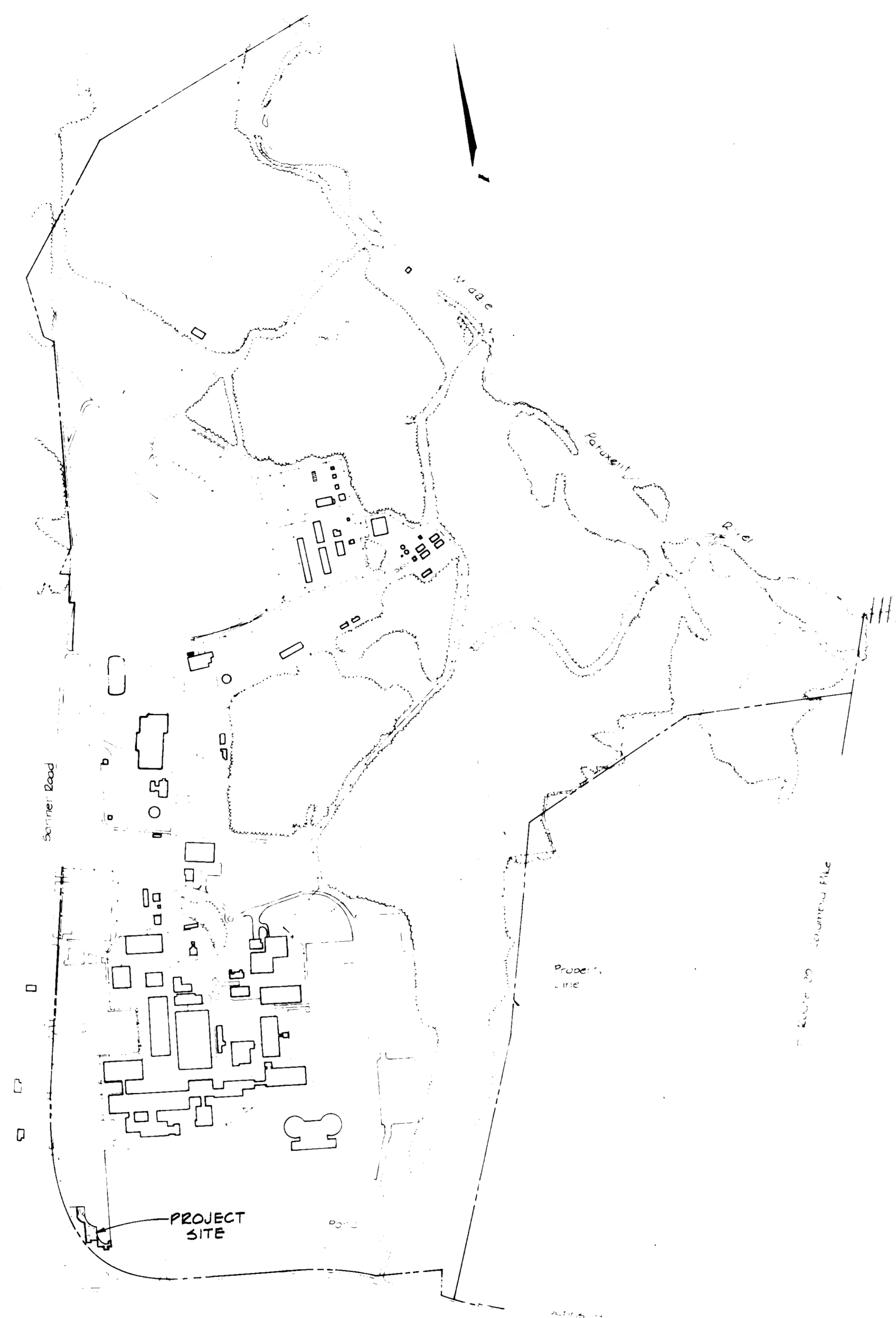


**GENERAL NOTES**

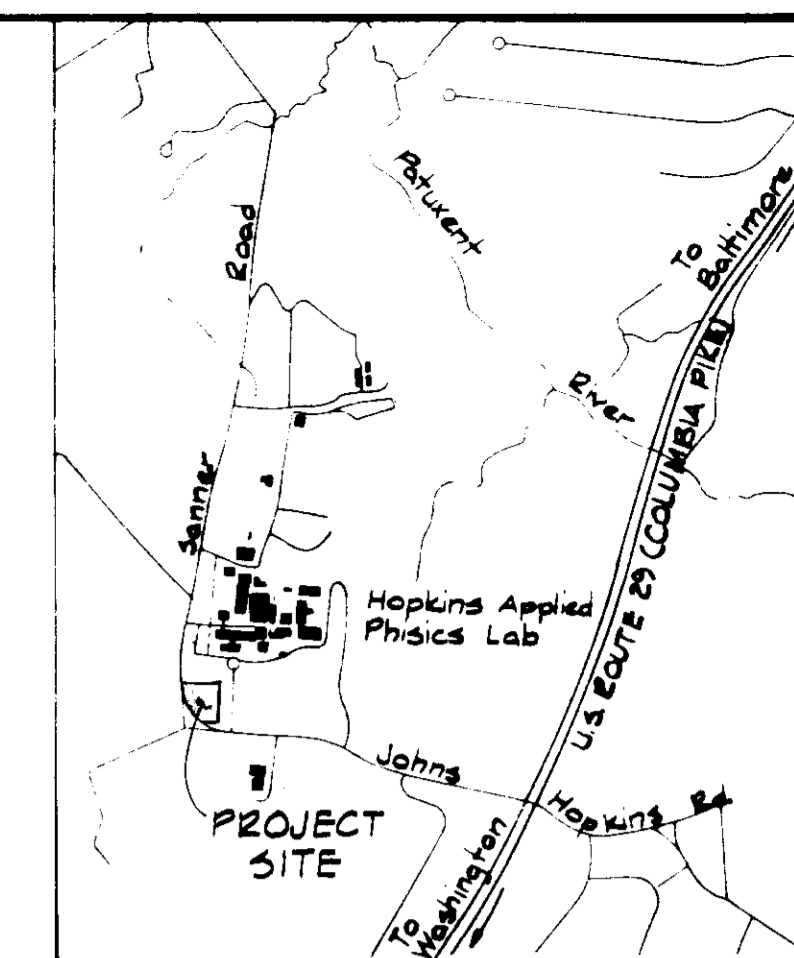
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. ELEVATIONS SHOWN ARE BASED ON THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY DATUM. JHU-APL-DATUM - 0.94' = HOWARD COUNTY DATUM.
3. THE CONTRACTOR SHALL CALL MISS UTILITY (301) 559-0100, FIVE DAYS PRIOR TO THE START OF CONSTRUCTION.
4. POLY FILTER X FILTER CLOTH BLANKET OR EQUAL SHALL BE PLACED UNDER ALL STONE RIP RAP.
5. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN AN UNINTERRUPTED SERVICE. ANY DAMAGE BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
6. LANDSCAPING SHALL BE BY JHU-APL.
7. THE CONTRACTOR SHALL CONTACT MR. ARTHUR STUCKI, PLANT ENGINEER, (301) 953-7100 AT LEAST 5 WORKING DAYS PRIOR TO COMMENCING ANY WORK.
8. THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION, 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK, AT 992-2417 OR 2418.
9. ALL DISTURBED SLOPE AREAS TO BE STABILIZED AS SOON AS GRADING IS COMPLETED.
10. STORMWATER MANAGEMENT FOR THIS PROJECT HAS BEEN APPROVED UNDER SDP-83-21.

**SITE DATA**

1. ZONING - - - - -	RURAL, R.
2. SITE AREA - - - - -	0.38 AC.
3. ACREAGE OF ENTIRE PROPERTY - - - - -	366 AC.
4. EXISTING BUILDING COVERAGE - - - - -	14.0 AC. = 3.82%
5. TOTAL NUMBER OF EXISTING EMPLOYEES/ PERSONNEL ON THE ENTIRE SITE - - - - -	3,100
6. TOTAL NUMBER OF PARKING SPACES REQUIRED - - - - -	2,258
7. TOTAL NUMBER OF PARKING SPACES PROVIDED	
EXISTING SPACES - - - - -	2,596
PROPOSED SPACES - - - - -	31
TOTAL EXISTING AND PROPOSED - - - - -	2,627



**LOCATION PLAN**  
Scale 1"=400'



**VICINITY MAP**  
Scale 1"=2000

**SHEET INDEX**

1. Cover Sheet
2. Plan

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
P 123	11100 JOHNS HOPKINS ROAD

SUBDIVISION NAME		SECT / AREA	LOT / PARCEL		
J.H.U. APPLIED PHYSICS LAB		N/A	123		
PLAT# OR L/F	BLOCK#	ZONE	TAX / ZONE MAP	ELEC DIST	CENSUS TR
234/304	16	R	41	5TH	6051
WATER CODE		SEWER CODE			
E 21		6480000			

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*Joyce Berlin* DATE 6-16-86  
COUNTY HEALTH OFFICER

APPROVED FOR ROADS, STORM DRAINS, PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

*Walter F. Nemmy* DATE 6-9-86  
DIRECTOR

*Richard S. Ray* DATE 6-9-86  
CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*Thomas L. Harris* DATE 6-17-86  
PLANNING DIRECTOR

*Arthur M. Murchison* DATE 6-17-86  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY  
DATE 5-12-86  
*M. Hill*

WHITMAN, BEQUARDT AND ASSOCIATES 2315 SAINT PAUL STREET BALTIMORE, MARYLAND 21218		APPLIED PHYSICS LABORATORY THE JOHNS HOPKINS UNIVERSITY Johns Hopkins Road, Howard County, Maryland Approved For The University By <i>Arthur M. Murchison</i> Date 4/4/86 Title Plant Engineer	VISITOR'S PARKING LOT EXPANSION PARKING LOT ADDITION TO SDP-86-149 THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY 11100 Johns Hopkins Road Laurel, Maryland 20707	COVER SHEET	REVISIONS	SCALE: AS SHOWN SHEET NO. 1 OF 2 DATE: 4-9-86	DRAWING 1 SDP-86-225
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**SEQUENCE OF CONSTRUCTION**

1. Notify the Howard Soil Conservation District and the Howard County Bureau of Licenses, in person and provide 48 hours advance notice before work begins.
2. Construct stabilized construction entrance and silt fence.
3. Construct the parking area and finish grading the site.
4. Seed and stabilize the proposed grassed areas.
5. When all areas have been stabilized, Sediment Control features may be removed.

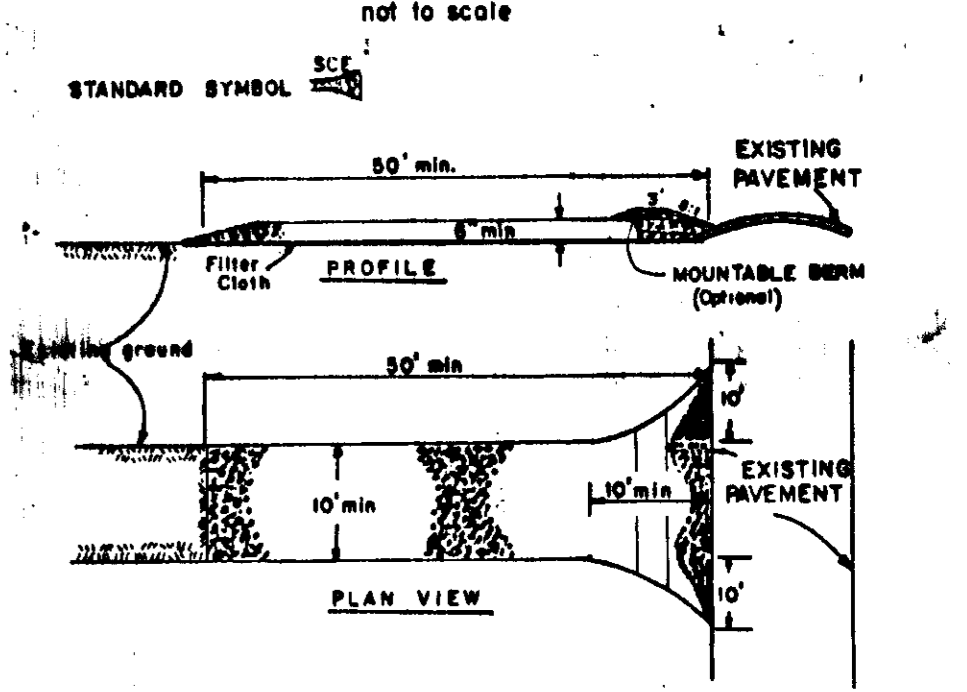
**SEDIMENT CONTROL NOTES**

- 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. (992-2437)
- 2) All vegetative and structural practices are to be installed according to the provisions of this plan and standards and specifications for SOIL EROSION AND SEDIMENT CONTROL.
- 3) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, ditches, 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 established within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). 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.
- 7) Site Analysis:
  - Total Area of Site: 366 Acres
  - Area Disturbed: 0.38 Acres
  - Area to be roofed or paved: 0.42 Acres
  - Area to be vegetatively stabilized: 0.16 Acres
  - Total Cut: 50 Cu. yds
  - Total Fill: 180 Cu. yds
  - Offsite waste/borrow area location:
- 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 DPM 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.

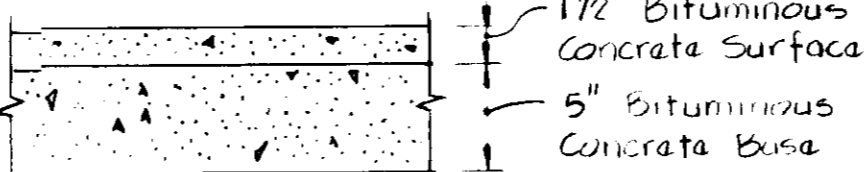
**PERMANENT SEEDING NOTES**

- Apply to seeded or cleared areas not subject to immediate further disturbance where a permanent vegetative cover is needed.
- Soil Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.
- Soil Amendment:** In lieu of soil test recommendations, use one of the following schedules and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding.
- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Narrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform 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 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Narrow 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 50 lbs per acre (14 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 40 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 seed. Option (3) Seed with 40 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 unmodified 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 reseeding.
- Apply to seeded or cleared areas likely to be re-disturbed 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.
- Soil Amendment:** 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 November 15, seed with 35 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 15, seed with 1 lb 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 seed.
- 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 gal per acre (5 gal/1000 sq ft) of unmodified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring. Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

**STABILIZED CONSTRUCTION ENTRANCE**

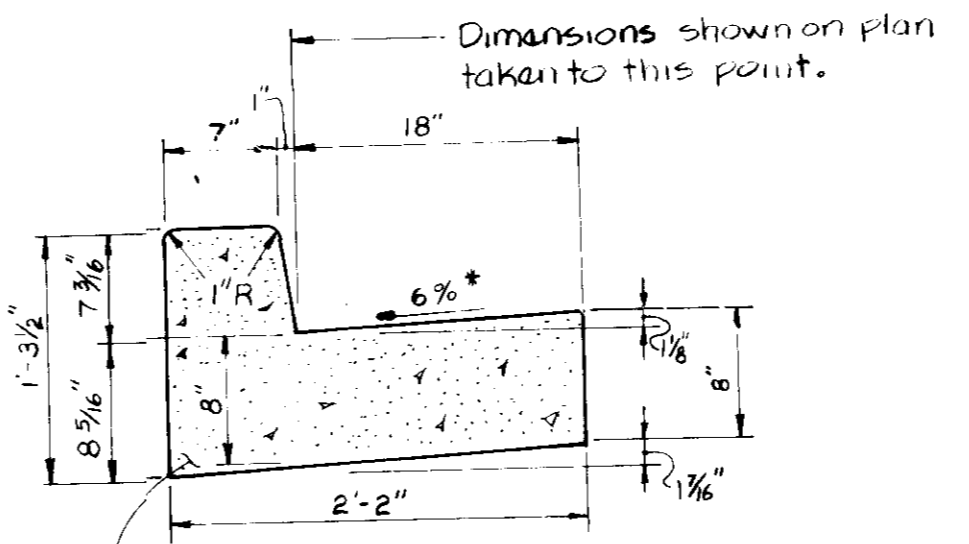


- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
  2. Length - As required, but not less than 30 feet (except on a single residential lot where a 10 foot minimum length would apply).
  3. Thickness - Not less than six (6) inches.
  4. Width - Ten (10) foot minimum, but not less than the full width at points where increase of stream occurs.
  5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
  6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 3:1 slopes will be permitted.
  7. Maintenance - The entrance shall be maintained in a condition which will prevent seeping or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment applied, scraped, washed or tracked onto public right-of-way must be removed immediately.
  8. Washing - Trucks shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
  9. Periodic inspection and needed maintenance shall be provided after each rain.



**PAVING SECTION**

Not to Scale



**STANDARD 7" COMBINATION CURB & GUTTER**

Scale: 1"=1'-0"

\* Gutter Run on the high side of parking areas shall be sloped at the same rate as the pavement

APPROVED  
DIVISION OF LAND DEVELOPMENT  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 5-12-86  
[Signature]

**RESPONSIBLE PERSONNEL CERTIFICATION**  
"I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT"

[Signature] 4/4/86  
SIGNATURE OF DEVELOPER DATE

**CERTIFICATION BY THE ENGINEER**  
"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"

[Signature] 4/9/86  
SIGNATURE OF ENGINEER DATE

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

APPROVED: [Signature] 4/4/86  
HOWARD S.C.D. DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE: [Signature] DATE 6-5-86  
U.S. SOIL CONSERVATION SERVICE

**CERTIFICATION BY THE DEVELOPER**  
"I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY"

[Signature] 4/4/86  
SIGNATURE OF DEVELOPER DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

[Signature] 6-16-86  
COUNTY HEALTH OFFICER DATE

APPROVED FOR ROADS, STORM DRAINS, PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

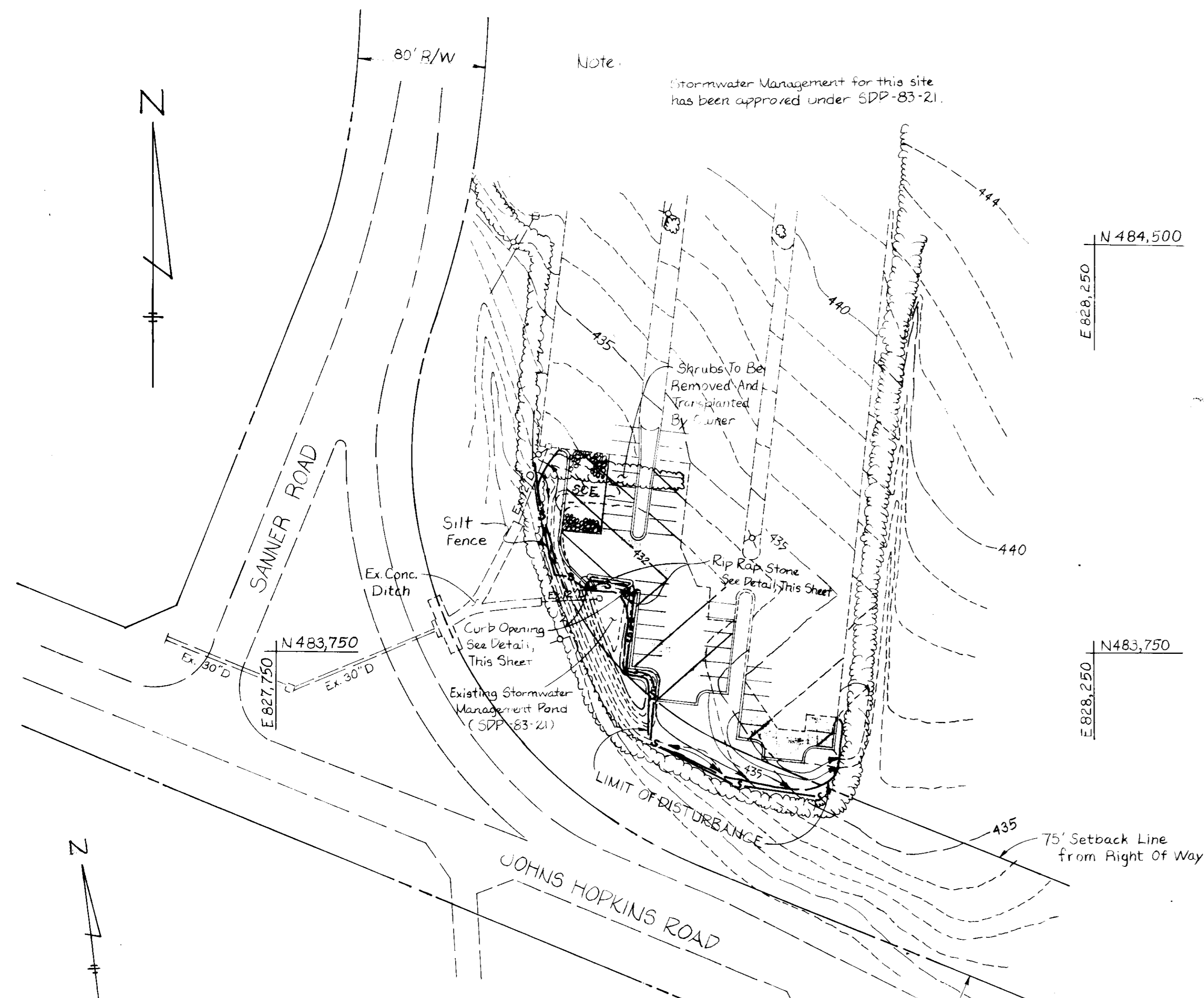
[Signature] 6-8-86  
DIRECTOR DATE

[Signature] 6-9-86  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

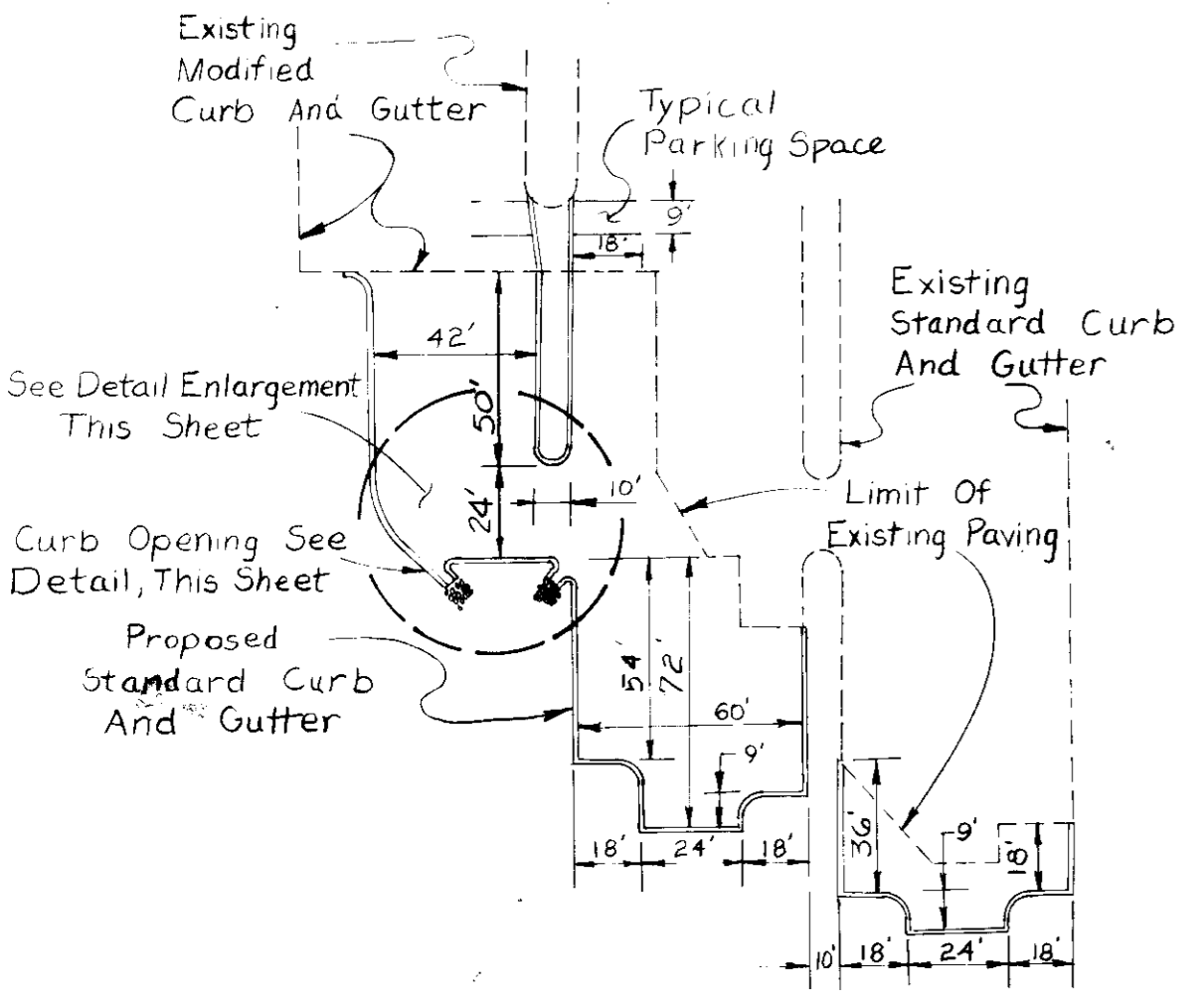
[Signature] 6-17-86  
PLANNING DIRECTOR DATE

[Signature] 6-17-86  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE



**PLAN**

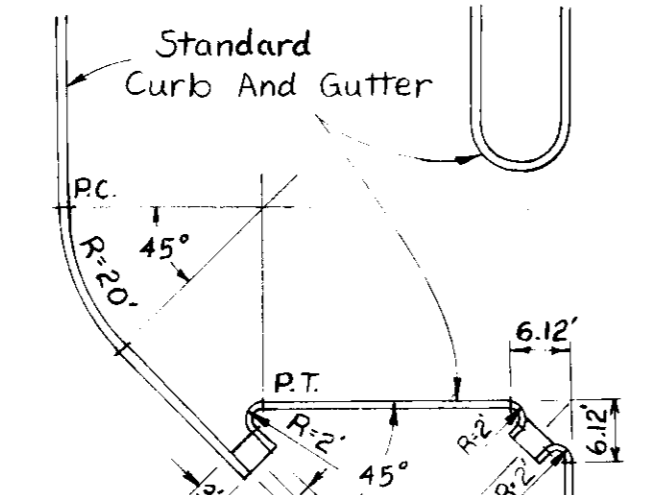
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**LAYOUT DIMENSIONS**

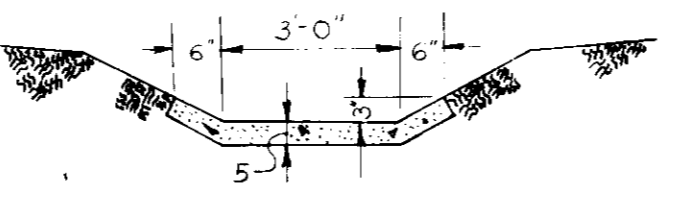
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- Notes:
1. All transitions between Modified and Standard Curb and gutter shall be 5 feet.
  2. All radii 5' unless otherwise indicated.
  3. Note down curb to gutter at curb openings.
  4. Provide minimum 3' length of gutter at curb openings.
  5. Interior access roads and parking lot are private.



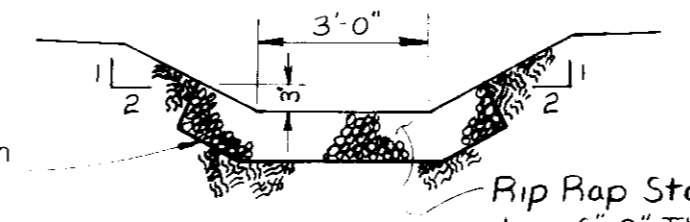
**CURB OPENING LAYOUT**

Scale: 1"=20'



**CONCRETE GUTTER @ CURB OPENING**

Not To Scale



**SECTION RIP RAP STONE**

Not To Scale

APPLIED PHYSICS LABORATORY  
THE JOHNS HOPKINS UNIVERSITY  
3741 Johns Hopkins Road, Baltimore, Maryland  
[Signature] 4/4/86  
Plant Engineer

**VISITOR'S PARKING LOT EXPANSION**  
PARKING LOT ADDITION TO SDP-86-149  
THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY  
1100 Johns Hopkins Road  
Laurel, Maryland 20707

REVISIONS

SCALE AS SHOWN

DRAWING

PLAN

SHEET NO. 2 OF 2

DATE: 4-9-86

SDP-86-225