

- LEGEND**
- PROPOSED BIT. CONCRETE PAVING
  - E.XIST. CONTOURS
  - PROPOSED CONTOURS
  - PROPOSED CONC. CURB & GUTTER
  - PROPOSED UTILITY (AS MARKED)
  - 100 YEAR FLOOD PLAIN
  - LIMIT OF SUBMISSION (GRADING)
  - 2 1/2" CALIBER DECIDUOUS TREES (ACER RUBRUM)
  - PROPOSED SPOT ELEVATIONS (T.C. TOP OF CURB)
  - FLOW ARROWS
  - DRAINAGE AREA BOUNDARY
  - EXISTING TIMBER LIGHT POLES
  - EXISTING OVERHEAD WIZING
  - PROPOSED TIMBER LIGHT POLES W/ DIRECTION OF AIR
  - PROPOSED OVERHEAD WIZING
  - EXISTING FENCE
  - PROPOSED FENCE W/ APPROX. LENGTH
  - DRILL HOLE LOCATION
  - WHITE PINE (PINUS STROBUS)

**ZONED: 12 MH**  
 SEPARATE EXISTING 18" DCCMP AS SHOWN. INSTALL 22 LF-21" DCCMP FROM NEW INLET NORMAL TO CURB AS SHOWN. PROVIDE COATED METAL END SECTION. PROVIDE 36" DCCMP 121/2", CONCRETE BASE & ANTI-VORTEX DEVICE. SEE DETAILS SHEET 2 OF 3.

**ZONED: RMH**  
 PLANT EVERGREEN TREES, 6'-8" High (2 1/2" Cal.) As shown  
 PLANT DECIDUOUS TREE ON 3' HIGH EARTH MOUND LEFT OF DITCH & FROM STA. 3+20 TO STA. 4+40 (SEE DETAIL SHEET 2 OF 3)

**ZONED: 12-12**  
 BOARD OF EDUCATION  
 850/380  
 R=1220.00'  
 L=92.99'  
 Chd.=U16°45'00"W 92.97'

- GENERAL NOTES**
- PROPERTY OUTLINE, 100 YEAR FLOOD PLAIN, EXISTING IMPROVEMENTS & UTILITIES TAKEN FROM APPROVED SDP 73-32 BY G.W. STEPHENS JR. & ASSOC., DEC. 1972.
  - ELEVATIONS SHOWN HEREON ARE BASED ON HOWARD COUNTY DATUM.
  - ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.
  - EXISTING ZONING U-1 (SUBJECT TO VARIANCE BA 80-33)
  - ADDITION TO SDP 73-32
  - TAX MAP 38 PARCEL 845
  - TOTAL AREA OF SUBMISSION 3.59 AC±
  - DEED REFERENCE: LIBER 600 FOLIO 147

**SITE ANALYSIS**

1. EXISTING ZONING (SUBJECT TO VARIANCE BA 80-33)	M-1
2. AREA LIMITS OF SUBMISSION	3.59 AC±
3. AREA NEW PAVING	1.67 AC±
4. AREA NEW OPEN SPACE	1.83 AC±
5. NEW BUILDING AREA	0.09 AC±
6. TOTAL SITE	SDP 73-32 THIS SUBMISSION TOTAL
A. TOTAL SITE AREA	14.50 AC±
B. PAVED & BLDG. AREA	5.77 AC± 1.76 AC± 7.53 AC±
C. OPEN SPACE (INCL. FLOOD PLAIN)	6.47 AC± (45%)
D. FLOOD AREA	21,744 S.F. 3,926 S.F. 25,670 S.F.
7. TOTAL NO. OF EMPLOYEES	25
8. PARKING REQ'D @ 1 SPACE/500 S.F.	51
9. PARKING PROVIDED	58

HOWARD SOIL CONSERVATION DISTRICT:  
 Reviewed for Howard Conservation District and meets technical requirements

*James M. DeLoach*  
 U.S. SOIL CONSERVATION SERVICE  
 8-28-81  
 DATE

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

APPROVED: *[Signature]*  
 HOWARD S.C.D.  
 8-28-81  
 DATE

APPROVED: *[Signature]*  
 PLANNING DIRECTOR  
 9-4-81  
 DATE

APPROVED: *[Signature]*  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
 9-8-81  
 DATE

DEVELOPER:  
 I certify that all development and/or construction will be done according to these plans, and that I will maintain control of the site until all work is completed. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

*[Signature]*  
 5/19/81  
 DATE

ENGINEER:  
 I certify that this plan for pond construction, erosion, and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District.

*[Signature]*  
 5/19/81  
 DATE

APPROVED  
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 8-4-81

Rev. Fence Location Ref BA 81-50  
 ADD CONC. PAD 7/9/82

**PURDUM & JESCHKE CONSULTING ENGINEERS LAND SURVEYORS**  
 1023 North Calvert Street  
 Baltimore, Maryland 21202 301/837-0194

APPROVED: *[Signature]*  
 DIRECTOR  
 9-12-81  
 DATE

*[Signature]*  
 CHIEF, BUREAU OF ENGINEERING  
 9-12-81  
 DATE

APPROVED: *[Signature]*  
 PLANNING DIRECTOR  
 9-4-81  
 DATE

APPROVED: *[Signature]*  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
 9-8-81  
 DATE

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*[Signature]*  
 5/19/81  
 DATE

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*[Signature]*  
 5/19/81  
 DATE

ADDITION TO APPROVED SDP 73-32

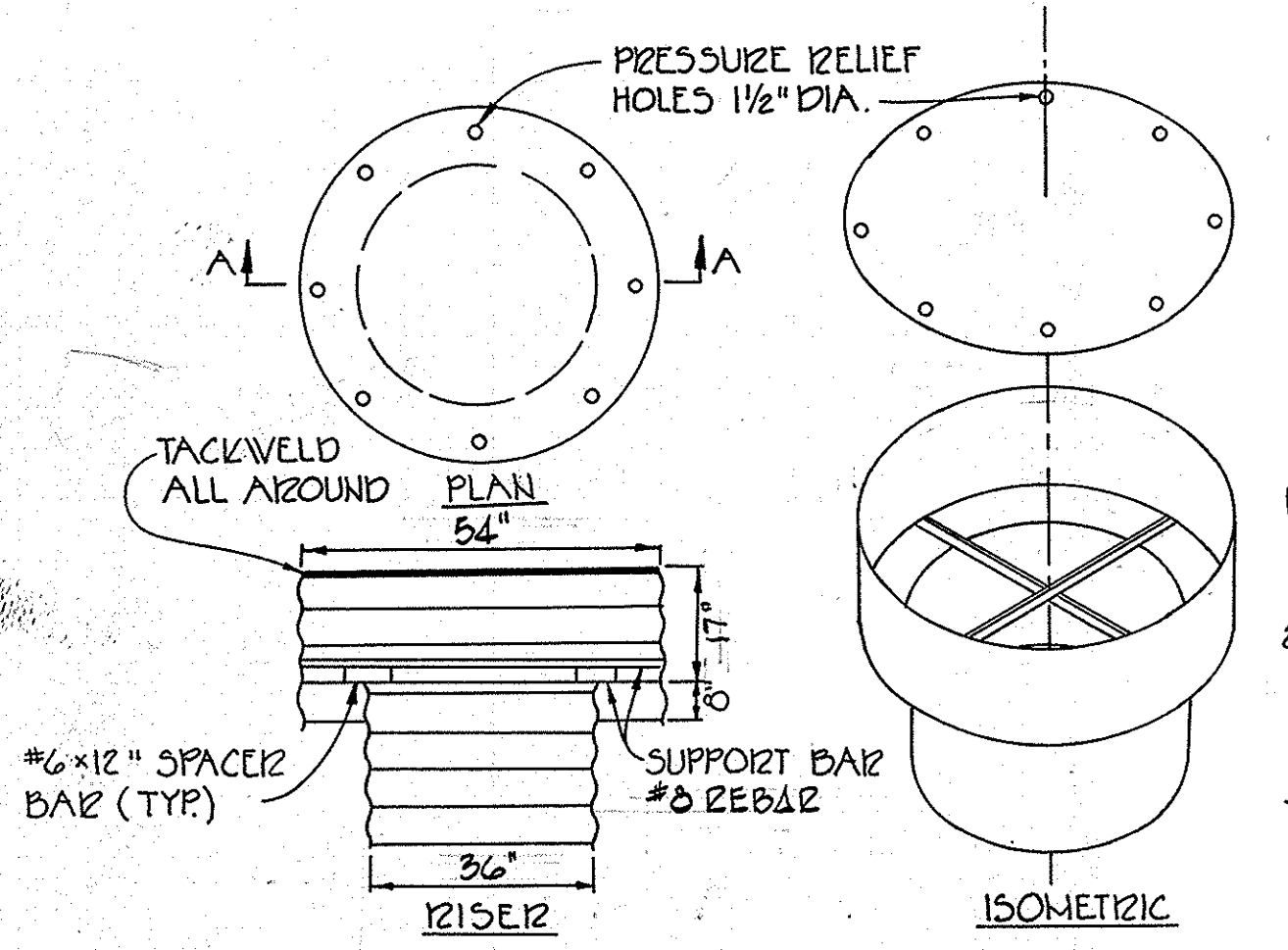
**SITE DEVELOPMENT PLAN CAROLINA FREIGHT CARRIERS CORPORATION SITE PLAN**

ELECTION DIST. NO 1  
 SCALE: AS SHOWN  
 TAX MAP: 38

HOWARD COUNTY MD  
 DATE: MAY 4, 1981  
 PARCEL: 845

SHEET 1 OF 3  
 REVISIONS: REVISIO TO REFLECT HO CO COMTS 7/14/81 AUGUST 10, 1981

DESIGNED: R.J.T.  
 DRAWN: C.O.P.  
 CHECKED: A.E.L.

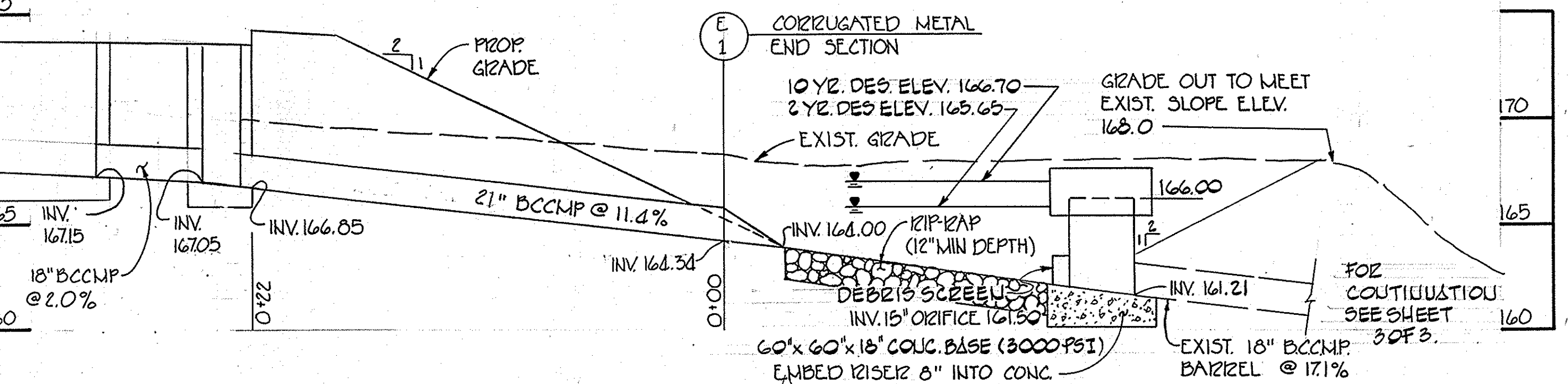


**CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE**  
NO SCALE

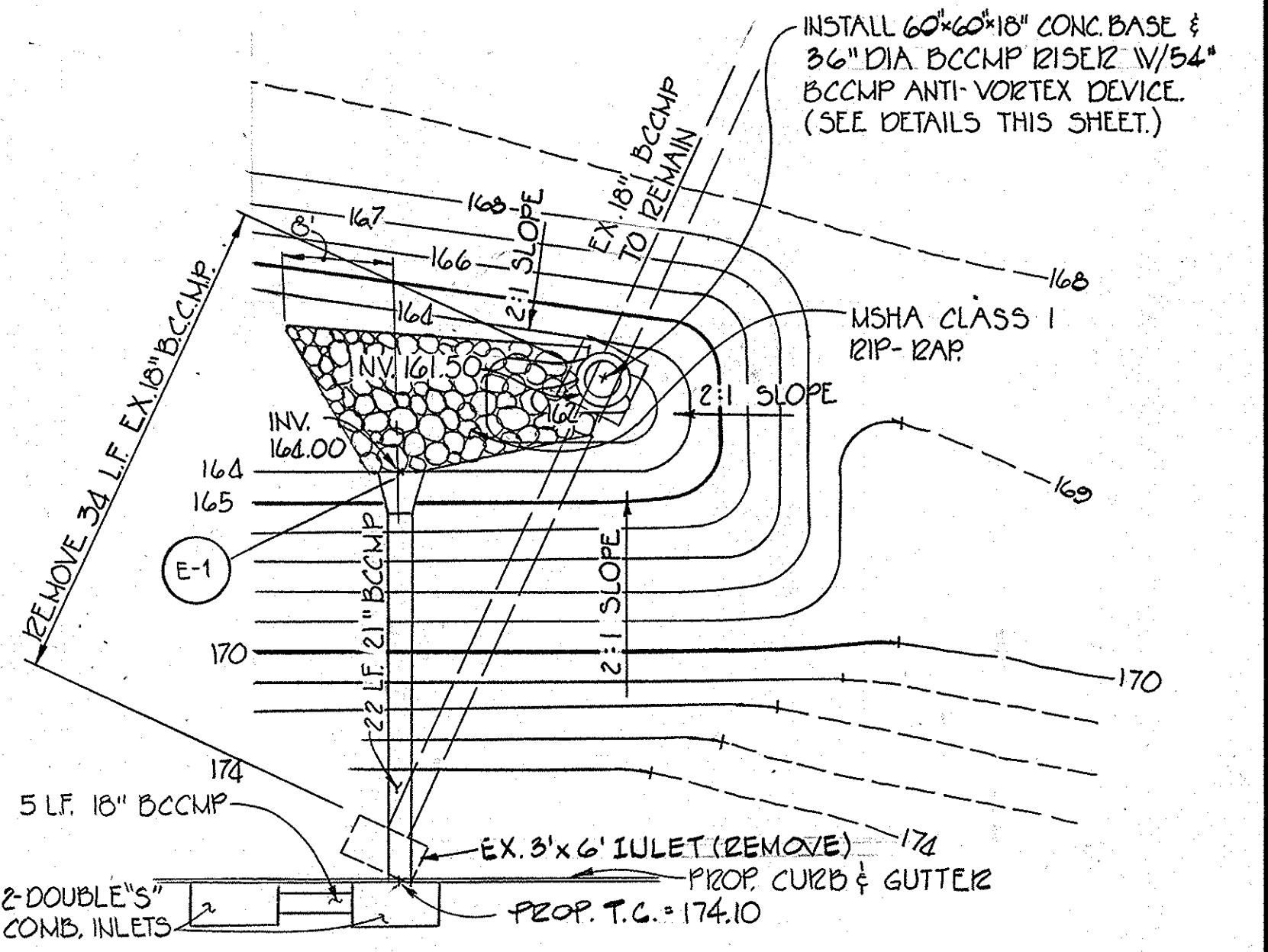
TOP IS 1/2 GAGE CORRUGATED OR 1/8" STEEL PLATE. PRESSURE RELIEF HOLES MAY BE OMITTED IF ENDS OF CORRUGATION ARE LEFT FULLY OPEN WHEN CORRUGATED TOP IS WELDED TO CYLINDER.

**NOTES**

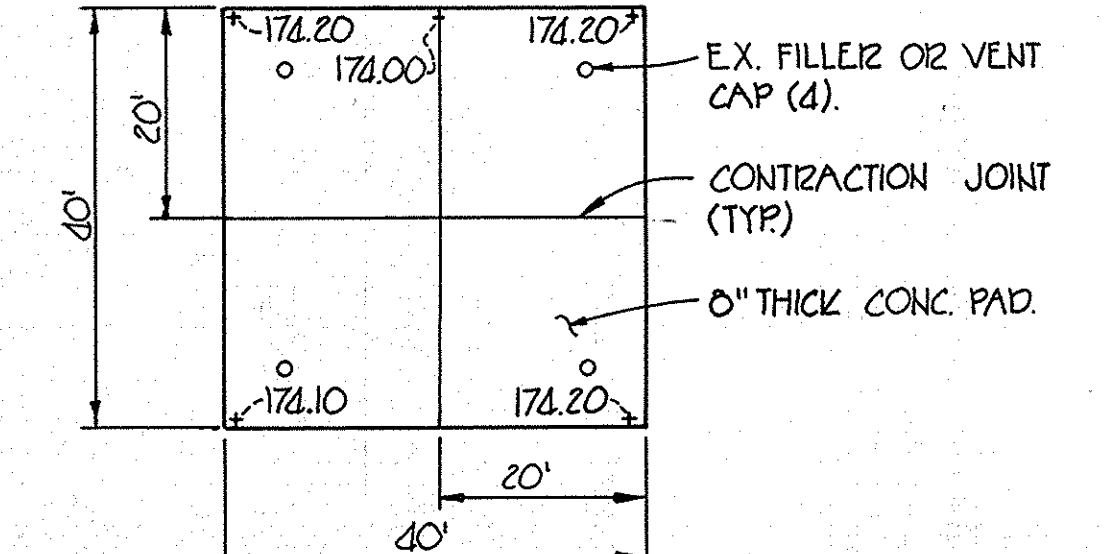
1. THE CYLINDER MUST BE FIRMLY FASTENED TO THE TOP OF THE RISER.
2. SUPPORT BARS ARE WELDED TO THE TOP OF THE RISER OR ATTACHED BY STRAPS BOLTED TO THE TOP OF THE RISER.
3. ALL CORRUGATED METAL PIPE & COLLARS SHALL BE FULLY BITUMINOUS COATED.
4. CYLINDER IS 1/4 GA. CORRUGATED METAL PIPE.



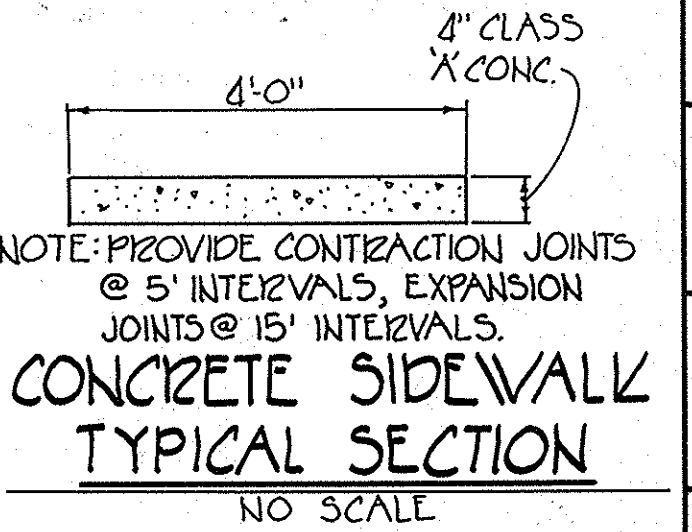
**SECTION THROUGH EXCAVATED STORM WATER MANAGEMENT POND**  
SCALE: HORIZ = 1"=5' VERT = 1"=5'



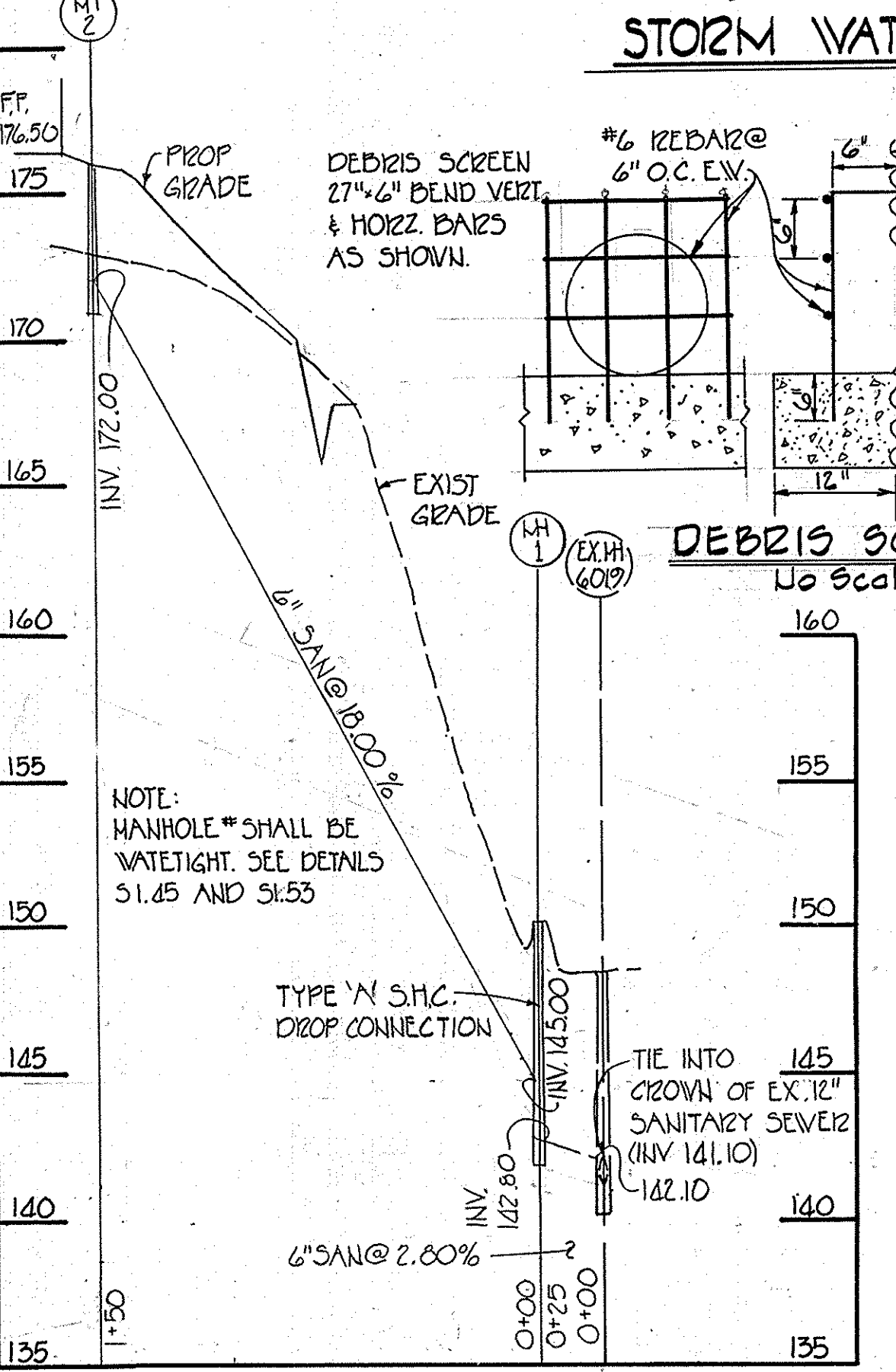
**STORM WATER MANAGEMENT POND DETAIL**  
SCALE: 1"=10'



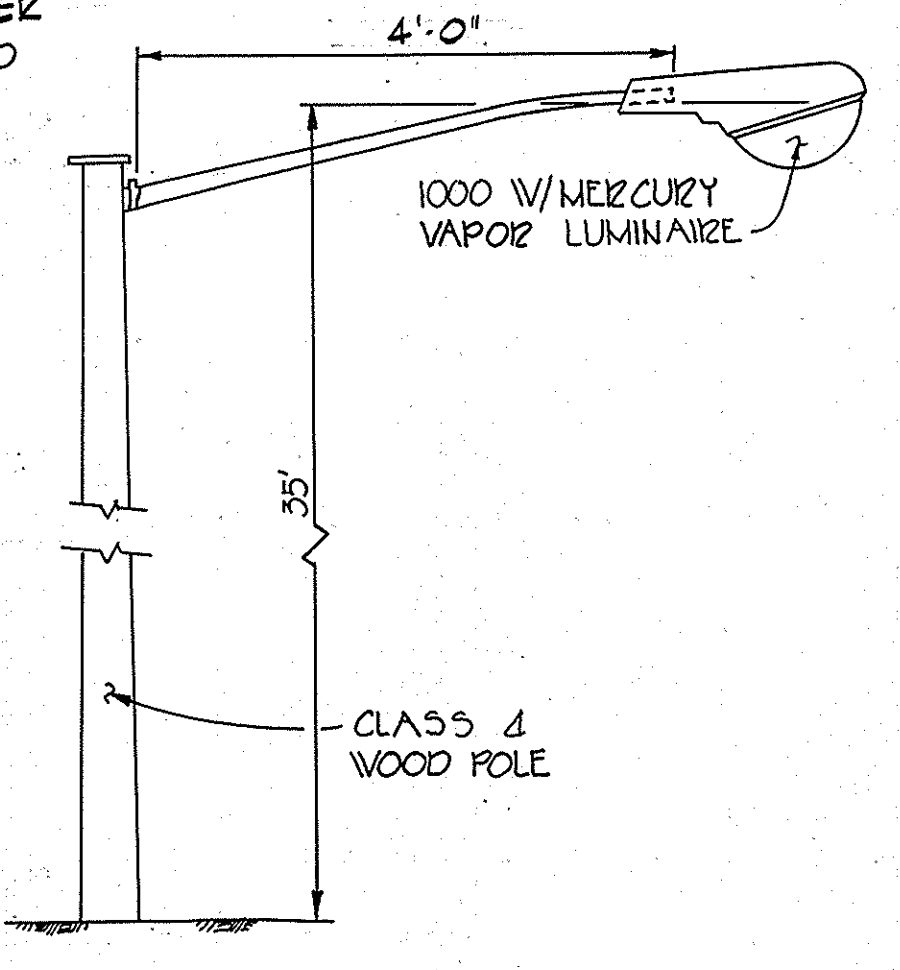
**FILLER CAP CONCRETE PAD DETAIL**  
NO SCALE



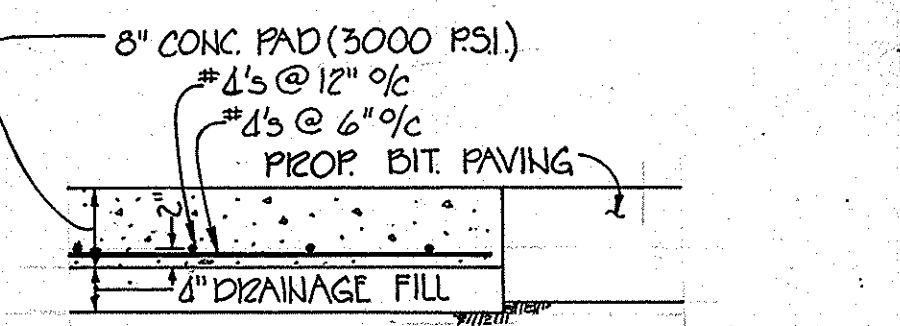
**CONCRETE SIDEWALK TYPICAL SECTION**  
NO SCALE



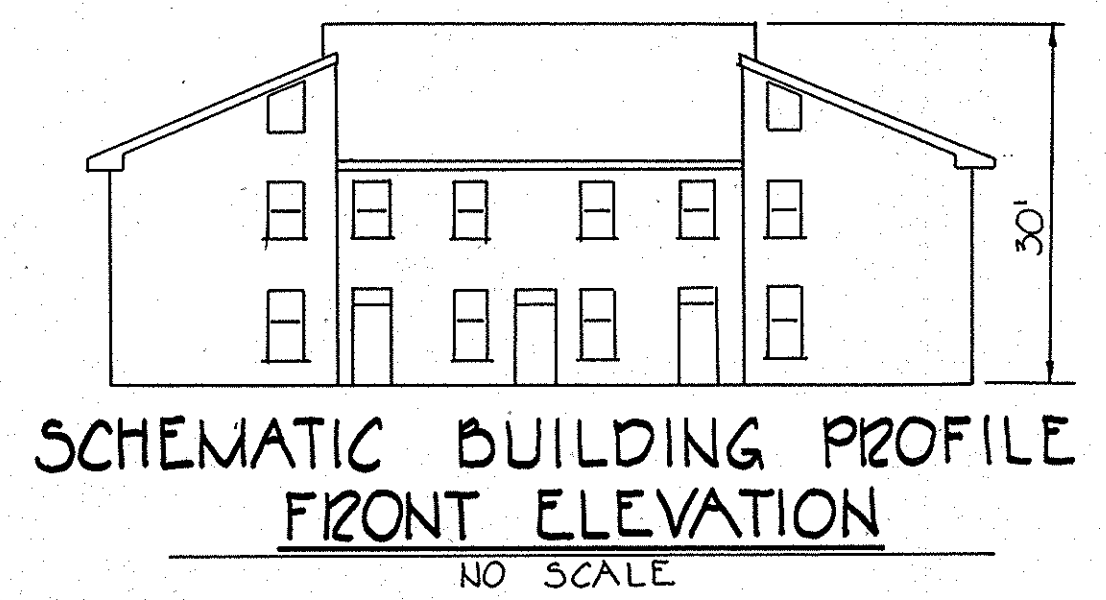
**SANITARY SEWER PROFILE**  
SCALE: HORIZ = 1"=5' VERT = 1"=5'



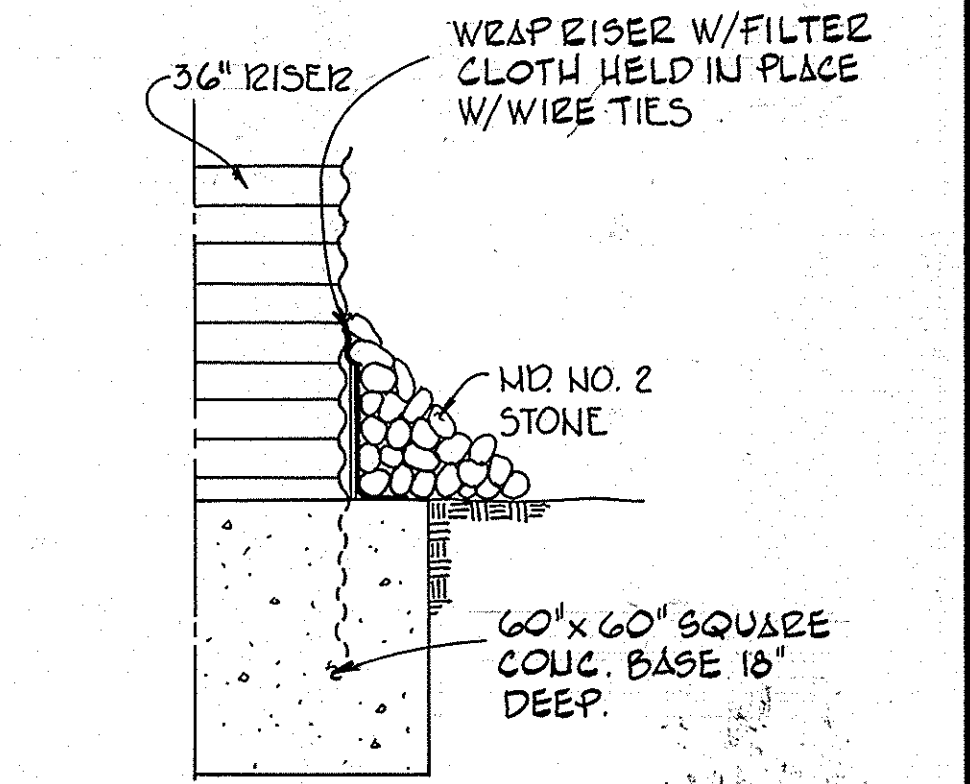
**SITE LIGHTING DETAIL**  
NO SCALE  
NOTE: LIGHTS AND INSTALLATION BY BGI & E.



**CONCRETE PAD @ FILLER CAPS TYPICAL SECTION**  
NO SCALE

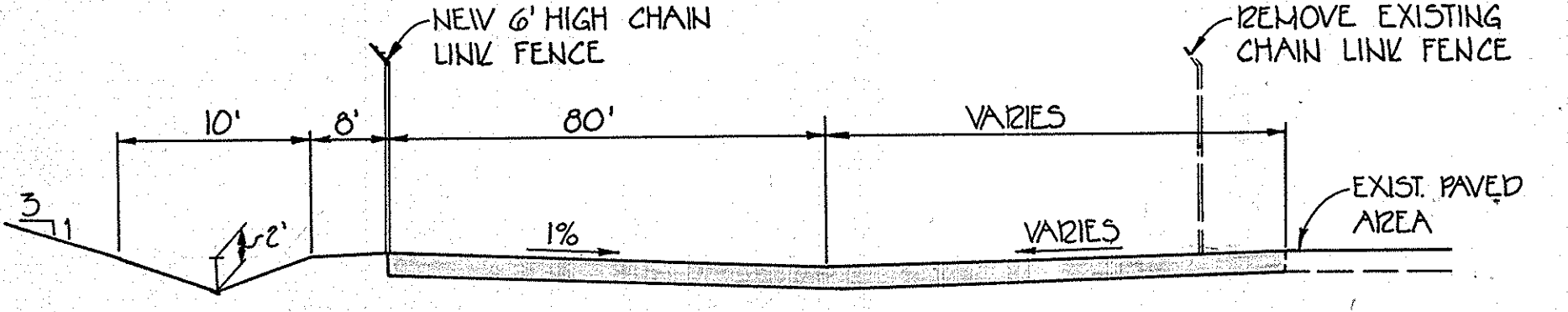


**SCHEMATIC BUILDING PROFILE FRONT ELEVATION**  
NO SCALE

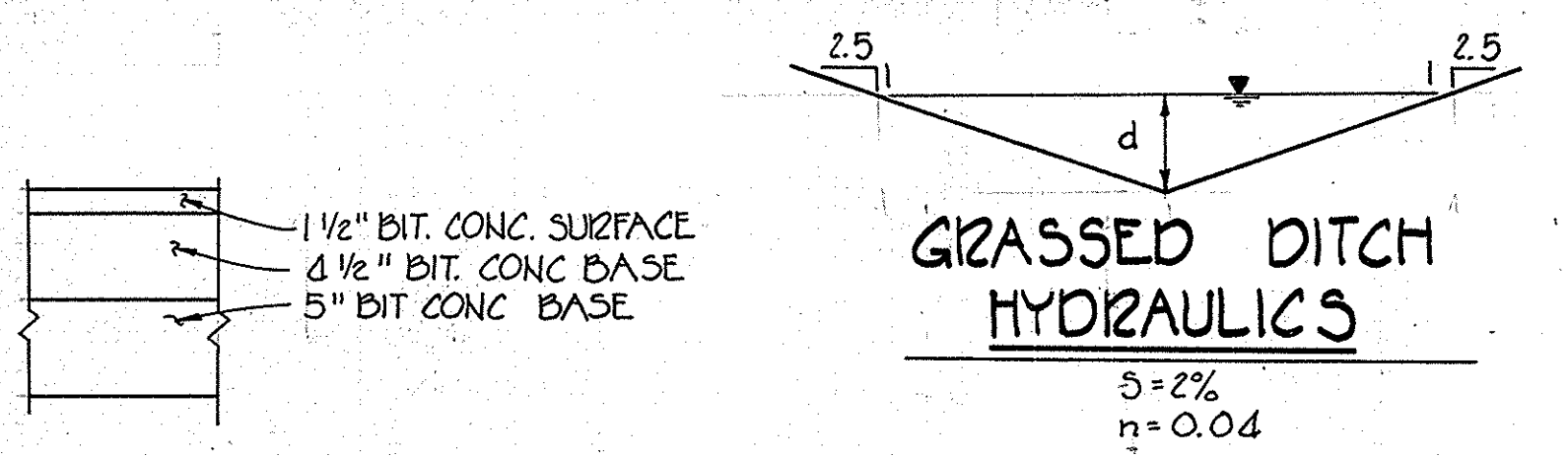


**LOW FLOW ORIFICE BLOCKING DETAIL**  
NO SCALE

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 8-4-81



**TYPICAL SECTION THROUGH PARKING AREA**  
NO SCALE

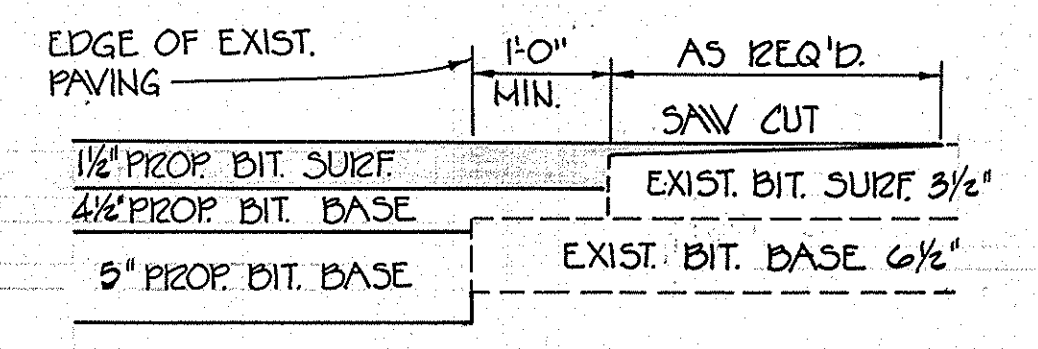


**GRASSSED DITCH HYDRAULICS**

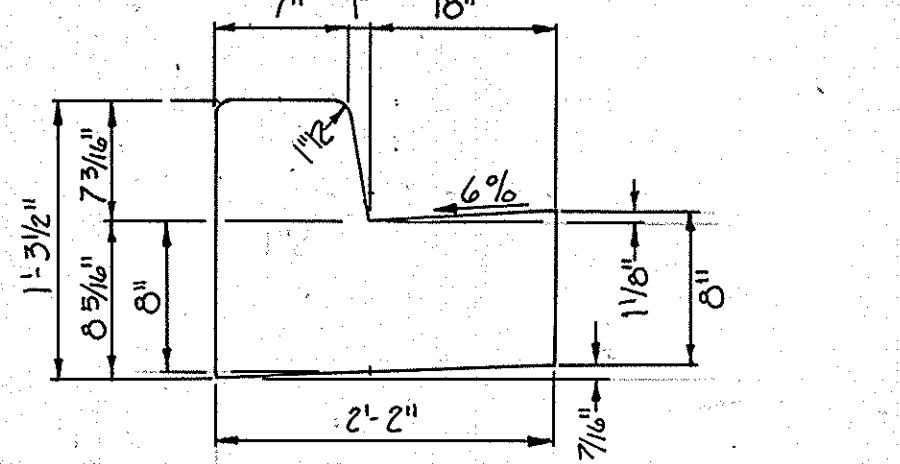
Sta 2+00  
Q10 = 2.0 cfs.  
d = 0.65  
a = 1.05  
r<sup>2</sup>/8 = 0.45  
V = 2.26 fps.

Sta 6+00  
Q10 = 4.2 cfs.  
d = 0.8  
a = 1.6  
r<sup>2</sup>/8 = 0.52  
V = 2.7 fps.

**PAVING SECTION**  
NO SCALE

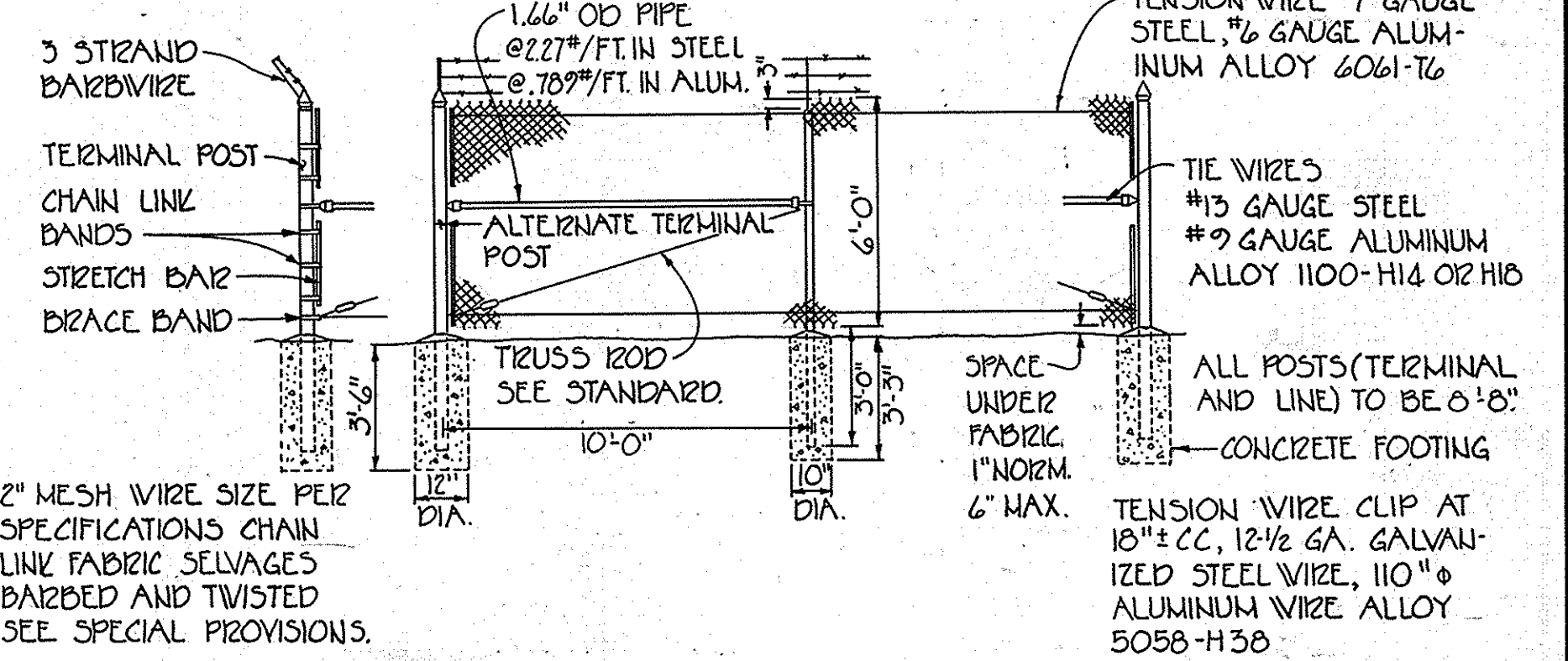


**PAVEMENT TRANSITION SECTION**  
NO SCALE



**STANDARD 7" COMBINATION CURB AND GUTTER**  
NO SCALE

H BEAM STEEL - 2.25"x1.95" @ 4.10"/FT.	ALT. TERM. POST STEEL - 2.50" SQ @ 5.70"/FT.
H BEAM ALUMINUM - 2.25"x1.95" @ 1.25"/FT.	ALT. TERM. POST ALUM. - 3.00" SQ @ 2.00"/FT.
TERM. POST STEEL - 2.875" OD @ 5.79"/FT.	HOG RING STEEL - 18" C/C 12.5 GA. GALV. STEEL WIRE.
TERM. POST ALUMINUM - 2.875" OD @ 2.00"/FT.	HOG RING ALUM. - 18" C/C 110.0 WIRE ALLOY 5058-H38



**CHAIN LINK FENCE DETAIL**  
NO SCALE

STRUCT	TYPE	INV. IN	INV. OUT	TOP	STD. DETAIL
I-1	DOUBLE 'S' COMB.	-	167.15	174.20	SD-4.34
I-2	DOUBLE 'S' COMB.	167.05	166.85	174.10	SD-4.34
E-1	METAL END SECT	-	164.00	-	SD-5.61

HOWARD SOIL CONSERVATION DISTRICT:  
Reviewed for Howard Conservation District and meets technical requirements

APPROVED: *James M. Helm* 8-28-81  
U.S. SOIL CONSERVATION SERVICE DATE

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District

APPROVED: *Wes Femp* 8-28-81  
HOWARD S.C.D. DATE

NOTES:  
1. EXTEND TRANSITION SECTIONS AS SHOWN ON SITE PLAN TO FILL IN LOCAL LOW AREAS.  
2. EXIST. PAVEMENT SECTION BASED ON TYPICAL SECTION ON SDP 73-32.

DEVELOPER:  
I certify that all development and/or construction will be done according to these plans of development, pond, erosion and sediment control. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made without the written approval of the Howard Soil Conservation District.

*David M. Men* 5/19/81  
DATE

ENGINEER:  
I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District.

*William G. Bash II* 5/19/81  
WILLIAM G. BASH II REG. NO. 4515 DATE

ADDITION TO APPROVED SDP 73-32

**SITE DEVELOPMENT PLAN CAROLINA FREIGHT CARRIERS CORPORATION**

SITE PLAN DETAILS: STORM WATER MANAGEMENT  
ELECTION DIST. NO. 1 HOWARD COUNTY MD  
SCALE: AS SHOWN DATE: MAY 4, 1981  
TAX MAP: 36 PARCEL: 845

SHEET 2 OF 3  
REVISIONS:  
REVISED TO REFLECT HQ 20 COM'S 7/10/81 AUGUST 12, 1981

DESIGNED: R.J.T.  
DRAWN: S.I.B.  
CHECKED: D.E.

**PURDUM & JESCHKE CONSULTING ENGINEERS LAND SURVEYORS**

1023 North Calvert Street  
Baltimore, Maryland 21202 301/837-0194

APPROVED:  
For Public water, Public sewerage and Storm Drainage systems and roads.  
Howard County Department of Public Works  
*W. F. Newman* 9-2-81  
DIRECTOR DATE

*D. C. ...* 9/2/81  
CHIEF BUREAU OF ENGINEERING DATE

APPROVED:  
For Public water and Public sewerage systems.  
Howard County Health Department  
*...* 9-4-81  
COUNTY HEALTH OFFICER DATE

APPROVED:  
Howard County Office of Planning and Zoning  
*...* 9-8-81  
PLANNING DIRECTOR DATE

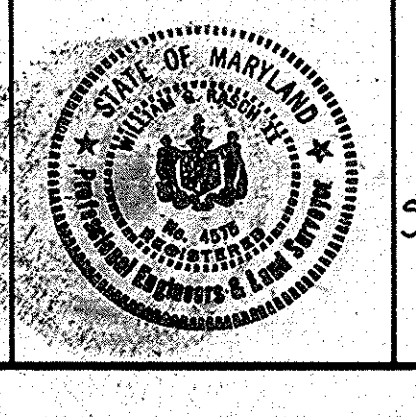
*...* 9-8-81  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMIN. DATE

DEVELOPER:  
I certify that all development and/or construction will be done according to these plans of development, pond, erosion and sediment control. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made without the written approval of the Howard Soil Conservation District.

*David M. Men* 5/19/81  
DATE

ENGINEER:  
I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District.

*William G. Bash II* 5/19/81  
WILLIAM G. BASH II REG. NO. 4515 DATE

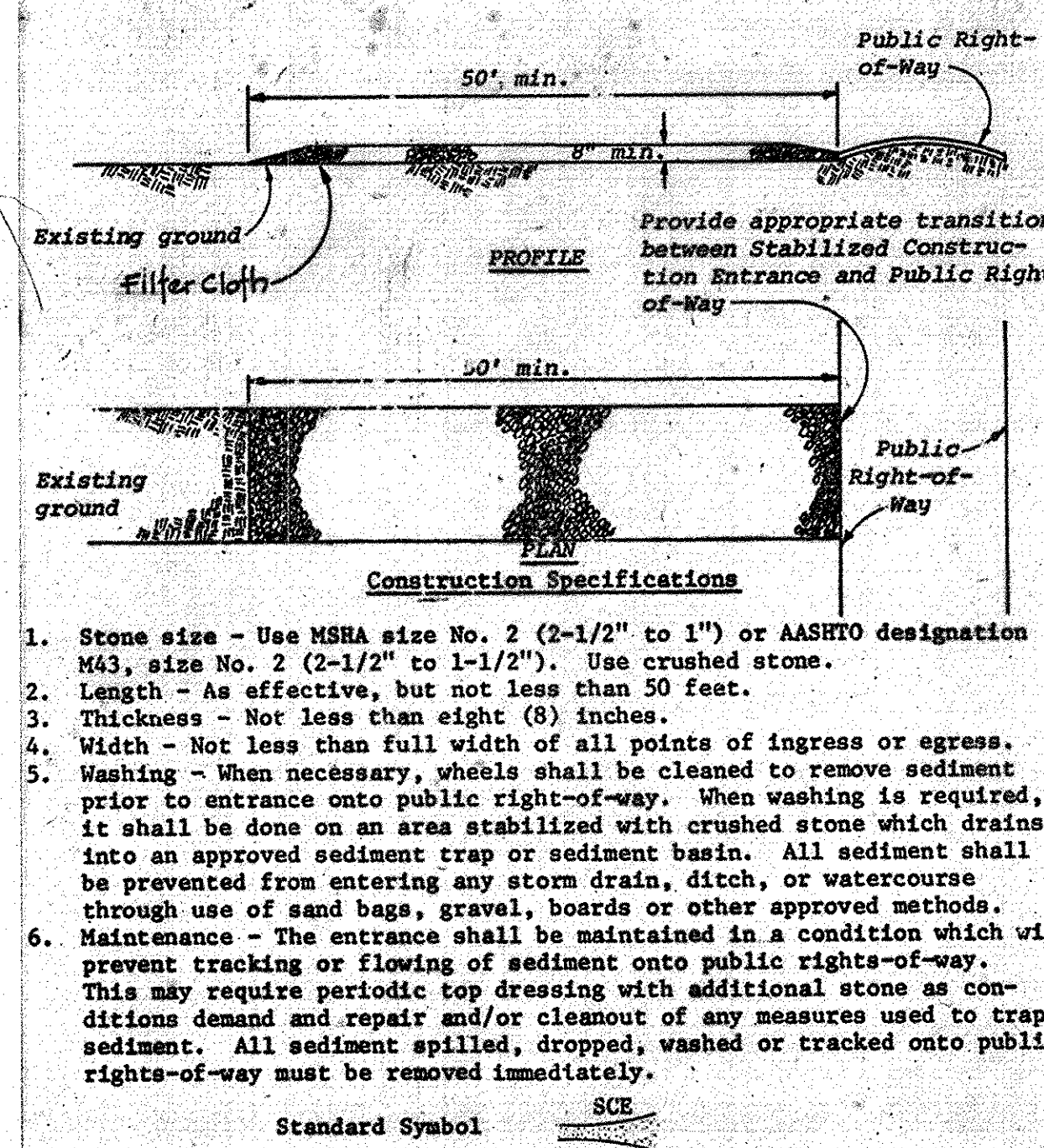


- Specifications for the Sediment Control Details shown hereon are included in the U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".
- The developer shall notify Howard County Office of Inspection and Permits at least 24 hours prior to beginning any construction shown hereon (992-2435 or 992-2436).
- All sediment control structures to remain in place until permission for their removal has been obtained from the Howard County Office of Inspection and Permits (992-2435 or 992-2436).
- All graded areas shall be stabilized in accordance with the following requirements:
  - Site Preparation:
    - Harrow or disc the areas to be seeded with the following materials at the specified rate to a depth of 3".
      - Pulverized limestone at 50 lbs./1000 s.f.
      - Commercial fertilizer 10-6-4 at 30 lbs./1000 s.f.
    - Seeding: (For Slopes Graded 3:1 and Flatter)
      - Sow the following seed mixture at the specified rate with a mechanical spreader.
        - Temporary - Italian or Perennial Ryegrass 1 lb./1000 s.f.
        - Permanent - (Slopes 3:1 and flatter) - Common Kentucky Bluegrass 40%, Merion Bluegrass 40%, Red Fescue 20% 3 lbs./1000 s.f.
      - The seeded areas shall be raked with a York Rake (minimum of 2 passes), covered and compacted with a cultipacker or other approved method.
    - Mulching:
      - Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1 1/2 to 2 tons/acre.
      - Tie mulch down with liquid asphalt at 0.1 gal./s.y. or emulsified asphalt at 0.04 gal./s.y.
    - Sodding:
      - Apply 10-6-4 fertilizer at 1000 lbs./acre (25 lbs./1000 s.f.)
      - Apply ground agricultural limestone at 2000 lbs./acre (50 lbs./1000 s.f.)
      - Incorporate both lime and fertilizer into soil by discing. Firm up after incorporation.
      - Lay sod to a tight fit. Roll to insure contact with underlying soil. Water as necessary for first two weeks (in summer) to insure establishment.
  - Ground Cover: (For Slopes Graded at 2:1)
    - Crown Vetch (innoculated) at 15 lbs./acre, and Kentucky 31 Tall Fescue (certified) at 40 lbs./acre (2:1 maximum slope).
  - Winter stabilization shall be performed as directed by the Office of Inspections and Permits.
- The Contractor shall place plywood braced with sand bags at the inlet end of unfinished drainpipes at the end of each work day.
- All stockpiles shall be protected with straw bale dikes, silt fences, or other approved sediment control devices.

CONSTRUCTION SEQUENCE

- Obtain Grading Permit. Notify the Howard County Office of Inspection and Permits (992-2435 or 992-2436) 24 hours prior to beginning any work shown hereon.
- Clear and grub for installation of sediment control devices only. Construct sediment control devices. Cut existing 18" BOCMP and install 36" BOCMP riser. Barricade low flow orifice.
- Grade site to subgrade.
- Place topsoil to proposed grades (excluding storm water management facility area) and stabilize as appropriate.
- Place base course over proposed paved area.
- Pump all standing water over riser into barrel. Remove all sediment and place storm water management facility area, to subgrade. Place topsoil and stabilize as appropriate.
- Place second and final courses of bituminous paving.
- Remove remaining sediment control devices and stabilize local areas as appropriate.

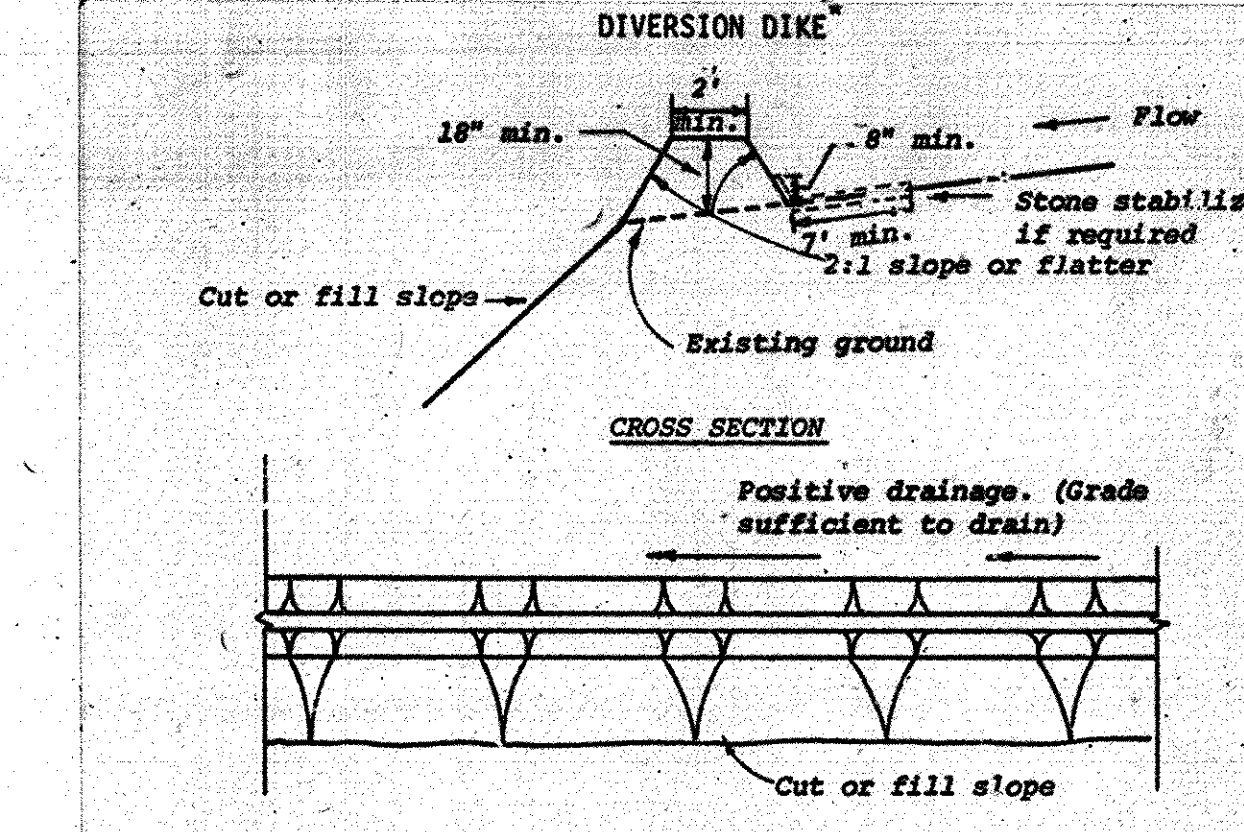
STABILIZED CONSTRUCTION ENTRANCE (not to scale)



- Construction Specifications
- Stone size - Use MSHA size No. 2 (2-1/2" to 1") or AASHTO designation M43, size No. 2 (2-1/2" to 1-1/2"). Use crushed stone.
  - Length - As effective, but not less than 50 feet.
  - Thickness - Not less than eight (8) inches.
  - Width - Not less than full width of all points of ingress or egress.
  - Washing - When necessary, wheels 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 crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved methods.
  - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

Standard Symbol

DIVERSION DIKE

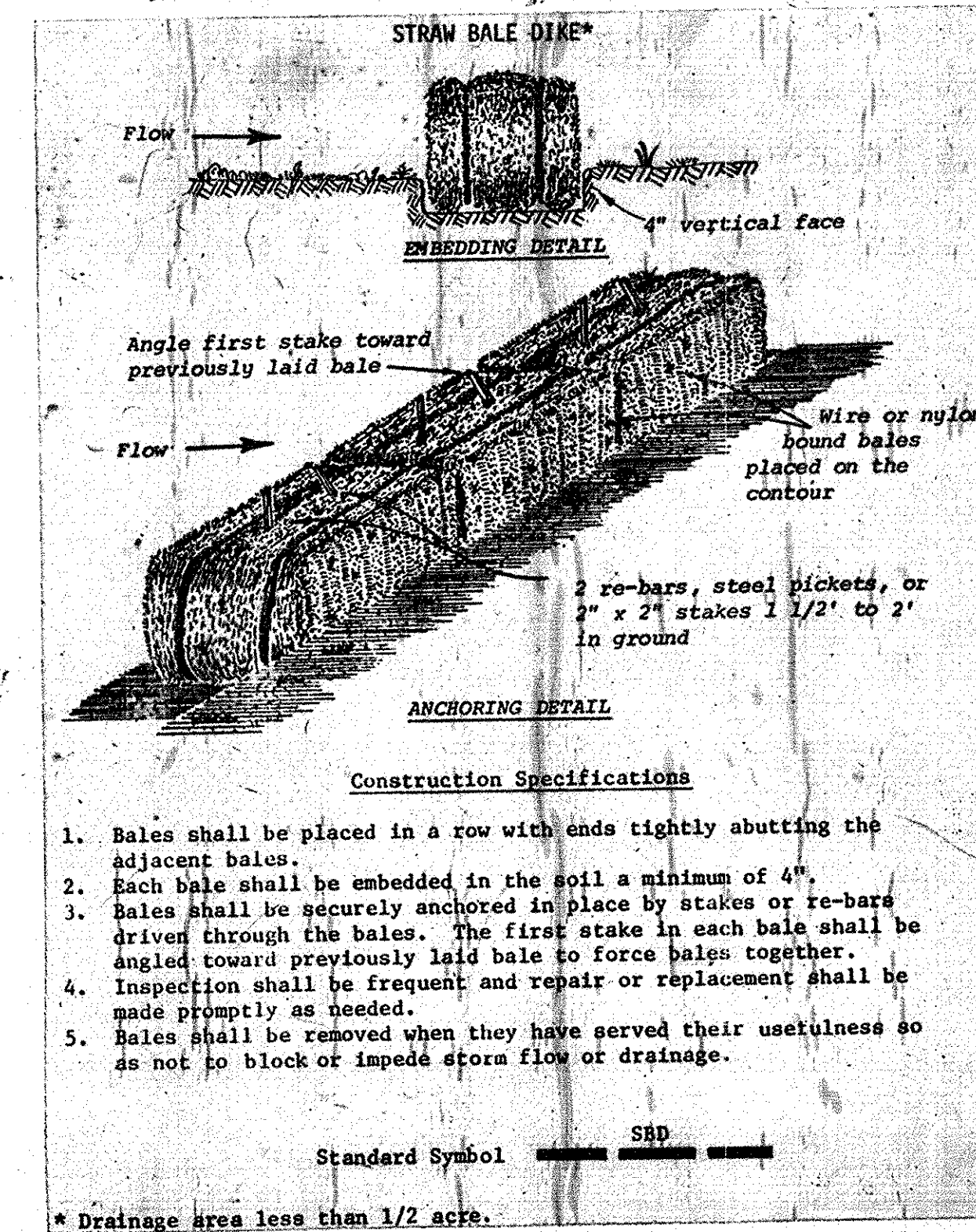


- Construction Specifications
- All dikes shall be machine compacted.
  - All diversion dikes shall have positive drainage to an outlet.
  - Diverted runoff from a protected or stabilized area shall outlet directly to an undisturbed stabilized area or into a level spreader or grade stabilization structure.
    - Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or to an area protected by any of these practices.
  - Stabilization, as specified by the plans, shall be: (1) in accordance with Standard and Specifications for Grassed Areas, and the area to be stabilized shall be the channel (flow area); or (2) the flow area shall be lined with stone that meets MSHA size No. 2 or AASHTO M43 size No. 2 or 24 which is placed in a 3 inch thick layer and pressed into the soil. The area covered by the stone shall be as shown on the drawing above.
  - Periodic inspection and required maintenance shall be provided.

Standard Symbol

NOTE: ALL EXCAVATED MATERIALS TO BE REMOVED FROM SITE SHALL BE PLACED IN DISPOSAL AREA WITH APPROVED EROSION & SEDIMENT CONTROL PLANS.

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 8-4-81

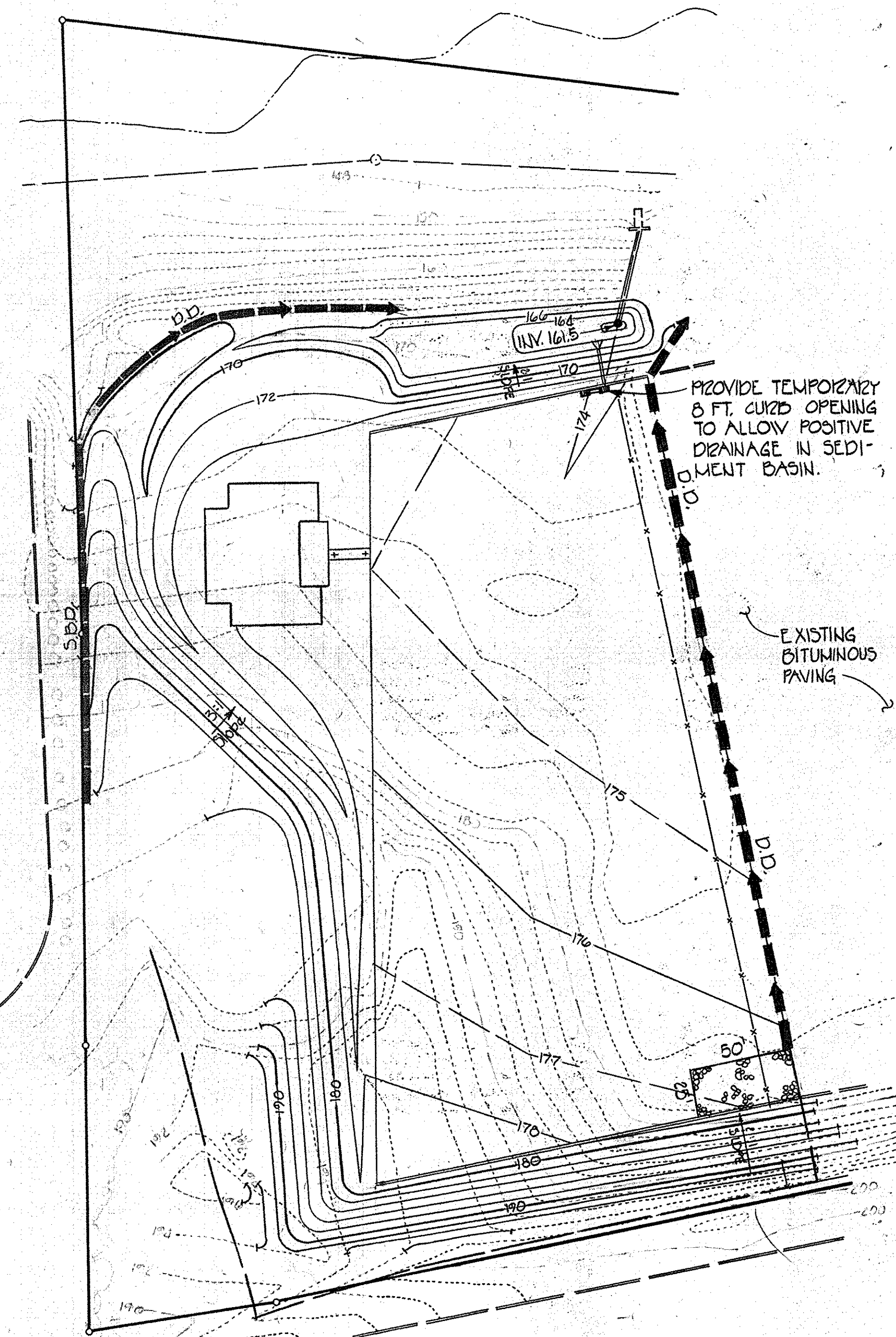


- Construction Specifications
- Bales shall be placed in a row with ends tightly abutting the adjacent bales.
  - Each bale shall be embedded in the soil a minimum of 4".
  - Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
  - Inspection shall be frequent and repair or replacement shall be made promptly as needed.
  - Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

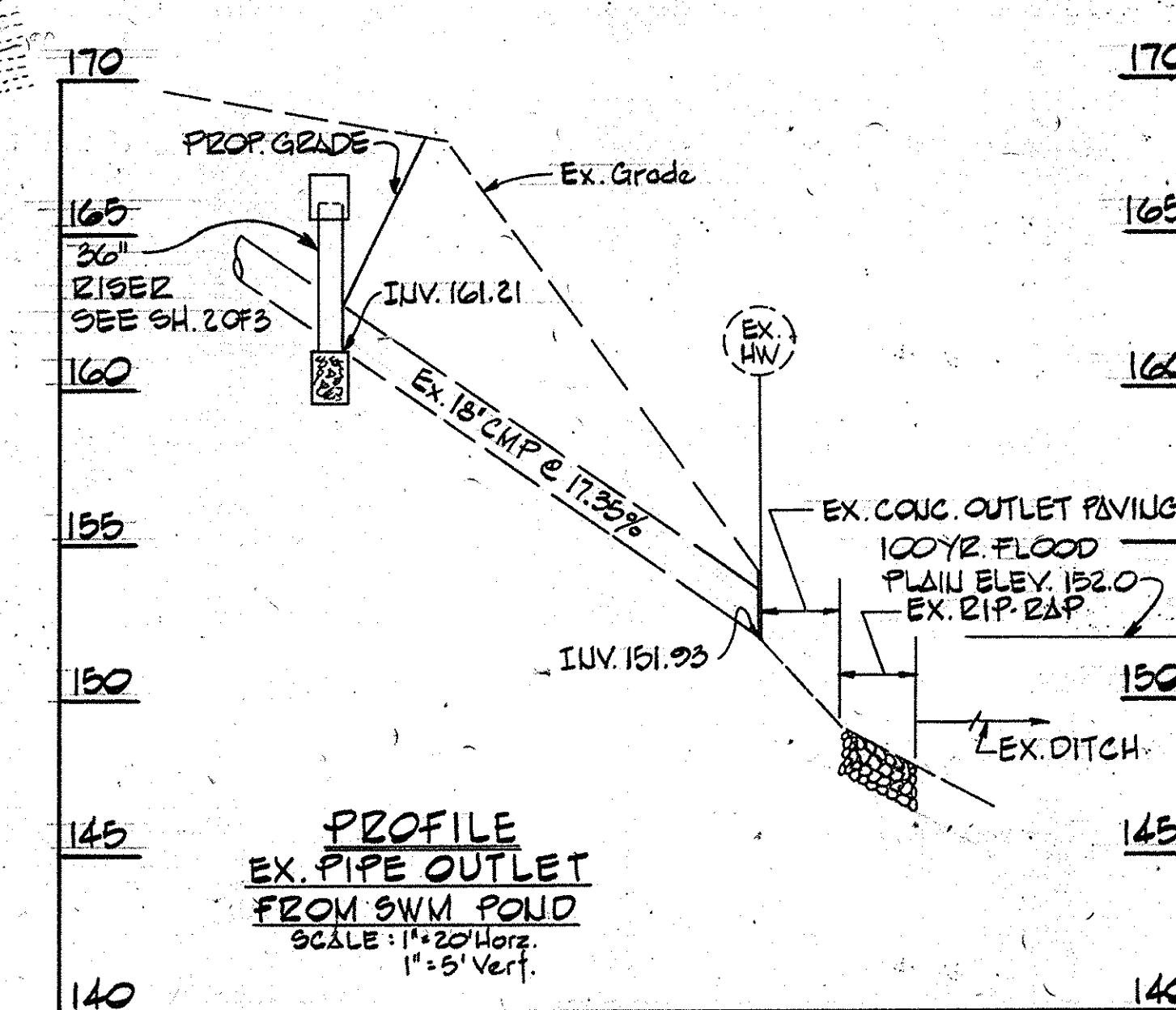
Standard Symbol

TEMPORARY SEDIMENT BASIN/STORM WATER MANAGEMENT FACILITY

Drainage Area	=	3.3 Ac.
Storage Volume required	=	5,940 FT. <sup>3</sup>
Storage Volume provided	=	11,000 FT. <sup>3</sup>
Size	=	AS SHOWN
Clean out Depth	=	164.0



SEDIMENT CONTROL PLAN  
SCALE: 1"=50'



PROFILE  
EX-PIPE OUTLET  
FROM SWM POND  
SCALE: 1"=20' Horiz.  
1"=5' Vert.

HOWARD SOIL CONSERVATION DISTRICT:  
Reviewed for Howard Conservation District and meets technical requirements.  
*James M. DeLoe*  
SOIL CONSERVATION SERVICE  
8-28-81 DATE

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
APPROVED: *Howard S.C.D.*  
8-28-81 DATE  
PLAN NUMBER

**PURDUM & JESCHKE**  
CONSULTING ENGINEERS  
LAND SURVEYORS  
1023 North Calvert Street  
Baltimore, Maryland 21202 301/837-0194

APPROVED:  
For Public water, Public sewerage and Storm Drainage systems and Roads.  
Howard County Department of Public Works  
*Michael F. Newman*  
DIRECTOR 9-2-81 DATE  
*Michael S. Kelly*  
CHIEF, BUREAU OF ENGINEERING 9/2/81 DATE

APPROVED:  
For Public water and Public sewerage systems.  
Howard County Health Department  
*Jacques Brown* 9-4-81 DATE  
COUNTY HEALTH OFFICER

APPROVED:  
Howard County Office of Planning and Zoning  
*Domenic L. Amico* 9-8-81 DATE  
PLANNING DIRECTOR  
*William G. Schmitt* 9-8-81 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

DEVELOPER:  
I certify that all development and for construction will be done according to these plans of development, erosion control, and sediment control. I also authorize periodic on-site inspection by the Howard Soil Conservation District or its authorized agents, as deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.  
*David D. Brown* 8/25/81 DATE

ENGINEER:  
I certify that this plan for pond construction, erosion, and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District.  
*William G. Schmitt* 8/24/81 DATE  
WILLIAM G. SCHMITT REG. NO. 2575 DATE

ADDITION TO APPROVED SDP 73-32

**SITE DEVELOPMENT PLAN**  
**CAROLINA FREIGHT CARRIERS**  
**CORPORATION**  
SEDIMENT CONTROL PLAN & DETAILS  
ELECTION DIST NO 1 HOWARD COUNTY MD  
SCALE AS SHOWN DATE: MAY 4, 1981  
TAX MAP: 38 PARCEL: 645

SHEET 3 OF 3  
REVISIONS:  
REVISED TO REFLECT  
NO. CO. COM '75 7/14/81  
8/24/81 10 1281  
DESIGNED: E.J.T.  
DRAWN: G.O.P.  
CHECKED: D.E.

SDP-81-168