CONSTRUCTION PLANS

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER

PARCELS C-1 & D-1, SECTION 1 AREA 1

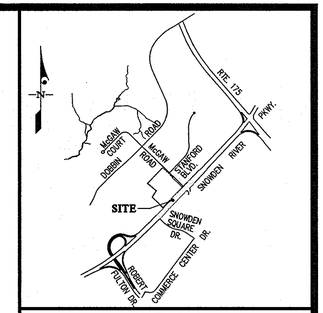
SIXTH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

HOWARD COUNTY CONTROL
NAD83 & NAVD88 (VERTICAL DATA)

36IB N 553348.6361
E 1364085.2553
ELEV.=385.72

42CA N 551695.7342
E 1362506.4222
ELEV.=376.50



VICINITY MAP
1"=2000'

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

4. PROJECT BACKGROUND:

LOCATION:	TAX MAP 36
ZONING:	NT-EMPLOYMENT CENTER-INDUSTRIAL
ELECTION DISTRICT:	6TH ELECTION DISTRICT
SECTION/AREA:	1/1
SITE AREA:	2.84± AC. (ROAD MODIFICATIONS L.O.D.)

APPROVED NAME AND DEPT. OF PLANNING & ZONING REF. FILE NOS.:
F-72-90C, F-05-124, FDP-117-A-11, F-73-29c, SDP-89-05, SDP-81-31, SDP-07-131, WP-10-71.

5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.

6. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.

7. EXISTING TOPOGRAPHY AND FEATURES WERE DERIVED AVAILABLE PUBLIC RECORDS AND FROM SURVEY BY GUTSCHICK, LITTLE & WEBER, P.A. DONE IN FEBRUARY, 2005.

8. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL STA. 36IB AND 42CA. THE VERTICAL DATUM IS IN NAVD 88.

9. THIS SITE IS SERVED BY PUBLIC WATER & SEWER UNDER CONTRACT #483-D, #441-W AND #24-4504-D.

10. STORMWATER MANAGEMENT FOR THE ROAD IMPROVEMENT IS PROVIDED BY A PRIVATELY OWNED AND MAINTAINED FACILITY (STORMCEPTOR & UNDERGROUND MANIFOLDS) UNDER SDP-07-131.

11. THE EXISTING UTILITIES SHOWN HEREIN WERE DERIVED FROM AVAILABLE PUBLIC RECORDS. THE CONTRACTOR MUST HAND DIG TEST PITS AT ALL UTILITY CROSSINGS AND CONNECTION POINTS TO VERIFY EXACT LOCATION.

12. THERE ARE NO WETLANDS, FLOODPLAIN OR GRAVEYARDS ON THIS SITE.

13. OTHER TOPICS RELATED TO THIS SITE:
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP (MAR. 5, 2007)
- SUBSURFACE EXPLORATION AND GEOTECHNICAL EVALUATION BY SPECIALIZED ENGINEERING (MAR. 5, 2007).

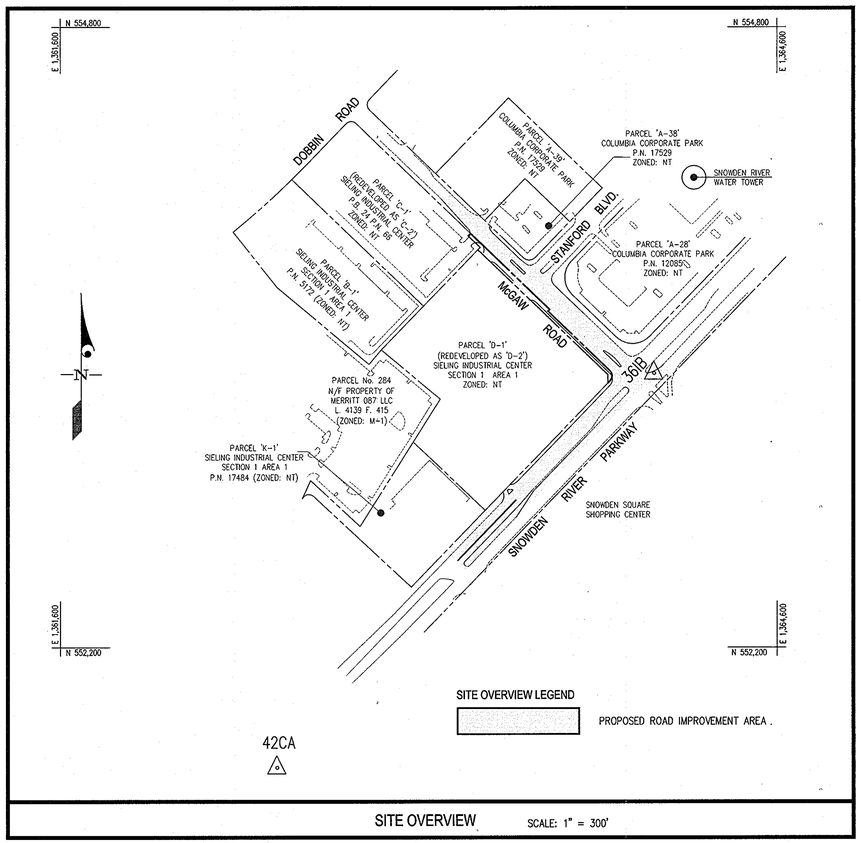
14. GUTTER PAN OF CURBS SHALL BE PITCHED TO CONFORM TO THE ADJACENT DRAINAGE PATTERN OF THE ADJOINING PAVING FOR VEHICULAR USE. FOR CONCRETE CURB AND GUTTER, SEE DETAIL ON SHEET 2.

15. SPOT ELEVATIONS ALONG CURB LINE ARE FOR THE FLOW LINE (BOTTOM OF CURB), UNLESS NOTED OTHERWISE.

16. ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OF RADIALLY BETWEEN ITEMS UNLESS OTHERWISE NOTED.

17. THERE ARE NO WETLANDS, FLOODPLAIN, STREAMS OR BUFFERS LOCATED WITHIN THE SUBJECT PARCELS.

WP-10-71 WAS APPROVED ON 12/23/09 TO ALLOW THE RIGHT-IN/RIGHT-OUT FROM PARCEL D-2 TO SNOWDEN RIVER PARKWAY (SRP) WHICH IS RESTRICTED FOR VEHICULAR INGRESS/EGRESS PER SECTION 16.119(F). THE REMAINING PORTION OF SRP ALONG THIS SITE STILL RESTRICTED.



SITE OVERVIEW LEGEND

PROPOSED ROAD IMPROVEMENT AREA .

SITE OVERVIEW SCALE: 1" = 300'

PLAN LEGEND (for GLW PLAN SHEETS)

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- EXISTING CONDUIT
- EXISTING SANITARY SEWER
- WATERLINE (PUBLIC)
- EXISTING FIRE HYDRANT
- EXISTING CURB & GUTTER TO REMAIN
- EXISTING CURB & GUTTER TO BE REMOVED
- LIMIT OF DISTURBANCE
- CONCRETE CURB & GUTTER (DET. 1/3)
  - GUTTER PAN
  - FACE OF CURB
  - PT/PC
  - BACK OF CURB
- CONCRETE/PAVER SIDEWALK (DET. 2/2)
- HANDICAP RAMP
- EXISTING LIGHT FIXTURES & POLE
- PROPOSED LIGHT FIXTURES & POLE (NEW)
- PROPOSED LIGHT FIXTURES & POLE RELOCATION

SHEET INDEX

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/4/10

Chief, Development Engineering Division — Date 8/13/10

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975, EXPIRATION DATE: MAY 26, 2012.

STATE OF MARYLAND — CLAYTON K. GUTSCHICK — REG. NO. 12975 — PROFESSIONAL ENGINEER

6-11-10

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\Drawings\07005\FDP\07005-CS.dwg | DES. MBT | DRN. klp | CHK.

DATE	REVISION	BY	APP'R.
5/2010	REVISE SHEET INDEX		

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

(REVISED) COVER SHEET

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

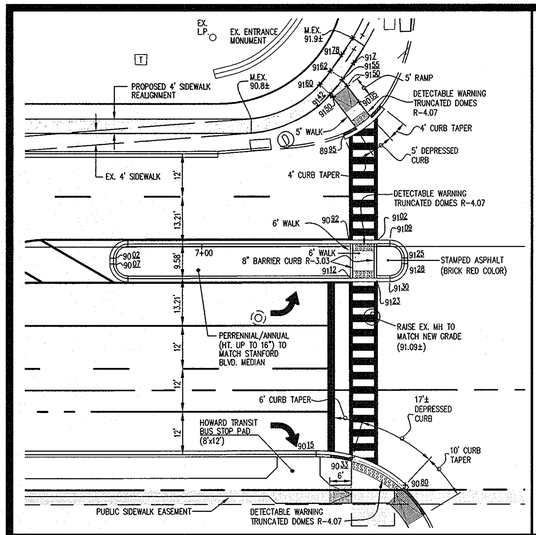
COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos. 17484 & 21172)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

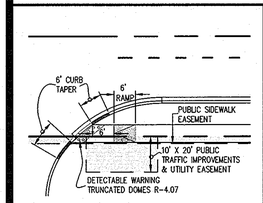
SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	07005
DATE	TAX MAP - GRID	SHEET
JUNE/2010	TM 36 - 23/24	1 of 20

F-07-208



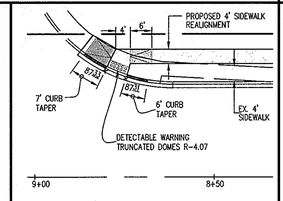
DETAIL OF CROSSWALK ON McGAW RD.

SCALE: 1" = 20'



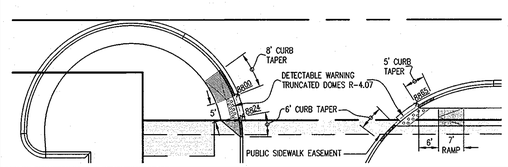
DETAIL OF RAMPS ON McGAW RD.

STA. 5+20± TO 5+50± LEFT SCALE: 1" = 20'



DETAIL OF RAMPS ON McGAW RD.

STA. 8+50± TO 9+00± RIGHT SCALE: 1" = 20'

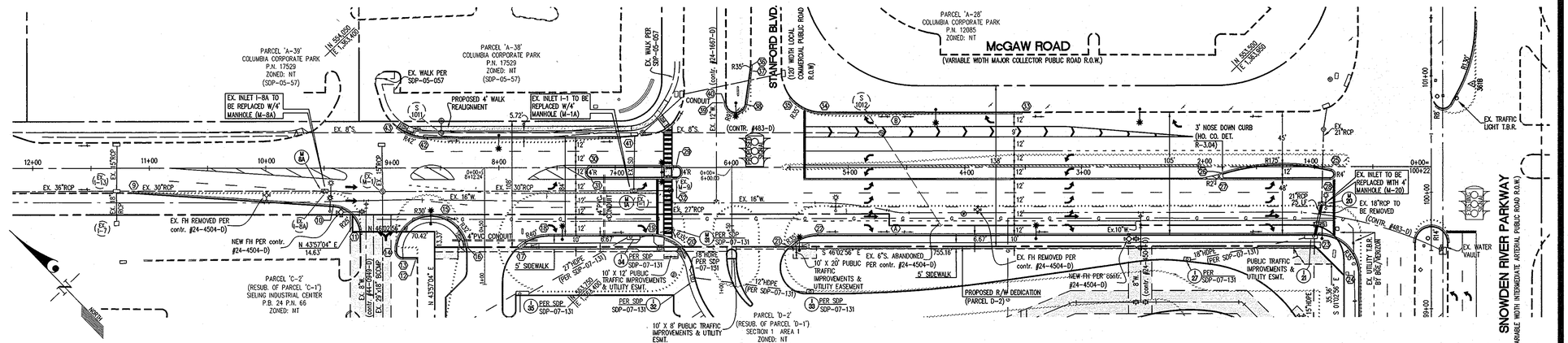


DETAIL OF RAMPS ON McGAW RD.

STA. 7+65± TO 8+40± LEFT SCALE: 1" = 20'

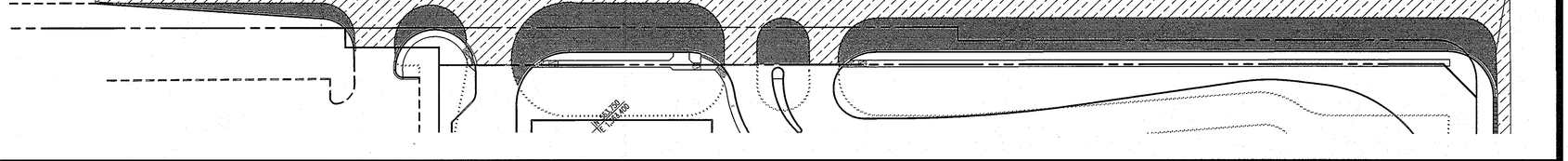
ROAD IMPROVEMENTS on McGAW ROAD

SCALE: 1" = 50'



LEGEND

- PROPOSED ROADWAY PAVEMENT (SEE DET. 1/2)
- EXISTING PAVEMENT TO BE MILLED AND OVERLAID (PER R-1.08)
- PROPOSED CURB (DET. 1/3)
- EXISTING CURB TO REMAIN
- EXISTING CURB TO BE REMOVED
- T.B.R. TO BE RELOCATED



PAVING, MILLED and OVERLAID of McGAW ROAD

SCALE: 1" = 50'

CURB ELEVATION TABLE FOR McGAW ROAD

PT. NO	STATION	OFFSET	ELEV.(BOC)	PT. NO	STATION	OFFSET	ELEV.(BOC)
(9)	11+13.67	20.9' LT.	MATCH EX.	(26)	5+38.89	13.0' LT.	389.13
(10)	9+41.98	32.5' LT.	385.57	(27)	5+38.89	9.0' LT.	389.23
(11)	9+18.67	57.1' LT.	MATCH EX.	(28)	1+71.06	9.0' LT.	387.05
(12)	8+70.28	77.5' LT.	MATCH EX.	(29)	6+47.51	0.8' RT.	391.09
(13)	8+82.28	77.4' LT.	388.63	(30)	7+20.64	0.8' RT.	389.96
(14)	8+88.27	71.6' LT.	388.34	(31)	7+20.64	8.8' LT.	390.14
(15)	8+43.73	44.6' LT.	387.37	(32)	6+47.47	8.8' LT.	391.30
(16)	8+27.58	68.0' LT.	388.26	(33)	3+50.70	46.2' RT.	MATCH EX.
(17)	7+83.70	68.0' LT.	388.75	(B)	4+59.22	47.0' RT.	392.12
(18)	7+57.24	58.0' LT.	388.69	(34)	5+22.36	47.0' RT.	391.72
(19)	6+68.09	58.0' LT.	390.15	(35)	5+49.74	59.9' RT.	MATCH EX.
(20)	6+42.98	68.0' LT.	390.83	(36)	5+83.45	88.2' RT.	MATCH EX.
(21)	5+50.81	68.0' LT.	392.25	(37)	5+83.80	83.6' RT.	MATCH EX.
(22)	5+26.32	58.0' LT.	392.26	(38)	5+88.05	54.2' RT.	MATCH EX.
(A)	4+59.22	58.0' LT.	392.26	(39)	6+05.36	55.4' RT.	MATCH EX.
(23)	0+95.29	57.8' LT.	386.54	(40)	6+05.36	57.1' RT.	MATCH EX.
(24)	0+61.79	93.0' LT.	384.92	(41)	6+95.48	26.0' RT.	MATCH EX.
(25)	0+94.91	13.0' LT.	386.85	(42)	8+61.49	26.0' RT.	387.75
				(43)	8+87.39	35.0' RT.	MATCH EX.

NOTE: CURB ELEVATIONS ARE BOTTOM OF CURB (BOC)

MCGAW ROAD PAVING SECTION

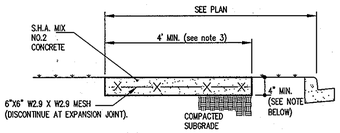
PAVEMENT MATERIAL (inches)	3 TO <5	5 TO <7
HMA SUPERPAVE FINAL SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)	2.0	2.0
HMA SUPERPAVE INTERMEDIATE SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)	2.0	2.0
HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 2 (LOW ESAL)	4.0	4.0
GRADED AGGREGATE BASE (GAB)	13.0	7.0

SNOWDEN RIVER PARKWAY PAVING SECTION

PAVEMENT MATERIAL (inches)	3 TO <5	5 TO <7
HMA SUPERPAVE FINAL SURFACE 12.5 MM, PG 70-22, LEVEL 3 (HIGH ESAL)	2.0	2.0
HMA SUPERPAVE INTERMEDIATE SURFACE 12.5 MM, PG 64-22, LEVEL 3 (HIGH ESAL)	2.0	2.0
HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 3 (HIGH ESAL)	7.0	7.0
GRADED AGGREGATE BASE (GAB)	13.0	6.0

NOTE:
DEPENDING ON THE CBR VALUES OBTAINED IN THE FIELD, THE PAVING SECTIONS MAY BE REVISED, IF APPROVED BY A PROFESSIONAL SOILS ENGINEERS. THESE SUBSTITUTIONS MUST ALSO BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

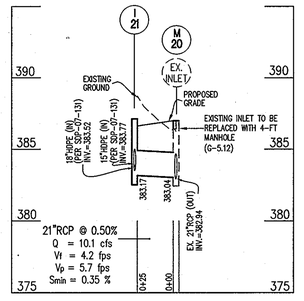
1 **PAVING SECTIONS** NO SCALE



NOTES:

1. UNLESS SHOWN OTHERWISE, INSTALL EXPANSION JOINTS AT MAX. 20'-0" O.C. AND SCORING JOINTS AT MAX. 5'-0" O.C.
2. PROVIDE 1/2" PREFORMED BITUMINOUS EXPANSION JOINT WHERE SIDEWALK ABUTS AGAINST CURB AND SET SIDEWALK 1/4" ABOVE CURB PER HO. CO. DET. R-3.05.
3. THE NEW SIDEWALK ON THE SOUTH SIDE OF McGAW ROAD FRONTING PARCEL D2 SHALL BE 5' WIDE.

2 **TYPICAL SIDEWALK SECTION** NO SCALE



STRUCTURE SCHEDULE

NO.	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STANDARD DETAIL	LOCATIONS & REMARKS	REMARKS
I-21	A-10	3' I.D.	387.55	387.15	383.95	383.54	D-4.04		
M-20	4' MANHOLE	4'-0"	386.99	———	383.04	382.94	G-5.12		
M-8A	4' MANHOLE	4'-0"	389.9	———	379.82	379.72	G-5.12		
M-1A	4' MANHOLE	4'-0"	386.2	———	383.07	384.07	G-5.12		

NOTES:

1. ALL STRUCTURES TO BE PRECAST.
2. THE STRUCTURE SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN VALUES SHOWN ON THE SCHEDULE AND THOSE SHOWN ON THE PLAN & PROFILES, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR CLARIFICATION PRIOR TO PRECASTING.

PIPE SCHEDULE

SIZE & TYPE	QUANTITY (LF)
21" RCP	25

PROFILES
SCALES: 1" = 5' VERT.
1" = 50' HORZ.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/12/10

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975, EXPIRATION DATE: MAY 26, 2012.

STATE OF MARYLAND — CLIFTON K. GUTSCHICK — REG. NO. 12975 — PROFESSIONAL ENGINEER

6-11-10

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\07005\FDP\07005-FDP.dwg | DES. MBT | DRN. KLP | CHK.

DATE	REVISION	BY	APP'R.
6/2010	MOVE DETAILS AND CORRESPONDING SD PROFILES TO THIS SHEET		

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

(REVISED) McGAW ROAD IMPROVEMENTS

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos. 17484 & 21172)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

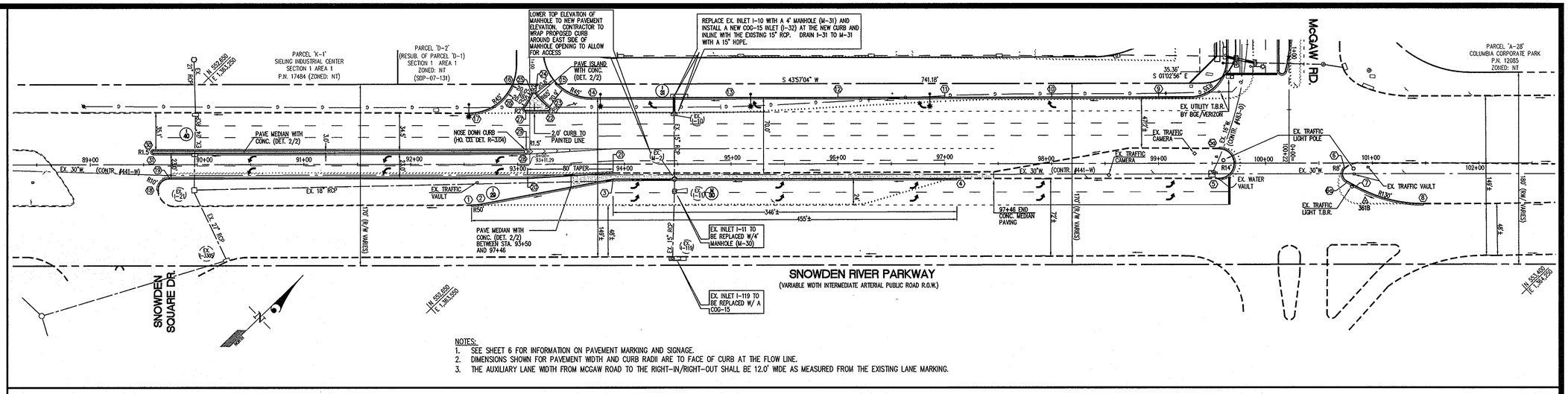
SCALE	ZONING	G. L. W. FILE No.
1"=50'	NT	07005
DATE	TAX MAP – GRID	SHEET
JUNE/2010	TM 36 – 23/24	2 of 20

F-07-208

CURB ELEVATION TABLE FOR SNOWDEN RIVER PARKWAY

PT. NO	STATION	OFFSET	ELEV.(BOC)
1	92+56.73	38.6' RT.	MATCH EX.
2	92+65.55	37.7' RT.	375.81
3	93+89.29	14.4' RT.	380.02
4	97+11.26	14.2' RT.	MATCH EX.
5	99+56.69	14.5' RT.	MATCH EX.
5a	99+56.69	14.2' LT.	MATCH EX.
6	100+74.33	4.3' RT.	MATCH EX.
6a	100+75.76	17.3' RT.	386.04
7	100+84.69	22.2' RT.	386.00
8	101+47.75	38.5' RT.	MATCH EX.
9	99+00.00	61.8' LT.	384.73
10	98+00.00	61.8' LT.	384.06
11	97+00.00	61.8' LT.	383.30
12	96+00.00	61.8' LT.	382.02
13	95+00.00	61.8' LT.	380.60
14	93+68.70	61.8' LT.	378.55
15	93+35.28	75.7' LT.	378.81
16	93+95.92	75.4' LT.	377.90
17	92+54.39	47.8' LT.	MATCH EX.
18	89+62.86	23.8' RT.	MATCH EX.
19	89+73.02	11.7' RT.	370.96
20	93+09.41	13.7' RT.	378.73
21	93+89.30	8.0' RT.	MATCH EX.
22	93+28.66	49.9' LT.	377.82
23	93+29.86	53.5' LT.	377.93
24	93+17.08	66.4' LT.	378.09
25	93+13.65	66.0' LT.	378.00
26	93+05.95	53.0' LT.	377.41
27	93+07.55	49.8' LT.	377.34
28	93+07.91	10.3' LT.	378.19
29	93+07.91	13.3' LT.	378.13
30	89+58.82	13.3' LT.	369.96
31	89+58.82	10.3' LT.	369.99

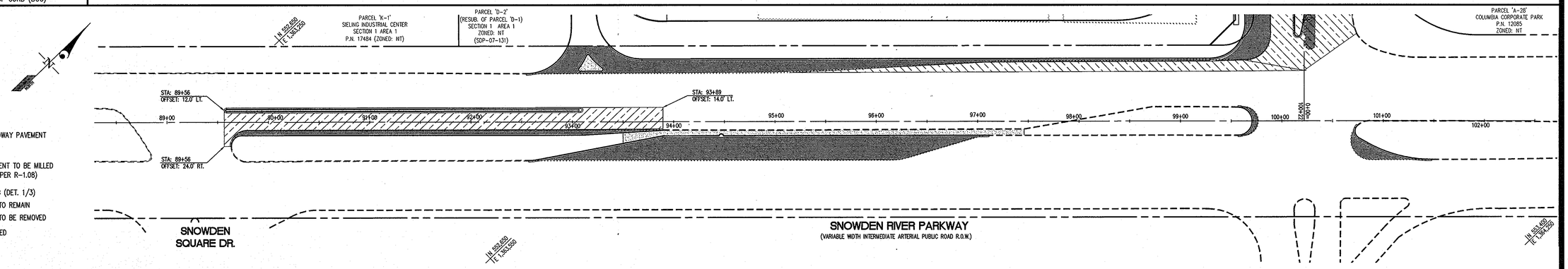
NOTE: CURB ELEVATIONS ARE BOTTOM OF CURB (BOC)



NOTES:
1. SEE SHEET 6 FOR INFORMATION ON PAVEMENT MARKING AND SIGNAGE.
2. DIMENSIONS SHOWN FOR PAVEMENT WIDTH AND CURB RADII ARE TO FACE OF CURB AT THE FLOW LINE.
3. THE AUXILIARY LANE WIDTH FROM MCGAW ROAD TO THE RIGHT-IN/RIGHT-OUT SHALL BE 12.0' WIDE AS MEASURED FROM THE EXISTING LANE MARKING.

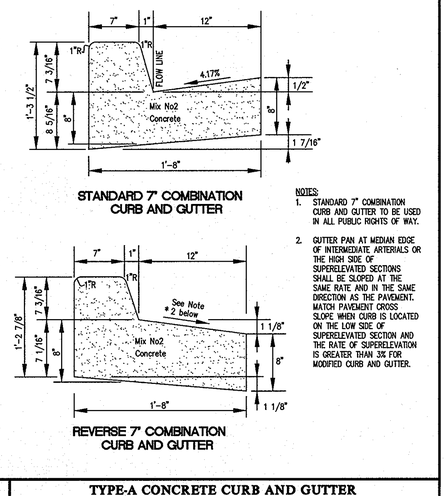
ROAD IMPROVEMENTS ON SNOWDEN RIVER PARKWAY

SCALE: 1" = 50'



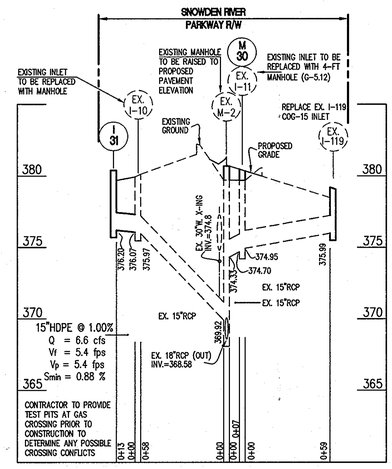
PAVING, MILLED and OVERLAID of SNOWDEN RIVER PARKWAY

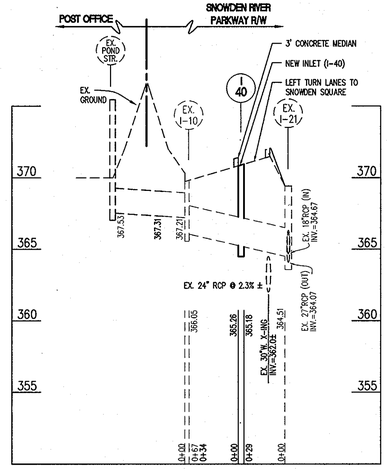
SCALE: 1" = 50'



NOTES:
1. STANDARD 7" COMBINATION CURB AND GUTTER TO BE USED IN ALL PUBLIC RIGHTS OF WAY.
2. GUTTER PAN AT MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

1	TYPE-A CONCRETE CURB AND GUTTER (STANDARD AND REVERSE) NO SCALE





STRUCTURE SCHEDULE

NO.	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STANDARD DETAIL	LOCATION	REMARKS
I-31	COG-15	4'-0"	380.52	380.22	376.12	TERMINAL	MD 374.62		
M-31	4' MANHOLE	4'-0"			376.07	375.97	G-5.12		
M-30	4' MANHOLE	4'-0"	380.43	———	374.95	374.70	G-5.12		
I-40	Double WR INLET	3'-5 1/8"	(east)	(west)	365.26	365.18	D-4.35		
I-119	COG-15	4' I.D.	379.40	379.07	375.99	TERMINAL	MD-374.62		

* FLOW LINE ELEVATIONS

NOTES:
1. ALL STRUCTURES TO BE PRECAST.
2. THE STRUCTURE SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN VALUES SHOWN ON THE SCHEDULE AND THOSE SHOWN ON THE PLAN & PROFILES, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR CLARIFICATION PRIOR TO PRECASTING.

PIPE SCHEDULE

SIZE & TYPE	QUANTITY (LF)
15" HDPE	13

PROFILES
SCALES: 1" = 5' VERT.
1" = 50' HORZ.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975, EXPIRATION DATE: MAY 26, 2012.

STATE OF MARYLAND — BRIAN K. GUTSCHICK — No. 12975 — PROFESSIONAL ENGINEER

6-11-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/4/10

Chief, Development Engineering Division — Date 8/13/10

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\07005\FDP\07005-FDP.dwg | DES. MBT | DRN. KLP | CHK.

DATE	REVISION	BY	APP'R.
6/2010	MOVE DETAILS AND CORRESPONDING SD PROFILES TO THIS SHEET		

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

(REVISED) SNOWDEN RIVER PARKWAY IMPROVEMENTS

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

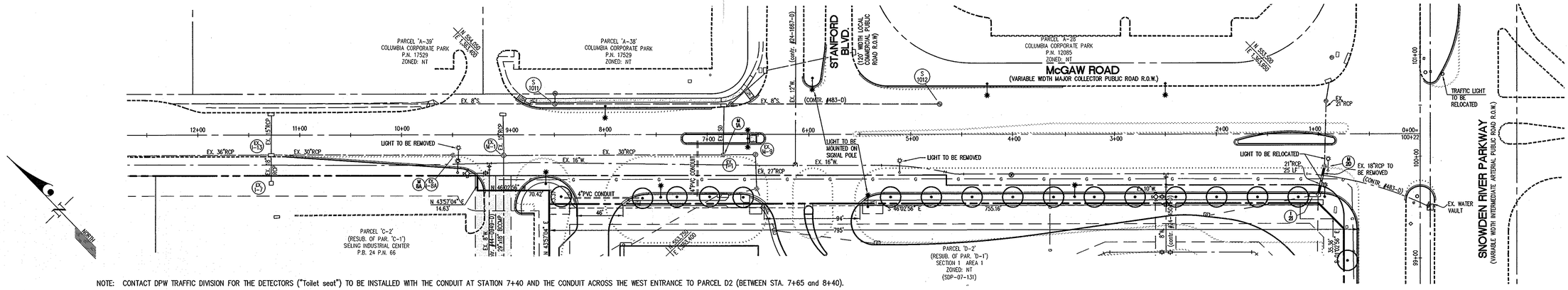
COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos. 17484 & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

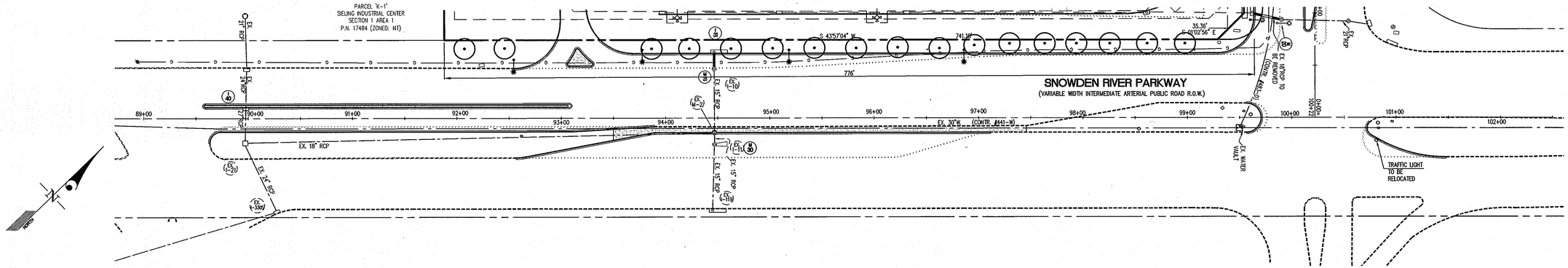
SCALE	ZONING	G. L. W. FILE No.
1"=50'	NT	07005
DATE	TAX MAP – GRID	SHEET
JUNE/2010	TM 36 – 23/24	3 of 20

F-07-208

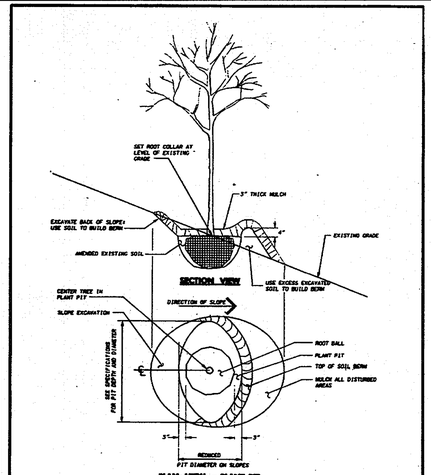


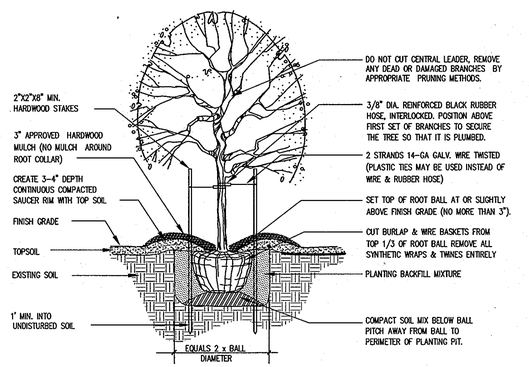
NOTE: CONTACT DPW TRAFFIC DIVISION FOR THE DETECTORS ("Toilet seat") TO BE INSTALLED WITH THE CONDUIT AT STATION 7+40 AND THE CONDUIT ACROSS THE WEST ENTRANCE TO PARCEL D2 (BETWEEN STA. 7+65 and 8+40).

STREET TREE and STREET LIGHTING RELOCATION PLAN FOR MCGAW ROAD SCALE: 1" = 50'



STREET TREE and STREET LIGHTING RELOCATION PLAN FOR SNOWDEN RIVER PARKWAY SCALE: 1" = 50'





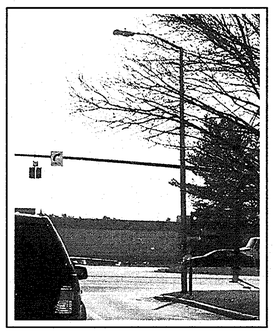
NOTE: ALL SUPPORTING DEVICES (STAKES, WIRES, ETC.) SHALL BE REMOVED AFTER 2 GROWING SEASONS.

DECIDUOUS TREE PLANTING DETAIL
FOR PLANTING MATERIAL UP TO 3 1/2" CALIPER NTS

McGAW RD. STREET LIGHT RELOCATION SCHEDULE
LIGHT @ 0+91± TO BE RELOCATED TO 0+93.8 62.00' LT.

STREET LIGHT NOTES:

1. UNLESS OTHERWISE DIRECTED BY DPW TRAFFIC DIVISION, ALL NEW STREET LIGHTS SHALL MATCH THE EXISTING STREET AT AT STATION 0+91 (250 watt HPS Vapor sag fixture mounted 30' on a bronze figerglass pole using a 12' arm). FOR THE LIGHTS AT THE ENTRANCE TO PARCEL D-2 (in the vicinity of McGAW ROAD STA. 5+42) SEE SHEET 7.
2. THE EXACT PLACEMENT OF ALL STREET LIGHTS SHALL BE DONE AS DIRECTED BY DPW TRAFFIC DIVISION.



TYPICAL McGAW RD. STREET LIGHT TO BE RELOCATED (this one is in the vicinity of station 0+91)

STREET TREE GENERAL NOTES:

1. STREET TREES ARE PROVIDED ALONG MCGAW ROAD AND SNOWDEN RIVER PARKWAY IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
2. STREET TREES SHALL BE PLANTED A MINIMUM OF 6' BEHIND THE CURB WHERE THERE ARE NO SIDEWALKS.
3. STREET TREES SHALL BE PLACED A MINIMUM OF 30 FEET FROM ALL SIGNS AND INTERSECTIONS WHEN PLANTED BETWEEN THE SIDEWALK AND CURB, AND BE LOCATED WITH CONSIDERATION OF UNDERGROUND UTILITY AND STRUCTURES; STREET TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A DRAIN INLET STRUCTURE, 5 FEET OF AN OPEN SPACE ACCESS STRIP, OR 10 FEET OF A DRIVEWAY.
4. A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY STREET TREE.

STREET TREE CALCULATIONS:

795' McGAW ROAD 'CURB' FRONTAGE (Sta. 0+60 to 8+58)
-140' DRIVEWAY OPENING
- 30' CLEARANCE FROM INTERSECTION W/ SNOWDEN RIVER PKWY.
625' AT 1:40 = 16 STREET TREES (16 ARE PROVIDED)

776' SNOWDEN RIVER PKWY 'CURB' FRONTAGE (Sta. 91+88 to 99+64)
- 30' CLEARANCE FROM INTERSECTION W/ McGAW ROAD)
746' AT 1:40 = 19 STREET TREES (16 NEW TREES + 3 EXISTING)

7 REPLACEMENT STREET TREES TO BE PLANTED IN THE SNOWDEN RIVER PKWY. MEDIAN FOR THE SAME QUANTITY DISPLACED IN ORDER TO LENGTHEN THE DOUBLE LEFT TURN LANES.

THE SURETY FOR THE 39 NEW STREET TREES (AT $300/TREE) IS $11,700.00

STREET TREE SCHEDULE FOR McGAW ROAD			
SYMBOL	QUANT.	SIZE	NAME (BOTANICAL/COMMON)
⊙	16	2.5" MIN. CAL.	ZELKOVA SERRATA 'GREEN VILLAGE'/ GREEN VILLAGE ZELKOVA

STREET TREE SCHEDULE FOR THE WEST SIDE OF SNOWDEN RIVER PKWY.			
SYMBOL	QUANT.	SIZE	NAME (BOTANICAL/COMMON)
⊙	17	2.5" MIN. CAL.	ZELKOVA SERRATA 'GREEN VILLAGE'/ GREEN VILLAGE ZELKOVA

STREET TREE SCHEDULE FOR SNOWDEN RIVER PKWY. MEDIAN			
SYMBOL	QUANT.	SIZE	NAME (BOTANICAL/COMMON)
⊙	7	2.5" MIN. CAL.	ACER RUBRUM 'ARMSTRONG'/ ARMSTRONG COLUMMAR RED MAPLE

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975, EXPIRATION DATE: MAY 26, 2012.

STATE OF MARYLAND — KEVIN K. GUTSCHICK — REG. NO. 12975 — PROFESSIONAL ENGINEER

6-11-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/6/10

Chief, Development Engineering Division — Date 8/12/10

SPECIFICATION 710 — ORDINARY CODE INDEX 710 — APPROVED — Maryland Department of Transportation STATE HIGHWAY ADMINISTRATION — Standards for Highways, Incidental Structures and Traffic Control Applications

PLANTING TREES ON SLOPES FROM 3:1 TO 2:1

STANDARD NO. MD 710.03-14

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
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TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\07005\FDP\07005-DET.dwg | DES. MBT | DRN. KLP | CHK.

DATE	REVISION	BY	APP'R.
6/2010	ADD ACCESS FROM SRP TO WEGMANS; REMOVE ALL SD PROFILES FROM THIS SHEET		

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASER:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

(REVISED) STREET TREE & LIGHTING PLAN

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos. 17484 & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	07005
DATE	TAX MAP – GRID	SHEET
JUNE/2010	TM 36 – 23/24	4 of 20

F-07-208

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPE WHERE:

A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIED OF MOISTURE AND PLANT NUTRIENTS.

C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE RESPECTIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA–SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS – SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY A AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.

B. TOPSOIL MUST BE FREE OF PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

C. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE IF 4–8 TONS/ACRE (200–400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

A. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION – SECTION I – VEGETATIVE STABILIZATION METHODS AND MATERIALS (OR SEE SEEDING NOTES).

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

A. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER & LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

1. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
2. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
3. TOPSOIL HAVING SOLUBLE SALT GREATER THAN 500 PARTS PER MILL SHALL NOT BE USED.
4. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHOTO–TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

B. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION – SECTION I – VEGETATIVE STABILIZATION METHODS AND MATERIALS (OR SEE SEEDING NOTES).

V. TOPSOIL APPLICATION

A. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.

B. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4"–8" HIGHER IN ELEVATION.

C. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" –8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER

D. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

VI. ALTERNATIVE FOR PERMANENT SEEDING – INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

A. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWNG REQUIREMENTS:

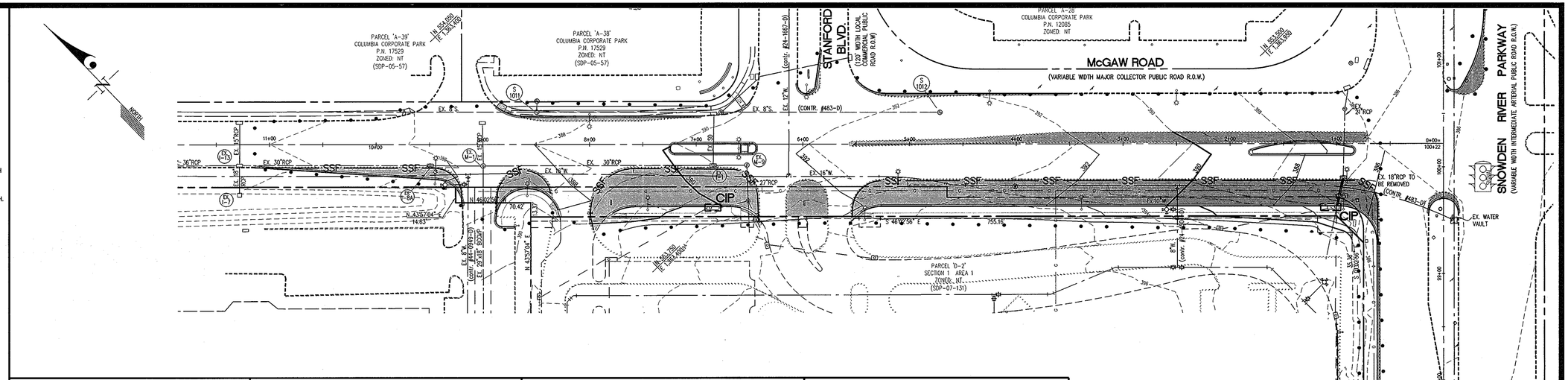
1. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.

2. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.

3. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.

B. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT A RATE OF 4LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD–VA PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.



PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG–LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES

1) PREFERRED – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FEET) AND 600 LBS PER ACRE 10–10–10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30–0–0 UREA–FORM FERTILIZER (9 LBS/1000 SQ FT).
2) ACCEPTABLE – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE OF 10–10–10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1–1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT–TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10–10–10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2–1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1–1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED, WEED–FREE, SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

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

HOWARD S.C.D. — DATE 7/29/10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/12/10

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975, EXPIRATION DATE: MAY 26, 2012.

STATE OF MARYLAND — CLIFTON K. GUTSCHICK — REG. NO. 12975 — PROFESSIONAL ENGINEER

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (410) 313–1855

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES AND PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDINGS AND MULCHING (SEC. G). TEMPORARY STABILIZATION, WITH MULCH ALONE, CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

TOTAL AREA OF SITE	:	4.00± ACRES (L.O.D.)
AREA DISTURBED	:	3.84± ACRES
AREA TO BE ROOFED OR PAVED	:	3.41± ACRES
AREA TO BE VEGETATIVELY STABILIZED	:	0.43± ACRES
TOTAL CUT	:	1,850± CU. YDS.
TOTAL FILL	:	250± CU. YDS.
OFF–SITE WASTE/BORROW AREA LOCATION	:	TO BE DETERMINED.

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO 3 PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY, WHICHEVER IS SHORTER.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON–SITE INSPECTION BY THE HSCD."

Stephen Leaty — SIGNATURE OF DEVELOPER/BUILDER — 6/11/10 DATE

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

6-11-10 DATE

Dust Control

Definition

Controlling dust blowing and movement on construction sites and roads.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off–site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement where on and off–site damage is likely without treatment.

Specifications

Temporary Methods

1. Mulches – See standards for vegetative stabilization with mulches only, mush should be crimped or tacked to prevent blowing.
2. Vegetative Cover – See standards for temporary vegetative cover.
3. Tillage – To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel–type plows spaced about 12" apart, spring–toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
4. Irrigation – This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed At no time should the site be irrigated to the point that runoff begins to flow.
5. Barriers – Solid board fences, silt fences, snow fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angle to prevailing currents at intervals at about ten times their height are effective in controlling soil blowing.
6. Calcium Chloride – Apply at rates that will keep surface moist. May need treatment.

Permanent Methods

1. Permanent Vegetation – See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
2. Topsoiling – Covering with less erosive soil material. See standards for top soil.
3. Stone – Cover surface with crushed stone or gravel.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.
2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA_ARS.

SEQUENCE OF CONSTRUCTION

1. APPLY FOR A GRADING PERMIT AND SCHEDULE A PRE–CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR (SCI). THE PERMIT IS ISSUED AT THE PRE–CON MEETING.
2. INSTALL THE SUPER SILT FENCE (–SSF–) AND IMPLEMENT WORK ZONE TRAFFIC CONTROL MEASURES.

MCGAW ROAD SOUTH SIDE WIDENING AND EXTENSION OF SNOWDEN RIVER PARKWAY LEFT TURN LANES:

3. GRADE THE AREA BEHIND THE –SSF– TO THE APPROPRIATE SUB–GRADE AND RELOCATE/ADJUST THE UTILITIES BETWEEN THE –SSF– AND THE NEW CURB LINE. PROVIDE INLET PROTECTION AT (McGaw RD) INLETS I–21, I–34 and (Snowden River Pkwy) INLET I–29 AS SOON AS THEY ARE INSTALLED.
4. INSTALL THE NEW CURB AND REMOVE JUST ENOUGH EXISTING CURB AT THE TIE–IN LOCATIONS.
5. REMOVE THE CURB SECTION ADJACENT TO THE INLETS TO BE REPLACED AS MANHOLE M–20 AND M–1A, THEN REPLACE THESE INLETS WITH MANHOLES (1 DAY).
6. RELOCATE THE –SSF– BEHIND THE NEW CURB LINE AND REMOVE REST OF THE EXISTING CURB THEN IMMEDIATELY INSTALL THE GRANULAR BASE AND BITUMINOUS BASE COURSE FOR WIDENING IN ACCORDANCE WITH R–1.08 (2 DAYS).

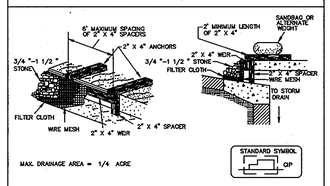
OTHER MODIFICATIONS TO MCGAW RD. AND SNOWDEN RIVER PKWY
(CAN BE CONCURRENT WITH SOC #3–6)

7. REMOVE THE EXISTING MEDIAN ISLAND AND PATCH THIS AREA IN ACCORDANCE WITH R–10.01 (2 DAYS).
8. REMOVE THE EXISTING KINKED CURB SECTIONS ON THE NORTH SIDE OF MCGAW BETWEEN STA. 34+50 TO 54+50 AND 64+86 TO 84+88 AND REPLACE THEM WITH A STRAIGHT NEW CURB LINE AND WIDEN THIS SIDE PER R–1.08 (2 DAYS).
9. SAW CUT AND REMOVE THE EXISTING PAVEMENT THEN INSTALL THE NEW MEDIAN ISLAND (2 DAYS).

OTHER MODIFICATIONS SNOWDEN RIVER PARKWAY MEDIAN IN VICINITY OF STATION 110+00
(CAN BE CONCURRENT WITH SOC #3–9)

10. RELOCATE TRAFFIC SIGNAL POLE AS DIRECTED BY DPW TO A NEW LOCATION BEHIND THE NEW CURB LINE.
11. INSTALL THE NEW CURB AND REMOVE JUST ENOUGH EXISTING CURB AT THE TIE–IN LOCATIONS (1 DAY).
12. REMOVE THE REMAINDER OF THE EXISTING CURB AND WIDEN THE PAVEMENT PER R–1.08 (2 DAYS).

DETAIL 23C
CURB INLET PROTECTION (COG OR COS INLETS)

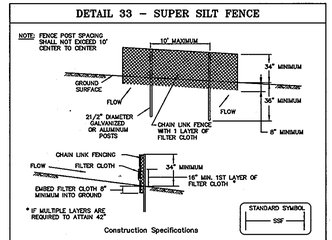


Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to a 6" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).
4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H – 16 – 68	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 – SUPER SILT FENCE



Construction Specifications

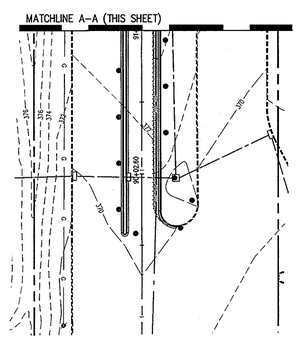
1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

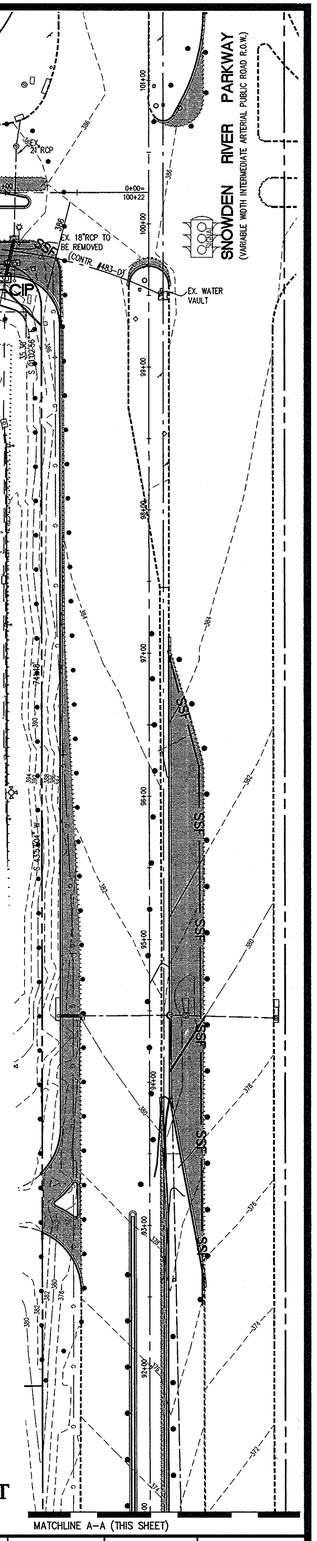
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H – 88 – 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CURB (DET. 1/3)
- EXISTING CURB TO REMAIN
- EXISTING CURB TO BE REMOVED
- SSF — PROPOSED SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- CIP — CURB INLET PROTECTION



THIS PLAN IS FOR SEDIMENT CONTROL PURPOSES ONLY



GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301–421–4024 BALT: 410–880–1820 DC/VA: 301–989–2524 FAX: 301–421–4186

\DRAWINGS\07005\FDP\07005–SNE.dwg | DES. MBT | DRN. KLP | CHK.

DATE	REVISION	BY	APP'R.
6/2010	ADD MATCHLINE A–A AND REVISED SRP INFORMATION		

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585–464–4600 EXT. 6833

(REVISED) SEDIMENT CONTROL PLAN, NOTES & DETAILS

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

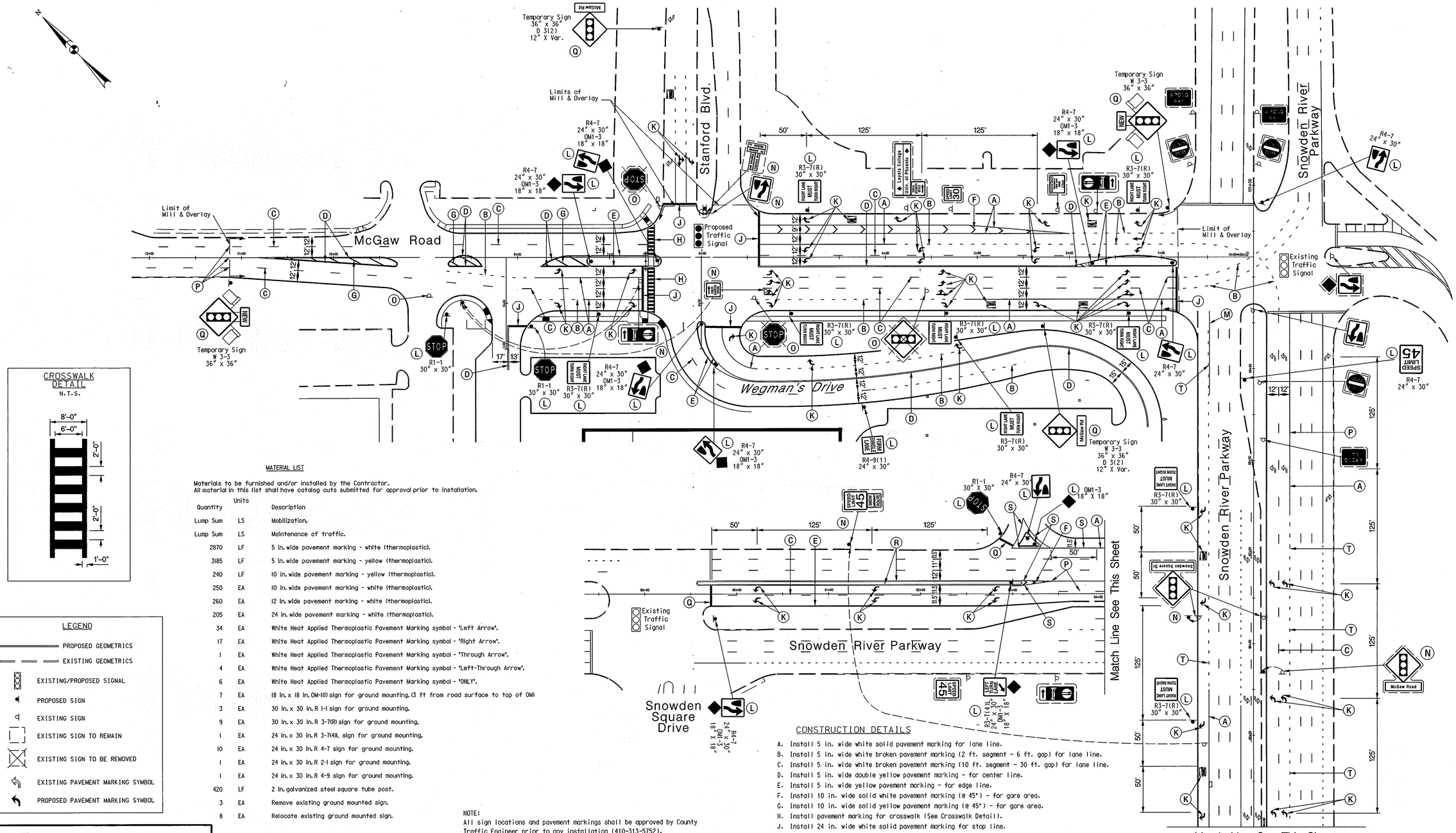
COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C–1, PLAT BOOK 24 FOLIO 66 and PARCEL D–1, PLAT Nos.17484 & 21176)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NT	07005
DATE	TAX MAP – GRID	SHEET
JUNE/2010	TM 36 – 23/24	5 of 20

F-07-208


McGaw Road
Stanford Blvd.
Wegman's Drive
Snowden River Parkway
Limits of Mill & Overlay
Limit of Mill & Overlay
Proposed Traffic Signal
Existing Traffic Signal
Snowden Square Drive
Match Line See This Sheet
Match Line See This Sheet
Temporary Sign W 3-3 36" x 36"
Temporary Sign W 3-3 36" x 36" D 3(2) 12" X Var.
R4-7 24" x 30" OM1-3 18" x 18"
R3-7(R) 30" x 30"
R1-1 30" x 30"
R4-9(1) 24" x 30"
R3-7(4)L 24" x 30"
OM1-3 18" x 18"
STOP
NEW
SPEED LIMIT 45 SHOW ROUTES
50'
125'
125'
17'
13'
15'
15'
12'
12'
12

Wisconsin Road is considered to run in a east/west direction.

PROPOSED SIGNS

17,21,22,25 — R 3-5(L) 30" x 36"

18 — D-3(1) 16" x Var.

19,24,27,29 — R 3-5(R) 30" x 36"

20 — R 3-4 24" x 24"

23 — D-3(1) 16" x Var.

26,28 — R 3-6(L) 30" x 36"

30,31 — R 10-3(1) 9" x 15" (To Be Installed With Pushbutton)

32,33 — W 3-3 36" x 36" D 3(2) 12" X Var.

34,35 — W 3-3 36" x 36" D 3(2) 12" X Var.

PROPOSED SIGNALS

1,2,5,6 — 12"

3,4,7,8,10 — 12"

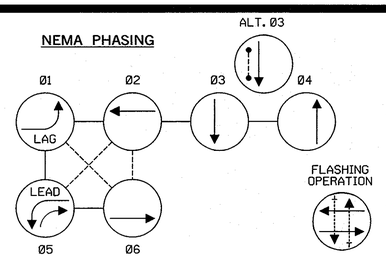
9,11,12 — 12"

13 — 12"

14,15 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

a,b,c,d,e,f — PROPOSED VIDEO DETECTION

NEMA PHASING



PHASE Ø1 WILL LAG BEHIND PHASES Ø2 & Ø6

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

LEGEND

PROPOSED		EXISTING
	OVERHEAD DETECTION CAMERA	
	MAST ARM	
	STEEL POLE	
	TRAFFIC SIGNAL HEAD	
	PEDESTRIAN SIGNAL HEAD	
	SIGN	
	STREET LIGHT	
	HANDBOX	
	CONDUIT	
	VIDEO DETECTION ZONE	
	LOOP DETECTOR	
	CONTROLLER	
	CONTROLLER WITH PAD	
	WOOD POLE	
	FIRE HYDRANT	
	MANHOLE	
W.V.	WATER VALVE	W.V.
G.V.	GAS VALVE	G.V.
	GEOMETRICS	

CONSTRUCTION DETAILS

A. Install 27 ft. steel pole with a 50 ft. mast arm with signal heads, signs, overhead video detection, pedestrian signal, pushbutton and sign. (Note: One 3 in. PVC schedule 80 conduit bend).

B. Install 27 ft. steel pole with a 60 ft. mast arm with signal heads, signs, 20 ft. lighting arm, 250 watt SAG lamp and luminaire, and overhead video detection (Note: One 3 in. PVC schedule 80 conduit bend).

C. Install concrete foundation with a 27 ft. steel pole with twin 50 ft. and 70 ft. mast arms with signal heads, signs, 20 ft. lighting arm, 250 watt SAG lamp and luminaire, and overhead video detection. (Note: One 3 in. PVC schedule 80 conduit bend).

D. Install 10 ft. steel pedestal pole with breakaway base with signal head. (Note: One 3 in. PVC schedule 80 conduit bend).

E. Install 8 ft. steel pedestal pole with breakaway base with pedestrian signal, pushbutton, and sign. (Note: One 3 in. PVC schedule 80 conduit bend).

F. Install base mounted cabinet and controller, concrete foundation, ground rods and all necessary equipment for an electrical service, two 30 amp disconnect switches with trough. (Note: Two-4 in. PVC, and Two-2 in. PVC schedule 80 conduit bends).

G. Install 3 in. PVC schedule 80 electrical conduit - trenched.

H. Install 4 in. PVC schedule 80 electrical conduit - trenched.

J. Install 4 in. PVC schedule 80 electrical conduit - bored.

K. Install handbox.

L. Install ground mounted W3-3 as shown on plans.

M. See Interconnect Plan Sheet No. 9 of 16 for details.

N. Install 4 in. PVC schedule 80 electrical conduit - trenched for electric service.

O. Proposed street light to be installed by Howard County (contact Parris Zirkenbach 410-313-5752).

P. Install 4 in PVC schedule 40 duct @ 3 in. cover w/pull string. All bends to be 3 ft. radius min., tape ends of duct. Stop duct 3 ft. before transformer and meter location.

GENERAL NOTES

1. Video camera location/aligning shall be coordinated with the County engineer.
2. The contractor shall verify all proposed pole and cabinet locations prior to installation.
3. For final pavement markings refer to the pavement marking plans, other than those detailed on the plan. All pavement markings shall be installed in accordance with County Standards.
4. All existing traffic signal equipment removed shall become the property of the signal contractor upon completion of the new signal.
5. All proposed luminaires shall be supplied with a photocell.
6. The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly label each cable.
7. The contractor shall verify all underground utilities prior to installing proposed signal equipment. If any utility conflicts should arise the contractor shall contact the project engineer.
8. All traffic signal foundations shall be installed at the final sidewalk or curb grade for closed sections, highest roadway profile grade for open sections, to meet clearances as specified in MD 816.03, MD 818.01, MD 818.02, MD 818.04. The contractor shall verify ultimate grades prior to the installation of all signal equipment.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/13/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
D — D	STORM DRAIN
TV — TV	CABLE TELEVISION
E — E	ELECTRIC CABLES
T — T	TELEPHONE CABLES
A — A	AERIAL CABLES

The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600 1-800-583-8411 Fax: 410-931-6601
www.trafficgroup.com
"Merging Innovation and Excellence"

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

TRAFFIC SIGNAL PLAN (McGAW ROAD at STANFORD BOULEVARD)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT No. 17484 & 21178)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

SCALE	ZONING	TTG FILE No.
1" = 20'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE /2010	TM 36 - 23/24	7 of 20

F-07-208

Tuesday, June 22, 2010 AT 06:34 AM

PROJECT DESCRIPTION

GENERAL

This project involves the installation of a new traffic control signal at the intersection of McGaw Road at Stanford Boulevard, Howard County, Maryland.
McGaw Road is considered to run in an East/West direction.

INTERSECTION OPERATION

The intersection is to operate in a NEMA 6 phase, full-traffic-actuated mode. There will be an exclusive left turn phase for the eastbound and westbound movements of McGaw Road. They will operate in a Lead (westbound) and a Lag (eastbound) mode. The through movements will operate concurrently.
The Stanford Boulevard/Wegman's Entrance through movements will operate in a side street split phase mode with a actuated pedestrian movement across the west leg of the intersection.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, video detection equipment, (telemetry interface equipment) and (1) four-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

EQUIPMENT LIST

A. Equipment to be furnished by the County when reimbursed by developer or contractor.

Quantity	Units	Description
1	EA	Traffic signal controller, base mounted cabinet, video detection interface, telemetry interface equipment, and one (1) four-channel loop detector amplifiers
5	EA	12 in., one-way, three section L.E.D. (R,Y,G) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
4	EA	12 in., one-way, three section L.E.D. (RA,YA,GA) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	12 in., one-way, three section L.E.D. (RA,YA,GA) adjustable yellow faced traffic signal head with post top mounting hardware and tunnel visors.
3	EA	12 in., one-way, four section L.E.D. (R,Y,G,GA) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	12 in., one-way, five section L.E.D. (R,Y,YA,G,GA) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	16 in.,one-way, one section L.E.D. (Countdown indications) adjustable pedestrian signal head with pole mounting hardware and cut-away visors.
1	EA	16 in.,one-way, one section L.E.D. (Countdown indications) adjustable pedestrian signal head with post top mounting hardware and cut-away visors.
6	EA	Video Detection Camera and cable. (1 - 100 LF, 1 - 200 LF, 1 - 300 LF, 1 - 400 LF, 2 - 500 LF)
2	EA	Pedestrian pushbutton assembly with pushbutton sign.

B. Equipment to be furnished and/or installed by the contractor.

Quantity	Units	Description
Lump Sum	LS	Mobilization.
Lump Sum	LS	Maintenance of traffic.
1	EA	* 27 ft. steel mast arm pole with a 50 ft. mast arm (pole to be painted brown in accordance with Tnemec standards and specifications).
1	EA	* 27 ft. steel mast arm pole with a 60 ft. mast arm (pole to be painted brown in accordance with Tnemec standards and specifications).
1	EA	* 27 ft. steel twin mast arm pole with 50 ft. and 70 ft. mast arms (pole to be painted brown in accordance with Tnemec standards and specifications).
1	EA	* 10 ft. steel pedestal pole with break away transformer base (pole to be painted brown in accordance with Tnemec standards and specifications).
1	EA	* 8 ft. steel pedestal pole with break away transformer base (pole to be painted brown in accordance with Tnemec standards and specifications).
2	EA	16 in. x Var. D-3(1) sign with mast arm mounting hardware.
4	EA	12 in. x Var. D-3(2) sign for ground mounting.
4	EA	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
4	EA	30 in. x 36 in. R 3-5(R) sign with mast arm mounting hardware.
2	EA	30 in. x 36 in. R 3-6(L) sign with mast arm mounting hardware.
2	EA	36 in. x 36 in. W 3-3 "NEW" sign for ground mounting.
2	EA	36 in. x 36 in. W 3-3 sign for ground mounting.
2	EA	20 ft. luminaire arm.
2	EA	250 Watt SAG lamp and luminaire.
6	CY	Test pit excavation.
6	EA	Handbox.
45	LF	1-conductor electrical cable (No. 8 A.W.G.).
480	LF	2-conductor electrical tray cable (No. 12 A.W.G.).
510	LF	2-conductor electrical cable (No. 14 A.W.G.).
520	LF	3-conductor electrical cable (No. 14 A.W.G.).
150	LF	5-conductor electrical cable (No. 14 A.W.G.).
2275	LF	7-conductor electrical cable (No. 14 A.W.G.).
400	LF	Stranded THWN green ground wire (No. 6 A.W.G.).
270	LF	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
30	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
310	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
16.5	CY	Concrete foundation for traffic signal equipment.
5	EA	Ground rod - ¾ in. diameter x 10 ft. length.
1	EA	Electrical utility service equipment 120/240 V, one phase, three wire system) for an underground) electrical power service.
72	LF	2 in. galvanized steel, perforated, square tube post (14 gauge) inserted into a 2.5' galvanized steel, perforated, square tube sleeve (12 gauge) 3' long with a galvanized steel cap on top of post.

C. Equipment to be installed by the County signal shop when reimbursed by the developer or contractor.

Quantity	Units	Description
1	EA	Battery back-up system.

* Paint System Requirements:
Color shall conform to the following Federal Standard #595a-20040 - Brown.
A) Primer: shall be an Epoxy Polyamide meeting the requirements of Section 912.03.02.
B) Finish Coat: shall be an Aliphatic Polyurethane meeting requirements of Section 912.04.02.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

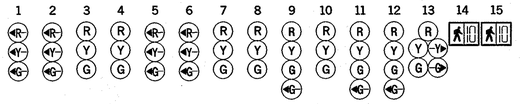
Chief, Development Engineering Division — Date 8/12/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/23/10

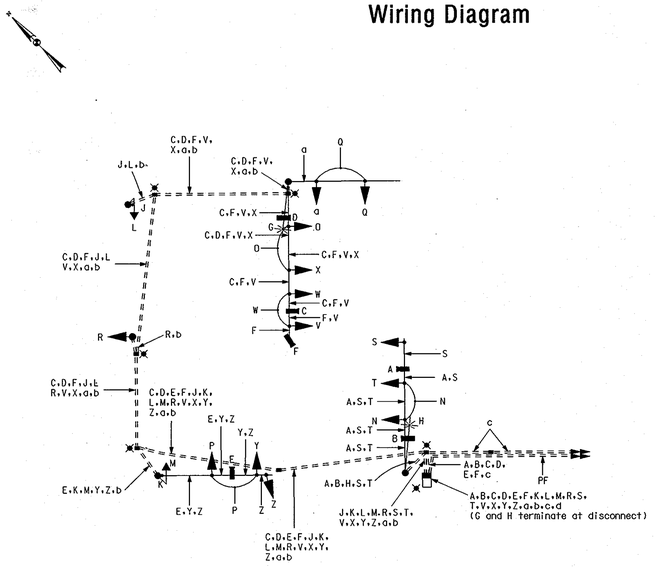
STATE OF MARYLAND · JOSEPH A. TANSEGNO · NO. 25547 · REGISTERED PROFESSIONAL ENGINEER

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
PHASE 2 AND 5	←R–	←R–	R	R	←G–	←G–	G	G	R	R	R	R	R→ G	DW	DW	
5 CHANGE	←R–	←R–	R	R	←Y–	←Y–	G	G	R	R	R	R	R→ Y	DW	DW	
PHASE 2 AND 6	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R	R	DW	DW	
2 CHANGE	←R–	←R–	G	G	←R–	←R–	Y	Y	R	R	R	R	R	DW	DW	
PHASE 1 AND 6	←G–	←G–	G	G	←R–	←R–	R	R	R	R	R	R	R	DW	DW	
1 AND 6 CHANGE	←Y–	←Y–	Y	Y	←R–	←R–	R	R	R	R	R	R	R	DW	DW	
PHASE 3	←R–	←R–	R	R	←R–	←R–	R	R	←G G–	G	R	R	R	DW	DW	
3 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	Y	Y	R	R	R	DW	DW	
PHASE ALT 3	←R–	←R–	R	R	←R–	←R–	R	R	←G G–	G	R	R	R	WK	WK	
PED CLEARANCE	←R–	←R–	R	R	←R–	←R–	R	R	←G G–	G	R	R	R	FL/DW	FL/DW	
ALT 3 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	Y	Y	R	R	R	DW	DW	
PHASE 4	←R–	←R–	R	R	←R–	←R–	R	R	R	R	←G–	←G–	G	DW	DW	
4 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	R	R	Y	Y	Y	DW	DW	
FLASHING OPERATION	FL/ ←R–	FL/ ←R–	FL/Y	FL/Y	FL/ ←R–	FL/ ←R–	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	

Wiring Diagram



KEY

A, D, B, E, C, F } Video Detector Cable

G } 2-Conductor Tray Cable
H } (No. 12 A.W.G.)

J } 2-Conductor Electrical
K } Cable (No. 14 A.W.G.)

L } 3-Conductor Electrical
M } Cable (No. 14 A.W.G.)

N, O, P, Q, W } 5-Conductor Electrical Cable (No. 14 A.W.G.)

R, X, S, Y, T, Z, V, a } 7-Conductor Electrical Cable (No. 14 A.W.G.)

b — Bare Copper Ground Wire (No. 6 A.W.G.)

c — 6-Pair Voice Grade Telemetry Interconnect Cable (No. 24 A.W.G.) and 7-Conductor Electrical Cable (No. 14 A.W.G.) (Stanford Blvd - Snowden River Pkwy Run)

d — 1-Conductor (No. 8 A.W.G.) (3 pieces) for Traffic Signal Electrical Service

PF — Proposed Electrical Service By BG&E (To be determined in the field)

✱ — Proposed Grounding Rod

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
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CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

GENERAL INFORMATION PLAN (McGAW ROAD at STANFORD BOUELVARD)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

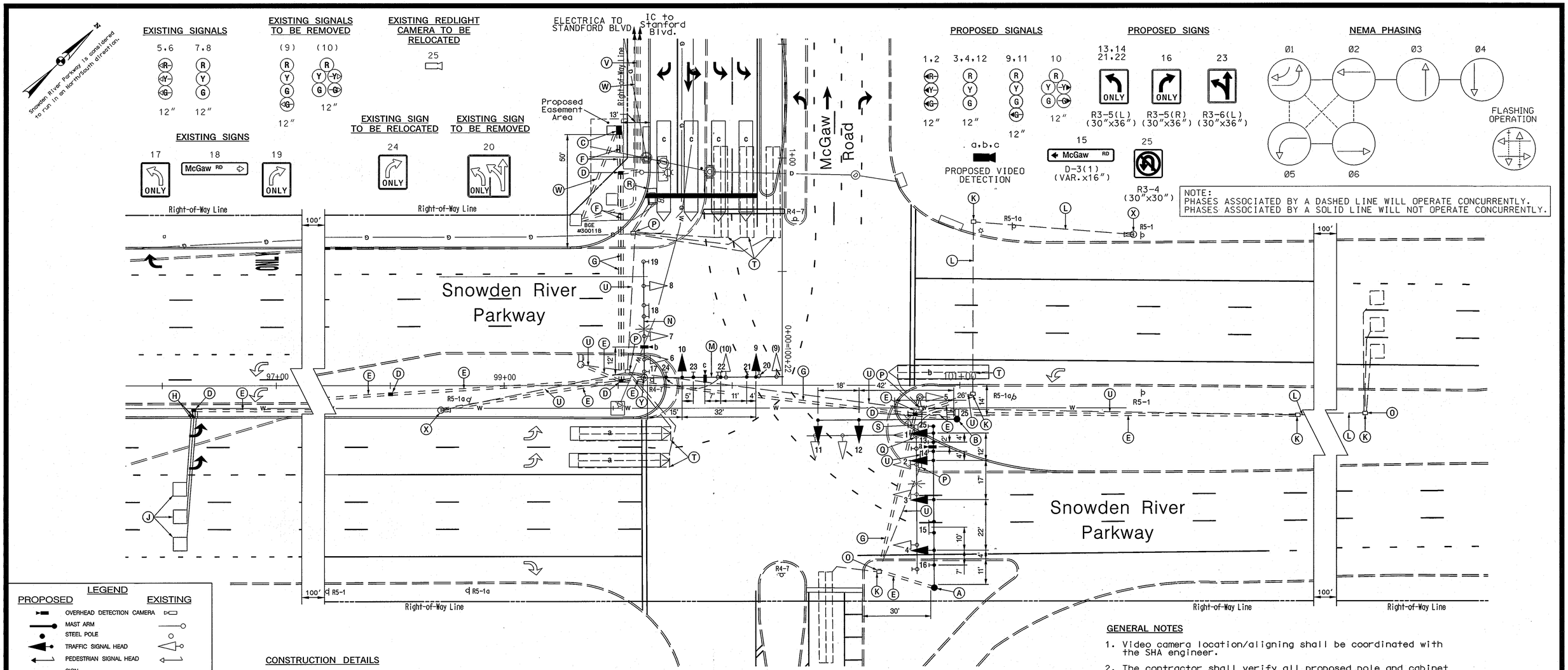
(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT No. 17484 & 21178)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

SCALE	ZONING	TTG FILE No.
N/A	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE /2010	TM 36 - 23/24	8 of 20

Monday, June 21, 2010 AT 02:13 PM

F-07-208



Existing Entrance

LEGEND

PROPOSED		EXISTING
➤■	OVERHEAD DETECTION CAMERA	▷○
●——●	MAST ARM	——○
●	STEEL POLE	○
◀——	TRAFFIC SIGNAL HEAD	◁—○
◀——	PEDESTRIAN SIGNAL HEAD	◁——
⊢	SIGN	⊢
✳	STREET LIGHT	✳
■	HANDBOX	□
= = =	CONDUIT	— — —
▭	VIDEO DETECTION ZONE	▭
▭	LOOP DETECTOR	▭
▨	CONTROLLER	▭
▮	CONTROLLER WITH PAD	▯
●	WOOD POLE	○
⋈	FIRE HYDRANT	⋈
Ⓜ	MANHOLE	Ⓜ
• W.V.	WATER VALVE	○ W.V.
• G.V.	GAS VALVE	○ G.V.
═══	GEOMETRICS	═══

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/6/10

Chief, Development Engineering Division — Date 8/3/10

CONSTRUCTION DETAILS

A. Install a 27 ft. steel pole with a 70 ft. mast arm with signal heads, signs, overhead video detection (Note: One 3 in. PVC schedule 80 conduit bend).

B. Install a 27 ft. steel pole with a 60 ft. mast arm with signal heads, 20 ft. lighting arm, 250 watt HPS luminaire, overhead video detection and relocated redlight camera. (Note: One 3 in. PVC schedule 80 conduit bend).

C. Install base mounted cabinet and controller, concrete foundation, ground rod and all necessary equipment for an electrical service, two 30 amp disconnect switches with trough. (Note: Two-4 in. PVC, and Two-2 in. PVC schedule 80 conduit bends).

D. Install handbox.

E. Install 3 in. PVC schedule 80 electrical conduit - trenched.

F. Install 4 in. PVC schedule 80 electrical conduit - trenched.

G. Install 4 in. PVC schedule 80 electrical conduit - bored.

H. Install 1 in. galvanized steel electrical conduit (for loop detector wire sleeve).

J. Install 6 ft. x 6 ft. vehicle loop detector (4 turns).

K. Use existing handbox.

L. Use existing conduit.

M. Use existing mast arm, remove existing signal heads and signs. Install signal heads, signs and overhead video detection.

N. Use existing mast arm, install overhead video detection.

O. Use existing handbox, splice new 2-conductor cable to existing aluminum shielded cable.

P. Remove existing handbox.

Q. Remove existing pole, mast arm, all associated equipment and foundation 12 in. below grade and backfill.

R. Remove existing base mounted cabinet and foundation 12 in. below grade and backfill. Remove existing controller, relocate in new cabinet.

S. Relocate existing redlight camera equipment to proposed signal pole.

T. Disconnect and remove existing loop detector cable from conduits, handbox, signal structures and controller.

U. Cap and abandon existing conduit.

V. See Interconnect Plan Sheet No. 9 of 16 for details.

W. Install 4 in PVC schedule 40 duct @ 3 in. cover w/pull string for electrical service. All bends to be 3 ft. radius min., tape ends of duct. Stop duct 3 ft. before transformer and meter location.I

X. Install new redlight camera cable from camera pole to new cabinet.

Y. Install new Radio interconnect cable from antenna to new cabinet.

GENERAL NOTES

1. Video camera location/aligning shall be coordinated with the SHA engineer.
2. The contractor shall verify all proposed pole and cabinet locations prior to installation.
3. For final pavement markings refer to the pavement marking plans, other than those detailed on the plan. All pavement markings shall be installed in accordance with County Standards.
4. All existing traffic signal equipment removed shall become the property of the signal contractor upon completion of the new signal.
5. All proposed luminaires shall be supplied with a photocell.
6. The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly label each cable.
7. The contractor shall verify all underground utilities prior to installing proposed signal equipment. If any utility conflicts should arise the contractor shall contact the project engineer.
8. All traffic signal foundations shall be installed at the final sidewalk or curb grade for closed sections, highest roadway profile grade for open sections, to meet clearances as specified in MD 816.03, MD 818.01, MD 818.02, MD 818.04.The contractor shall verify ultimate grades prior to the installation of all signal equipment.

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH M. CALDWELL — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
D — D	STORM DRAIN
TV — TV	CABLE TELEVISION
E — E	ELECTRIC CABLES
T — T	TELEPHONE CABLES
A — A	AERIAL CABLES

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
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CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

TRAFFIC SIGNAL PLAN (SNOWDEN RIVER PARKWAY at McGAW ROAD)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos 17484 & 21178)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

SCALE	ZONING	TTG FILE No.
1" = 20'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE /2010	TM 36 - 23/24	9 of 20

F-07-208

Monday, June 21, 2010 AT 02:17 PM

PROJECT DESCRIPTION

GENERAL

This project involves the modification of the existing traffic control signal at the intersection of Snowden River Parkway at McGaw Road, Howard County, Maryland.
Snowden River Road is considered to run in a North/South direction.

INTERSECTION OPERATION

The intersection operates in a NEMA 6 phase, full-traffic-actuated mode. There are existing exclusive left turn phases for both north and southbound movements of Snowden River Parkway. The through movements operate concurrently. The side roads opperate in a side street split phase mode.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, video detection equipment, (telemetry interface equipment) and (2) four-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

EQUIPMENT LIST

A. Equipment to be furnished by the County when reimbursed by Developer or Contractor.

Quantity	Units	Description
1	EA	Traffic signal controller, base mounted cabinet, video detection interface, telemetry interface equipment, and one (1) four-channel loop detector amplifiers
3	EA	12 in., one-way, three section L.E.D. (R,Y,G) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	12 in., one-way, three section L.E.D. (RA,YA,GA) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	12 in., one-way, four section L.E.D. (R,Y,G,GA) adjustable yellow faced traffic signal head with mast arm mounting hardware and tunnel visors.
3	EA	Video Detection Camera and cable. (1 - 200 LF, 1 - 400 LF, 1 - 500 LF)

C. Equipment to be installed by the County signal shop when reimbursed by the developer or contractor.

Quantity	Units	Description
1	EA	Battery back-up system.

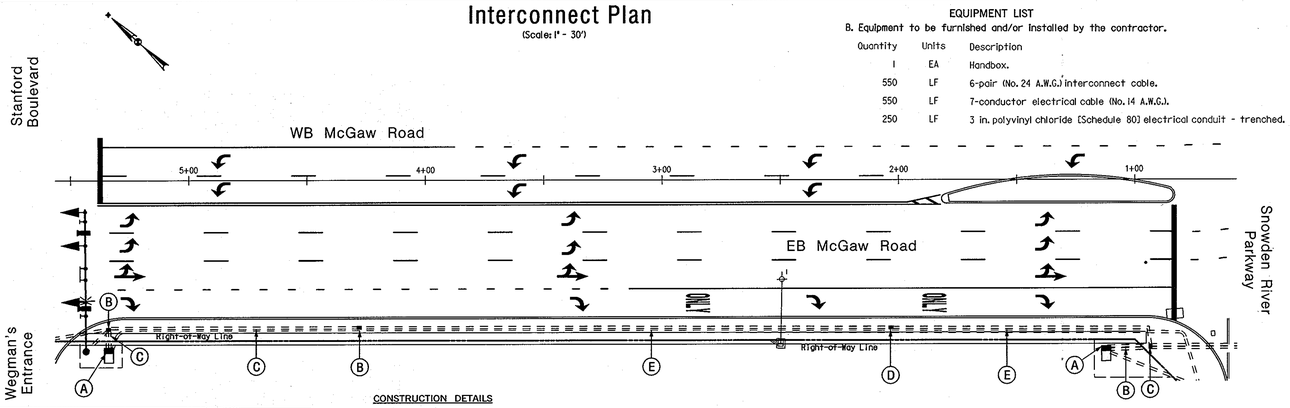
B. Equipment to be furnished and/or installed by the contractor.

Quantity	Units	Description
Lump Sum	LS	Mobilization.
Lump Sum	LS	Maintenance of traffic.
1	EA	* 27 ft. steel mast arm pole with a 60 ft. mast arm (to be painted brown in accordance with Tnemec standards and specifications).
1	EA	* 27 ft. steel mast arm pole with a 70 ft. mast arm (to be painted brown in accordance with Tnemec standards and specifications).
1	EA	16 in. x Var. D-3(1) sign with mast arm mounting hardware.
1	EA	30 in. x 30 in. R 3-4 sign with mast arm mounting hardware.
4	EA	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
1	EA	30 in. x 36 in. R 3-5(R) sign with mast arm mounting hardware.
1	EA	30 in. x 36 in. R 3-6(L) sign with mast arm mounting hardware.
1	EA	20 ft. luminaire arm.
1	EA	250 Watt SAG lamp and luminaire.
3	CY	Test pit excavation.
6	EA	Handbox.
195	LF	Sawcut for signal loop detector.
560	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
45	LF	1-conductor electrical cable (No. 8 A.W.G.).
3325	LF	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
335	LF	2-conductor electrical tray cable (No. 12 A.W.G.).
800	LF	3-conductor electrical cable (No. 14 A.W.G.).
260	LF	5-conductor electrical cable (No. 14 A.W.G.).
940	LF	7-conductor electrical cable (No. 14 A.W.G.).
870	LF	12-pair Laser cable (cable shall be purchased from Lasercraft). Contact Jacquelyn Nuygen at 410-884-5882.
205	LF	Radio interconnect cable.
375	LF	Stranded THWN green ground wire (No. 6 A.W.G.).
80	LF	1 in. galvanized steel electrical conduit for loop detector wire sleeve.
550	LF	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
50	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
385	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
11.5	CY	Concrete foundation for traffic signal equipment.
4	EA	Ground rod - ¾ in. diameter x 10 ft. length.
1	EA	Electrical utility service equipment (120/240 V, one phase, three wire system) for an underground electrical power service.
4	EA	Loop detector splice.
Lump Sum	LS	Relocate signal equipment.
Lump Sum	LS	Remove and salvage signal equipment.
550	LF	4 in. polyvinyl chloride (Schedule 40) w/pull string.

* Paint System Requirements:
Color shall conform to the following Federal Standard #595a-20040 - Brown.
A) Primer: shall be an Epoxy Polyamide meeting the requirements of Section 912.03.02.
B) Finish Coat: shall be an Aliphatic Polyurethane meeting requirements of Section 912.04.02.

Interconnect Plan

(Scale: 1" - 30')



EQUIPMENT LIST

B. Equipment to be furnished and/or installed by the contractor.

Quantity	Units	Description
1	EA	Handbox.
550	LF	6-pair (No. 24 A.W.G.) interconnect cable.
550	LF	7-conductor electrical cable (No. 14 A.W.G.).
250	LF	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.

CONSTRUCTION DETAILS

A. Use cabinet/controller (installed as part of traffic signal plan).
B. Use handbox (installed as part of traffic signal plan).
C. Use conduit (installed as part of traffic signal plan).
D. Install handbox.
E. Install 3 in. PVC schedule 80 electrical conduit - trenched.

NOTE

1. Install 6-pair (No. 24 A.W.G.) interconnect cable with a 7 conductor electrical cable (No. A.W.G.) from cabinet/controller at McGaw Road and Stanford Drive to the cabinet/controller at Snowden River Parkway and McGaw Road (Approx 550 LF).

LEGEND

PROPOSED

- OVERHEAD DETECTION CAMERA
- MAST ARM
- STEEL POLE
- TRAFFIC SIGNAL HEAD
- HANDBOX
- CONDUIT
- VIDEO DETECTION ZONE
- CONTROLLER WITH PAD
- GEOMETRICS

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

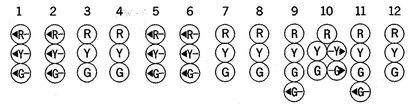
Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

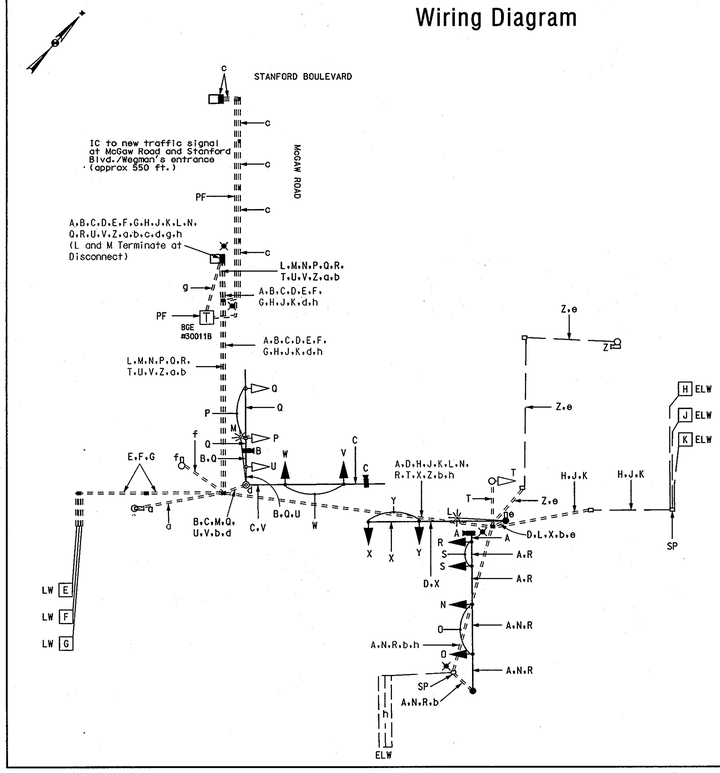
Chief, Development Engineering Division — Date 8/13/10

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 AND 5	←G–	←G–	R	R	←G–	←G–	R	R	R	R/–G→	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	←G–	←G–	G	G	←R–	←R–	R	R	R	R/–G→	R	R
1 CHANGE	←Y–	←Y–	G	G	←R–	←R–	R	R	R	R/–Y→	R	R
PHASE 2 AND 5	←R–	←R–	R	R	←G–	←G–	G	G	R	R	R	R
5 CHANGE	←R–	←R–	R	R	←Y–	←Y–	G	G	R	R	R	R
PHASE 2 AND 6	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R
2 AND 6 CHANGE	←R–	←R–	Y	Y	←R–	←R–	Y	Y	R	R	R	R
PHASE 3	←R–	←R–	R	R	←R–	←R–	R	R	G/←G–	G	R	R
3 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	Y	Y	R	R
PHASE 4	←R–	←R–	R	R	←R–	←R–	R	R	R	R	G/←G–	G
4 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	R	R	Y	Y
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



KEY

- A B C D } Video Detector Cable
- E F G H J K h } 2-Conductor Cable (Aluminum Shielded)
- L M } 2-Conductor Tray Cable (No. 12 A.W.G.)
- N O S P Y } 5-Conductor Electrical Cable (No. 14 A.W.G.)
- R T U V W X Y Z Q } 7-Conductor Electrical Cable (No. 14 A.W.G.)
- b — Stranded THWN Green Ground Wire (No. 6 A.W.G.)
- c — 6-Pair Voice Grade Telemetry Interconnect Cable (No. 24 A.W.G.) and 7-Conductor Electrical Cable (No. 14 A.W.G.) (Snowden River Pkwy - Stanford Blvd Run)
- d — Radio Interconnect Cable
- e } 3-conductor Cable (No. 14 A.W.G.) & f } 12-pair Laser Cable
- g — 1-Conductor (No. 8 A.W.G.) (3 pieces) for Traffic Signal Electrical Service
- LW — Loop Detector Wire (No. 14 A.W.G.) in Flexible Tubing
- ELW — Existing Loop Detector Wire (No. 14 A.W.G.) in Flexible Tubing
- PF — Proposed Electrical Service By BG&E
- SP — Splice Loop Wire To Existing Aluminum Shielded Cable
- ✕ — Proposed Grounding Rod

STATE OF MARYLAND — JOSEPH J. CALLOCCHIA — NO. 23547 — REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 23547 EXPIRATION DATE: 9/25/10

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS, INC.
100 WEGMANS MARKET STREET
ROCHESTER, NY 14624
CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

GENERAL INFORATION PLAN (SNOWDEN RIVER PARKWAY at McGAW ROAD)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT No. 17484 & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	TTG FILE No.
N/A	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE/ 2010	TM 36 - 23/24	10 of 20

F-07-208

Monday, June 21, 2010 AT 02:14 PM

Snowden River Parkway is considered to run in an North/South direction.

EXISTING SIGNS

9,10, 12,13 — ONLY

14 — ONLY

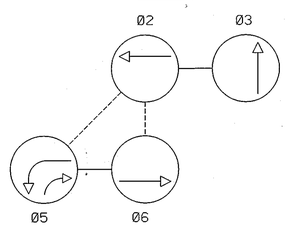
EXISTING SIGNALS

1,2,5-7 — R, Y, G — 12″

3,4 — R, Y, G — 12″

8 — R, Y, G, Yₒ, Gₒ — 12″

NEMA PHASING



FLASHING OPERATION

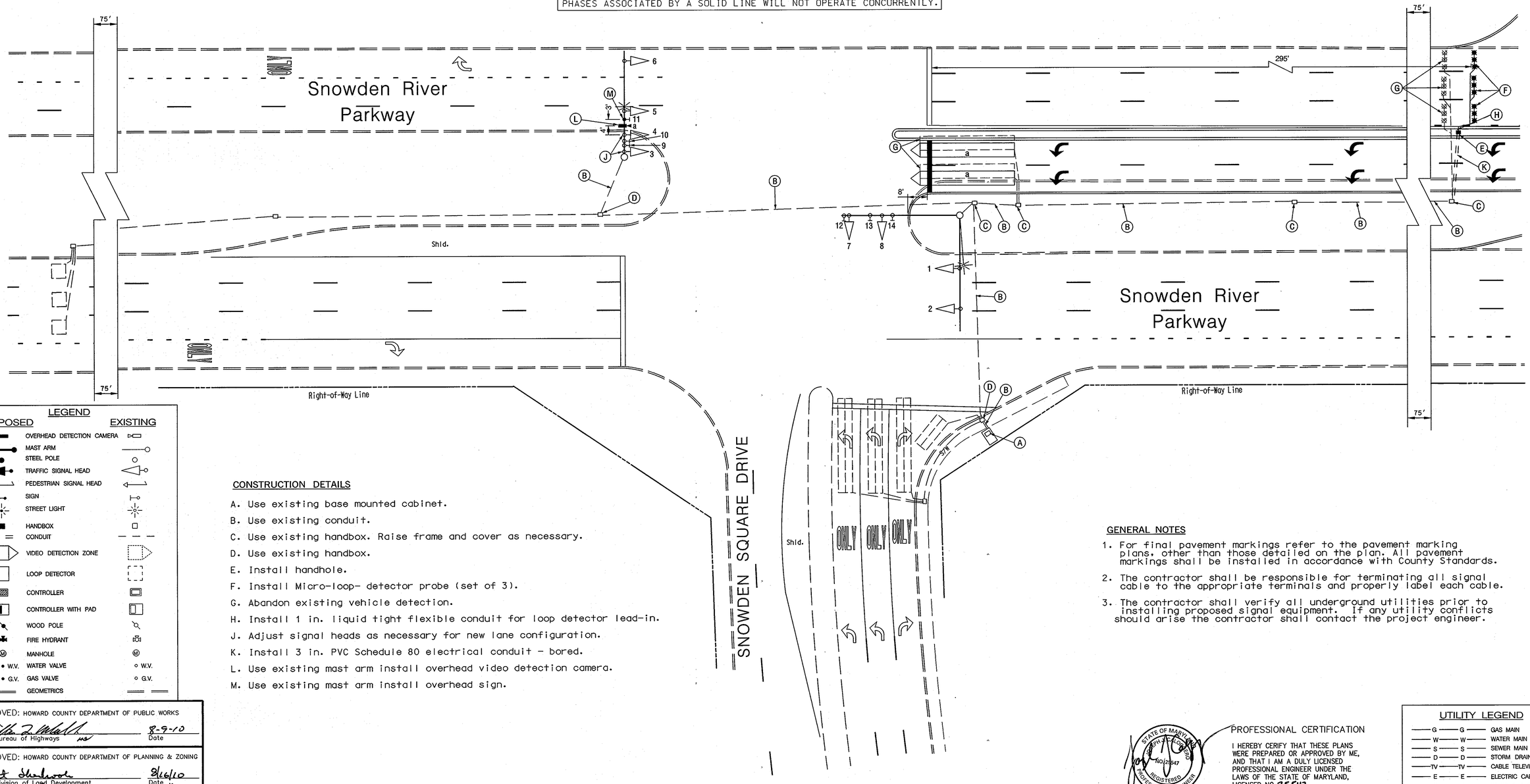
PROPOSED SIGN

11 — ONLY — R3-5a 30″x36″

PROPOSED VIDEO DETECTION

a

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



LEGEND

PROPOSED		EXISTING
▸▬	OVERHEAD DETECTION CAMERA	▹▭
——●	MAST ARM	——○
●	STEEL POLE	○
◀●	TRAFFIC SIGNAL HEAD	◁○
◀—	PEDESTRIAN SIGNAL HEAD	◁—
⊢	SIGN	⊢
✳	STREET LIGHT	✳
■	HANDBOX	□
= = =	CONDUIT	— — —
▭▷	VIDEO DETECTION ZONE	▭▷
□	LOOP DETECTOR	□
▨	CONTROLLER	▣
▨	CONTROLLER WITH PAD	▣
◣	WOOD POLE	◣
✱	FIRE HYDRANT	✱
Ⓜ	MANHOLE	Ⓜ
• W.V.	WATER VALVE	○ W.V.
• G.V.	GAS VALVE	○ G.V.
═══	GEOMETRICS	═══

CONSTRUCTION DETAILS

A. Use existing base mounted cabinet.
B. Use existing conduit.
C. Use existing handbox. Raise frame and cover as necessary.
D. Use existing handbox.
E. Install handhole.
F. Install Micro-loop- detector probe (set of 3).
G. Abandon existing vehicle detection.
H. Install 1 in. liquid tight flexible conduit for loop detector lead-in.
J. Adjust signal heads as necessary for new lane configuration.
K. Install 3 in. PVC Schedule 80 electrical conduit - bored.
L. Use existing mast arm install overhead video detection camera.
M. Use existing mast arm install overhead sign.

GENERAL NOTES

1. For final pavement markings refer to the pavement marking plans, other than those detailed on the plan. All pavement markings shall be installed in accordance with County Standards.
2. The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly label each cable.
3. The contractor shall verify all underground utilities prior to installing proposed signal equipment. If any utility conflicts should arise the contractor shall contact the project engineer.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development — Date 8/6/10
Chief, Development Engineering Division — Date 8/2/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH F. HAMMOND — No. 25547 — REGISTERED PROFESSIONAL ENGINEER

UTILITY LEGEND

G — G	GAS MAIN
W — W	WATER MAIN
S — S	SEWER MAIN
D — D	STORM DRAIN
TV — TV	CABLE TELEVISION
E — E	ELECTRIC CABLES
T — T	TELEPHONE CABLES
A — A	AERIAL CABLES

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F:\2002\2002-1120A\Des\TEDD\sigplan3.dgn | FJH | FDB | CHK.

DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
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C/O ANTWERPEN AUTOMOTIVE GROUP
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TRAFFIC SIGNAL PLAN (SNOWDEN RIVER PARKWAY at SNOWDEN SQUARE DR)

SNOWDEN RIVER PKWY AT SNOWNDEN SQUARE DR MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT No. 17484 & 21178)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

SCALE	ZONING	TTG FILE No.
1" = 20'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE /2010	TM 36 - 23/24	11 of 20

F-07-208

Tuesday, June 22, 2010 AT 07:02 AM

PROJECT DESCRIPTION

GENERAL

This project involves the modification of the exisitng traffic control signal at the intersection of Snowden River Parkway at Snowden Square Drve in, Howard County, Maryland. Snowden River Road is considered to run in a North/South direction.

INTERSECTION OPERATION

The intersection operates in a NEMA 4 phase, full-traffic-actuated mode. There is an existing exclusive left turn phase for the southbound movement of Snowden River Parkway with a WB to NB right turn overlap.The through movements operate concurrently. The Snowder Square Drive movement operates alone.

Existing cabinet will remain at this location.

EQUIPMENT LIST

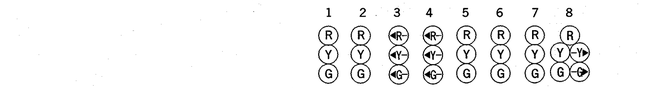
A. Equipment to be furnished by the County when reimbursed by Developer or Contractor.

Quanity	Units	Description
1	EA	Video Detection Camera and cable. (1 - 400 LF)
1	EA	Video detector retro-pack w/power supply.
1	EA	Video detector interface panel.
1	EA	30 in. x 36 in. R3-5a Sign for mast arm mounting.

B. Equipment to be furnished and/or installed by the contractor.

Quanity	Units	Description
Lump Sum	LS	Mobilization.
Lump Sum	LS	Maintenance of traffic.
3	EA	Microloop probe (set of 3) with 500 ft. lead-in cable.
50	LF	Sawcut for signal loop detector.
5	LF	1 in. liquid tight flexible conduit for detector sleeve.
40	LF	3 in. PVC conduit (Schedule 80) - bored.
Lump Sum	LS	Adjust vehicle signal heads.
Lump Sum	LS	Adjushandholes to grade.

Phase Chart



PHASE 2 AND 5	R	R	←Y–	←Y–	G	G	R	R/G→
5 CHANGE	R	R	←R–	←R–	G	G	R	R/Y→
PHASE 2 AND 6	G	G	←R–	←R–	G	G	R	R
2 AND 6 CHANGE	Y	Y	←Y–	←Y–	Y	Y	R	R
PHASE 3	R	R	←R–	←R–	R	R	G	G
3 CHANGE	R	R	←R–	←R–	R	R	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/ ←R–	FL/ ←R–	FL/Y	FL/Y	FL/R	FL/R

Wiring Diagram

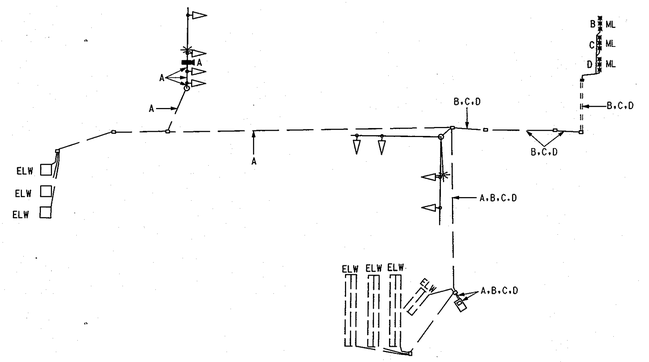
KEY

A — Video Detector Cable

B, C, D } Invasive probe

ML — Micro-Lopp

ELW — Existing Loop Detector Wire (No. 14 A.W.G.) in Flexible Tubing



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/13/10

STATE OF MARYLAND — JOSEPH A. CLOSE — No. 25547 — REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

PREPARED FOR:

OWNER/DEVELOPER/LAND LEASER:
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CONTACT: STEPHEN LEATY
585-464-4600 EXT. 6833

GENERAL INFORATION PLAN (SNOWDEN RIVER PARKWAY at SNOWDER SQUARE DRIVE)

SNOWDEN RIVER PARKWAY at SNOWDER SQUARE DR MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos 17484 & 21172)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

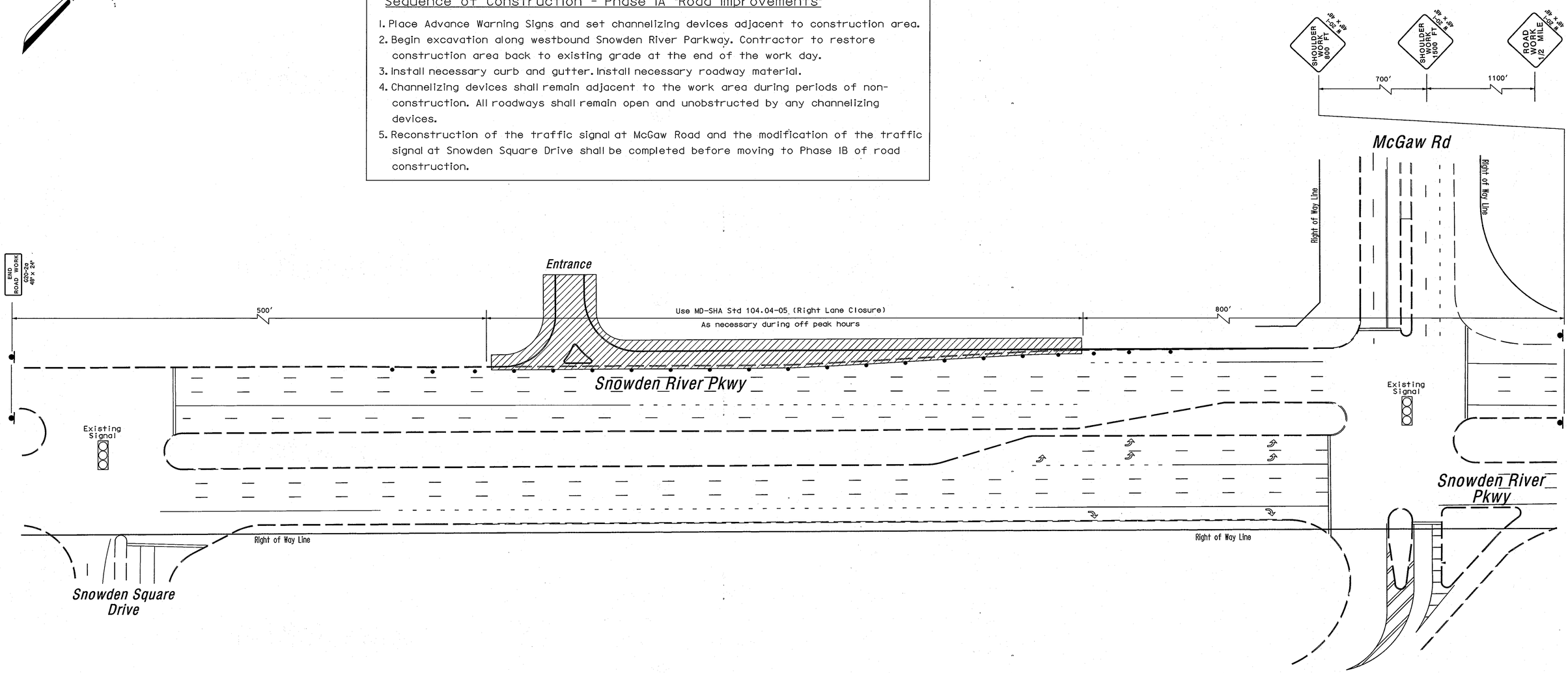
SCALE	ZONING	TTG FILE No.
N/A	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE /2010	TM 36 - 23/24	12 of 20

F-07-208

Monday, June 21, 2010 AT 02:15 PM

Sequence of Construction - Phase IA "Road Improvements"

1. Place Advance Warning Signs and set channelizing devices adjacent to construction area.
2. Begin excavation along westbound Snowden River Parkway. Contractor to restore construction area back to existing grade at the end of the work day.
3. Install necessary curb and gutter. Install necessary roadway material.
4. Channelizing devices shall remain adjacent to the work area during periods of non-construction. All roadways shall remain open and unobstructed by any channelizing devices.
5. Reconstruction of the traffic signal at McGaw Road and the modification of the traffic signal at Snowden Square Drive shall be completed before moving to Phase IB of road construction.



KEY

- Area of Construction
- Direction of Traffic
- Channelizing Device (Drum)
- Flagger
- Temp. Traffic Sign
- Arrow Panel
- Existing Geometrics
- Proposed Geometrics

Drop Off Policy

Contractor to maintain less than 2.5 in. of drop-off during periods of non-construction. Use appropriate standard. See General Note No: 13.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/11/10

Chief, Development Engineering Division — Date 8/12/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH J. CASSILO — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

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ROCHESTER,NY 14624
CONTACT: STEPHEN LEATY
585-484-4600 EXT. 6833

(Revised) Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos17484 & 21178

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

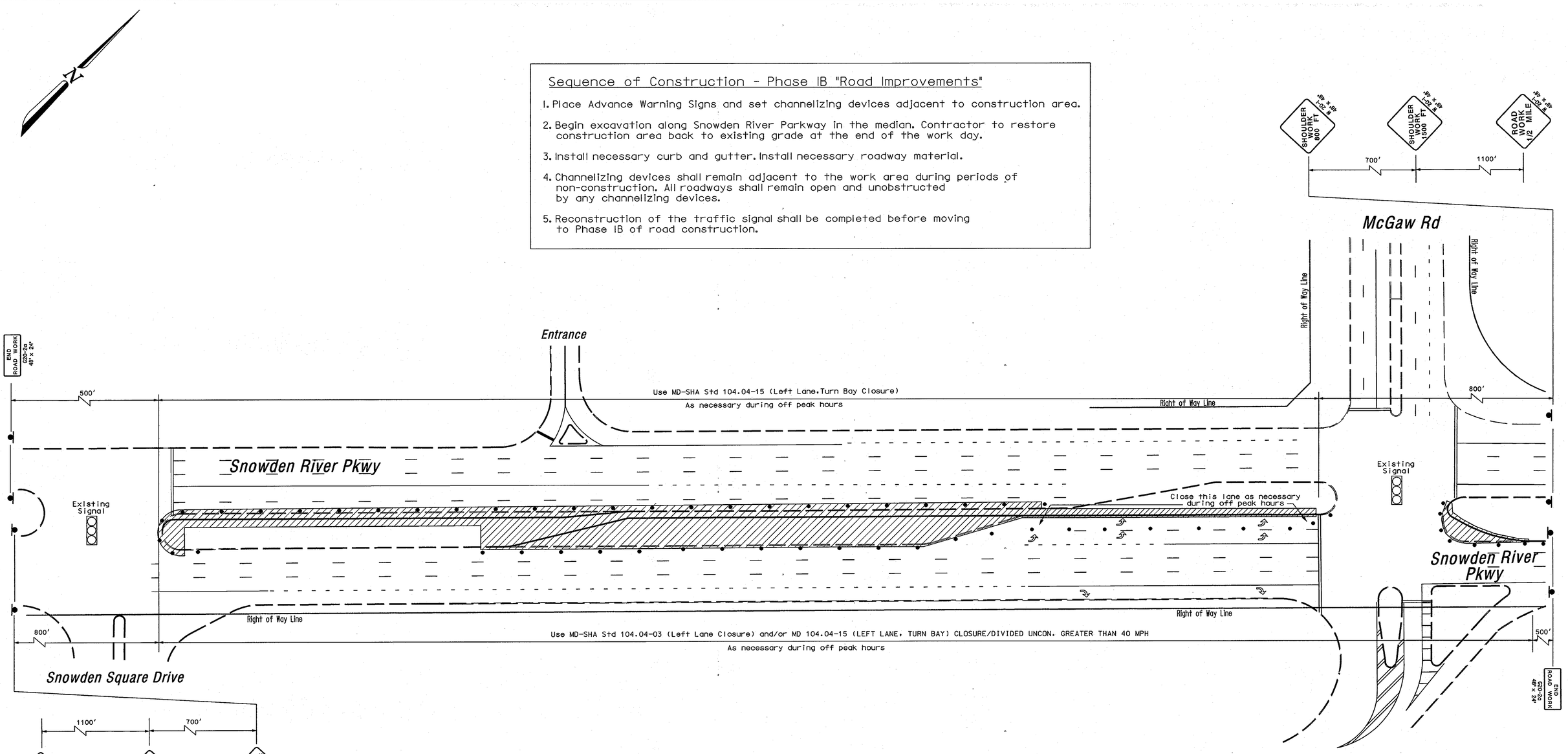
SCALE	ZONING	The Traffic Group File #
1" = 40'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE/2010	TM36-23/24	13 of 20

PLOTTED: Monday, June 21, 2010 AT 02:20 PM

F-07-208

Sequence of Construction - Phase IB "Road Improvements"

1. Place Advance Warning Signs and set channelizing devices adjacent to construction area.
2. Begin excavation along Snowden River Parkway in the median. Contractor to restore construction area back to existing grade at the end of the work day.
3. Install necessary curb and gutter. Install necessary roadway material.
4. Channelizing devices shall remain adjacent to the work area during periods of non-construction. All roadways shall remain open and unobstructed by any channelizing devices.
5. Reconstruction of the traffic signal shall be completed before moving to Phase IB of road construction.



KEY

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- Arrow Panel
- Existing Geometrics
- Proposed Geometrics

Drop Off Policy

Contractor to maintain less than 2.5 in. of drop-off during periods of non-construction. Use appropriate standard. See General Note No: 13.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/13/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH J. JEFFERSON — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

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CONTACT: TIM HARRISON

LAND LEASEE:
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100 WEGMANS MARKET ST.
ROCHESTER,NY 14624
CONTACT: STEPHEN LEATY
585-484-4600 EXT. 6833

(Revised) Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos 17484 & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

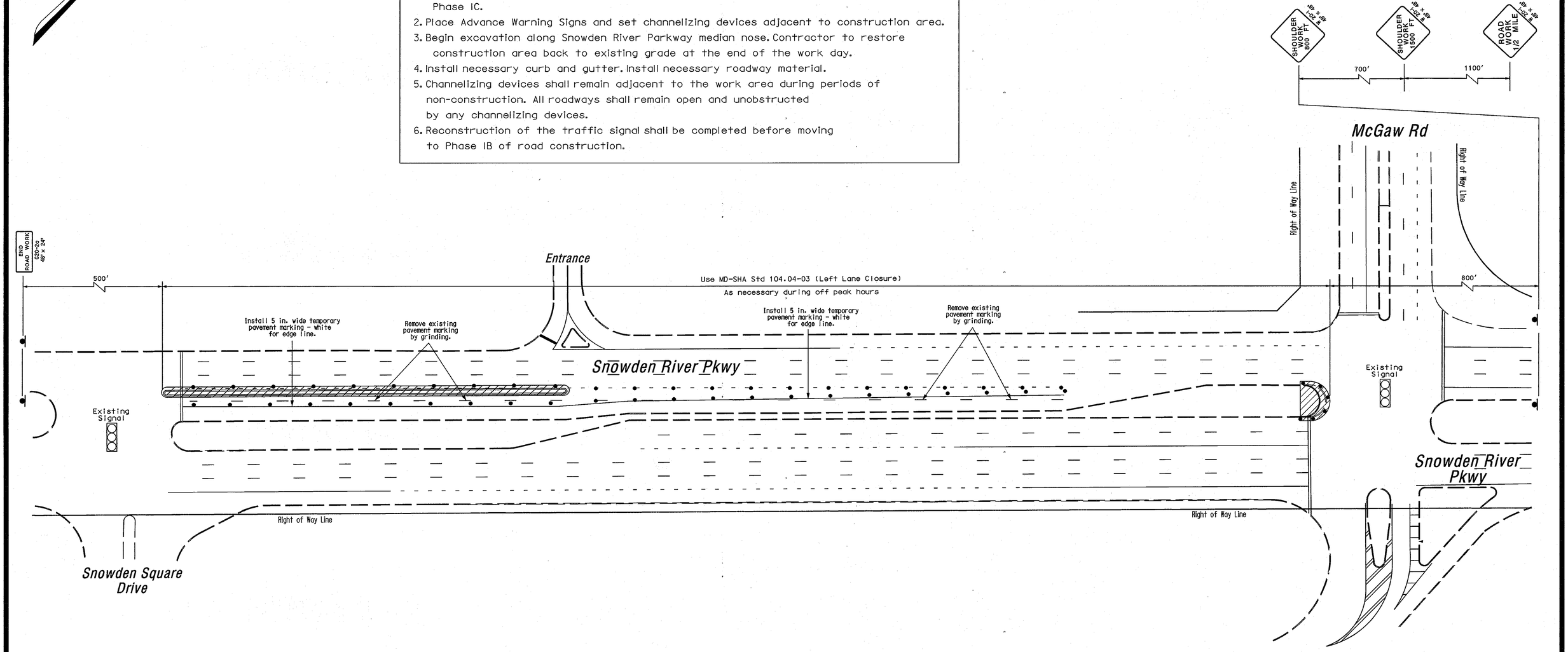
SCALE	ZONING	The Traffic Group File #
1" = 40'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE/2010	TM36-23/24	14 of 20

PLOTTED: Tuesday, June 22, 2010 AT 06:33 AM

F-07-208

Sequence of Construction - Phase IC "Road Improvements"

1. Reconstruction of the traffic signal shall be complete prior to the road constuction of Phase IC.
2. Place Advance Warning Signs and set channelizing devices adjacent to construction area.
3. Begin excavation along Snowden River Parkway median nose. Contractor to restore construction area back to existing grade at the end of the work day.
4. Install necessary curb and gutter. Install necessary roadway material.
5. Channelizing devices shall remain adjacent to the work area during periods of non-construction. All roadways shall remain open and unobstructed by any channelizing devices.
6. Reconstruction of the traffic signal shall be completed before moving to Phase IB of road construction.



KEY

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- Channelizing Device (Drum)
- Flagger
- Temp. Traffic Sign
- Arrow Panel
- Existing Geometrics
- Proposed Geometrics

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/13/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 7/25/10

STATE OF MARYLAND — JOSEPH MCCAUGHEY — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

Drop Off Policy

Contractor to maintain less than 2.5 in. of drop-off during periods of non-construction. Use appropriate standard. See General Note No: 13.

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585-464-4600 EXT. 6833

(Revised) Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

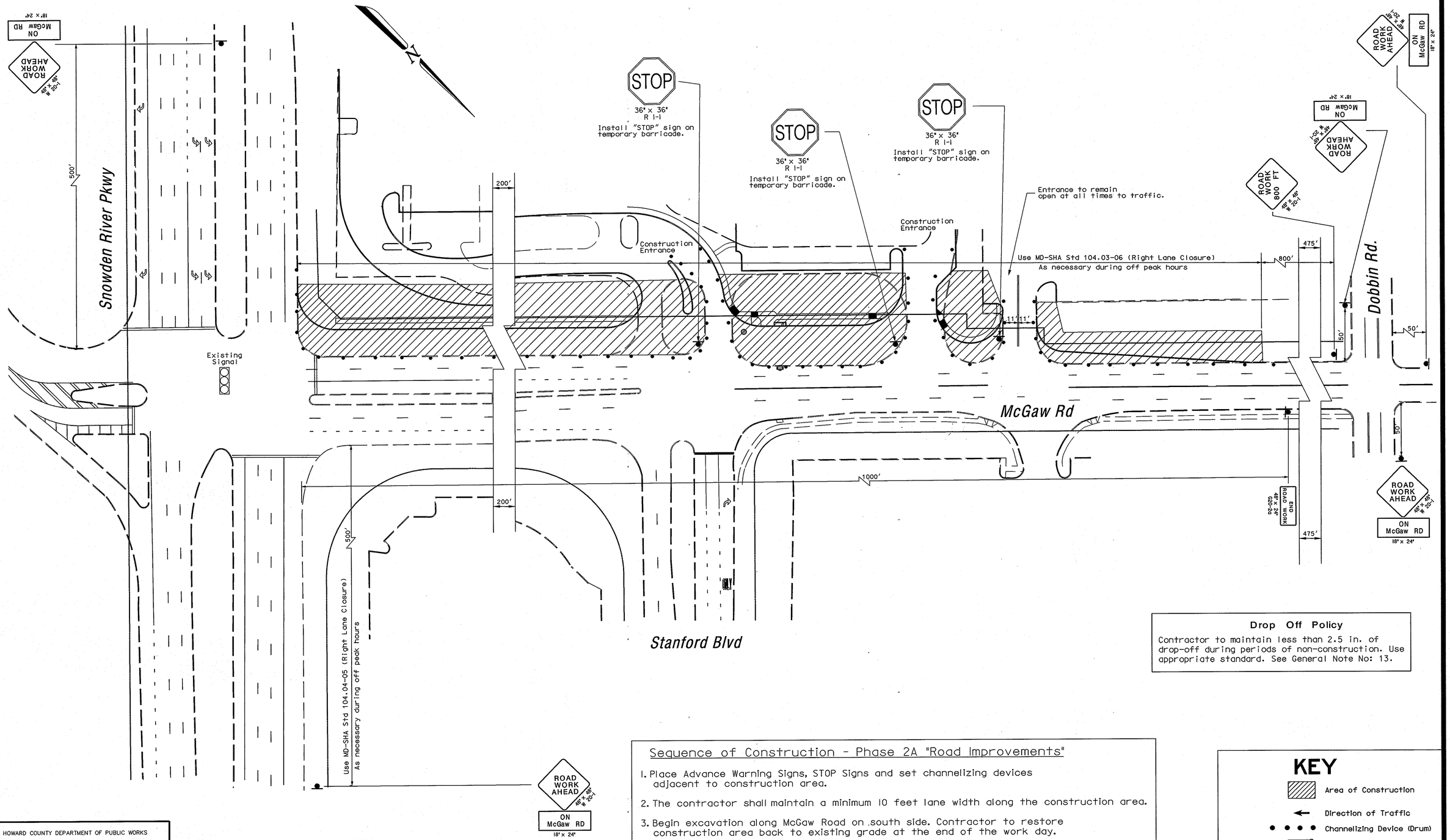
COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2
(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos 17484 & 21178)

6TH ELECTION DISTRICT | TAX MAP PARCEL 356 | HOWARD COUNTY, MARYLAND

SCALE	ZONING	The Traffic Group File #
1" = 40'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE/2010	TM36-2324	15 of 20

PLOTTED: Monday, June 21, 2010 AT 02:20 PM

F-07-208



Drop Off Policy

Contractor to maintain less than 2.5 in. of drop-off during periods of non-construction. Use appropriate standard. See General Note No: 13.

Sequence of Construction - Phase 2A "Road Improvements"

1. Place Advance Warning Signs, STOP Signs and set channelizing devices adjacent to construction area.
2. The contractor shall maintain a minimum 10 feet lane width along the construction area.
3. Begin excavation along McGaw Road on south side. Contractor to restore construction area back to existing grade at the end of the work day.
4. Install necessary curb and gutter. Install necessary roadway material.
5. Channelizing devices shall remain adjacent to the work area during periods of non-construction. All roadways shall remain open and unobstructed by any channelizing devices.

KEY

- Area of Construction
- Direction of Traffic
- Channelizing Device (Drum)
- Flagger
- Temp. Traffic Sign
- Arrow Panel
- Existing Geometrics
- Proposed Geometrics

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/6/10

Chief, Development Engineering Division — Date 8/3/10

PROFESSIONAL CERTIFICATION

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STATE OF MARYLAND — JOSEPH J. CALLAGHAN — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

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Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2

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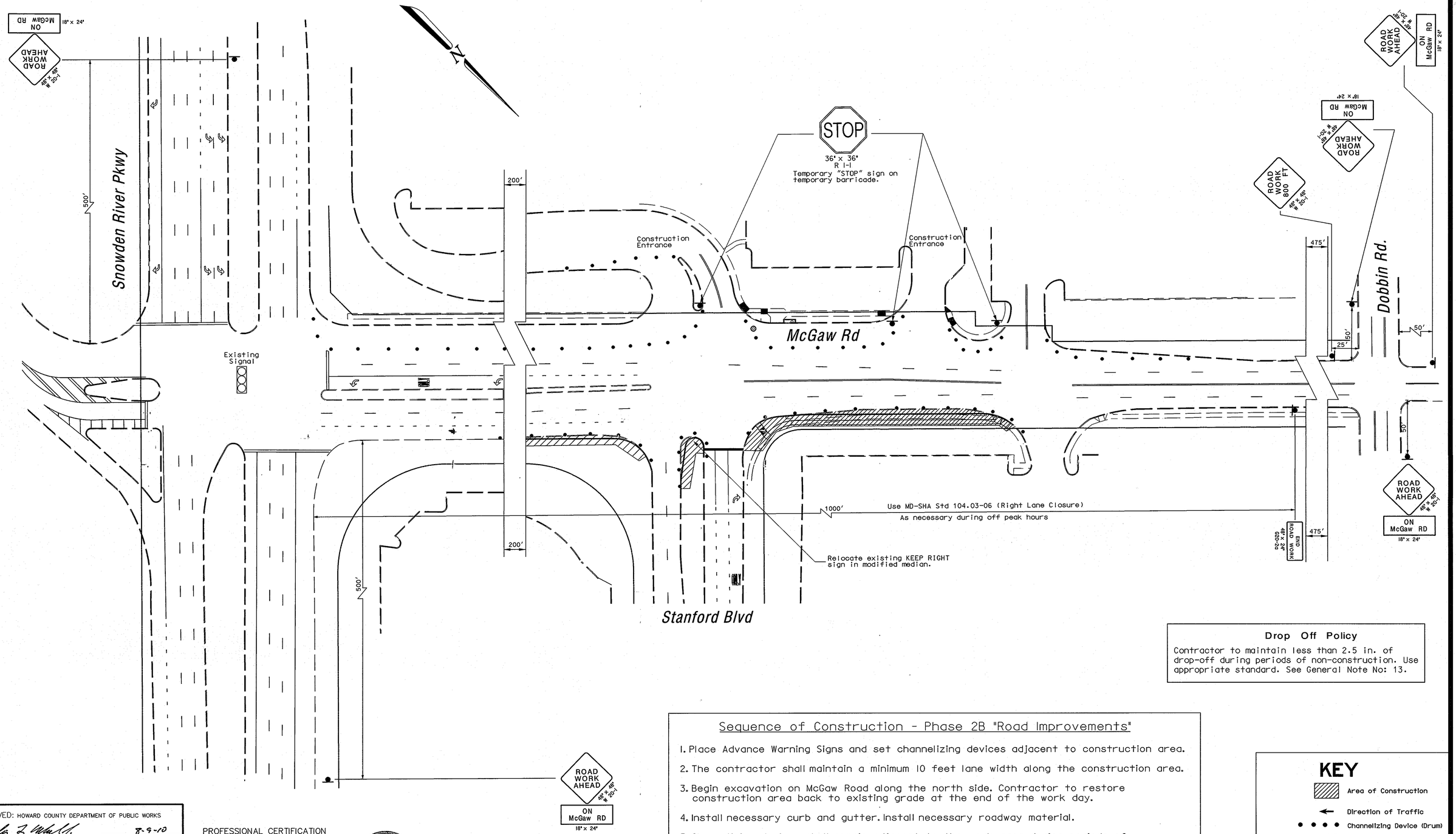
6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	The Traffic Group File #
1" = 40'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE2010	TM36-23/24	16 of 20

F-07-208

PLOTTED: Monday, June 21, 2010 AT 07:34 AM



Drop Off Policy

Contractor to maintain less than 2.5 in. of drop-off during periods of non-construction. Use appropriate standard. See General Note No: 13.

Sequence of Construction - Phase 2B "Road Improvements"

1. Place Advance Warning Signs and set channelizing devices adjacent to construction area.
2. The contractor shall maintain a minimum 10 feet lane width along the construction area.
3. Begin excavation on McGaw Road along the north side. Contractor to restore construction area back to existing grade at the end of the work day.
4. Install necessary curb and gutter. Install necessary roadway material.
5. Channelizing devices shall remain adjacent to the work area during periods of non-construction. All roadways shall remain open and unobstructed by any channelizing devices.

KEY

- Area of Construction
- Direction of Traffic
- Channelizing Device (Drum)
- Flagger
- Temp. Traffic Sign
- Arrow Panel
- Existing Geometrics
- Proposed Geometrics

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/4/10

Chief, Development Engineering Division — Date 8/12/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 17243 EXPIRATION DATE: 2/7/11

STATE OF MARYLAND — ROBERT A. CONNELLY — NO. 17243 — REGISTERED PROFESSIONAL ENGINEER

The Traffic Group, Inc.
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Baltimore, Maryland 21236
410-931-6600 1-800-583-8411 Fax: 410-931-6601
www.trafficgroup.com
"Merging Innovation and Excellence"

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/FH	

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTWERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS,INC
100 WEGMANS MARKET ST.
ROCHESTER,NY 14624
CONTACT: STEPHEN LEATY
585-484-4600 EXT. 6833

Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

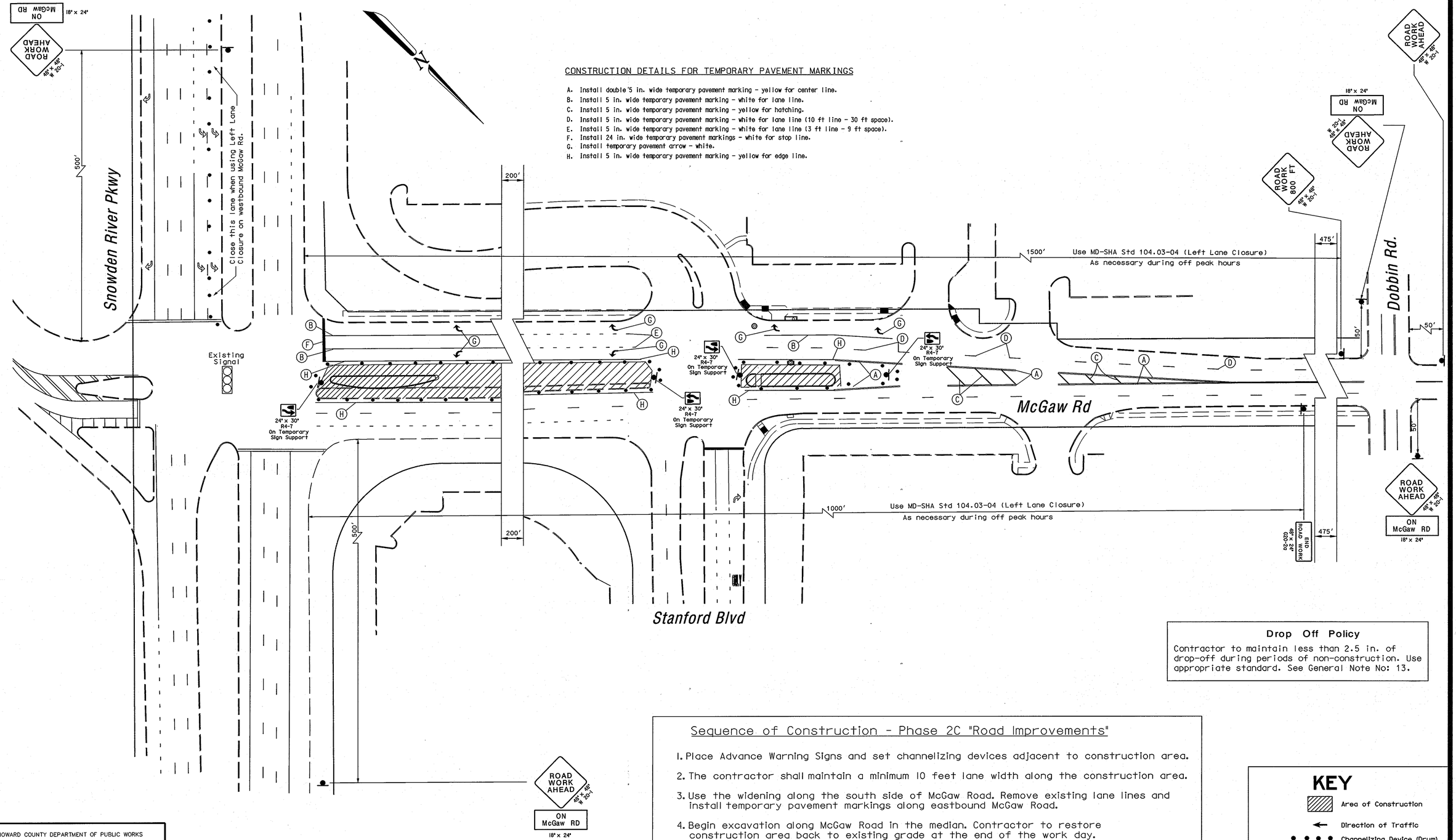
COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2
(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos.17484 & 20012 & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	The Traffic Group File #
1" = 40'	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE/2010	TM36-23/24	17 of 20

PLOTTED: Tuesday, July 13, 2010 AT 01:01 PM

F-07-208



Drop Off Policy

Contractor to maintain less than 2.5 in. of drop-off during periods of non-construction. Use appropriate standard. See General Note No: 13.

Sequence of Construction - Phase 2C "Road Improvements"

1. Place Advance Warning Signs and set channelizing devices adjacent to construction area.
2. The contractor shall maintain a minimum 10 feet lane width along the construction area.
3. Use the widening along the south side of McGaw Road. Remove existing lane lines and install temporary pavement markings along eastbound McGaw Road.
4. Begin excavation along McGaw Road in the median. Contractor to restore construction area back to existing grade at the end of the work day.
5. Install necessary curb and gutter. Install necessary roadway material.
6. Channelizing devices shall remain adjacent to the work area during periods of non-construction. All roadways shall remain open and unobstructed by any channelizing devices.

KEY

- Area of Construction
- Direction of Traffic
- Channelizing Device (Drum)
- Flagger
- Temp. Traffic Sign
- Arrow Panel
- Existing Geometrics
- Proposed Geometrics

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/12/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH J. CALHOUN — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

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DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER	FB/EH	

OWNER/DEVELOPER/LAND LEASER:
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C/O ANTWERPEN AUTOMOTIVE GROUP
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CONTACT: TIM HARRISON

LAND LEASEE:
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100 WEGMANS MARKET ST.
ROCHESTER,NY 14624
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Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2
(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos.17484 & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	The Traffic Group File #
1" = 40'	NT	2002-1120A
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JUNE2008	TM36-23/24	18 of 20

F-07-208

PLOTTED: Monday, June 21, 2010 AT 07:34 AM

GENERAL NOTES
TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS (TTCTA)

1.0 INTRODUCTION

1.1 The General Notes (GN) supplement the Standard Details and the TTCTAs, and have been assembled to provide additional direction on the installation and application of traffic control devices shown in these standards. The GNs also provide additional guidelines and other useful information that will facilitate the installation of appropriate temporary traffic controls. Users of these standards shall also comply with provisions of FHWA's Manual on Uniform Traffic Control Devices (MUTCD) and SHA's Supplement to the MUTCD, Standard Specifications for Construction and Materials, and General Provisions for Construction Contracts.

1.2 The TTCTA show the minimum requirements necessary to plan for the safety of workers, motorists, pedestrians, and other system users throughout the temporary traffic control zone for various types of work activities. Typically, more traffic control devices are required for long–term stationary work activities than for short–term stationary work activities. Additional temporary traffic control devices may be necessary because of other traffic factors, such as the roadway's accident history, expected traffic backups, high truck traffic, roadway geometrics or characteristics, and other conditions that may adversely affect the flow of traffic. Users of these TTCTA should review the temporary traffic control setup once in place to ensure that traffic is traveling smoothly throughout the traffic control zone, driver expectancy is being met, and no other adjustments to the temporary traffic control devices are necessary. This review is to be repeated on a regular basis as noted elsewhere.

1.3 The TTCTA address a wide variety of different conditions; however, every situation could not be shown. Therefore, charts have been provided showing standard devices to be used for the proposed work zone activity and the placement of these devices for certain roadway conditions and work durations. The user is expected to combine the information from these charts into a workable traffic control plan.

1.4 In applying these standards and guidelines, questions about applications and interpretations should be referred to the State Highway Administration's Assistant District Engineer–Traffic, County Traffic Engineer, City Traffic Engineer, Public Works Engineer, or other responsible party, who has expertise in traffic engineering and has jurisdiction on the appropriate roadways. Such consultation may be required, for example, to determine the appropriate TTCTA for the work zone condition.

4.0 SIGNS

4.1 Signs should be spaced at the distances shown on the TTCTA diagrams.

4.2 See the "Sign and Buffer Spacing Charts/Standard Temporary Traffic Control Operations" for the appropriate spacing of the advance warning signs for lower speed highway facilities.

4.3 At locations where queues extend beyond the first advance warning sign, additional advance warning signs (static and/or PCMS) shall be placed in advance of the longest observed queue.

4.4 When bus and/or truck volumes are high, an initial advance warning sign may be placed on the left side of a multilane undivided roadway.

4.5 As of December 31, 2003, Fluorescent Orange High Performance Wide Angle (FOHPWA) Retroflective Sign Sheeting material shall be used on all temporary post–mounted warning signs erected in work zones.

4.6 FOHPWA Retroreflective Sign Sheeting material may be used for maintenance work along freeways and major expressways at the discretion of the Engineer.

4.7 Approved temporary roll–up signs may be used for maintenance work along all roadways.

4.8 When work zone speed limits along 65 and 60 mph roadways are reduced, temporary regulatory speed signing shall be posted for work activities of one–hour duration or longer, unless otherwise directed by the Engineer. These signs are to be placed as directed in Standard Nos. MD 104.01–06 and MD 104.01–07.

4.9 Sign designations and messages for the signs most commonly used in work zones are shown within these General Notes. See Specification 104.08–03 for information on other temporary traffic signs.

4.10 G95–4 (Hat and Shovel) signs shall be used for projects lasting greater than two months in duration, unless otherwise specified by the Engineer.

4.11 Along streets in urban areas where the prevailing speed is 35 mph or less, and along secondary roads where the Average Daily Traffic (ADT) is less than 1000 vehicles, the minimum sign size of 36" x 36" may be used.

4.12 For utility operations, the word "AHEAD" may be used on warning signs in lieu of distance messages for warning signs placed up to and including 1500 feet in advance of the work area. At greater distances, the correct distance messages shall be used on such warning signs. Also, the message UTILITY WORK may be used in lieu of ROAD WORK or SHOULDER WORK. ROAD WORK AHEAD signs may also be used in lieu of distance messages on side streets and entrance ramps that intersect roads where work is being performed (as shown in the Typical Applications) and on the main road during mobile and mowing operations.

4.13 ROAD WORK AHEAD signs shall be installed on all side streets and entrance ramps that intersect roads within work zones. The signing shall be placed along the intersection approach to the right of the travel lane. Refer to Standard Detail 104.01–02 for guidance on sign placement. For side streets intersecting roads outside of work zone boundaries, no advanced signing should be installed.

4.14 Warning signs mounted on wood posts, and those mounted on approved portable supports, shall be mounted in conformance with Standard No. MD 104.01–17. Signs mounted on concrete barrier shall be installed using clamps that are on the Office of Traffic & Safety's Approved Product List.

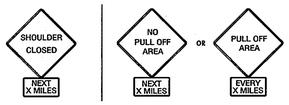
4.15 For shoulder closures greater than a half (1/2) mile in length, advance warning signs should be placed as follows:

a. A NEXT XX MILES supplemental plate should be provided with the first SHOULDER CLOSED sign in the sequence

b. The second SHOULDER CLOSED sign in the sequence should be replaced with either:

– a NO PULL OFF AREA warning sign with NEXT XX MILES area, or

– a PULL OFF AREA warning sign with EVERY XX MILES



4.16 A BUMP sign should be placed when there is a temporary pavement wedge along a transverse joint, a transverse construction trench with temporary backfill, or a similar transverse disturbance. Signs should be placed according to Shoulder Work Typical Applications for the appropriate prevailing speed and work duration, with BUMP signs replacing the SHOULDER WORK signs.

4.17 TRUCK CROSSING (W11–(10)1) signs shall only be used during the following two situations:

1) A work area entrance is allowed along a controlled access highway.

2) A work area entrance is provided along highways other than controlled access, the entrance does not have adequate decision sight distance for approaching traffic, and the entrance cannot be relocated to provide adequate decision sight distance. Refer to Standard No. MD 104.00–03 of the General Notes for decision sight distance criteria.

TRUCK CROSSING signs shall be placed according to the Shoulder Work Typical Applications, with TRUCK CROSSING signs replacing all SHOULDER WORK signs.

Any distances to be displayed on the TRUCK CROSSING sign shall be installed using supplemental distance plaques.

5.0 PORTABLE VARIABLE MESSAGE SIGNS (PVMS)

5.1 The PVMS shall not replace standard traffic control devices, but is to supplement these devices.

5.2 PVMS shall be used where a new traffic signal has been installed along State routes having a prevailing speed of 50 mph or greater.

5.3 PVMS shall display a message regarding new traffic signal installation up to 3 days prior to signal turn–on. PVMS shall be removed no later than 7 days after the signal is operational.

5.4 When PVMS are used to advise/warn motorists regarding a new traffic signal installation, they shall be installed along all the major approaches to the intersection, and shall be used in such a way as to supplement the standard traffic control devices required for a new traffic signal installation.

5.5 No more than two displays shall be used within any message cycle unless approved by the District Engineer or ADE–T.

5.6 For a list of standard messages/abbreviations, contact appropriate District Engineer or ADE–T. All customized messages shall be approved by the ADE–T.

5.7 A single message shall be displayed for 2–3 seconds with an "off" interval of 0.5 to 1.0 second. When two messages comprise a message cycle, neither message shall exceed 2 seconds duration. The second message shall follow the first message immediately without any "off" interval. If an off–interval is used between the first and second messages, it shall not exceed 0.5 second.

5.8 The text of the message shall not scroll or travel (horizontally or vertically) across the face of the sign.

5.9 A PVMS should not be used for more than 14 continuous days as part of the same application. A PVMS should be used 3 to 5 days in advance of planned roadwork, if needed.

5.10 PVMS should be used if there is significant change in traffic patterns, unexpected road conditions, or safety concerns that may result in delays/queues and may require caution/diversion.

5.11 PVMS should not be used in place of an arrow panel. The PVMS should be visible from 0.5 mile under day and night conditions and should be legible from a minimum distance of 650 feet.

5.12 PVMS should be placed on the shoulder of the roadway or, if practical, farther from the traveled lane (Standard MD 104.01–22).

5.13 In order to reduce the effect of sun behind the PVMS, the PVMS should be placed so that the sun is not directly behind it (such as during sunrise or sunset).

5.14 The entire message should be readable at least twice at the off–peak 85th–percentile speed prior to work starting or the anticipated prevailing speed.

6.0 ARROW PANELS

6.1 Arrow panels that are installed along roadways with prevailing speeds greater than 40 mph shall be provided with a minimum shoulder closure taper of 1/3 the taper length, (see 7.0 Channelizing Devices). For all other roadways a 100–foot minimum shoulder closure taper shall be used.

7.0 CHANNELIZING DEVICES

7.1 Taper Formulas:

L = WS for speeds greater than (>) 40 mph

L = $WS^2/60$ for speeds equal to or less than (≤) 40 mph

Where: L = minimum length of taper (ft)
S = numerical value of prevailing travel speed or speed limit (MPH), whichever is higher, prior to work starting,
W = width of offset (ft)

7.2 Maximum spacing between channelizing devices:

Taper Channelization: equal in feet to the posted speed limit.

Tangent Channelization: equal in feet to twice the posted speed limit.

7.3 At horizontal or vertical curves, channelizing devices should be extended to a point where they are visible to approaching traffic. On two–lane, two–way roadways, a full taper length shall always be provided in advance of curves.

7.4 Drums, not cones, should always be used to form the taper on roadways having a prevailing travel speed greater than 40 MPH.

7.5 Storing channelizing devices within 30 feet of the edge of open section roadway or 15 feet of a closed section roadway along any roadway is prohibited without approval of the Engineer.

7.6 Type 3 object markers (VP–1) are required for barrier flare / tangent points.

7.7 The appropriate channelizing devices (including approved barrier) to separate opposing traffic shall be as shown on the plans or as directed by the Engineer.

7.8 On straight sections of roadway with full dimension center and / or lane lines, but without edge lines, channelizing drums shall be used to delineate the edge of the roadway, except at locations designated by the Engineer. Examples would include roadways with curbs, parking, bicycle lanes, or other markings. The channelizing drums may be spaced up to 500' apart where no undue hazards exist unless otherwise directed by the Engineer. On curves, these spacings shall be reduced to a value equal to the posted speed limit, unless otherwise directed by the Engineer.

8.0 PAVEMENT MARKINGS

8.1 Temporary pavement markings should be installed according to Section 104.02–03(f), Specific Requirements for Temporary Pavement Markings, from the Standard Specifications for Construction and Materials and from SHA's "Pavement Marking Policy and Guidelines" issued by OOTS.

8.2 Pavement markings that are no longer applicable shall be completely removed or obliterated. Temporary markings shall be used as necessary. Operations less than 12 hours or undertaken during the daytime may require that the permanent markings be temporarily covered with black tape as specified in Section 8.3.

8.3 Pavement marking lines adjacent to any long duration lane transition or lane closure taper shall be removed (or covered with SHA approved black pavement marking tape), unless otherwise directed by the Engineer. Pavement marking lines shall be re–installed (or uncovered) prior to re–opening the closed lane(s).

8.4 Temporary markings on intermediate pavement surfaces (e.g. base course) shall be placed to full dimensions per the Contract Documents (i.e. continuous double yellow center lines; single dashed yellow center line @ 10' segments, 30' gaps where passing is allowed; lane lines @ 10' segments, 30' gaps).

8.5 Guidance on UNMARKED PAVEMENT signing:

1. Daytime: If the pavement is not marked to SHA's standards/specifications during the daytime, no sign is needed, provided item #3 below is adhered to.

2. Nighttime: If, due to unforeseen circumstances as determined by the Engineer, the pavement is left in a condition overnight that does not meet SHA pavement marking standards/specifications, then UNMARKED PAVEMENT signing shall be used.

3. In all instances where less than standard markings are in place (permanent or short–term), appropriate channelizing devices and other traffic control devices shall be used to guide traffic through the work zone in an effective, safe, and positive manner.

9.0 FLAGGING

9.1 Where two or more flaggers are used and are unable to see each other, two–way radio communications shall be used.

9.2 If the entire work area is visible from one station, a single flagger may be used, subject to other safety considerations.

9.3 Guidance on flagging at signalized intersections:

1. Issues regarding flagging at signalized intersections should be discussed in the planning/design stages of the project and the recommended intersection control strategy should be specified in the contract documents.

2. At the pre–construction conference, SHA staff and the contractor should discuss the need for flagging operations, MSP (or local police) presence, and the Standard Operating Procedures to request signal operating mode modifications (if needed).

3. In general, all persons (contractors, maintenance, and utility) should contact the Assistant District Engineer – Traffic (ADE–T) to determine the best method for temporary traffic control at a signalized intersection from the following two (2) cases:

Case 1: The signal is turned to flashing mode during flagging operation.

Case 2: The signal is turned off (dark mode) during flagging operation.

Note: Except for police, flagging shall not occur at a signalized intersection operating in a full–color stop–and–go mode (Normal Operation).

10.0 VEHICLES

10.1 If work vehicles need to be stopped in a lane beyond a horizontal curve or a vertical curve (hill), non–essential vehicles are to be pulled as far off the road as possible or be otherwise parked in a manner as to inhibit the movement of traffic as little as possible. If no protection vehicle is available, channelizing devices shall be placed as specified in 7.0, Channelizing Devices.

10.2 Work vehicles should not occupy any part of the buffer area.

10.3 Vehicle safety lights (amber in color) shall be from the Office of Traffic & Safety's Approved Products list.

10.4 A protection vehicle with a rear truck–mounted–attenuator (TMA) is required for all freeway work operations that have no formal lane closure. A formal lane closure is one that includes a full complement of advance warning devices and a lane closure taper and a work area delineated by channelizing devices placed in accordance with these TTCTAs.

A protection vehicle is also required for highway marking operations and may be required under other traffic and work conditions in conformance with SHA policy or as directed by the Engineer. The protection vehicle may be considered as a substitute for the initial advance warning sign for some mobile work operations. A protection vehicle should also be used in advance of a work operation that is located beyond a horizontal and/or vertical curve. Consideration should also be given to placing an additional temporary advance warning sign(s) or truck mounted variable message sign no less than 500' and no more than 1500' (1/2 mile for expressway conditions) in advance of the protection vehicle, when one or more of the traffic factors listed under General Notes 1.2 exist.

10.5 When a police vehicle is required, the vehicle shall not be located in the buffer and/or taper, but should be located as directed by the Engineer, depending on the type of work. It is sometimes preferable to deploy the police vehicle in advance of the work zone or queue (if queue exists) to encourage speed reduction prior to the work zone.

11.0 WORK HOUR RESTRICTIONS

11.1 Unless otherwise specified in the Contract Document or permitted by the Engineer, work within a lane, within 15 feet of the nearest edge line (open section roadway), or within 2 feet of the face of curb (closed section roadway), is prohibited during peak hours 6 a.m. – 9 a.m. and 3 p.m. – 7 p.m., Monday – Friday. Also, such work is not permitted on Saturdays, Sundays, National or State holidays, or days preceding and following said holidays.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-5-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/16/10

Chief, Development Engineering Division — Date 8/13/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547
EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH J. CALLOREN — NO. 25547 — REGISTERED PROFESSIONAL ENGINEER

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Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C–2 and D–2

(A RESUBDIVISION OF PACELS C–1, PLAT BOOK 24 FOLIO 66 and PARCEL D–1, PLAT Nos.17484: & 21178)

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	The Traffic Group File #
N/A	NT	2002–1120A
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JUNE/2010	TM36–23/24	19 of 20

F-07-208

PLOTTED: Monday, June 21, 2010 AT 02:22 PM

13.0 PAVEMENT DROP-OFF

13.1 When pavement drop-offs are present, the placement of temporary traffic control devices, including signs, channelizing devices, and barriers, as well as slope fillet wedges, shall follow SHA Standard Nos. MD 104.06-11, MD 104.06-12, MD 104.06-13, MD 104.06-14, MD 104.06-15, and MD 104.01-28. The Engineer may recommend alternative methods to protect the pavement edge drop-off, considering factors such as: pedestrian, bicycle, and traffic volumes, vehicle speeds, size of work zone, duration of work, etc.

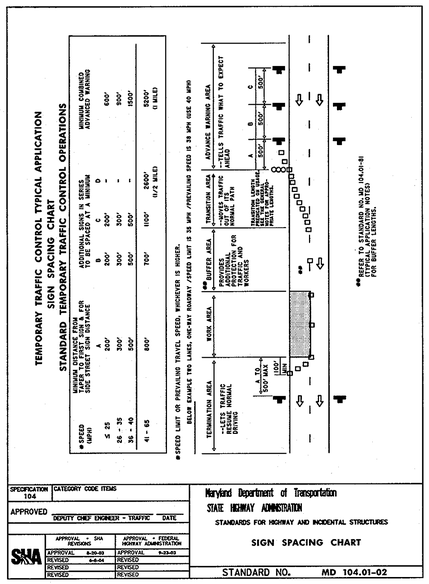
18.0 TRAFFIC CONTROL PLANS

18.1 Alternate traffic control plans may be presented to the SHA District Office for approval in conformance with Section 104.01 of the Standard Specifications for Construction and Materials.

18.2 For emergency repair operations, a lesser number of traffic control devices (TCDs) than the full compliment may be used. This generally will consist of one sign per direction, flashing lights on the vehicle, and minimum number of channelizing devices, flags, or high level warning devices. Additional TCDs such as arrow panel(s), additional signing, etc., shall be placed as soon as possible in accordance with the standard TTCTA.

18.3 Where closely spaced work zones create conflicting traffic patterns (e.g. left-lane closure followed by right-lane closure), they should be no closer than 1.5 miles apart (last sign to first sign). Where work zones are closely spaced, but where traffic patterns are not significantly altered and no conflicts exist, no minimum spacing is required; however, care should be exercised to present appropriate and non-conflicting guidance to the public.

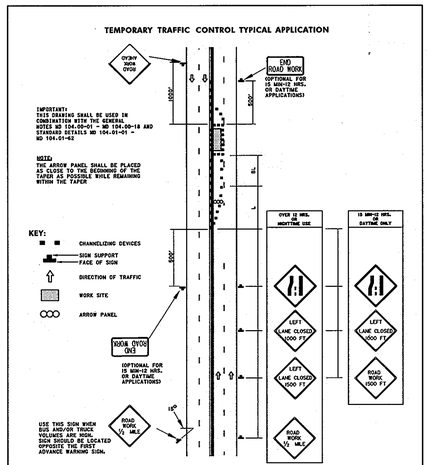
18.4 All signs, channelizing devices, and other traffic control devices shall be in conformance with the latest edition of the MUTCD.



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED	6-8-04	REVISED
REVISED		REVISED
REVISED		REVISED

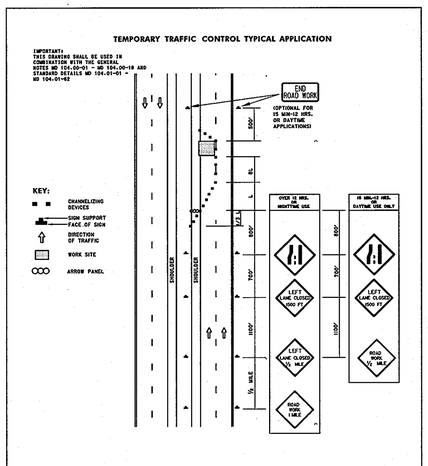
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
SIGN SPACING CHART
STANDARD NO. MD 104.01-02



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED		REVISED
REVISED		REVISED
REVISED		REVISED

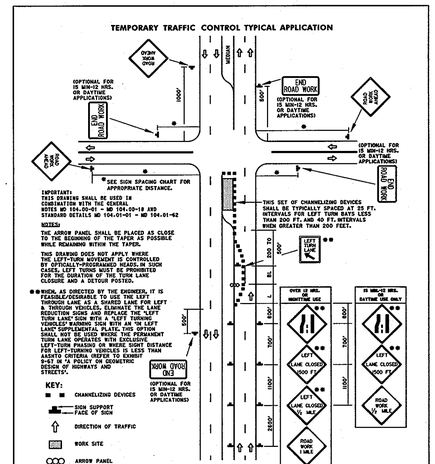
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
LEFT LANE CLOSURE/MULTILANE UNDIV. EQL/LESS THAN 40 MPH
STANDARD NO. MD 104.03-04



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED		REVISED
REVISED		REVISED
REVISED		REVISED

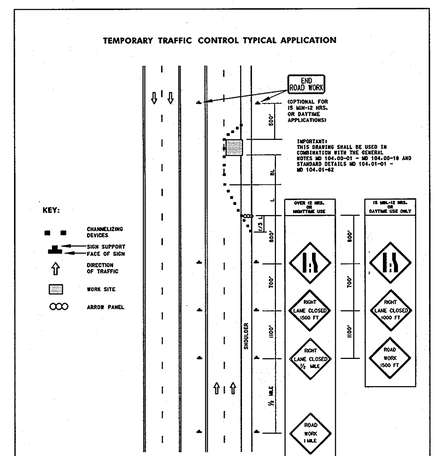
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
LEFT LANE CLOSURE/DIVIDED UNCON. GREATER THAN 40 MPH
STANDARD NO. MD 104.04-03



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED		REVISED
REVISED		REVISED
REVISED		REVISED

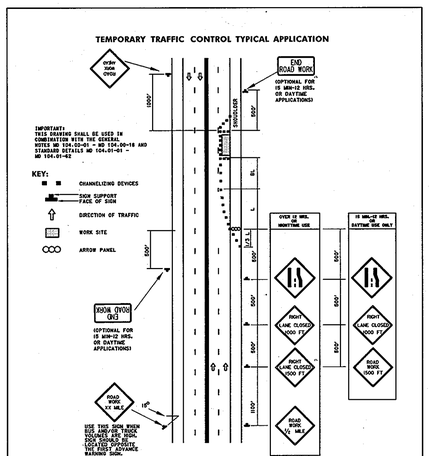
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
LEFT-TURN BAY CLOSURE /DIVIDED UNCON. GREATER THAN 40 MPH
STANDARD NO. MD 104.04-13



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED	6-8-04	REVISED
REVISED		REVISED
REVISED		REVISED

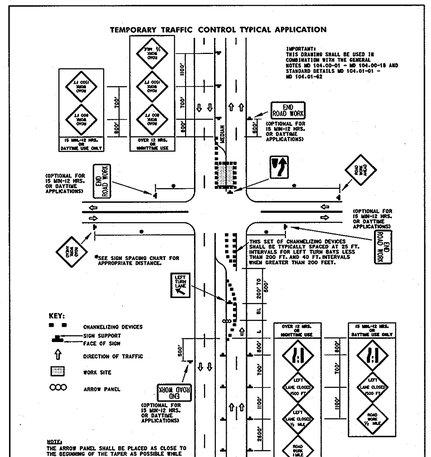
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
RIGHT LANE CLOSURE/DIVIDED UNCON. GREATER THE 40 MPH
STANDARD NO. MD 104.04-05



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED		REVISED
REVISED		REVISED
REVISED		REVISED

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
RIGHT LANE CLOSURE/MULTILANE UNDIV. EQL/LESS THAN 40 MPH
STANDARD NO. MD 104.03-06



SPECIFICATION 104	CATEGORY CODE ITEMS
APPROVED	DEPUTY CHIEF ENGINEER - TRAFFIC DATE

	APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL	9-20-03	9-23-03
REVISED		REVISED
REVISED		REVISED
REVISED		REVISED

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES
INTER. (LEFT LANE, TURN BAY) CLOSURE/ DIVIDED UNCON. GREATER THAN 40 MPH
STANDARD NO. MD 104.04-15

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways — Date 8-9-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 8/6/10

Chief, Development Engineering Division — Date 8/17/10

PROFESSIONAL CERTIFICATION

I HEREBY CERIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 25547 EXPIRATION DATE: 9/25/10

STATE OF MARYLAND — JOSEPH J. CASSIDY — REGISTERED PROFESSIONAL ENGINEER

The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600 1-800-583-8411 Fax: 410-931-6601
www.trafficgroup.com
"Merging Innovation and Excellence"

F:\2002\2002-1120A\Des\TEDD\MOT.dgn | DES. HJK | DRN. HJK | CHK. JD

DATE	REVISION	BY	APP'R.
6/2010	REVISED TITLE BLOCK WITH NEW DATE AND SHEET NUMBER ADDED NEW TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION	FB/FH	

OWNER/DEVELOPER/LAND LEASER:
SCIENCE FICTION, LLC
C/O ANTMERPEN AUTOMOTIVE GROUP
6440 BALTIMORE NATIONAL PIKE
CATONSVILLE, MD 21228
CONTACT: TIM HARRISON

LAND LEASEE:
WEGMANS FOOD MARKETS,INC
100 WEGMANS MARKET ST.
ROCHESTER,NY 14624
CONTACT: STEPHEN LEATY
585-484-4600 EXT. 6833

(Revised) Maintenance of Traffic (Snowden River Parkway)

McGAW ROAD & SNOWDEN RIVER PARKWAY MODIFICATIONS

COLUMBIA SIELING INDUSTRIAL CENTER, Section 1 Area 1, Parcels C-2 and D-2
(A RESUBDIVISION OF PACELS C-1, PLAT BOOK 24 FOLIO 66 and PARCEL D-1, PLAT Nos.17484 & 21178

6TH ELECTION DISTRICT — TAX MAP PARCEL 356 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	The Traffic Group File #
N/A	NT	2002-1120A
DATE	TAX MAP - GRID	SHEET
JUNE/2010	TM36-23/24	20 of 20

F-07-208

PLOTTED: Monday, June 21, 2010 AT 02:22 PM