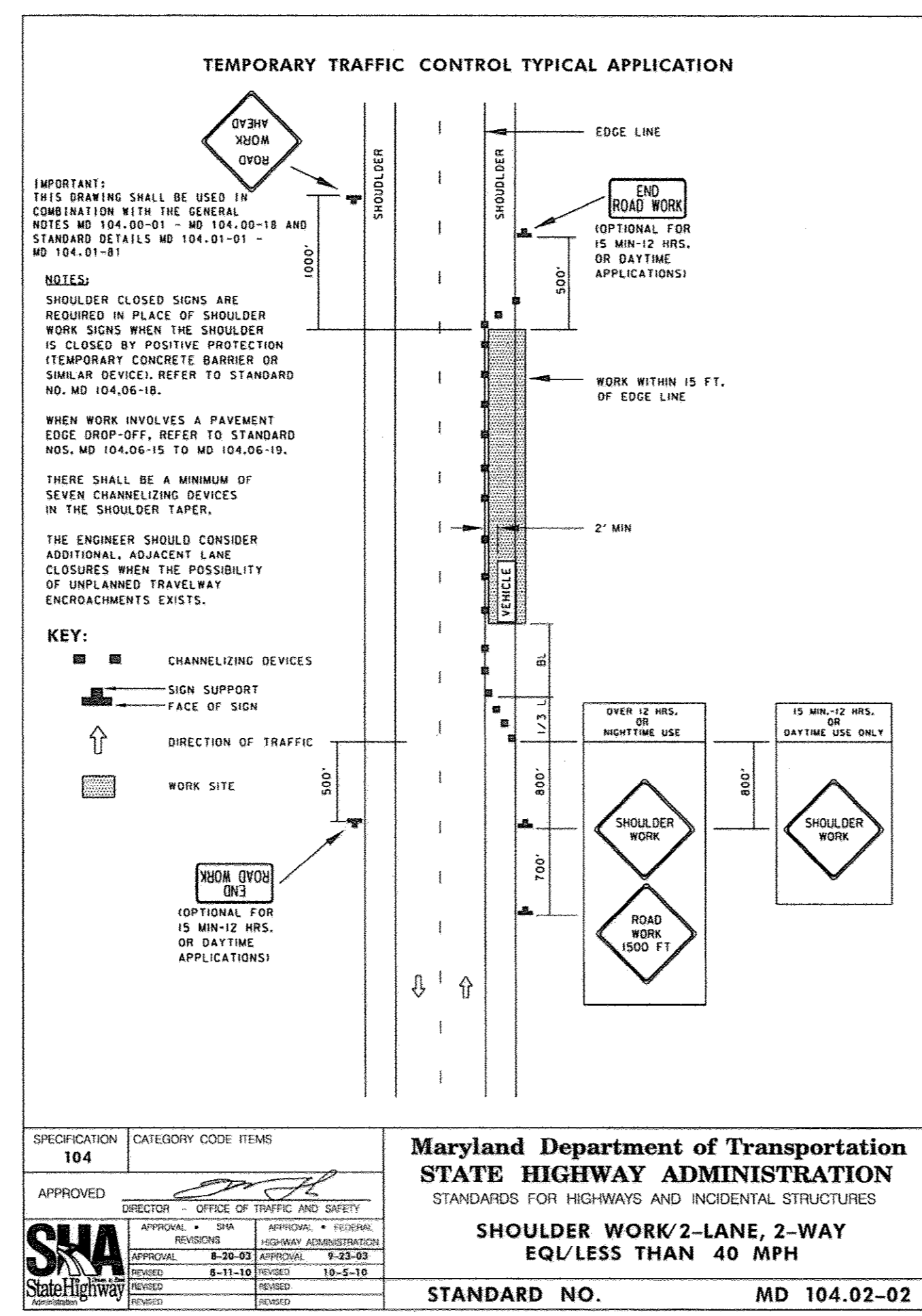
CAPITAL PROJECT No. F-5972
CONTRACT No. 65-4733

ELECTION DISTRICT NO. 4
HOWARD COUNTY, MARYLAND

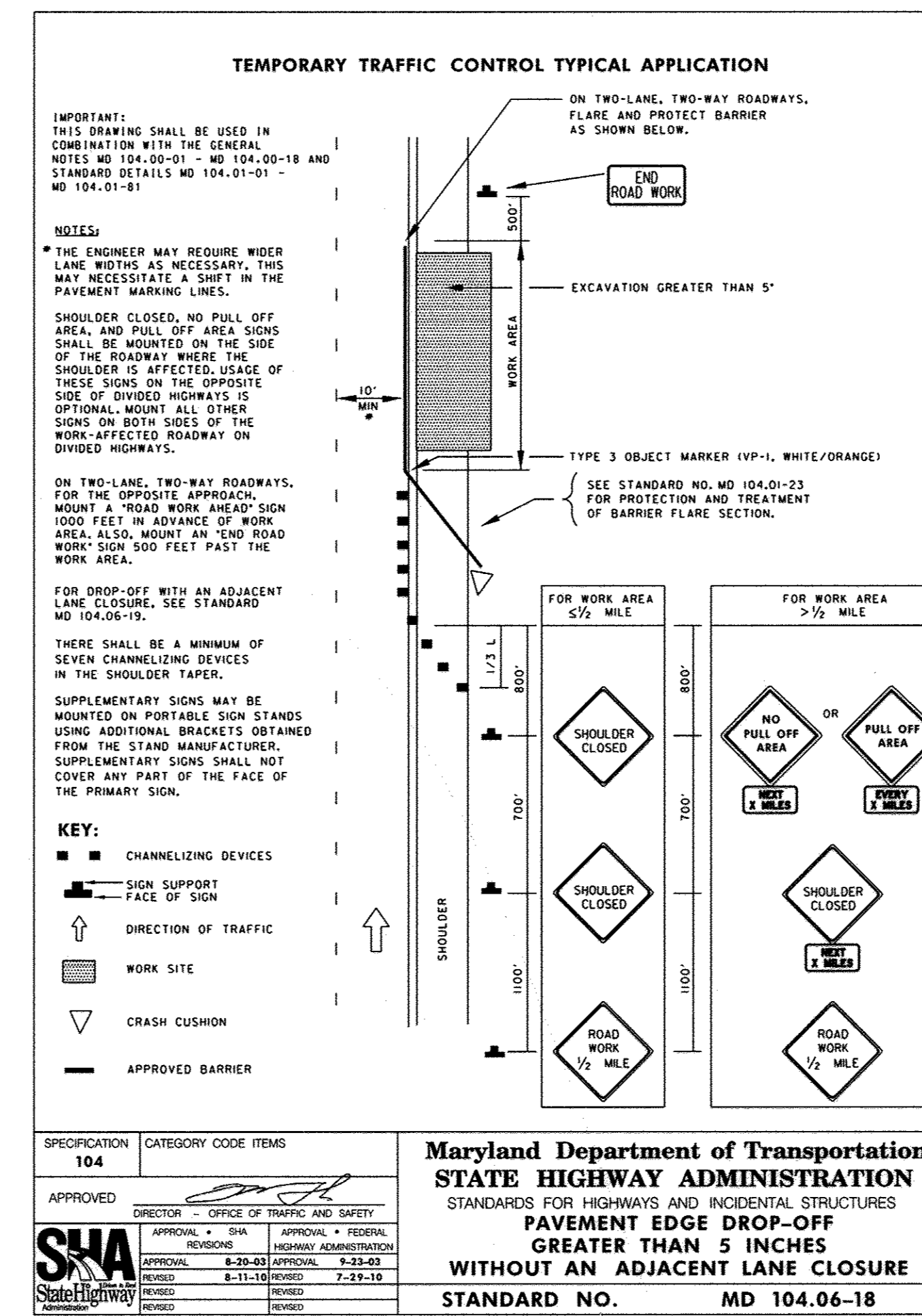
SCALE AS SHOWN
SHEET RT70



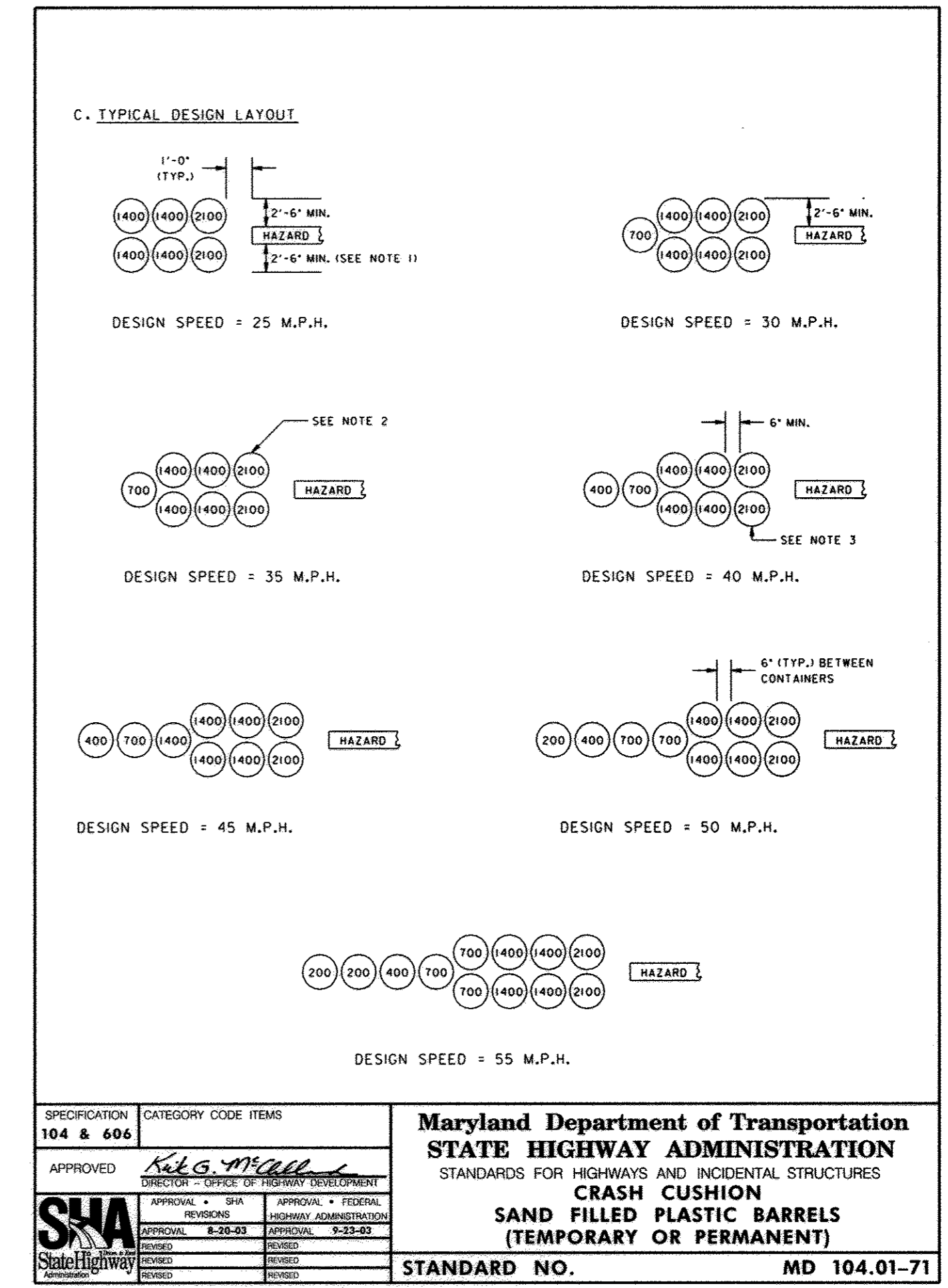
TO BE USED ON ALL WORK SITES AS NECESSARY



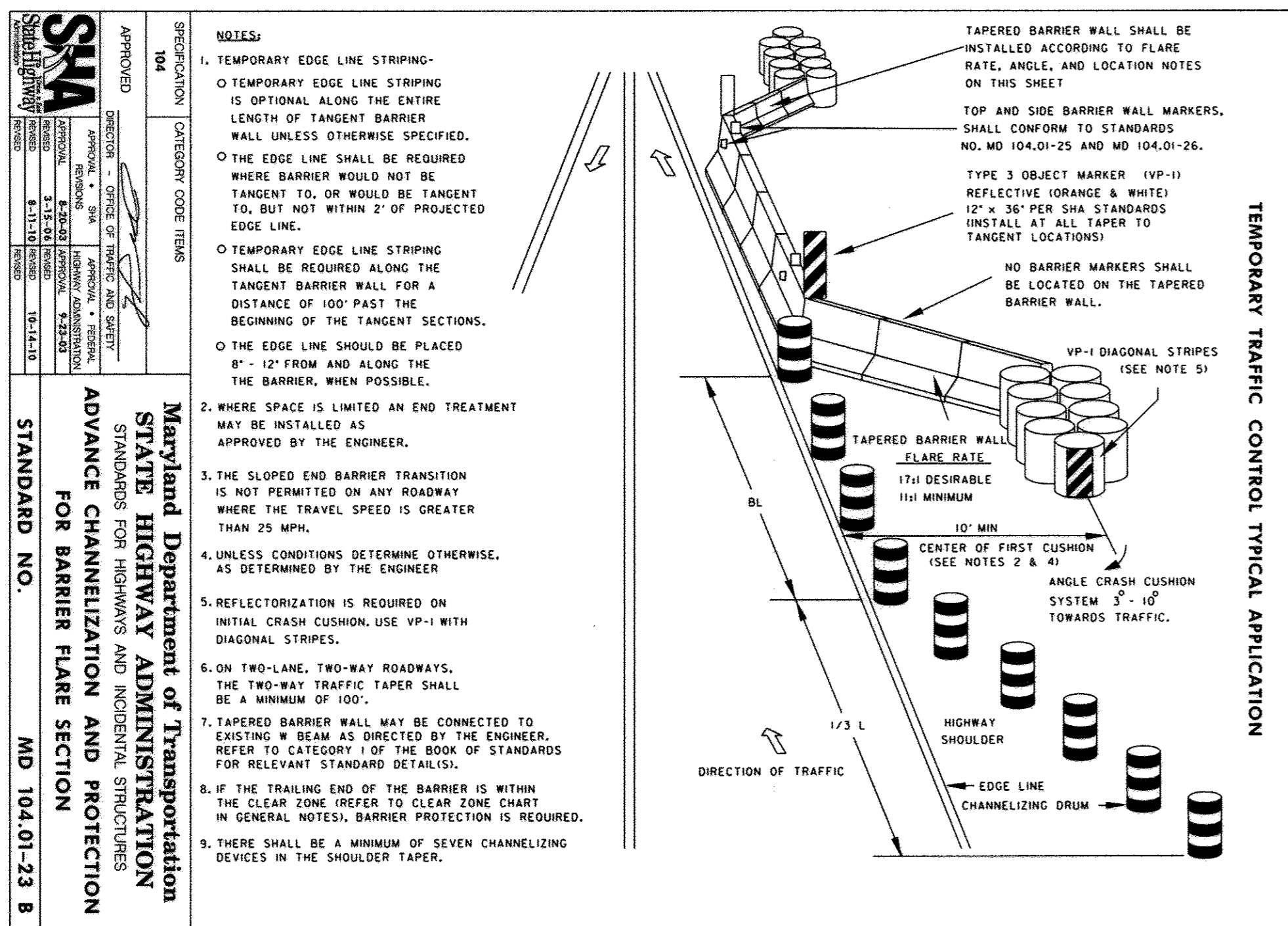
TO BE USED ON ALL WORK SITES AS NECESSARY



TO BE USED ON ALL WORK SITES AS NECESSARY



TO BE USED ON ALL WORK SITES



TO BE USED ON ALL WORK SITES

PROFESSIONAL CERTIFICATION. I hereby certify that these documents 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. 31363, Expiration Date 01/16/2014.

NOTE:

1. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS FOR EACH LOCATION FOR COUNTY APPROVAL BEFORE WORK BEGINS.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

12/21/11
DIRECTOR OF PUBLIC WORKS DATE

12/21/11
ACT. CHIEF, BUREAU OF ENGINEERING DATE

12/21/11
CHIEF, BUREAU OF UTILITIES DATE

12/21/11
ACT. CHIEF, UTILITY DESIGN DIVISION DATE

ENGINEERS
PLANNERS
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CONSTRUCTION MANAGERS

KCI TECHNOLOGIES

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Fax: (410) 316-7817
www.kci.com

STATE OF MARYLAND
GUTHRIE WALKER
PROFESSIONAL ENGINEER
No. 31363
12/19/11

DES:	EDK				
DRN:	KFJ				
CHK:	GW				
DATE:	12/20/11	BY	NO.	REVISION	

DATE	600' SCALE MAP NO.	VARIES	BLOCK NO.	VARIES
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UNDERGROUND WATER STORAGE
TANKS FOR FIRE SUPPRESSION

CAPITAL PROJECT No. F-5972
CONTRACT No. 65-4733

ELECTION DISTRICT NO. VARIES
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET TD-1