S.D. # D-37, 65136 Y

WASHINGTON Suburban Sanitary Commission

APPROVED July 14, 1965

FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY W.S.S.C. STRUCTURES AFFECTED.

THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

John D. Mars

SENIOR DESIGNING ENGINEER

Mont. Co. Director of Public Works' letter dated Sept. 6, 1961 regarding elimination of protective gate. Structures #1 and #10

Subject to issuance of permit by Maryland State Department of Health

GENERAL NOTES

FOR STORM DRAIN CONSTRUCTION

1. All storm drains shall be constructed in accordance with the latest Edition of the General Specifications of the W.S.S.C.
2. Types of structures refer to the Standard Storm Drainage Details of the W.S.S.C., unless otherwise noted.
3. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevations of the mains by digging test pits by hand at all utility crossing, well in advance of trenching. If clearances are less than shown on this plan or six (6) inches, whichever is less, contact the Storm Drain Section of the Washington Suburban Sanitary Commission before proceeding with construction
4. All storm drain construction shown on this plan to be maintained by the Montgomery County Dept. of Public Works.

PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15"	RCP IV	12'
18"	RCP IV	49'
24"	RCP IV	194'
27"	RCP III	386'
27"	RCP IV	469'

STRUCTURE SCHEDULE				
No.	TYPE		TOP ELEV.	REMARKS
1	Flared End Section with cut-off wall & Rip-Rap			Gray Conc. Co. or equal. See Detail Sheet 4 of 5
2	K	Inlet	340.76	M.S.R.C. Type (Modified) See Detail Sheet 3 of 5
3	K	Inlet	340.66	" "
4	Cut-off wall			W.S.S.C. Standard
10	Flared end Section with cut-off wall & Rip-Rap			Gray Conc. Co. or equal. See detail Sheet # 4 of 5
11	J	Inlet	344.57	M.S.R.C. Type (Modified) See Detail sheet 3 of 5
13	B	Manhole 48" Sq.	349.73	W.S.S.C. Standard
15	J	Inlet	348.29	M.S.R.C. Type (Modified) See Detail Sheet 3 of 5
17	D	Inlet 2.50 Sq.	354.40	W.S.S.C. Std. Open N & N.E. Side
16	J	Inlet	353.74	M.S.R.C. Type (Modified) See Detail Sheet 3 of 5
18	J	Inlet	354.35	" " "

PIPE CURVE DATA						
CURVE	RADIUS	ARC	TANGENT	CHORD	DELTA	Max. Laying Length of pipe
A	179.00	129.97	68.00	127.13	41°36'08"	5'

Permit # 65-159

Permit # 65-160

Easement

24" Stub 24" RCP Bricked shut.

Limit of paving

Note
Construct an earth berm across roadside ditch immediately below inlet 18 to form a dam across the ditch. Top width = 3 ft., height above ditch invert = 9 inches; side slope = 4:1

Future Storm Drain
Construct 30 Lin. Ft. of ditch see section this sheet

CURVE A

Place 10 Lin. Ft. of dry stone Rip-Rap min. weight = 100 lbs. Weight of 50% of stones to exceed 150 lbs. Place stones to provide rough surface. See Sheet 4 of 5.

Construct 54 Lin. Ft. of Ditch See Section this sheet

These Lots to be filled according to approved prelim. Siltdin Plan - See Plat Agreement.

Place 10 Lin. ft. of dry stone Rip Rap min. weight = 100 lbs. Weight of 50% of stones to exceed 150 lbs. Place stones to provide rough surface. See Sheet 4 of 5.

Construct 53 L.F. of ditch. See Section this sheet.

PERMIT TO DEDICATE TO LIMIT OF WAY AND ENGRAVE PER ORDINANCE 4-115

MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
FINAL APPROVAL
DATE: May 20, 1968
BY:

STATE OF MARYLAND
ALDEN E. IMUS, JR.
No. 204
REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imus Jr

Existing Ground

Sodded Slopes

1.7' min. @ # 10
2.9' min. @ # 1

Varies

6"

1

2

2'-6" at # 1, 4 # 10

DITCH SECTION

No Scale

DATE	REVISION
6-17-65	Poles added - Gas permit missing
6-22-65	Gas mains added

DRAFTING: M.W.S.
CHECK:
DESIGN:
CHECK:

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring, Md.
681 - 2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAINS

NORTH GATE DRIVE

Layhill Village
MONTGOMERY COUNTY, MARYLAND

NORTH GATE TERRACE

DATE	JOB NO.
March, 1965	1787 A 1
SCALE 1"=50'	SHEET NO. 2
	1 OF 5

P5-100

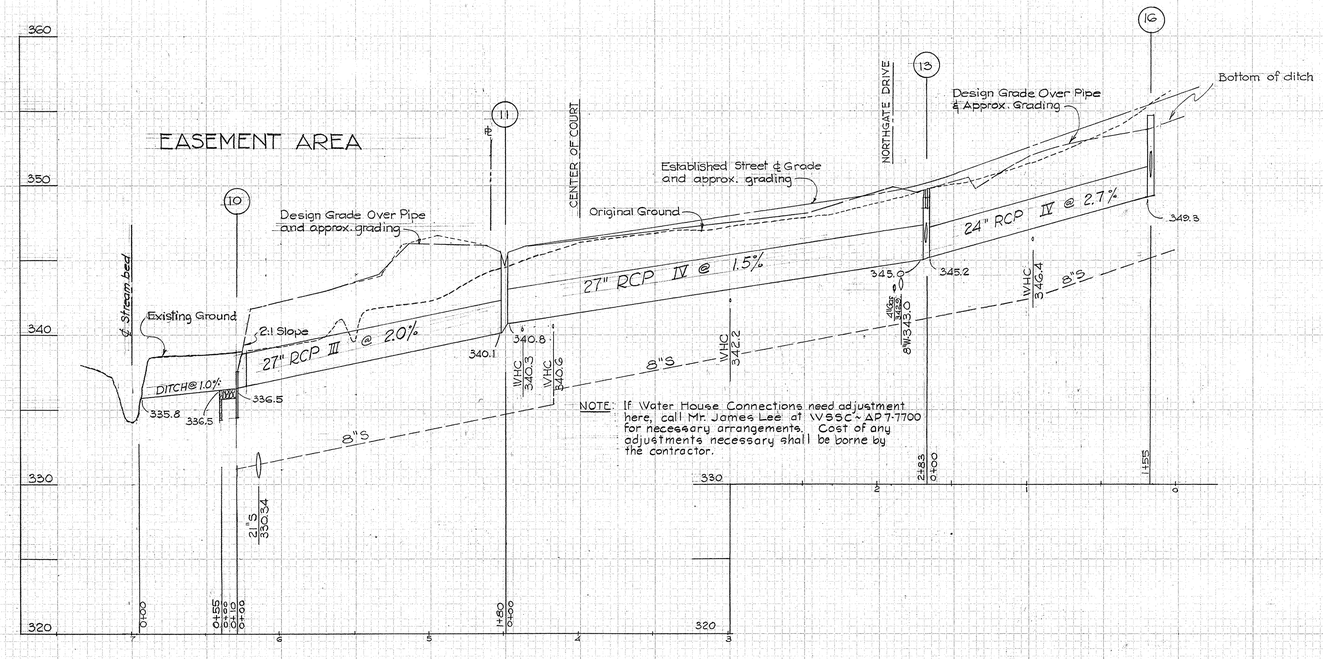
CE487-889-1

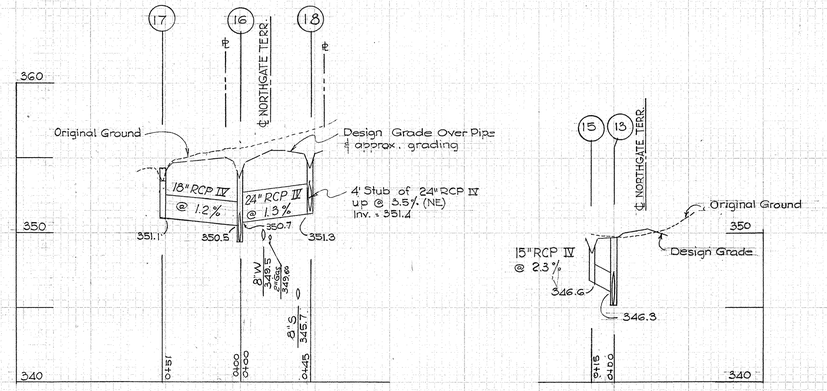
SD FILE NO. 905

Maryland State Archives

NORTH GATE TERRACE

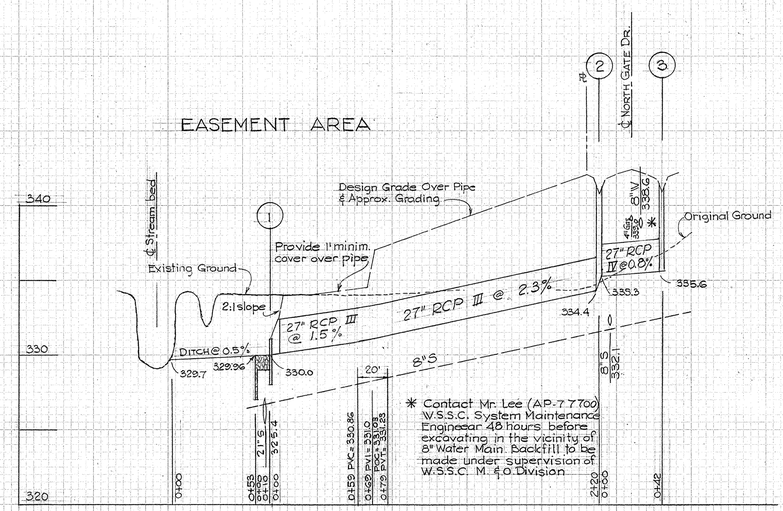
M.N.C.P.& P.C. FILE No. 8270, MARCH 4, 1964

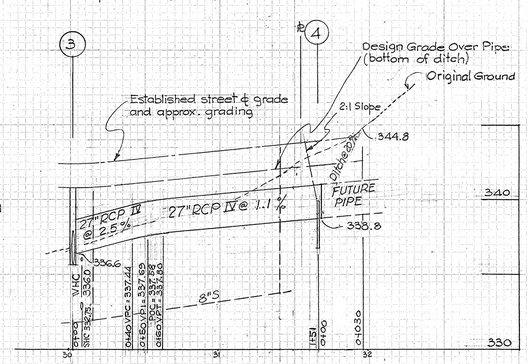




NORTH GATE DRIVE

M.N.C.P.& P.C. File # 8266 3-4,1964





S.D. # D-37, 65136Y

WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED July 14, 1965
FOR STORM DRAINS ONLY

SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WSSC STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

John A. Mary
SENIOR DESIGNER

* SUBJECT TO DEDICATION OF RIGHT OF WAY AND EASEMENTS PER ORDINANCE 4115

MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
FINAL APPROVAL
DATE July 20, 1965

STATE OF MARYLAND
ALDEN E. IMMS JR.
No. 2041 REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imms Jr.

DATE	REVISION	DRAFTING:	CHECK:	DESIGN:	CHECK:

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring, Md.
682-2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAIN

NORTH GATE DRIVE

Layhill Village
MONTGOMERY COUNTY, MARYLAND

NORTH GATE TERRACE

DATE	JOB NO.
March, 1965	1787 A-1
SCALE	SHEET NO.
Hor. 1"=50', Vert. 1"=5'	2 OF 5

P5-101

CE 487-889-2

SD FILE NO. 905

S.D. # D-37, 65136 Y

APPROVED July 14, 1965

...CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS ADOPTED BY THE WASHINGTON SUBURBAN SANITARY COMMISSION. APPROVAL OF THIS PLAN DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY STRUCTURES NOT SHOWN ON THIS PLAN. THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN ONLY AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THE COMMISSION ASSUMES NO RESPONSIBILITY FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS OR TO OTHERS CONCERNED, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.

John D. Mars
SENIOR DESIGNING ENGINEER

*See Montg. Co. Director of Public Works' letter dated Sept. 6, 1961 regarding elimination of protective gate. Structures # 1 and #10

GENERAL NOTES

FOR STORM DRAIN CONSTRUCTION

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2. Types of structures refer to the Standard Storm Drainage Details of the W.S.S.C., unless otherwise noted.
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PIPE SCHEDULE		
SIZE	TYPE	LENGTH
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18"	RCP IV	49'
24"	RCP IV	194'
27"	RCP III	386'
27"	RCP IV	469'

STRUCTURE SCHEDULE				
No.	TYPE		TOP ELEV.	REMARKS
1	Flared End Section with cut-off wall & Rip-Rap			Gray Conc. Co. or equal, See Detail Sheet 4 of 5
2	K	Inlet	340.76	M.S.R.C. Type 1 (Modified) See Detail Sheet 3 of 5
3	K	Inlet	340.66	" " "
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11	J	Inlet	344.57	M.S.R.C. Type 1 (Modified) See Detail Sheet 3 of 5
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15	J	Inlet	348.29	M.S.R.C. Type 1 (Modified) See Detail Sheet 3 of 5
17	D	Inlet 2.50 Sq.	354.40	W.S.S.C. Std. Dwg. No. 381
16	J	Inlet	353.74	M.S.R.C. Type 1 (Modified) See Detail Sheet 3 of 5
18	J	Inlet	354.35	" " "

PIPE CURVE DATA						
CURVE	RADIUS	ARC	TANGENT	CHORD	DELTA	Max. Laying Length of pipe
A	179.00	129.97	68.00	127.13	41°36'08"	5'

Existing Ground

Sodded Slopes

1.6'

Varies { 1.7' min. @ # 10 / 2.0' min. @ # 1

2'-6" at #1 & #10

DITCH SECTION

No Scale

Place 10 Lin. Ft. of dry stone Rip-Rap min. weight = 100 lbs. Weight of 50% of stones to exceed 150 lbs. Place stones to provide rough surface. See Sheet 4 of 5.

Construct 54 Lin. Ft. of Ditch See Section this sheet

Note: Construct an earth berm across roadside ditch immediately below inlet 18 to form a dam across the ditch. Top width = 3 ft., height above ditch invert = 9 inches; side slope = 4:1

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Future Storm Drain

Construct 30 Lin. Ft. of ditch see section this sheet

Limit of Paving

Easement

4' Stub 24" RCP Bricked shut.

DATE	REVISION
6-17-65	Poles added - Gas permit missing
6-22-65	Gas mains added

DRAFTING: M.W.S
CHECK:
DESIGN:
CHECK:

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring, Md.
652 - 2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAINS

NORTH GATE DRIVE

Layhill Village

MONTGOMERY COUNTY, MARYLAND

NORTH GATE TERRACE

STATE OF MARYLAND
ALDEN E. IMUS, JR.
No. 2041
REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imus Jr

905

DATE	JOB No.
March, 1965	1787 A 1
SCALE 1"=50'	SHEET No. 1 of 5

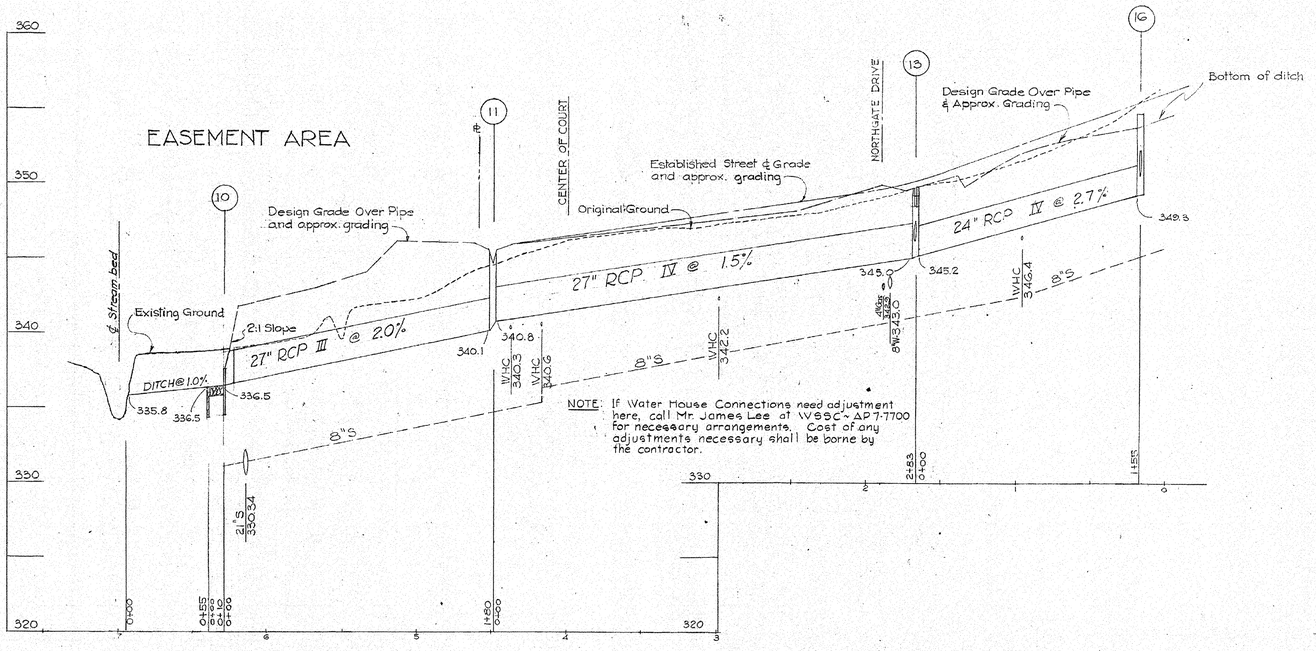
SD FILE NO. 905

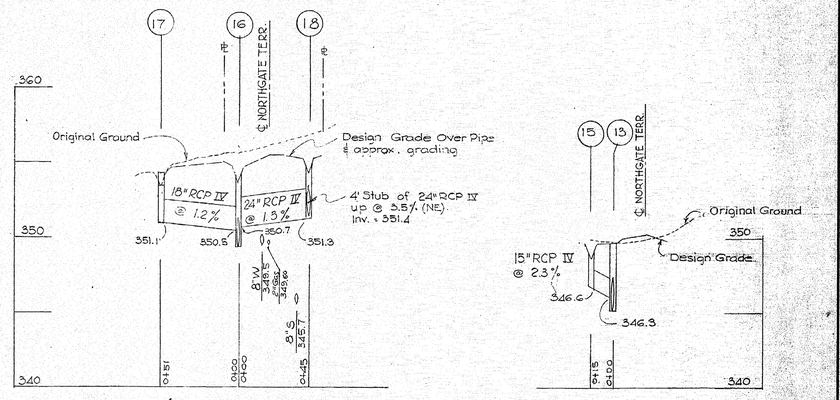
CE 487-889-3

Maryland State Archives

NORTH GATE TERRACE

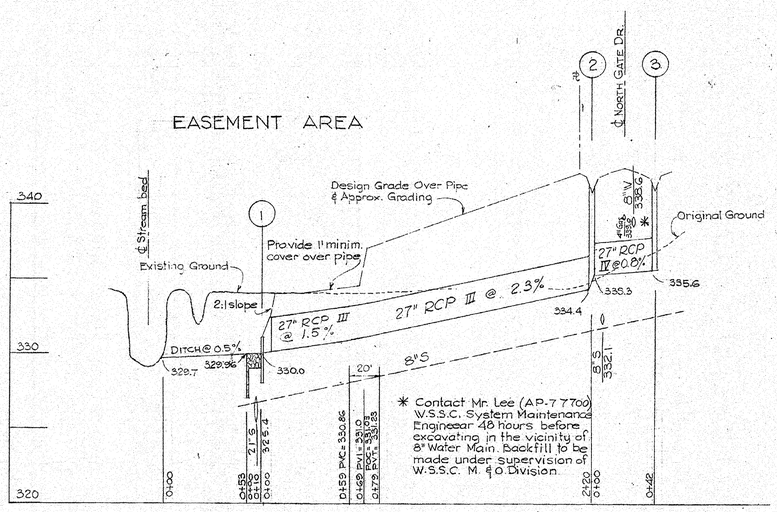
M.N.C.P.& P.C. FILE No. 8270, MARCH 4, 1964

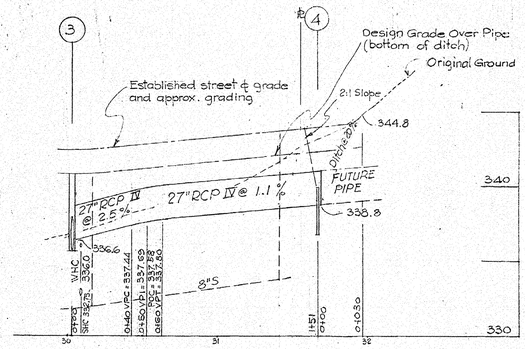




NORTH GATE DRIVE

M.N.C.P.& P.C. File # 8266 5-4,1964





S.D. # D-37, 65136 Y

WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED July 14, 1965
FOR STORM DRAINS ONLY
SUBJECT TO ... INSTALLATION OF ... WATER AND SEWER FOR ... AND ... STRUCTURES APPLIED.
THIS STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ... APPROVED ... BE ACCEPTED AS A COMPONENT ... BY THE COMMISSION ...
COMMISSION ... NO ...
... SEWER ... MAY BE ...
... USED TO ... IN ... OR ...
... OWNERS ... TO ... FOR ... OF THIS ...
... BY THE ... STRUCTURES
... BY THE COMMISSION
John A. Mary
SENIOR ENGINEER

STATE OF MARYLAND
ALDEN E. IMUS, JR.
No. 2041
REGISTERED
PROFESSIONAL ENGINEER
Alden E. Imus Jr.

905

DATE	REVISION	
		DRAFTING:
		CHECK:
		DESIGN:
		CHECK:

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring, Md.
622-2800

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

PAVING AND STORM DRAIN

NORTH GATE DRIVE

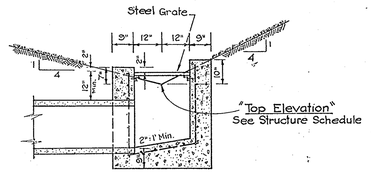
Layhill Village
MONTGOMERY COUNTY, MARYLAND

NORTH GATE TERRACE

DATE	JOB No.
March , 1965	1787 A-1
SCALE	SHEET No.
Hor.: 1"=50', Vert.: 1"=5'	2 OF 5

CE 487-889-4

SD FILE NO. 905



SECTION A-A

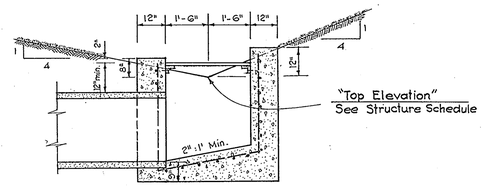
GENERAL NOTES

STEEL: Vert.: ½" ø bars, 6" c.c.
Hor.: ½" ø bars, 6" c.c.
Bott. ½" ø bars, 6" c.c.

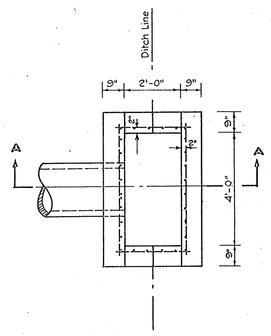
* **CONCRETE**: W.S.S.C. Class A Concrete

GRATE: Grate is made of 1"x1" square bars, butt welded, see SRC Detail IL 15. Grating to be fastened to inlet by welding to two 3"x2"x ⅜" L's-3'-10" long which shall be bolted to inlet walls with ½"x4" expansion bolts @ 9" c.c., (10 bolts required) 1"x1" cross bars shall be spaced 3" c.c.

* Brick may be used in lieu of concrete.



SECTION A-A

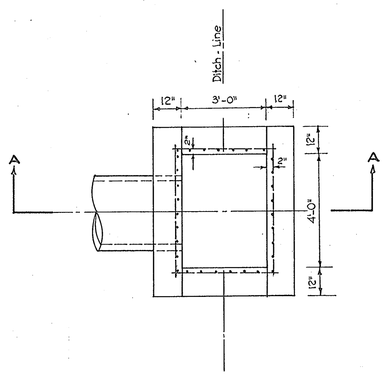


PLAN
(Grate Not Shown)

"J" INLET

Scale: ⅜" = 1'-0"

STRUCTURES No. 11-15-16-18



PLAN
(Grate Not Shown)

"K" INLET

Scale: ⅜"=1'-0"

STRUCTURES No. 2-3

S.D. # D-37, 65136 Y
DEPUTY SANITARY ENGINEER
July 14, 1965
John A. Clary

STATE OF MARYLAND
ALDEN E. IMMS JR.
No. 3011
REGISTERED
PROFESSIONAL ENGINEER

Alden E. Imms Jr.
905

DATE	REVISION	
		DRAFTING: J.F.
		CHECK:
		DESIGN:
		CHECK:

DEVELOPER
SI-CO, INC.
1400 Layhill Road
Silver Spring-Md.
682-2800

CIVIL ENGINEERS ▫ LAND PLANNERS ▫ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ▫ WHEATON ▫ MARYLAND ▫ 949-2011

MSRC TYPE INLETS MODIFIED

NORTH GATE DRIVE

Layhill Village
MONTGOMERY COUNTY - MARYLAND

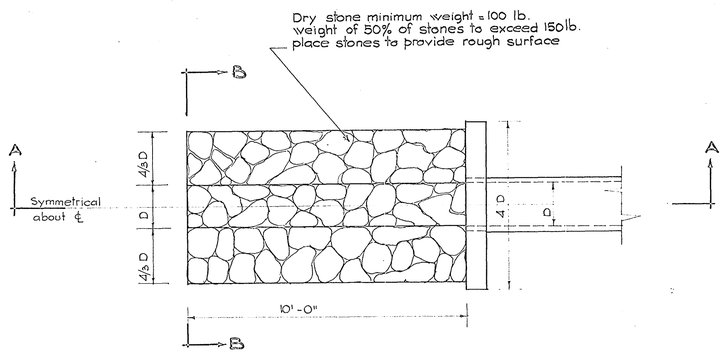
NORTH GATE TERRACE

DATE	JOB NO.
March, 1964	G-2 1787A-1
SCALE	SHEET NO.
As Shown	3 OF 5

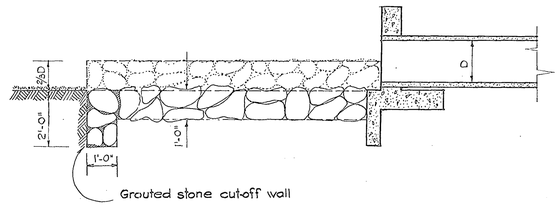
CE 487-889-5

SD FILE NO. 905

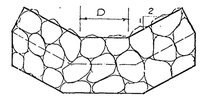
Maryland State Archives



PLAN



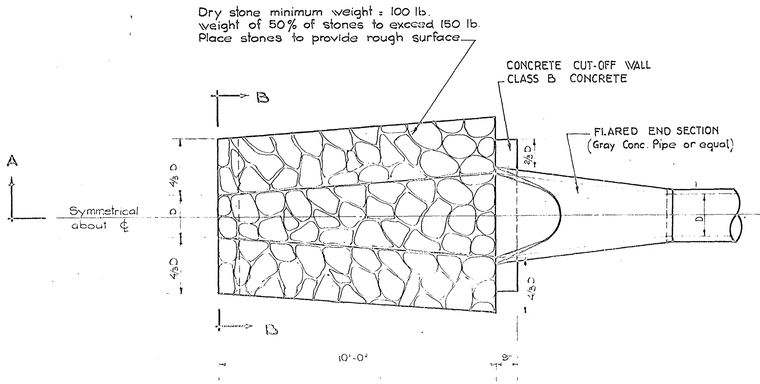
SECTION A-A



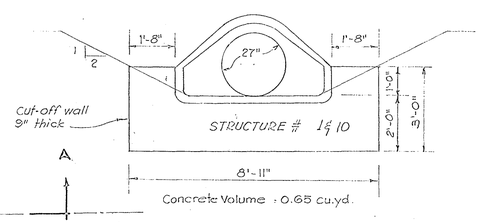
VIEW B-B

DRY RIP-RAP AS USED WITH A WSSC STD. ENDWALL

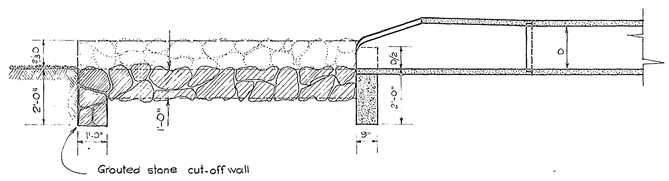
Note: For details of endwall not shown see WSSC Std. Detail No. 60743 - L



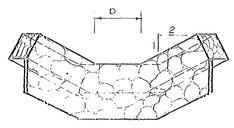
PLAN



DETAIL OF CUT OFF WALLS ON FLARED END SECTION.



SECTION A-A



VIEW B-B

S.D. # D-37, 65136Y

July 14, 1965

John R. Mayo

DRY RIP-RAP AS USED WITH A FLARED END SECTION

STRUCTURES No. 1 & 10

Alden E. Symons Jr.

905

DATE	REVISION		DEVELOPER	CIVIL ENGINEERS ◻ LAND PLANNERS ◻ LAND SURVEYORS		NORTH GATE DRIVE	Layhill Village	NORTH GATE TERRACE	DATE March, 1964	JOB NO. G-2 1787 A-1
		DRAFTING	SI - CO, INC.	THOMAS G. OYSTER AND ASSOCIATES INC.	PAVING AND STORM DRAINS				SCALE No Scale	SHEET NO. 4 of 5
		CHECK	1400 Layhill Road				MONTGOMERY COUNTY - MARYLAND			
		DESIGN	Silver Spring Md.							
		CHECK	682 - 2800	2419 REEDIE DRIVE ◻ WHEATON ◻ MARYLAND ◻ 949-2011						

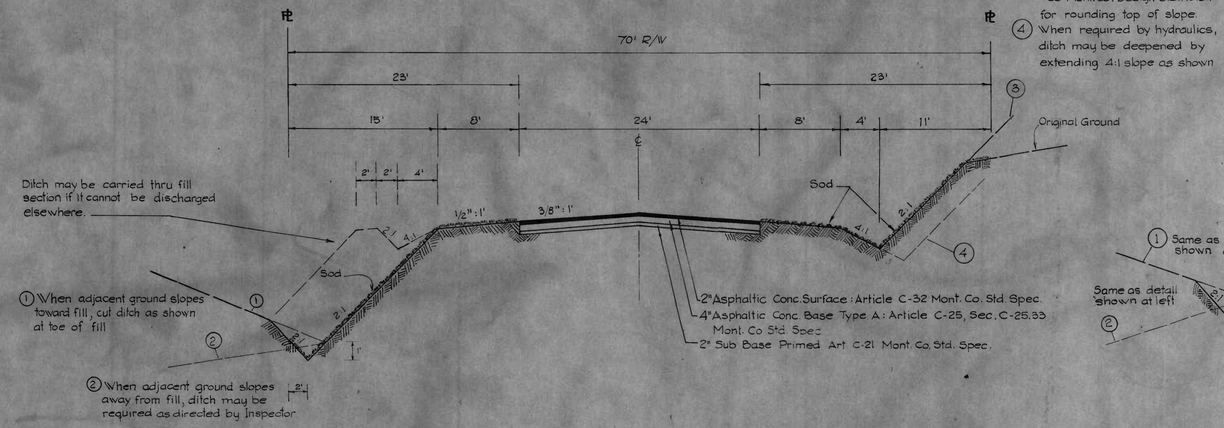
CE487-889-6

SD FILE NO. 905

Maryland State Archives

GENERAL NOTES

1. All work in public right of ways shall be in accordance with the Standards and Specifications of the Montgomery County Road Construction Code.
2. Work shall not commence until the proper permits have been issued.
3. All curb returns shall have a radius of 25'.
4. All unpaved areas within right of ways and all slopes adjacent thereto shall be sodded.
5. No street surfacing shall be started until fine grading and sodding has been completed and inspected.

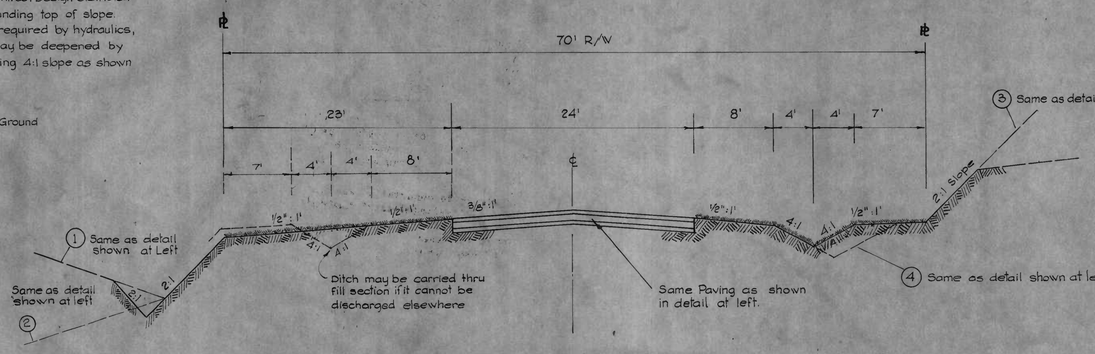


3 When depth of cut exceeds 8' See Mont. Co. Design Std. No. 54 for rounding top of slope.

4 When required by hydraulics, ditch may be deepened by extending 4:1 slope as shown

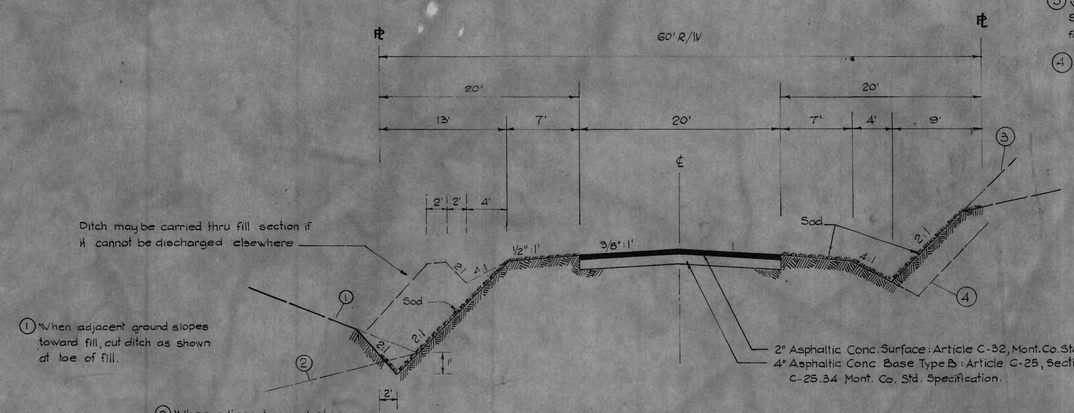
70' RIGHT OF WAY
24' PRIMARY OPEN SECTION PAVING
PARTIAL WIDTH GRADING

Scale: Hor. = 1/8" = 1', Vert. = 1/4" = 1'



70' RIGHT OF WAY
24' PRIMARY OPEN SECTION PAVING
FULL WIDTH GRADING

Scale: Hor. = 1/8" = 1', Vert. = 1/4" = 1'

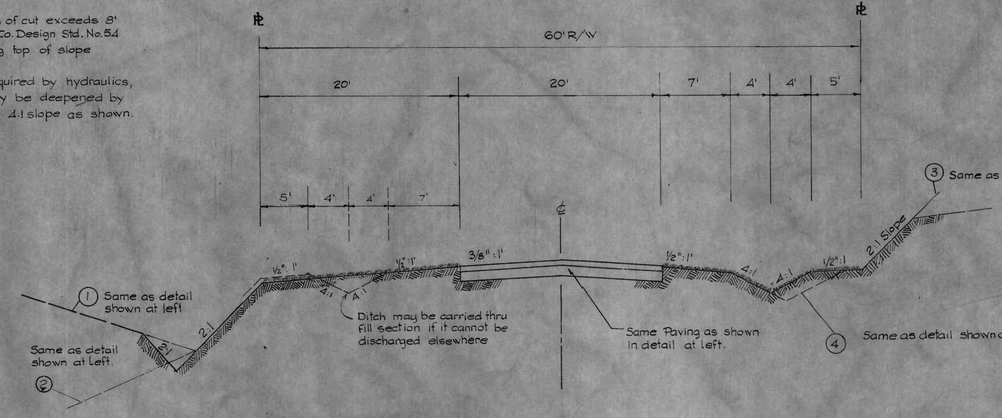


3 When depth of cut exceeds 8' See Mont. Co. Design Std. No. 54 for rounding top of slope

4 When required by hydraulics, ditch may be deepened by extending 4:1 slope as shown.

60' RIGHT OF WAY
20' SECONDARY OPEN SECTION PAVING
PARTIAL WIDTH GRADING

Scale: Hor. = 1/8" = 1'; Vert. = 1/4" = 1'



60' RIGHT OF WAY
20' SECONDARY OPEN SECTION PAVING
FULL WIDTH GRADING

Scale: Hor. = 1/8" = 1'; Vert. = 1/4" = 1'

NOTE:
All streets shown on these plans to be full width grading.

STATE OF MARYLAND
ALDEN E. INMAN JR.
No. 3041
REGISTERED
PROFESSIONAL ENGINEER

Alden E. Inman Jr

905

DATE	REVISION		
		DRAFTING:	
		CHECK:	
		DESIGN:	
		CHECK:	

CIVIL ENGINEERS ■ LAND PLANNERS ■ LAND SURVEYORS
THOMAS G. OYSTER AND ASSOCIATES INC.
2419 REEDIE DRIVE ■ WHEATON ■ MARYLAND ■ 949-2011

MONTGOMERY COUNTY PAVING STANDARDS

Laphill Village
NORTH GATE DRIVE — NORTH GATE TERRACE
MONTGOMERY COUNTY MARYLAND

DATE	JOB NO.
March, 1965	1787 A-1
SCALE	SHEET NO.
As Shown	5 OF 5

CE 487-889-7

SD FILE NO. 905