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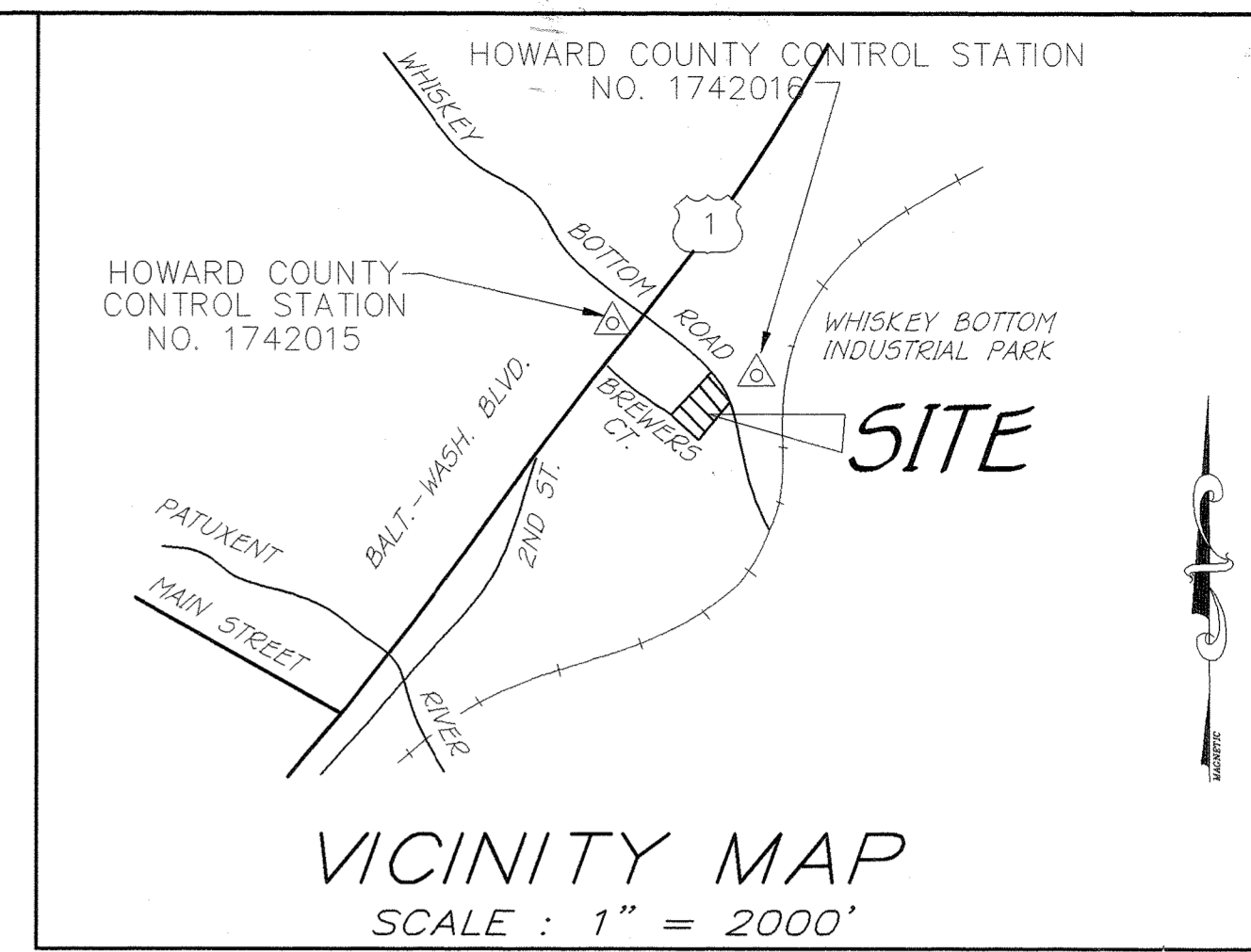
# SITE DEVELOPMENT PLAN

# WHISKEY BOTTOM TRADE CENTER

## PARCEL B

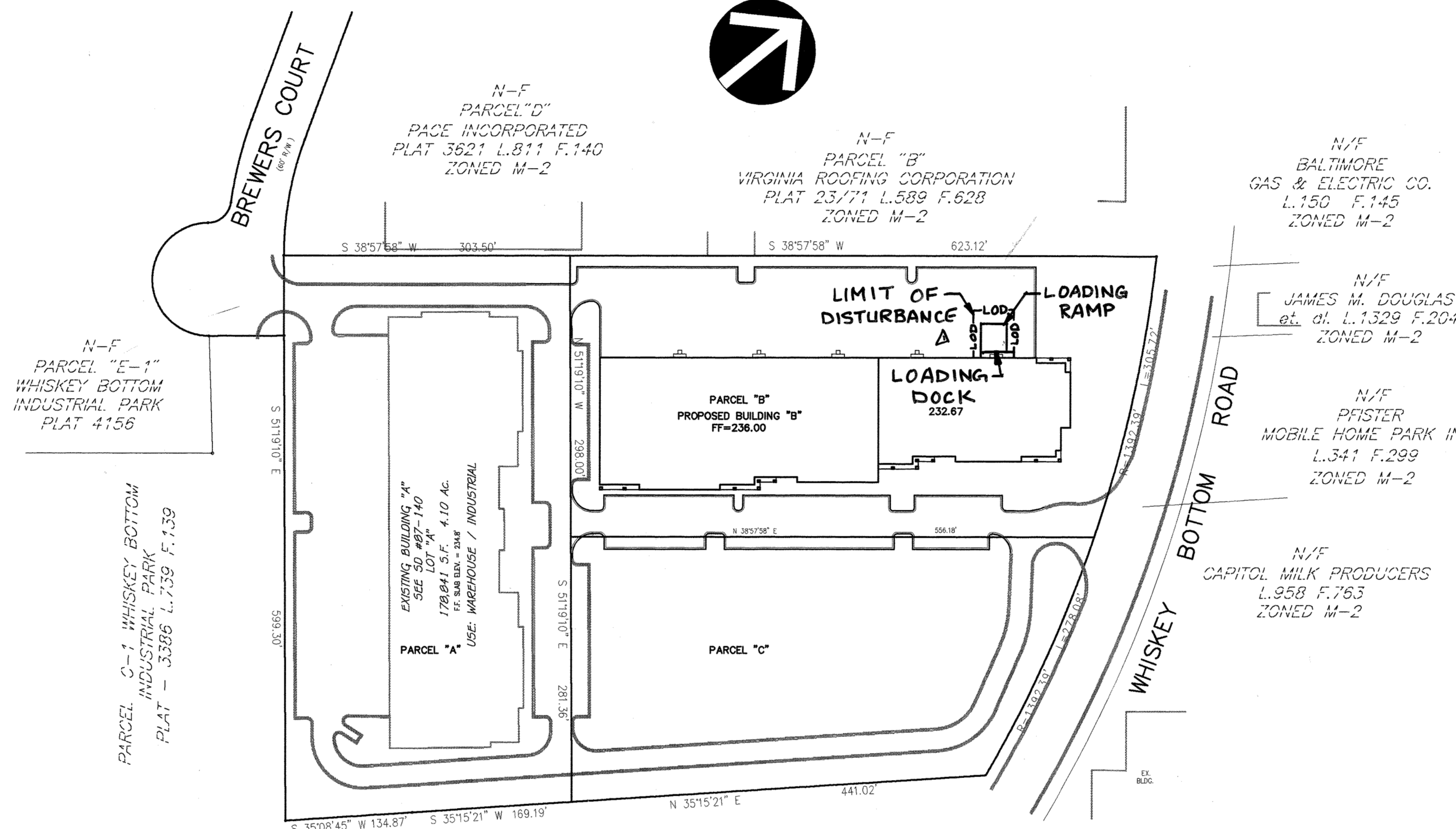
### 6<sup>th</sup> ELECTION DISTRICT

## HOWARD COUNTY, MARYLAND



**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- 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.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- TOPOGRAPHY IS TAKEN FROM A FIELD SURVEY PREPARED BY VIKI, INC. DATED SEPTEMBER, 1997.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM.
- WATER IS PUBLIC. CONTRACT NO. C-04.
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATAPSCO CONTRACT NO. 7103000
- THE STORMWATER MANAGEMENT FACILITY FOR THIS SITE IS PROPOSED. THE FACILITY IS AN EXTENDED DETENTION POND AND IS PRIVATELY MAINTAINED. WATER QUALITY MANAGEMENT IS ALSO PROVIDED ON-SITE BY STORMCEPTORS PRIOR TO RELEASE TO PROPOSED STORMWATER MANAGEMENT POND.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A WETLANDS DELINEATION FOR THIS PROJECT IS NOT REQUIRED.
- A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THE GEOTECHNICAL STUDY FOR THIS PROJECT WAS PREPARED BY HERBST & ASSOC. DATED FEBRUARY 28, 1989.
- THE BOUNDARY SURVEY FOR THIS PROJECT IS BASED ON PREVIOUSLY RECORDED PLAT NO. 10177.
- SUBJECT PROPERTY ZONED M-2 PER COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO. SDP 87-140 FOR BUILDING "A".
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I. e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.



**BENCHMARKS**

BM #1-VIKA TRAV. # TRAV 2011 - ELEV.=225.36  
BM #2-VIKA TRAV. # TRAV 2004 - ELEV.=227.59

**SITE ANALYSIS**

|                   |                  |
|-------------------|------------------|
| AREA OF PARCEL    | 4,073 AC.        |
| PRESENT ZONING    | M-2              |
| PROPOSED USE      | WAREHOUSE        |
| BUILDING COVERAGE | OFFICE WAREHOUSE |

**FLOOR SPACE BUILDING 'B'**

|                    |                |
|--------------------|----------------|
| WAREHOUSE          | 44,190 SQ. FT. |
| OFFICE             | 18,939 SQ. FT. |
| TOTAL BUILDING 'B' | 63,129 SQ. FT. |

**# OF OFFICE PARKING SPACES REQ'D @ 3.3 SP/1000SF PER SEC. 133-D-3.a** 62.5

**# OF WAREHOUSE PARKING SPACES REQ'D @ 0.5 SP/1000SF PER SEC. 133-D-5.c** 22.1

**TOTAL # OF PARKING SPACES REQ'D** 85

**# OF PARKING SPACES PROVIDED** 134

**HANDICAP SPACES REQUIRED** 5

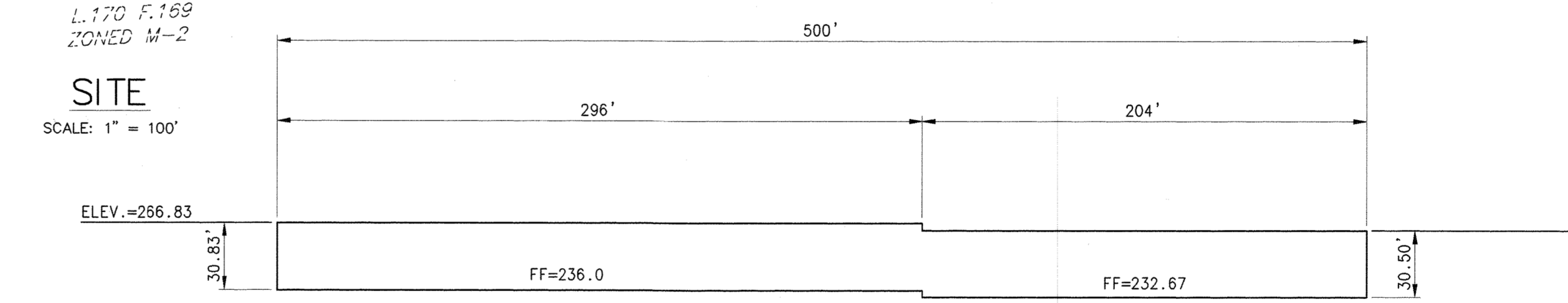
**HANDICAP SPACES PROVIDED** 6

**PAVED AREA** 67,273 SF

**EXISTING BUILDING 'A'**

|                           |     |
|---------------------------|-----|
| EXISTING PARKING REQUIRED | 72  |
| EXISTING PARKING PROVIDED | 109 |

(PER APPROVED SDP #87-140)



**OPERATION AND MAINTENANCE SCHEDULE FOR UNDERGROUND DETENTION FACILITY**

- UNDERGROUND STORMWATER MANAGEMENT DETENTION FACILITY SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PARCEL OWNER.
- THE MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITY SHALL INCLUDE BUT NOT BE LIMITED TO THE TWIN 108" ALUMINIZED CMPs, THE THREE ACPM ACCESS MANHOLES, THE SWM OUTLET STRUCTURE (SWM-1), THE TWIN 15" ACPM LEADING FROM THE DETENTION PIPES TO THE OUTLET STRUCTURE AND THE 24" RCP CONNECTING THE OUTLET STRUCTURE TO THE EXISTING INLET ON WHISKEY BOTTOM ROAD.
- OWNER SHALL HAVE THE UNDERGROUND FACILITY INSPECTED ON AN ANNUAL BASIS AND AFTER ALL LARGE STORM EVENTS, WITH A FREQUENCY OF A 2 YEAR OCCURANCE OR GREATER.
- THE FACILITY INSPECTOR SHALL INSURE THAT THE FACILITY IS CLEAR OF ALL DEBRIS AND ALL STORMWATER MANAGEMENT APPURTENANCES CAN FUNCTION PROPERLY.
- INSPECTOR SHALL INSPECT THE INTERIOR OF THE FACILITY TO ENSURE ALL JOINTS OF THE FACILITY APPEAR TO REMAIN WATERTIGHT AND EVIDENCE OF EXFILTRATION IS NOT PRESENT. THIS IS TO INCLUDE BUT NOT LIMITED TO THE INSPECTION OF ALL TACKWELDS ALONG THE INTERIOR SEAM OF THE FACILITY AND ASSURE NO CRACKING HAS OCCURRED.
- IF ANY EVIDENCE OF EXFILTRATION IS PRESENT OR SEAM CRACKING HAS OCCURRED, INSPECTOR SHALL HIRE A CONTRACTOR TO SEAL THE FACILITY. ALL COSTS OF THESE IMPROVEMENTS SHALL BE AT THE OWNERS EXPENSE.

**OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE**

- STORMCEPTOR WATER QUALITY STRUCTURES WILL REQUIRE PERIODIC INSPECTION AND CLEANING TO MAINTAIN OPERATION AND FUNCTION. OWNERS WILL HAVE THE STORMCEPTOR UNIT INSPECTED YEARLY OR AS REQUIRED BY HOWARD COUNTY, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS CAN BE DONE BY USING A CLEAR PLEXIGLAS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN SEDIMENT DEPTHS EXCEED THE SPECIFIED LEVEL (TABLE 6 OF TECHNICAL MANUAL), THEN CLEANING OF THE UNIT IS REQUIRED.
- STORMCEPTOR WATER QUALITY STRUCTURES MUST BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. CONTACT APPROPRIATE REGULATORY AGENCIES.
- MAINTENANCE OF STORMCEPTOR UNITS SHOULD BE DONE BY A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS, AND OTHER MATERIALS IN THE UNIT. THE PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED.
- INLET AND OUTLET PIPES MUST BE CHECKED FOR ANY OBSTRUCTIONS AND IF ANY OBSTRUCTIONS ARE FOUND, THEY MUST BE REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR WILL BE REPAIRED AS NEEDED.
- OWNER SHALL RETAIN AND MAKE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

**ADDRESS CHART**

| PARCEL | STREET ADDRESS           |
|--------|--------------------------|
| B      | 9125 WHISKEY BOTTOM ROAD |

|                    |                             |                |         |
|--------------------|-----------------------------|----------------|---------|
| SUBDIVISION NAME - | WHISKEY BOTTOM TRADE CENTER | SECT./AREA -   | 466     |
| PLAT # -           | 10177                       | BLOCK # -      | 5       |
| ZONING -           | M-2                         | TAX MAP NO. -  | 50      |
| ELECT. DIST. -     | 6th                         | CENSUS TRACT - | 6063    |
| WATER CODE -       | C-04                        | SEWER CODE -   | 7103000 |

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 5/11/98  
DIRECTOR DATE

*[Signature]* 5/11/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 5/11/98  
CHIEF, DIVISION OF LAND DEVELOPMENT

7/7/98  
DATE No. 1 REVISION Add loading docks.

OWNER: WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL "B"

AREA: TAX MAP No. PARCEL B SIXTH (6) ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE SHEET

**VIKA**  
ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS

VIKA INCORPORATED  
8180 GREENSBORO DRIVE SUITE 200 MCGLEAN, VIRGINIA 22102  
(703) 442-7800 ■ FAX (703) 741-2787  
MCGLEAN, VA

4-21-98  
DATE

SDP-98-59  
DESIGNED BY: PSC  
DRAWING BY: FTC  
PROJECT/FILE NO. 5457  
DATE: SEPT. 1997  
SCALE: 1"=100'  
DRAWING No. 1 OF 16

CHARLES A. IRISH #11217

| MARYLAND STATE GRID COORDINATES |             |             |
|---------------------------------|-------------|-------------|
| NO.                             | NORTHING    | EASTING     |
| 1                               | 466036.0507 | 847646.0937 |
| 2                               | 466756.5136 | 848228.8096 |
| 3                               | 466270.0682 | 848543.8056 |
| 4                               | 465771.7808 | 848191.5737 |
| 5                               | 465661.4992 | 848113.9343 |

**LEGEND**

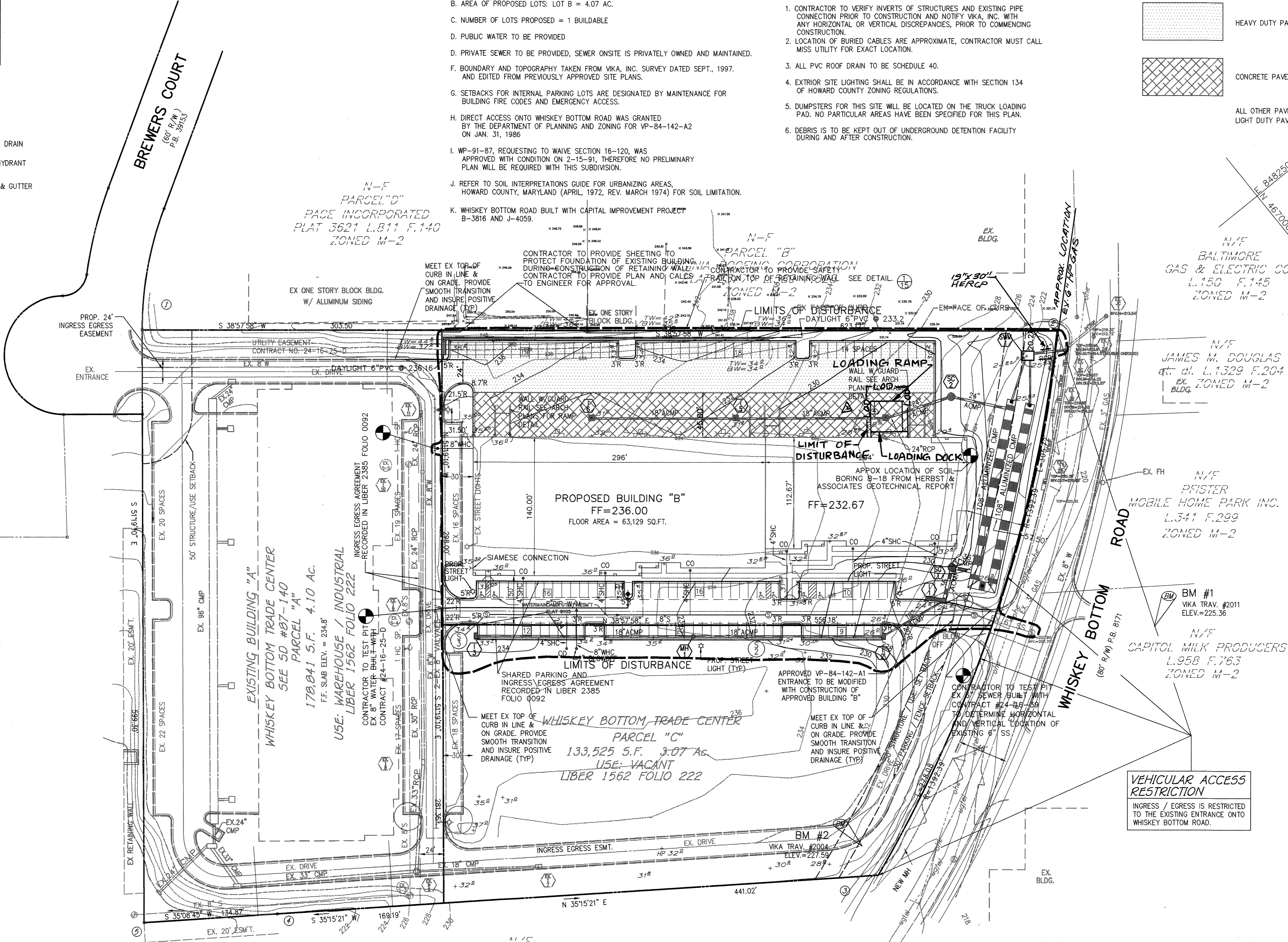
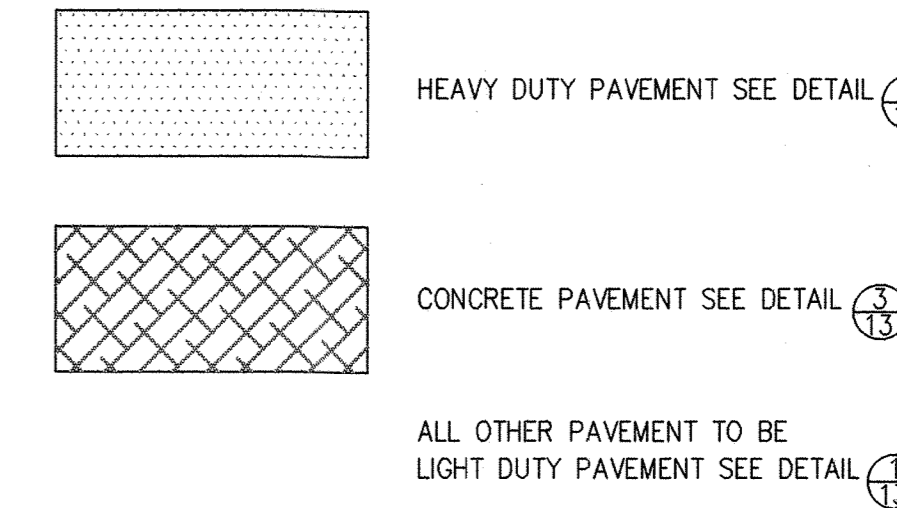
- EX. S — EX. SEWER
- EX. 8" W — EX. WATER
- EX. CMP — EX. STORM DRAIN
- EX. FH — EX. FIRE HYDRANT
- EX. C&G — EX. CURB & GUTTER
- 22" — EX. GRADE

**GENERAL NOTES:**

- A. EXISTING ZONE: M-2
- B. AREA OF PROPOSED LOTS: LOT B = 4.07 AC.
- C. NUMBER OF LOTS PROPOSED = 1 BUILDABLE
- D. PUBLIC WATER TO BE PROVIDED
- E. PRIVATE SEWER TO BE PROVIDED, SEWER ONSITE IS PRIVATELY OWNED AND MAINTAINED.
- F. BOUNDARY AND TOPOGRAPHY TAKEN FROM VIKI, INC. SURVEY DATED SEPT., 1997, AND EDITED FROM PREVIOUSLY APPROVED SITE PLANS.
- G. SETBACKS FOR INTERNAL PARKING LOTS ARE DESIGNATED BY MAINTENANCE FOR BUILDING FIRE CODES AND EMERGENCY ACCESS.
- H. DIRECT ACCESS ONTO WHISKEY BOTTOM ROAD WAS GRANTED BY THE DEPARTMENT OF PLANNING AND ZONING FOR VP-84-142-A2 ON JAN. 31, 1986
- I. WP-91-87, REQUESTING TO WAIVE SECTION 16-120, WAS APPROVED WITH CONDITION ON 2-15-91, THEREFORE NO PRELIMINARY PLAN WILL BE REQUIRED WITH THIS SUBDIVISION.
- J. REFER TO SOIL INTERPRETATIONS GUIDE FOR URBANIZING AREAS, HOWARD COUNTY, MARYLAND (APRIL, 1972, REV. MARCH 1974) FOR SOIL LIMITATION.
- K. WHISKEY BOTTOM ROAD BUILT WITH CAPITAL IMPROVEMENT PROJECT B-3816 AND J-4059.

**CONSTRUCTION NOTES:**

1. CONTRACTOR TO VERIFY INVERTS OF STRUCTURES AND EXISTING PIPE CONNECTION PRIOR TO CONSTRUCTION AND NOTIFY VIKI, INC. WITH ANY HORIZONTAL OR VERTICAL DISCREPANCIES, PRIOR TO COMMENCING CONSTRUCTION.
2. LOCATION OF BURIED CABLES ARE APPROXIMATE, CONTRACTOR MUST CALL MISS UTILITY FOR EXACT LOCATION.
3. ALL PVC ROOF DRAIN TO BE SCHEDULE 40.
4. EXTERIOR SITE LIGHTING SHALL BE IN ACCORDANCE WITH SECTION 134 OF HOWARD COUNTY ZONING REGULATIONS.
5. DUMPSTERS FOR THIS SITE WILL BE LOCATED ON THE TRUCK LOADING PAD. NO PARTICULAR AREAS HAVE BEEN SPECIFIED FOR THIS PLAN.
6. DEBRIS IS TO BE KEPT OUT OF UNDERGROUND DETENTION FACILITY DURING AND AFTER CONSTRUCTION.



BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND 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 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *[Signature]* DATE: 4/14/98

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.

ENGINEER: *[Signature]* DATE: 4/21/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE DATE: *[Signature]*

HOWARD SOIL CONSERVATION DISTRICT DATE: *[Signature]*

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: *[Signature]* DATE: 5/11/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 5/10/98

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 7/1/98

REVISIONS:

|        |   |                                   |
|--------|---|-----------------------------------|
| 7/7/98 | 2 | Add loading docks.                |
| 6/1/99 | 1 | CHANGED 24" RCP TO 19" 130" HERCP |

OWNER: WHISKEY BOTTOM TRADE CENTER B L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL B

AREA: TAX MAP No. PARCEL B SIXTH (6) ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

**VIKI**  
ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS

8180 GREENSBORO DRIVE, SUITE 200 ■ MGLEAN, VIRGINIA 22102  
(703) 442-7800 ■ FAX (703) 761-2787  
MGLEAN, VA

DATE: 4-21-98

SDP-98-59

DESIGNED BY: PSC

DRAWING BY: PSC

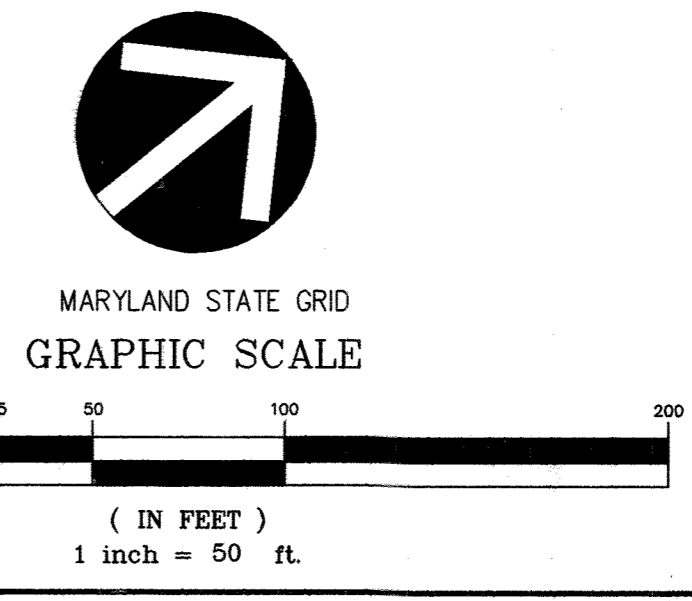
PROJECT/FILE NO. 5457

DATE: SEPT. 1997

SCALE: 1"=50'

DRAWING No. 2 OF 16

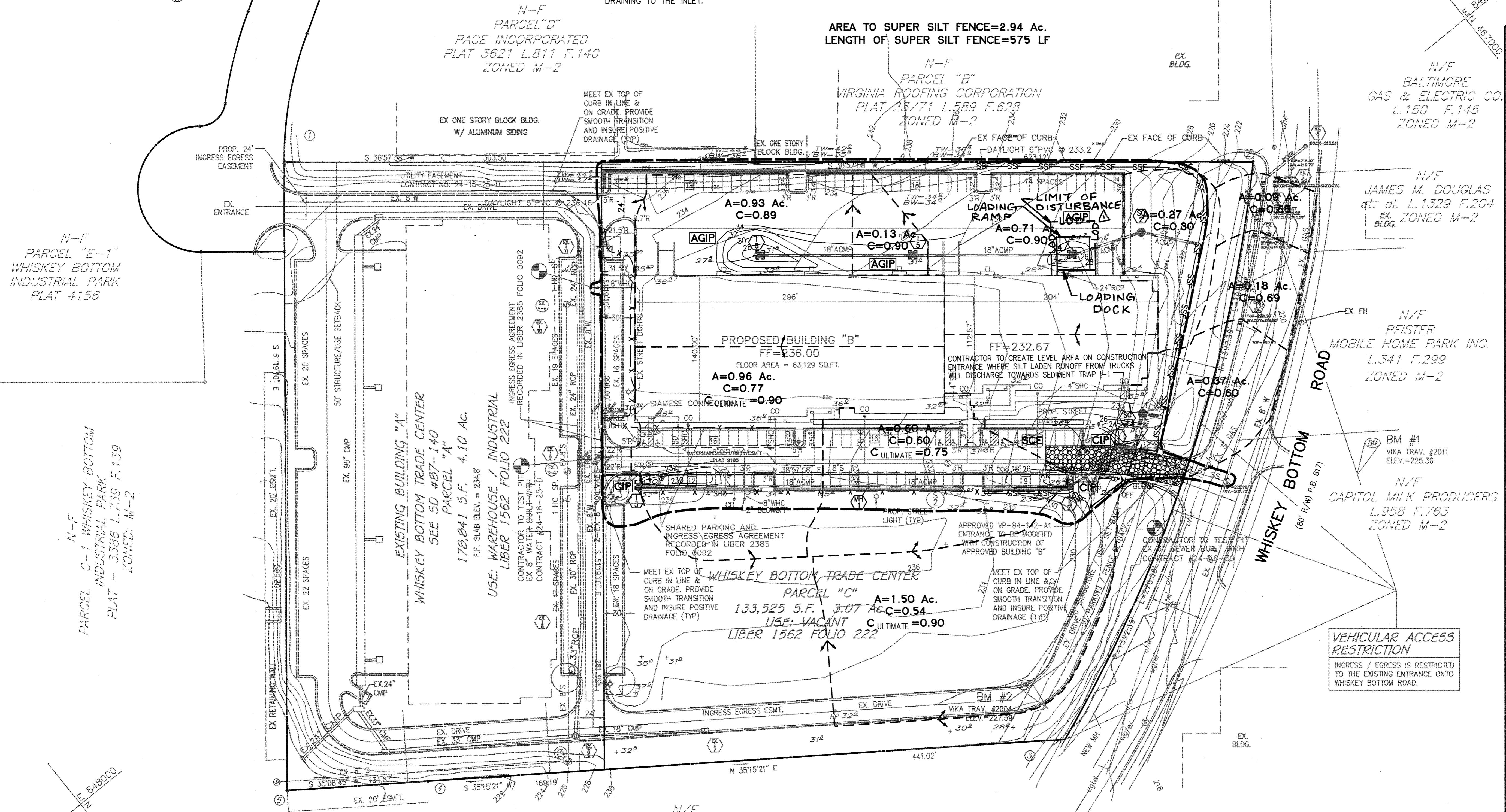
CHARLES A. IRISH #11217



- DRAINAGE DIVIDES
- LIMITS OF DISTURBANCE
- SEDIMENT TRAP WITH INLET PROTECTION  
SEE DETAIL ⑦ & ⑧
- SUPER SILT FENCE  
SEE DETAIL ⑤
- STABILIZED CONSTRUCTION ENTRANCE  
SEE DETAIL ④
- SILT FENCE  
SEE DETAIL ⑥

| BOTTOM TRAP / INLET # | DRAINAGE AREA | REQ'D VOL   | REQ'D VOL | VOL PROV | THROAT INV | BOTTOM OF TRAP | BOTTOM TRAP DIM | C.O. ELEV |
|-----------------------|---------------|-------------|-----------|----------|------------|----------------|-----------------|-----------|
| I-1                   | *0.48 AC      | 1,800 CF\AC | 864 CF    | 1130 CF  | 24.25      | 21.5           | 22 X 13         | 23.0      |
| I-2                   | 0.60 AC       | 1,800 CF\AC | 1080 CF   | 1138 CF  | 26.00      | 22.3           | 17 X 13         | 24.5      |
| I-3                   | 0.96 AC       | 1,800 CF\AC | 1728 CF   | 2400 CF  | 33.60      | 30.0           | 60 X 5          | 32.0      |
| I-4                   | 0.71 AC       | 1,800 CF\AC | 1278 CF   | 1375 CF  | 28.40      | 24.2           | 18 X 9          | 26.3      |
| I-6                   | 0.93 AC       | 1,800 CF\AC | 1674 CF   | 2425 CF  | 31.50      | 27.5           | 38 X 10         | 30.0      |

\* THE DRAINAGE AREA FOR TRAP COMPUTATION PURPOSES FOR INLET #1 IS BASED UPON DISTURBED AREA DRAINING TO THE INLET.



BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND 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 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*[Signature]* 9/19/98  
DEVELOPER DATE

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]* 4/21/98  
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL

*[Signature]* 5/6/98  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*[Signature]* 5/6/98  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 5/11/98  
DIRECTOR DATE

*[Signature]* 5/15/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 5/11/98  
CHIEF, DIVISION OF LAND DEVELOPMENT

7/1/98 Add loading docks  
DATE No. REVISION

OWNER: WHISKEY BOTTOM TRADE CENTER B L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT **WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL B**

AREA TAX MAP No. PARCEL B  
SIXTH (6) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE **SEDIMENT AND EROSION CONTROL PHASE I PLAN**

ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS

VKA INCORPORATED  
8180 GREENSBORO DRIVE, SUITE 200 ■ MGLEAN, VIRGINIA 22102  
(703) 442-7800 ■ FAX (703) 761-2787  
MGLEAN, VA BETHESDA, MD

4-21-98  
DATE

SDP-98-59

DESIGNED BY: PSC

DRAWING BY: PSC

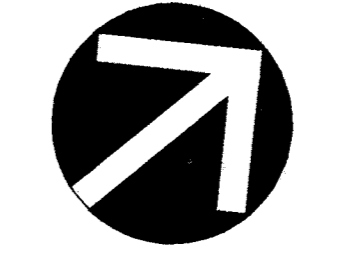
PROJECT/FILE NO. 5457

DATE: SEPT. 1997

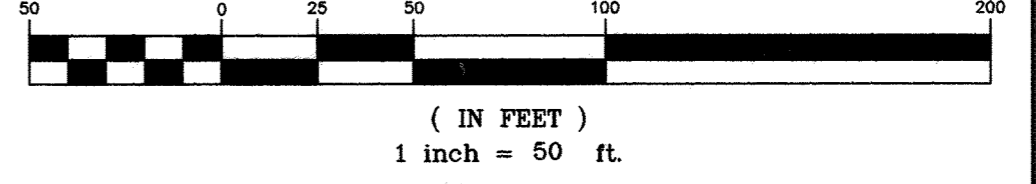
SCALE: 1"=50'

DRAWING No. 3 OF 16

CHARLES A. IRISH #11217



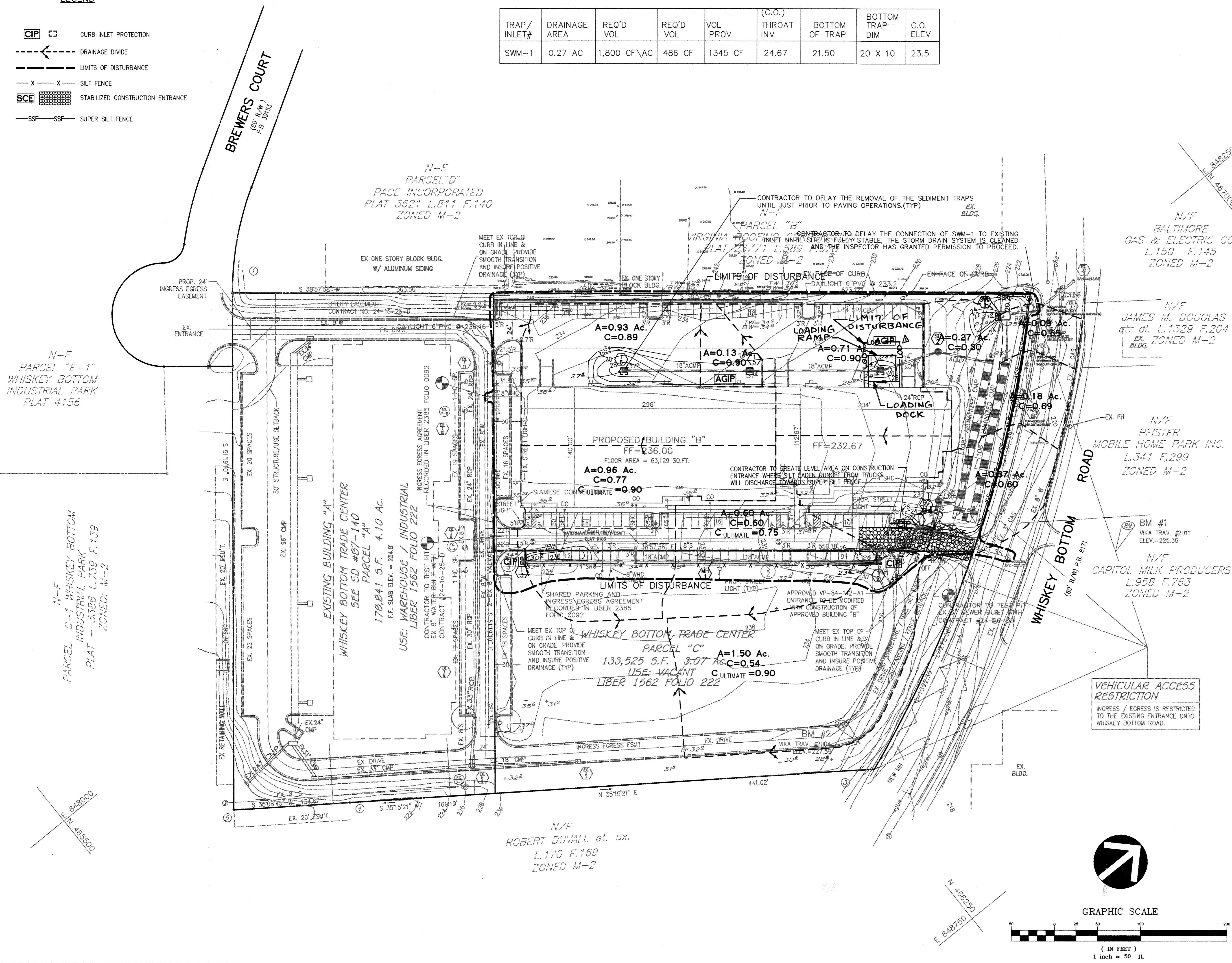
GRAPHIC SCALE



LEGEND

- CURB INLET PROTECTION
- DRAINAGE DIVIDE
- LIMITS OF DISTURBANCE
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE

| TRAP/<br>INLET# | DRAINAGE<br>AREA | REQ'D<br>VOL | REQ'D<br>VOL | VOL<br>PROV | (C.O.)<br>THROAT<br>INV | BOTTOM<br>OF TRAP | BOTTOM<br>TRAP<br>DIM | C.O.<br>ELEV |
|-----------------|------------------|--------------|--------------|-------------|-------------------------|-------------------|-----------------------|--------------|
| SWM-1           | 0.27 AC          | 1,800 CF\AC  | 486 CF       | 1345 CF     | 24.67                   | 21.50             | 20 X 10               | 23.5         |



BY THE DEVELOPER:  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND 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 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 DEVELOPER: *[Signature]* DATE: 4/19/98

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.  
 ENGINEER: *[Signature]* DATE: 4/21/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.  
*[Signature]* DATE: 5/6/98  
 NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*[Signature]* DATE: 5/6/98  
 HOWARD SOIL CONSERVATION DISTRICT

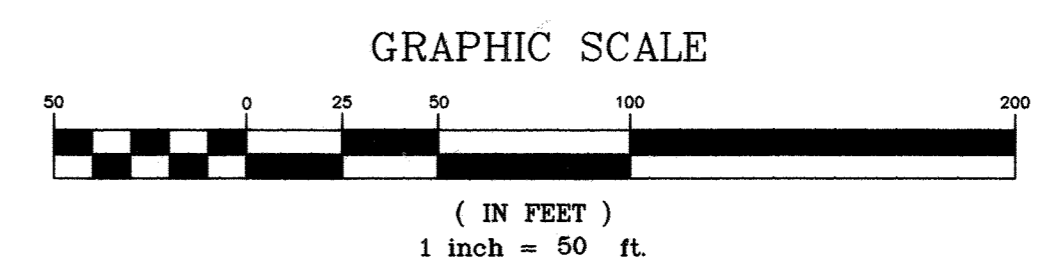
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*[Signature]* DATE: 5/11/98  
 DIRECTOR  
*[Signature]* DATE: 6/1/98  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*[Signature]* DATE: 5/11/98  
 CHIEF, DIVISION OF LAND DEVELOPMENT

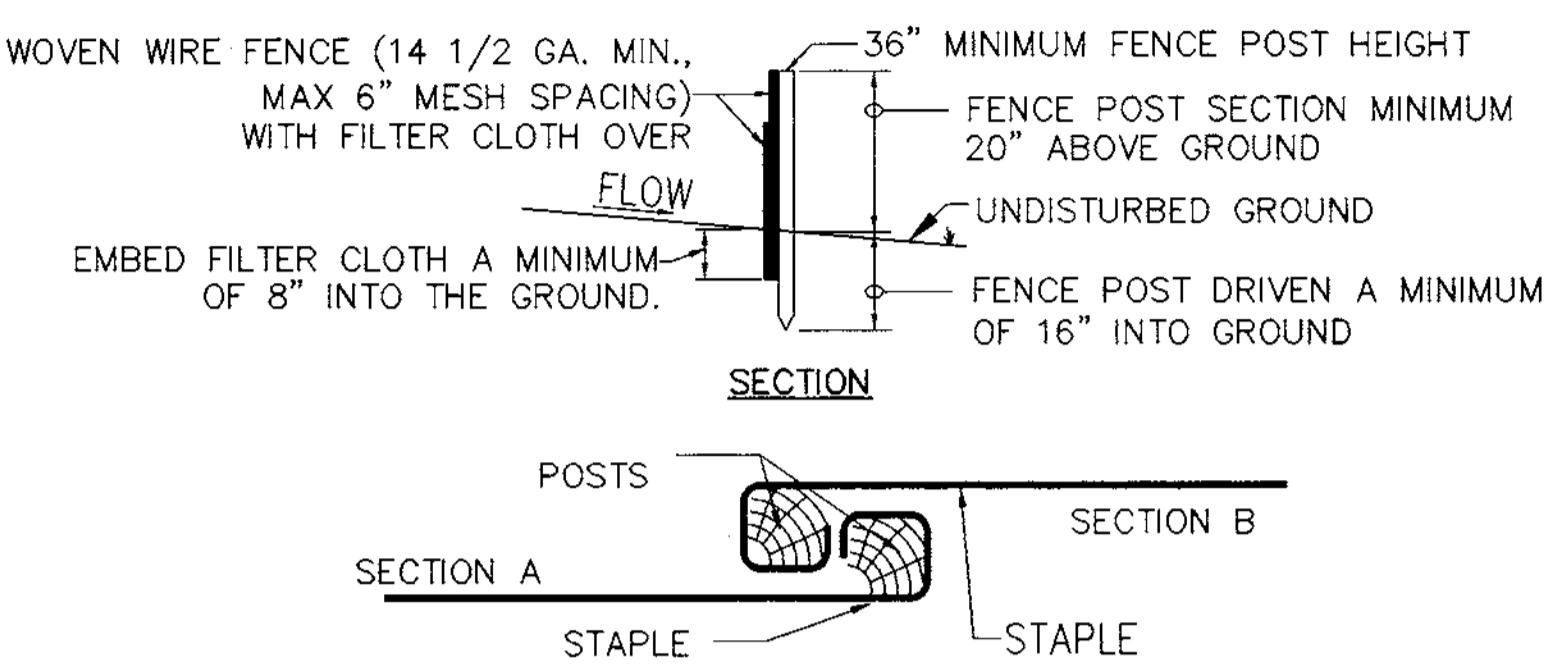
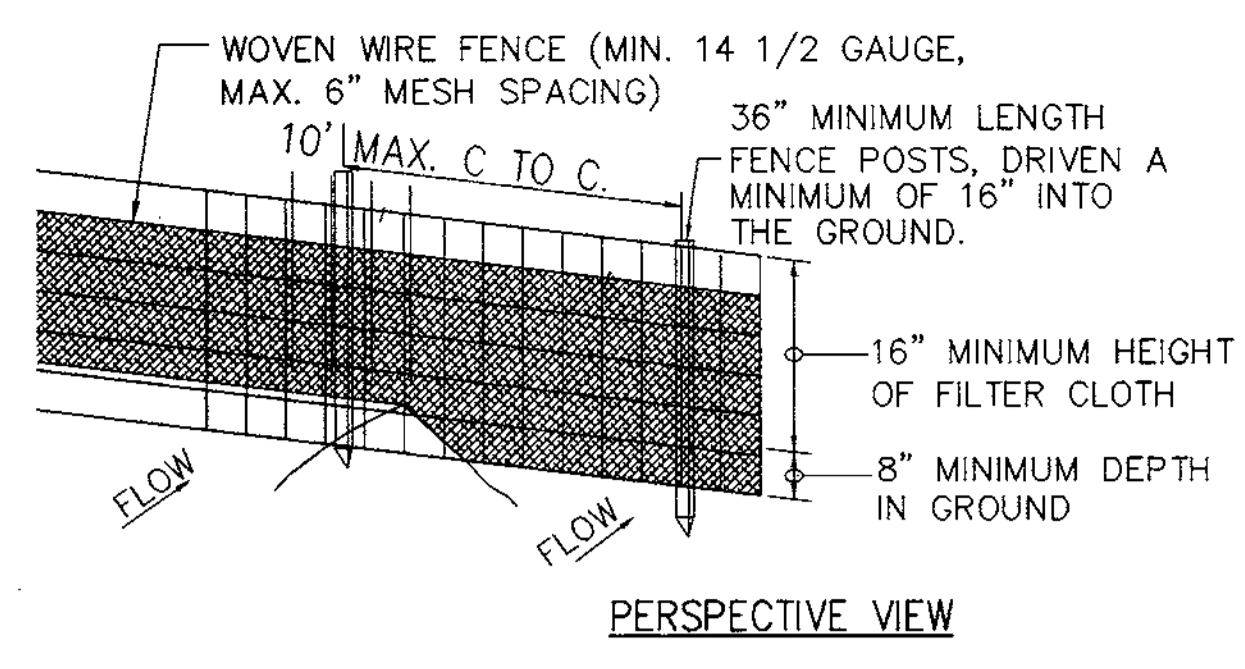
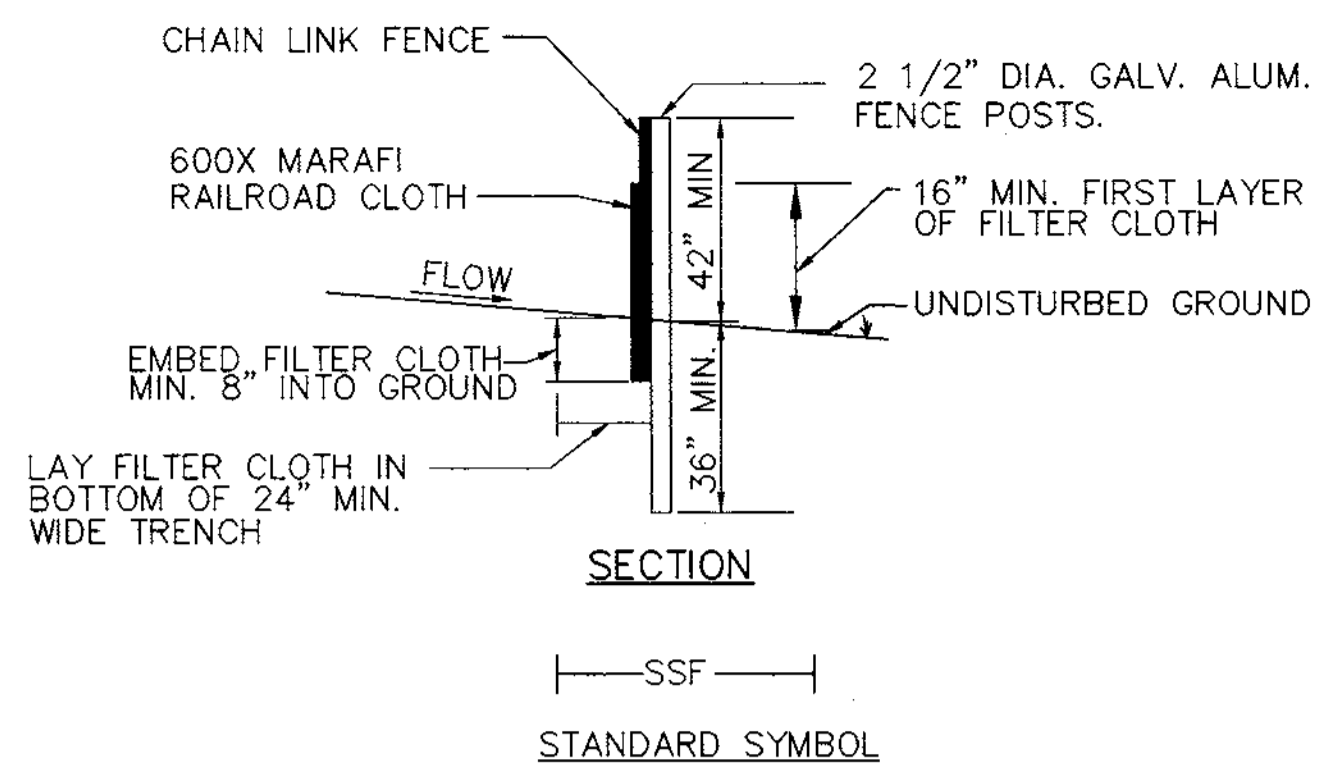
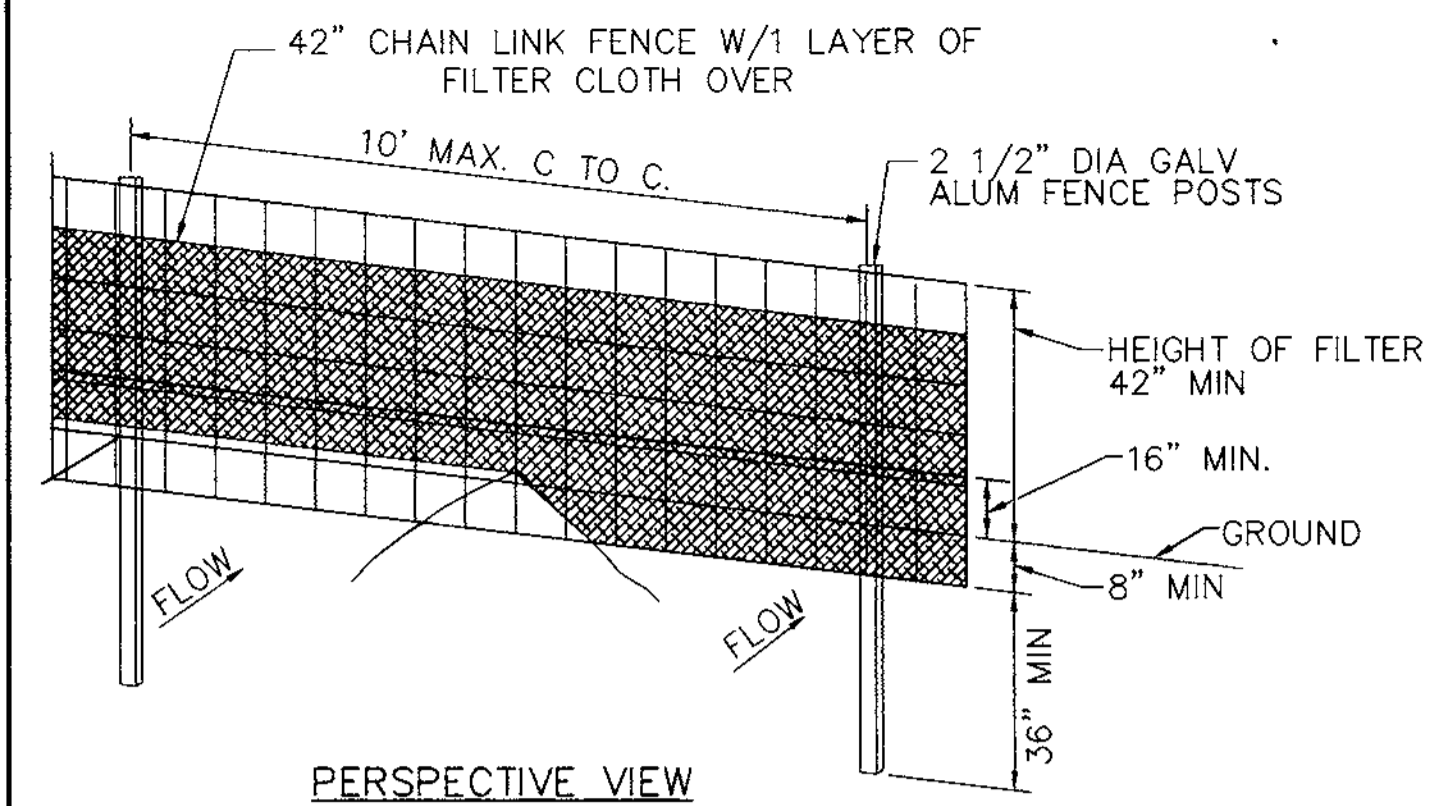
7/7/98 1 Add loading docks.  
 DATE No. REVISION  
 OWNER: WHISKEY BOTTOM TRADE CENTER B L.P.  
 C/O GINGERY DEVELOPMENT GROUP  
 1001 ROCKVILLE PIKE SUITE 503  
 ROCKVILLE, MARYLAND 20852  
 (301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II  
 PARCEL B  
 AREA: TAX MAP No. PARCEL B  
 SIXTH (6) ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 TITLE: SEDIMENT AND EROSION CONTROL PLAN PHASE II PLAN

**VIA**  
 ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS  
 VIKI INCORPORATED  
 8180 GREENSBORO DRIVE, SUITE 200 ■ McLEAN, VIRGINIA 22102  
 (703) 442-7800 ■ FAX (703) 761-2787  
 McLEAN, VA BETHESDA, MD

4/21/98  
 DATE  
 SDP-98-59  
 DESIGNED BY: PSC  
 DRAWING BY: PSC  
 PROJECT/FILE NO. 5457  
 DATE: SEPT. 1997  
 SCALE: 1"=50'  
 DRAWING No. 4 OF 16  
 CHARLES A. IRISH #11217



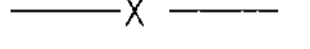


**FENCING**

FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH LATEST MARYLAND STATE HIGHWAY DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6 FOOT FENCE SHALL BE USED, SUBSTITUTING 42 INCH FABRIC AND 6 FOOT LENGTH POSTS.

1. THE POLES DO NOT NEED TO SET IN CONCRETE.
2. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH WIRE TIES OR STAPLES.
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 6" 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 SUILT BUILDUPS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

STANDARD SYMBOL



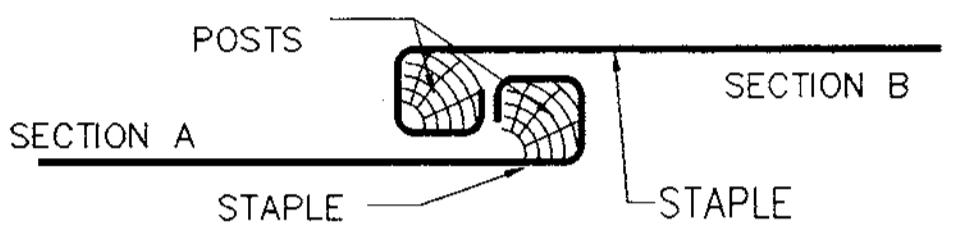
TOP OF SLAB = 215.20

**CONSTRUCTION SPECIFICATIONS:**

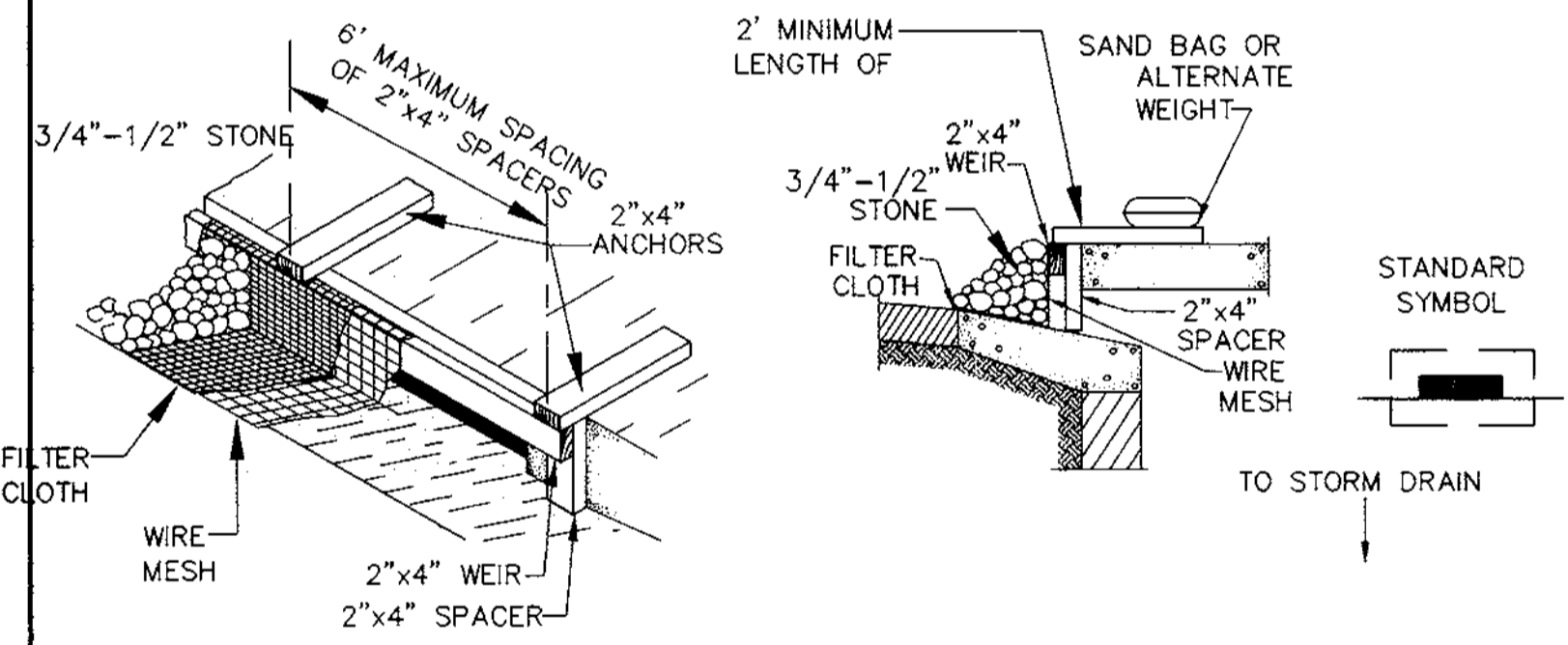
1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MIN. INTO THE GROUND. WOOD POSTS SHALL BE 1-1/2" X 1-1/2" SQUARE (MIN.) CUT, OR 1-3/4" DIA. (MIN.) ROUND AND SHALL BE OF SOUND QUALITY HARD WOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
2. GEOTEXTILE 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.)                       |
| TENSILE MODULUS      | 20 LBS./IN. (MIN.)                      |
| FLOW RATE            | 0.3 GAL FT <sup>2</sup> / MINUTE (MAX.) |
| FILTERING EFFICIENCY | 75% (MIN.)                              |
3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

**JOINING TWO ADJACENT SILT FENCE SECTIONS**



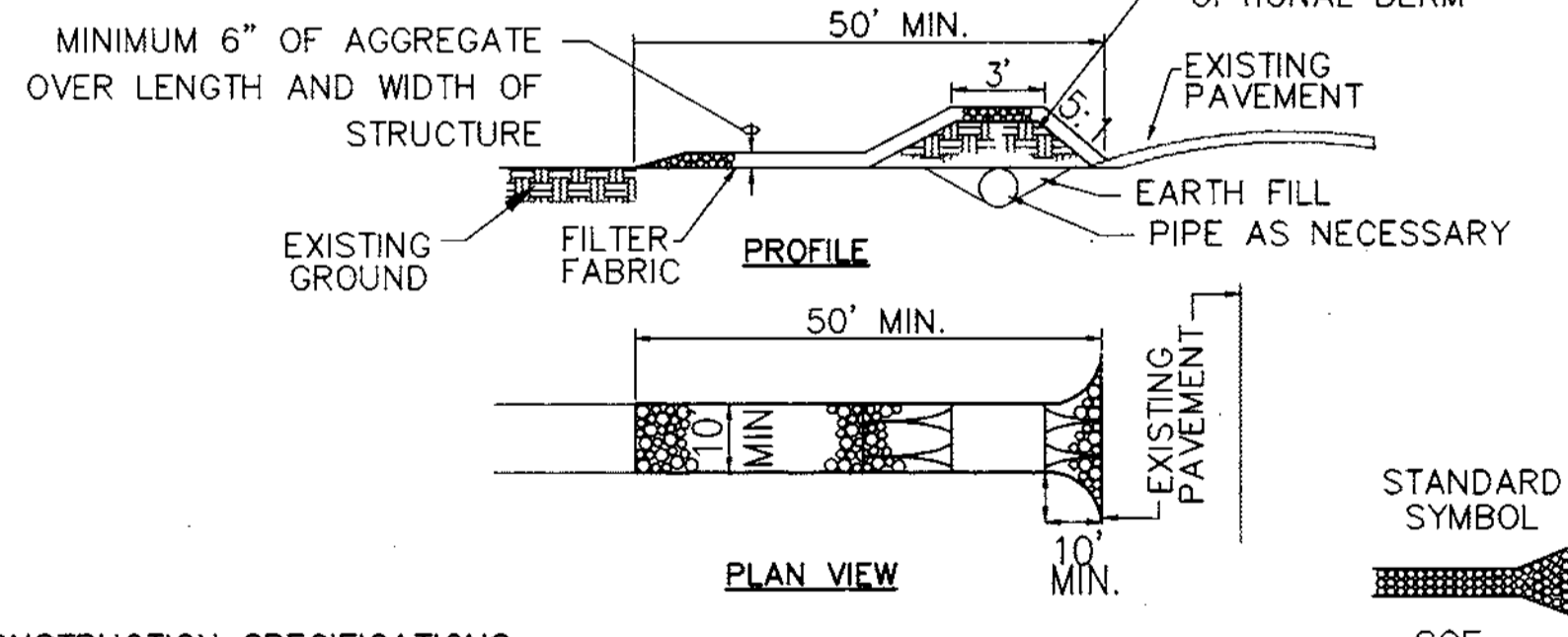
**1 SUPER SILT FENCE**  
NOT TO SCALE



**CONSTRUCTION SPECIFICATIONS**

1. WOODEN FRAME IS TO BE CONSTRUCTED OF 2" X 4" CONSTRUCTION GRADE LUMBER.
  2. WIRE MESH SIZE MUST BE OF SUFFICIENT STRENGTH OF SUPPORT FILTER FABRIC AND STONE FOR CURB INLETS WITH WATER FULLY IMPOUNDED AGAINST IT.
  3. FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE: RESISTANT TO ULTRAVIOLET LIGHT WITH AN EQUIVALENT OPENING SIZE 40 - 80 SIEVE TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
  4. WASHED STONE 3/4" TO 1-1/2" IN SIZE IS TO BE USED.
- B. CURB INLET PROTECTION**
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 AND SECURELY ATTACH IT TO THE 2" X 4" WEIR.
  3. SECURELY NAIL THE 2" X 4" WEIR TO A 9" 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 FABRIC 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 GEOTEXTILE FABRIC 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.

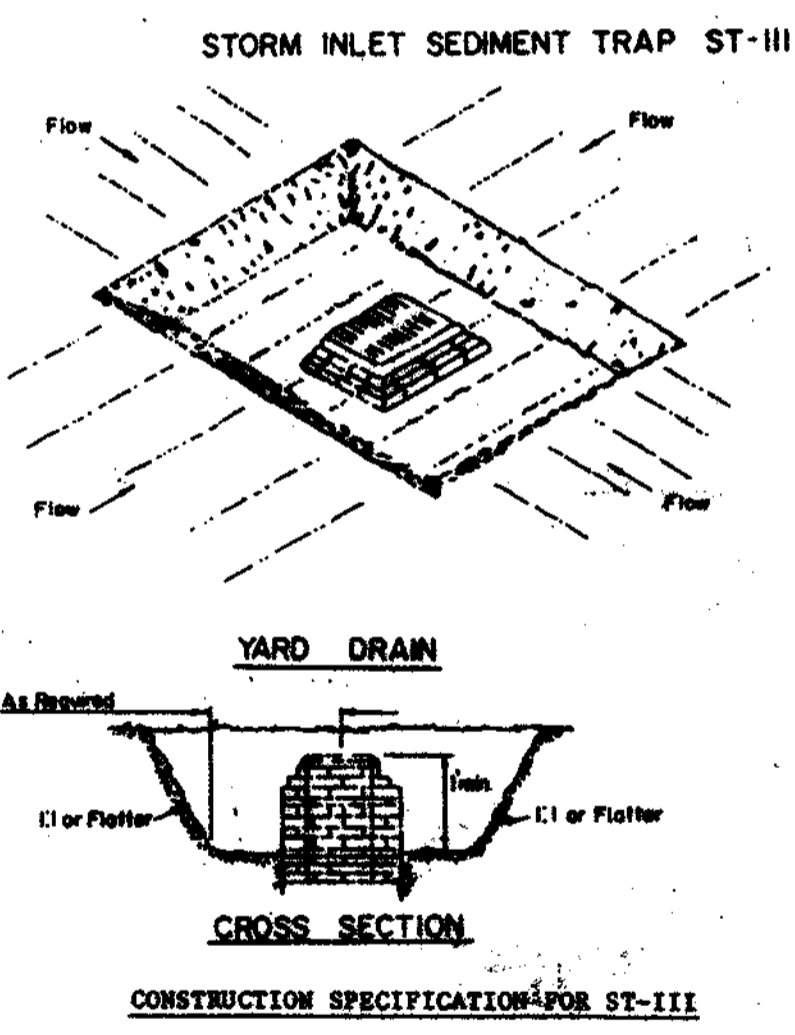
**2 CURB INLET PROTECTION**  
NOT TO SCALE



**CONSTRUCTION SPECIFICATIONS**

1. LENGTH - MINIMUM OF 50' (30' FOR A SINGLE RESIDENCE LOT).
2. WIDTH - 10' MINIMUM SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCE TO USE GEOTEXTILE.
4. STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE PROVIDED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

**4 STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE



1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
6. All cut slopes shall be 1:1 or flatter.

|   |                              |                              |
|---|------------------------------|------------------------------|
| U.S. DEPARTMENT OF AGRICULTURE<br>SOIL CONSERVATION SERVICE<br>COLLEGE PARK, MARYLAND | STORM INLET<br>SEDIMENT TRAP | STANDARD DRAWING<br>ST - III |
|---|------------------------------|------------------------------|

**5 SILT TRAP DETAIL**  
NOT TO SCALE

BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND 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 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *[Signature]* DATE: 4/19/98

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.

ENGINEER: *[Signature]* DATE: 4/21/98

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
DIRECTOR: *[Signature]* DATE: 5/11/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* 5/11/98  
CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 5/11/98

OWNER: WHISKEY BOTTOM TRADE CENTER B, L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER  
SITE PLAN PHASE II  
PARCEL "B"

TITLE: SEDIMENT AND EROSION CONTROL DETAILS

ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS  
VIA INCORPORATED  
8180 GREENSBORO DRIVE SUITE 200 ■ MGLEAN, VIRGINIA 22102  
(703) 442-7800 ■ FAX: (703) 761-2787  
MGLEAN, VA

DATE: 4/21/98  
SDP-98-59  
DESIGNED BY: PSC  
DRAWING BY: FTC  
PROJECT/FILE NO. 5457  
DATE: SEPT. 1997  
SCALE: N/A  
DRAWING No. 5 OF 18  
CHARLES A. IRISH

**SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION, PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- 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.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
  - 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1 CHAPTER 7, OF THE "HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE".
- 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 SEEDING, SOD, TEMPORARY SEEDING AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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.
- SITE ANALYSIS.  
 TOTAL AREA OF SITE: 4.07 ACRES  
 AREA DISTURBED: 4.40 ACRES - 191,664 S.F.  
 AREA TO BE ROOFED OR PAVED: 3.02 ACRES - 131,698 S.F.  
 AREA TO BE VEGETATIVELY STABILIZED: 1.38 ACRES - 59,966 S.F.  
 TOTAL CUT: 6,800 C.Y.  
 TOTAL FILL: 4,200 C.Y.  
 OFFSITE WASTE/BORROW AREA LOCATION: EXCESS CUT SHALL BE TAKEN TO A SITE WITH AN APPROVED GRADING PERMIT.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 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.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

**SEQUENCE OF OPERATIONS  
PHASE I**

- OBTAIN GRADING PERMIT
- NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES INSPECTOR 48 HOURS BEFORE BEGINNING WORK.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE #1 AND SUPER SILT FENCE. (2 DAYS)
- CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES AND DEVICES. (3 DAYS)
- INSTALL ALL SEDIMENT CONTROL MEASURES AND DEVICES. (3 DAYS)
- AFTER NOTIFYING AND OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, BEGIN ROUGH GRADING. MAINTAIN POSITIVE DRAINAGE TO SEDIMENT CONTROL MEASURES AND DEVICES. (2 DAYS)
- INSTALL STORM DRAIN STRUCTURES UPSTREAM OF THE SWM FACILITY. DELAY CONNECTION TO SWM FACILITY UNTIL SITE UPSTREAM OF SWM FACILITY HAS BEEN STABILIZED. (30 DAYS)
- INSTALL ALL UTILITIES AND INLET TRAPS CONCURRENTLY WITH INLET CONSTRUCTION. (10 DAYS)
- INSTALL FOOTINGS AND FOUNDATIONS WALL. CONTINUE BUILDING CONSTRUCTION.(14 DAYS)
- FINE GRADE THE ENTIRE SITE. MAINTAIN POSITIVE DRAINAGE TO SEDIMENT CONTROL MEASURES AND DEVICES. INSTALL STONE SUBBASE AND CONCRETE CURB AND GUTTER. AREA AT TRAP AND BELOW EARTH DIKE OUTFALLING INTO TRAP TO HAVE SUBBASE AND CURB AND GUTTER INSTALLED AFTER TRAP IS REMOVED. STABILIZE ALL REMAINING AREAS. (30 DAYS)
- ONCE THE UPSTREAM SITE HAS BEEN STABILIZED, BEGIN CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY. (10 DAYS)
- PRIOR TO CONNECTING THE 24" RCP FROM THE SWM FACILITY TO THE EXISTING STORM DRAIN SYSTEM, THE SITE MUST BE FULLY STABLE, THE STORM DRAIN SYSTEM CLEANED AND INSPECTION HAS BEEN GRANTED PERMISSION TO PROCEED. (2 DAYS)
- AFTER NOTIFYING AND OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL MEASURES AND DEVICES. (3 DAYS)
- FINE GRADE THESE AREAS. INSTALL REMAINDER OF STONE SUBBASE AND CONCRETE CURB AND GUTTER. (3 DAYS)
- PROCEED WITH PAVING OPERATIONS. (10 DAYS)

**PHASE II**

- ONCE THE UPSTREAM SITE HAS BEEN STABILIZED, BEGIN CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY. (10 DAYS)
- PRIOR TO CONNECTING THE 24" RCP FROM THE SWM FACILITY TO THE EXISTING STORM DRAIN SYSTEM, THE SITE MUST BE FULLY STABLE, THE STORM DRAIN SYSTEM CLEANED AND INSPECTION HAS BEEN GRANTED PERMISSION TO PROCEED. (2 DAYS)
- AFTER NOTIFYING AND OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL MEASURES AND DEVICES. (3 DAYS)
- FINE GRADE THESE AREAS. INSTALL REMAINDER OF STONE SUBBASE AND CONCRETE CURB AND GUTTER. (3 DAYS)
- PROCEED WITH PAVING OPERATIONS. (10 DAYS)

**INLET PROTECTION NOTE**

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

- ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.
- INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND CONTROL, PAGE 3-16-1 (OR AS MAY BE AMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

\*STORM DRAINS TO BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

**UTILITY CONSTRUCTION NOTES**

- OPEN ONLY THAT PORTION OF THE TRENCH WHICH CAN BE BACKFILLED AND STABILIZED EACH DAY.
- PLACE ALL EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH.
- ALL SEDIMENT CONTROL MEASURES DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY BEFORE LEAVING THE WORK SITE AT THE END OF EACH DAY.
- IF THE TRENCH MUST REMAIN OPEN LONGER THAN THE ONE DAY, SILT FENCE SHALL BE PLACED DOWN HILL FROM THE TRENCH.

NOTE:  
THIS PLAN IS TO BE USED FOR THE INSTALLATION AND MAINTENANCE OF THE SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES ONLY. SEE SITE PLAN FOR MORE SPECIFIC INFORMATION.

**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, IF NOT PREVIOUSLY LOOSENEED.

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

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 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. PER 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. PER 1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 347 GAL. PER ACRE (8 GAL. PER 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.

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS 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, IF NOT PREVIOUSLY LOOSENEED.

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

- PREFERRED: APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 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 UREAFORM FERTILIZER (9 LBS. PER 1000 SQ. FT.).
- ACCEPTABLE: APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. PER 1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 91.4 LBS. PER 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 (0.05 LBS. PER 1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

- 2 TONS PER ACRE OF WELL-ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.
- USE SOD.
- SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 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. PER 1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 347 GAL. PER ACRE (8 GAL. PER 1000 SQ. FT.) FOR ANCHORING.

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

**TOPSOIL SPECIFICATIONS**

**NEW TOPSOIL**

- Fertile, friable, naturally loamy, surface soil; reasonably free of subsoil, clay lumps, brush, weeds, and other litter; and free of roots, stumps, and other extraneous or toxic matter harmful to plant growth. New topsoil shall be shredded and screened to remove all stone in excess of 1" in size.
- Provide topsoil with a pH range of approximately 5.5 pH to 7.6 pH, when tested in accordance with the methods of testing as recommended by the Association of Official Agricultural Chemists. Organic content shall not be less than 3 percent nor more than 20 percent as determined by the wet-combustion method (chromic acid reduction). Not less than 20 percent nor more than 80 percent of the topsoil material shall pass the 200 mesh (0.075 mm) sieve, as determined by the wash test in accordance with ASTM C 117.
- Natural topsoil may be amended by the Contractor with approved materials and methods to meet above requirements.
- Obtain topsoil from local sources or from areas having similar soil characteristics to that found at site of work. Obtain topsoil from naturally well-drained sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

**STOCKPILED TOPSOIL**

- The stockpiled topsoil shall be shredded and screened to remove all stone in excess of 1" in size.
- Topsoil shall not be shredded and screened when in an excessively wet and/or frozen condition.
- The Contractor shall obtain approval of the shredded and screened topsoil by the Owner or Owner's Representative before proceeding with placement.

**SOIL AMENDMENTS**

- Lime: Natural limestone, conforming with requirements of ASTM C 602, and containing at least 85 percent of total carbonates ground to such fineness that at least 90 percent passes a 10-mesh sieve and at least 50 percent passes a 100-mesh sieve.
  - Provide lime in form of dolomitic limestone.
- Peat Humus: Finely divided or granular texture and with pH of 6.0 to 7.5 composes of moss peat (other than sphagnum), peat humus, or reed-sedge peat.

**FERTILIZER**

- Complete, 10-20-10 commercial fertilizer of neutral character, with some elements derived from organic sources, conforming to requirements of Federal Specification O-F-241d and applicable laws of the State of Maryland. Fertilizer to provide nitrogen in a form that will be available during initial period of turf growth.

BY THE DEVELOPER :  
I/WE CERTIFY THAT ALL DEVELOPMENT AND 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 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*[Signature]* 4/19/99  
DEVELOPER DATE

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]* 4/21/98  
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL

*[Signature]* 5/6/98  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*[Signature]* 5/6/98  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 5/11/98  
DIRECTOR DATE

*[Signature]* 5/18/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 5/11/98  
CHIEF, DIVISION OF LAND DEVELOPMENT

DATE No. REVISION

OWNER: WHISKEY BOTTOM TRADE CENTER B, L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT WHISKEY BOTTOM TRADE CENTER  
SITE PLAN PHASE II  
PARCEL "B"

AREA TAX MAP No. PARCEL B  
SIXTH (6) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE SEDIMENT AND EROSION  
CONTROL NOTES

SDP-98-59

DESIGNED BY: PSC

DRAWING BY: FTC

PROJECT/FILE NO. 5457

DATE: SEPT. 1997

SCALE: N/A

DRAWING No. 6 OF 16

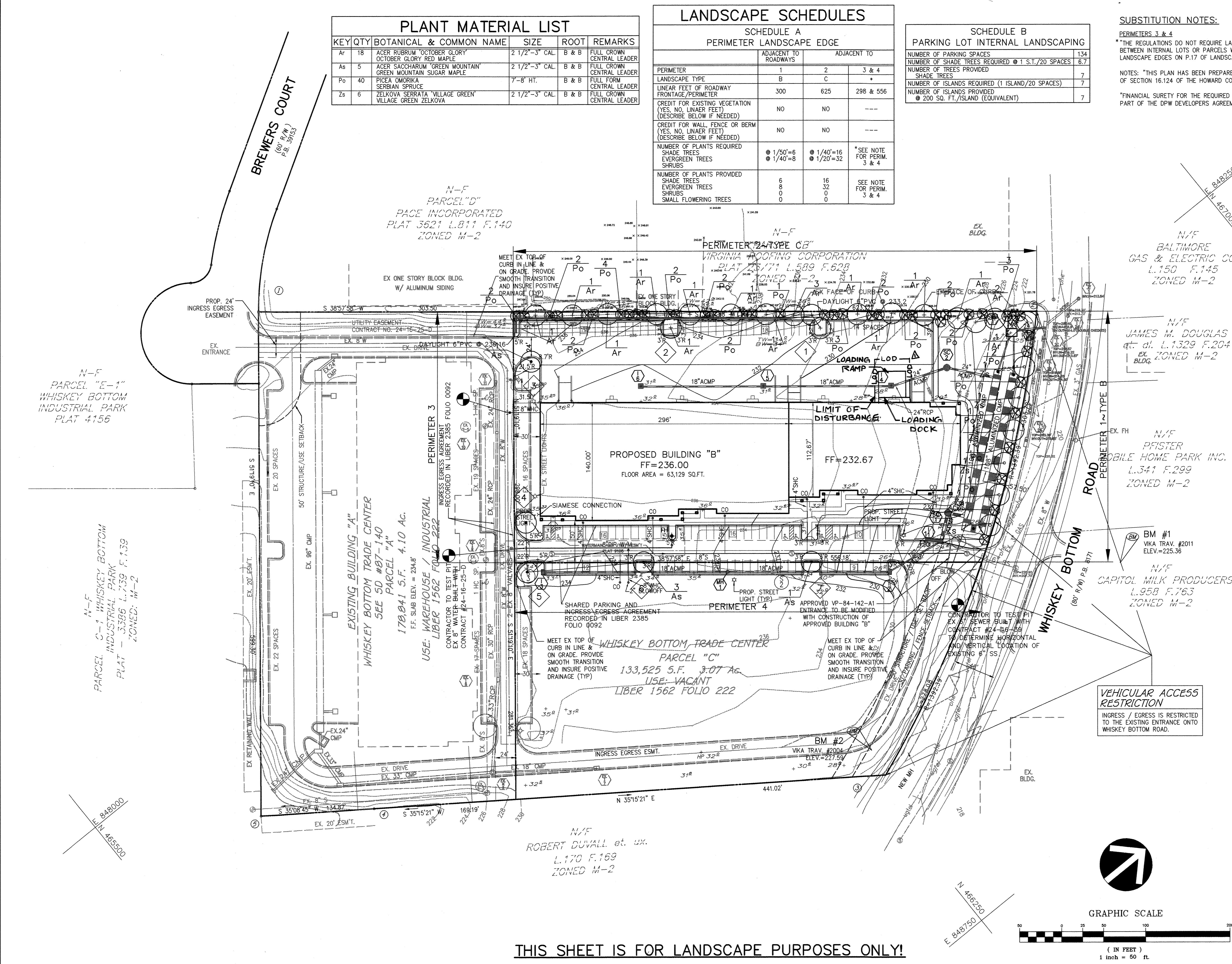
CHARLES A. IRISH #11277

| KEY | QTY | BOTANICAL & COMMON NAME                                       | SIZE           | ROOT  | REMARKS                      |
|-----|-----|---|----------------|-------|------------------------------|
| Ar  | 18  | ACER RUBRUM 'OCTOBER GLORY'<br>OCTOBER GLORY RED MAPLE        | 2 1/2"-3" CAL. | B & B | FULL CROWN<br>CENTRAL LEADER |
| As  | 5   | ACER SACCHARUM 'GREEN MOUNTAIN'<br>GREEN MOUNTAIN SUGAR MAPLE | 2 1/2"-3" CAL. | B & B | FULL CROWN<br>CENTRAL LEADER |
| Po  | 40  | PICEA OMORICA<br>SERBIAN SPRUCE                               | 7'-8' HT.      | B & B | FULL FORM<br>CENTRAL LEADER  |
| Zs  | 6   | ZELKOVA SERRATA 'VILLAGE GREEN'<br>VILLAGE GREEN ZELKOVA      | 2 1/2"-3" CAL. | B & B | FULL CROWN<br>CENTRAL LEADER |

| LANDSCAPE SCHEDULES  |                         |             |                                  |
|--|-------------------------|-------------|----------------------------------|
| SCHEDULE A<br>PERIMETER LANDSCAPE EDGE   |                         |             |                                  |
|  | ADJACENT TO<br>ROADWAYS | ADJACENT TO |                                  |
|  | 1                       | 2           | 3 & 4                            |
| PERIMETER  | 1                       | 2           | 3 & 4                            |
| LANDSCAPE TYPE   | B                       | C           | *                                |
| LINEAR FEET OF ROADWAY<br>FRONTAGE/PERIMETER   | 300                     | 625         | 298 & 556                        |
| CREDIT FOR EXISTING VEGETATION<br>(YES, NO, LINEAR FEET)<br>(DESCRIBE BELOW IF NEEDED) | NO                      | NO          | ---                              |
| CREDIT FOR WALL, FENCE OR BERM<br>(YES, NO, LINEAR FEET)<br>(DESCRIBE BELOW IF NEEDED) | NO                      | NO          | ---                              |
| NUMBER OF PLANTS REQUIRED  |                         |             |                                  |
| SHADE TREES  | 1/50'=6                 | 1/40'=16    | *SEE NOTE<br>FOR PERIM.<br>3 & 4 |
| EVERGREEN TREES  | 1/40'=8                 | 1/20'=32    |                                  |
| SHRUBS   |                         |             |                                  |
| NUMBER OF PLANTS PROVIDED  |                         |             |                                  |
| SHADE TREES  | 6                       | 16          | SEE NOTE<br>FOR PERIM.<br>3 & 4  |
| EVERGREEN TREES  | 8                       | 32          |                                  |
| SHRUBS   | 0                       | 0           |                                  |
| SMALL FLOWERING TREES  | 0                       | 0           |                                  |

| SCHEDULE B<br>PARKING LOT INTERNAL LANDSCAPING                  |     |
|---|-----|
| NUMBER OF PARKING SPACES  | 134 |
| NUMBER OF SHADE TREES REQUIRED @ 1 S.T./20 SPACES               | 6.7 |
| NUMBER OF TREES PROVIDED  | 7   |
| NUMBER OF ISLANDS REQUIRED (1 ISLAND/20 SPACES)                 | 7   |
| NUMBER OF ISLANDS PROVIDED                                      | 7   |
| NUMBER OF ISLANDS PROVIDED<br>@ 200 SQ. FT./ISLAND (EQUIVALENT) | 7   |

**SUBSTITUTION NOTES:**  
 PERIMETERS 3 & 4  
 \*THE REGULATIONS DO NOT REQUIRE LANDSCAPED EDGES, BUFFERING, OR SCREENING, BETWEEN INTERNAL LOTS OR PARCELS WITHIN THE SAME DEVELOPMENT.\* (SEE PERIMETER LANDSCAPE EDGES ON P.17 OF LANDSCAPE MANUAL)  
 NOTES: \*THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.\*  
 \*FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$6900.00.



**THIS SHEET IS FOR LANDSCAPE PURPOSES ONLY!**

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 5/11/98  
DIRECTOR DATE

*[Signature]* 5/10/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 5/11/98  
CHIEF, DIVISION OF LAND DEVELOPMENT

7/7/98 1 Add loading docks  
DATE No. REVISION

OWNER: WHISKEY BOTTOM TRADE CENTER B L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER  
SITE PLAN PHASE II  
PARCEL B

AREA: TAX MAP No. PARCEL B  
SIXTH (6) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN

**VKA**  
 ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS  
 VKA INCORPORATED  
 8180 GREENSBORO DRIVE, SUITE 200 ■ MGLEAN, VIRGINIA 22102  
 (703) 442-7800 ■ FAX (703) 761-2787  
 MGLEAN, VA ■ BETHESDA, MD

4/21/98  
 STATE OF MARYLAND  
 LANDSCAPE ARCHITECT  
 Matthew J. Tauscher #1094

SDP-98-59  
 DESIGNED BY: PSC  
 DRAWING BY: PSC  
 PROJECT/FILE NO. 5457  
 DATE: SEPT. 1997  
 SCALE: 1"=50'  
 DRAWING No. 7 OF 16

## PLANTING NOTES

PLANT LOCATIONS SHALL BE FIELD ADJUSTED TO AVOID UTILITIES. CONTRACTOR IS RESPONSIBLE FOR LOCATING UTILITIES PRIOR TO START OF WORK. ALL TREES SHALL BE MULCHED TO A MINIMUM OF 18" BEYOND THE EDGE OF THE ROOT BALL. ALL WIRE, PLASTIC AND TWINE TIES SHALL BE REMOVED FROM TOP OF THE ROOT BALL.

## PLANT STANDARDS

ALL NURSERY STOCK SHALL BE TOP QUALITY AND IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., "AMERICAN STANDARDS FOR NURSERY STOCK", LATEST EDITION. INFERIOR NURSERY STOCK WILL BE SUBJECT TO REJECTION BY THE LANDSCAPE ARCHITECT. BARE-ROOT SHALL NOT BE ALLOWED FOR ANY TREE DEFINED AS MAJOR DECIDUOUS, MINOR DECIDUOUS OR EVERGREEN.

## CHANGES MAY IMPACT REQUIRED CERTIFICATION

PLANT TYPES (DECIDUOUS TREES, EVERGREEN ETC.), QUANTITIES, SPACING, LOCATION, AND SPECIES SHOWN ON THE APPROVED LANDSCAPE PLAN ARE BASED ON REQUIREMENTS STATED IN THE LATEST HOWARD COUNTY LANDSCAPE MANUAL. ANY CHANGE IN THESE ITEMS MAY AFFECT THE REQUIRED APPROVAL AND CERTIFICATION OF THE INSTALLED PLANTING. OWNER IS REQUIRED TO ARRANGE AND PAY FOR CERTIFICATION BY LANDSCAPE ARCHITECT.

## LANDSCAPE SPECIFICATIONS

LANDSCAPE SPECIFICATION SHALL CONFORM TO LCA LANDSCAPE SPECIFICATION GUIDELINES FOR HOWARD-WASHINGTON METROPOLITAN AREA, INCLUDING PLANTING PROCEDURES AND SOIL PREPARATION FOR SHRUBS AND PERENNIAL BEDS. A ONE-YEAR WARRANTY PERIOD SHALL BE REQUIRED. MAINTENANCE REQUIRED TO HONOR THE ONE YEAR WARRANTY SHALL BE PERFORMED AS PART OF THIS CONTRACT.

## SPECIAL PROVISIONS TO LCA STANDARD SPECIFICATIONS

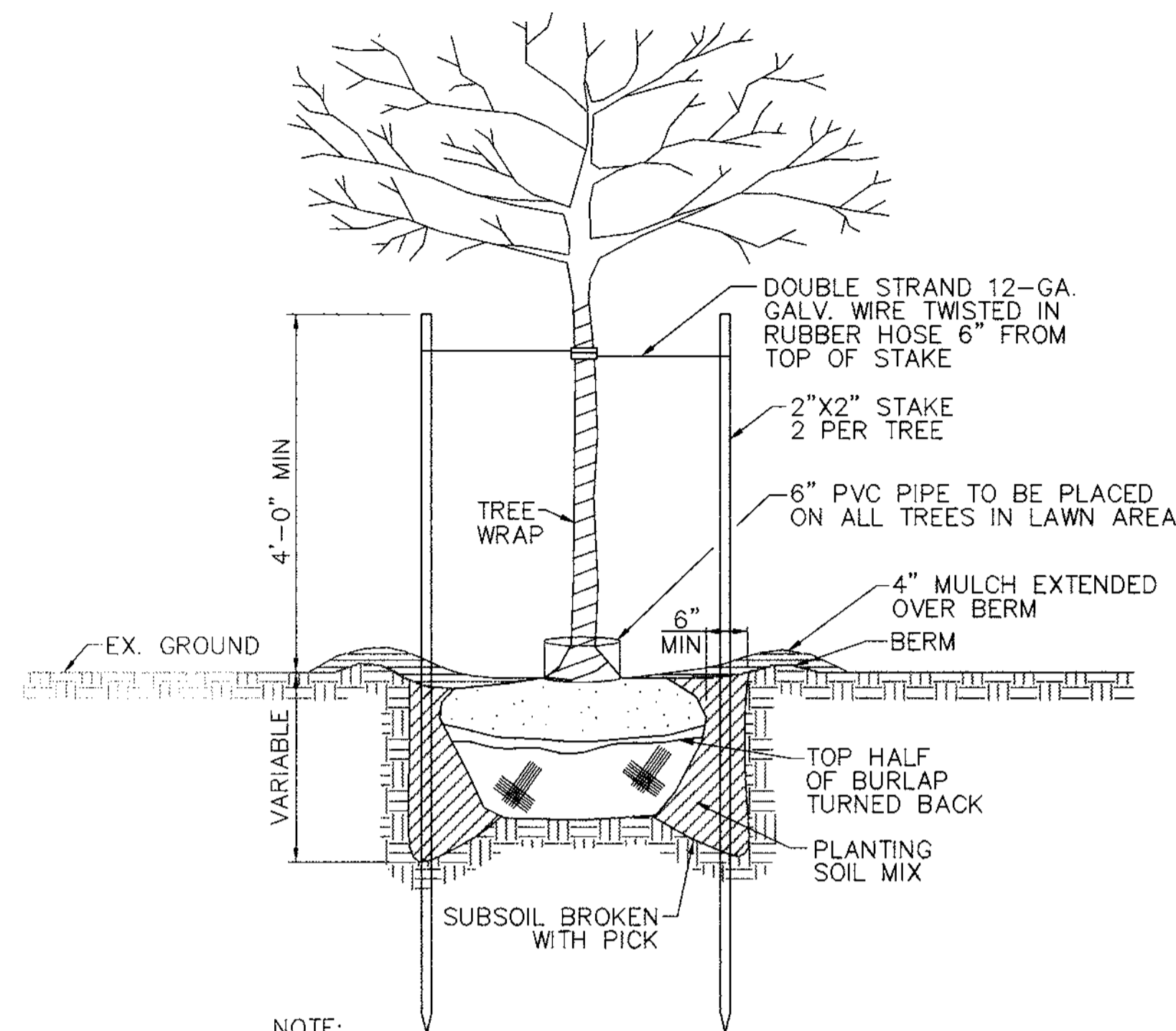
CONTRACTOR IS ENCOURAGED TO PERFORM SOIL TESTING. TEST RESULTS SHALL BE SUBMITTED 30 DAYS BEFORE PLANTING. FAILURE TO PERFORM TESTING WILL NOT VOID GUARANTEE PROVISIONS.

CONTRACTOR SHALL REVIEW AND TEST SUBSOIL DRAINAGE CHARACTERISTICS 30 DAYS PRIOR TO PLANTING AND NOTIFY OWNER OF UNACCEPTABLE CONDITIONS.

NO EXCEPTIONS TO THE GUARANTEE PROVISIONS ARE ALLOWED UNLESS AGREED TO IN WRITING PRIOR TO PLANTING.

## PLANTING SPECIFICATIONS

- PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.
- ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OF OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.
- UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO LANDSCAPE SPECIFICATION GUIDELINES FOR "BALTIMORE-WASHINGTON METROPOLITAN AREAS", (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, LATEST EDITION, INCLUDING ALL AGENDA.
- CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS, INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES. DAMAGE TO EXISTING STRUCTURE AND UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- PROTECTION OF EXISTING VEGETATION TO REMAIN SHALL BE ACCOMPLISHED BY THE TEMPORARY INSTALLATION OF A 4 FOOT HIGH SNOW FENCE AT THE DRIP LINE.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE. ALL PLANTING IS TO BE COMPLETED WITHIN GROWING SEASON OF COMPLETION OF SITE CONSTRUCTION.
- BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.
- PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN TAKE PRECEDENCE.
- POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS (MINIMUM 2 PERCENT SLOPE).
- PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE, ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL, ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.
- WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.
- ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED.
- THIS PLAN IS INTENDED FOR LANDSCAPE USE ONLY. SEE OTHER PLAN SHEETS FOR MORE INFORMATION ON GRADING, SEDIMENT CONTROL, LAYOUT, ETC.



NOTE:  
THIS DETAIL FOR DECIDUOUS AND EVERGREEN TREES  
UNDER 4" CALIPER AND 6' OR MORE IN HEIGHT.

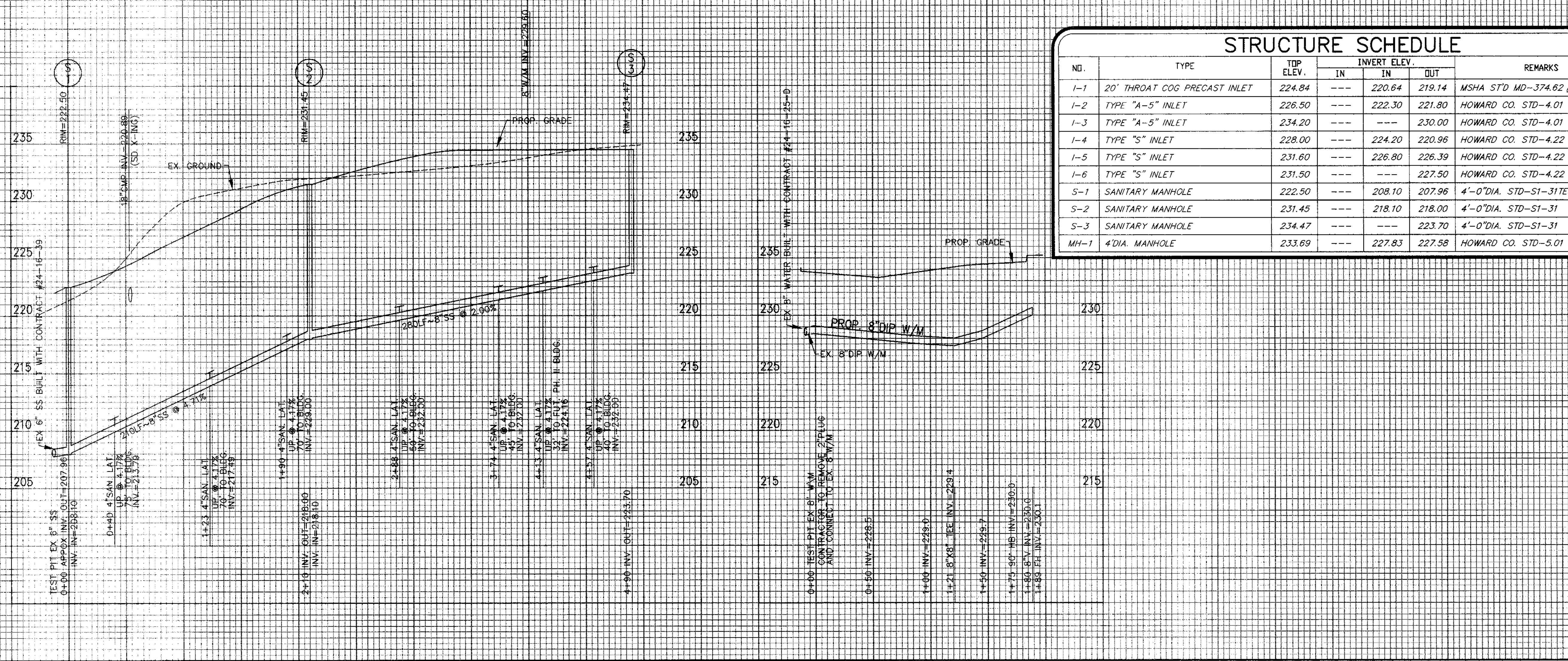
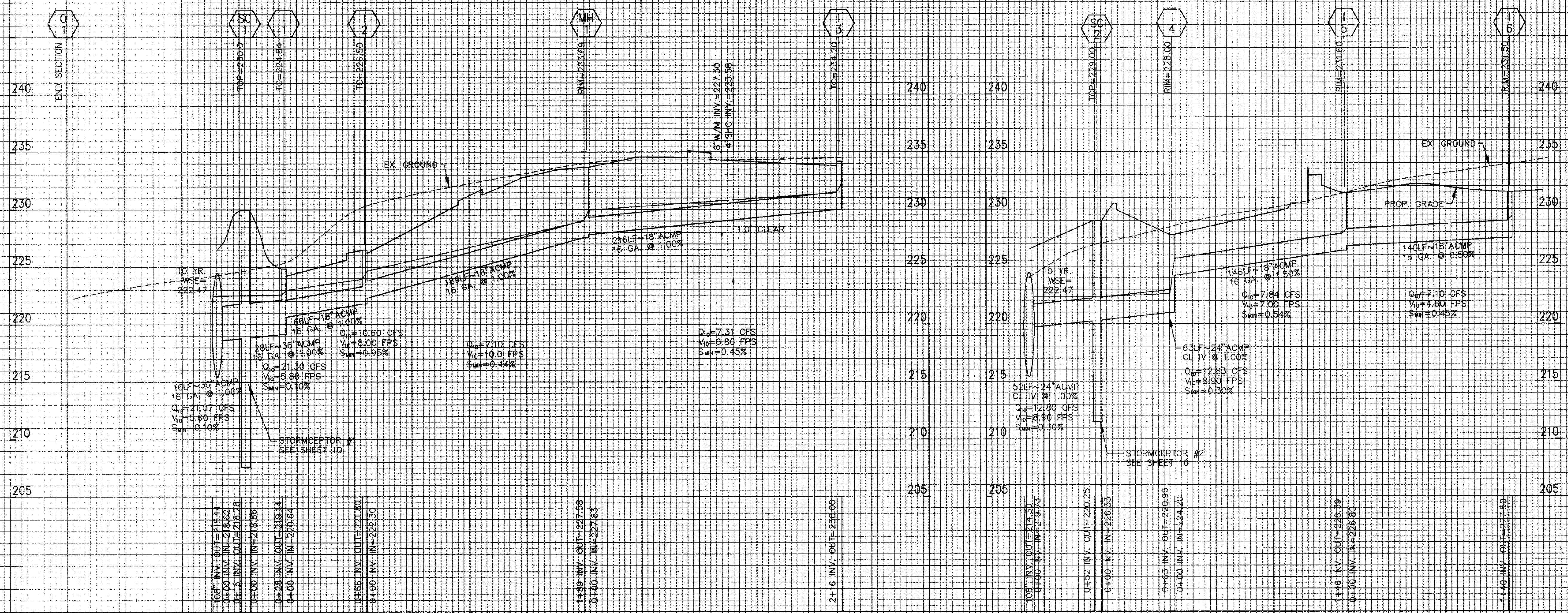
## 1/8 PLANTING AND STAKING DETAIL

NOT TO SCALE

|   |   |
|---|---|
| APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.   |   |
| <i>[Signature]</i><br>DIRECTOR  | 5/11/98<br>DATE   |
| <i>[Signature]</i><br>CHIEF, DEVELOPMENT ENGINEERING DIVISION   | 5/12/98<br>DATE   |
| <i>[Signature]</i><br>CHIEF, DIVISION OF LAND DEVELOPMENT   | 5/11/98<br>DATE   |
| DATE No.  | REVISION  |
| OWNER: WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP<br>C/O GINGERY DEVELOPMENT GROUP<br>1001 ROCKVILLE PIKE SUITE 503<br>ROCKVILLE, MARYLAND 20852<br>(301) 424-3600 |   |
| PROJECT WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL "B"   |   |
| AREA  | TAX MAP No. PARCEL B<br>SIXTH (6) ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND  |
| TITLE LANDSCAPE NOTES & DETAILS   |   |
| <b>VIA</b>  |   |
| ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS   |   |
| VIA INCORPORATED<br>8180 GREENSBORO DRIVE SUITE 200 ■ MCLEAN, VIRGINIA 22102<br>(703) 442-7800 ■ FAX (703) 761-2787<br>MCLEAN, VA BETHESDA, MD                            |   |
| 4/21/98<br>STATE OF MARYLAND<br>MATTHEW J. TAUSCHER<br>LANDSCAPE ARCHITECT<br>No. 1084  | SDP-98-59<br>DESIGNED BY: PSC<br>DRAWING BY: FTC<br>PROJECT/FILE NO. 5457<br>DATE: SEPT. 1997<br>SCALE: 1"=30'<br>DRAWING No. 8 OF 16 |



| PIPE SCHEDULE |       |          |        |
|---------------|-------|----------|--------|
| DIA.          | TYPE  | CLASS    | LENGTH |
| 18"           | CMP   | 16 GUAGE | 757    |
| 36"           | CMP   | 16 GUAGE | 182    |
| 19" x 30"     | HERCP | IV       | 55     |



| STRUCTURE SCHEDULE |                              |           |              |        |        |                                     |
|--------------------|------------------------------|-----------|--------------|--------|--------|-------------------------------------|
| NO.                | TYPE                         | TOP ELEV. | INVERT ELEV. |        |        | REMARKS                             |
|                    |                              |           | IN           | IN     | OUT    |                                     |
| I-1                | 20' THROAT COG PRECAST INLET | 224.84    | ---          | 220.64 | 219.14 | MSHA STD MD-374.62 (72" I.D.)       |
| I-2                | TYPE "A-5" INLET             | 226.50    | ---          | 222.30 | 221.80 | HOWARD CO. STD-4.01                 |
| I-3                | TYPE "A-5" INLET             | 234.20    | ---          | ---    | 230.00 | HOWARD CO. STD-4.01                 |
| I-4                | TYPE "S" INLET               | 228.00    | ---          | 224.20 | 220.96 | HOWARD CO. STD-4.22                 |
| I-5                | TYPE "S" INLET               | 231.60    | ---          | 226.80 | 226.39 | HOWARD CO. STD-4.22                 |
| I-6                | TYPE "S" INLET               | 231.50    | ---          | ---    | 227.50 | HOWARD CO. STD-4.22                 |
| S-1                | SANITARY MANHOLE             | 222.50    | ---          | 208.10 | 207.96 | 4'-0" DIA. STD-S1-31 TEST PIT REQ'D |
| S-2                | SANITARY MANHOLE             | 231.45    | ---          | 218.10 | 218.00 | 4'-0" DIA. STD-S1-31                |
| S-3                | SANITARY MANHOLE             | 234.47    | ---          | ---    | 223.70 | 4'-0" DIA. STD-S1-31                |
| MH-1               | 4" DIA. MANHOLE              | 233.69    | ---          | 227.83 | 227.58 | HOWARD CO. STD-5.01                 |

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: *[Signature]* DATE: 5/11/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* 5/10/98

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 5/11/98

DATE: 2/11/97  
 DATE No. CHANGED 24" RCP TO 19" x 30" HERCP  
 REVISION

OWNER: WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP  
 C/O GINGERY DEVELOPMENT GROUP  
 1001 ROCKVILLE PIKE SUITE 503  
 ROCKVILLE, MARYLAND 20852  
 (301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL "B"

AREA: TAX MAP No. PARCEL B  
 SIXTH (6) ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

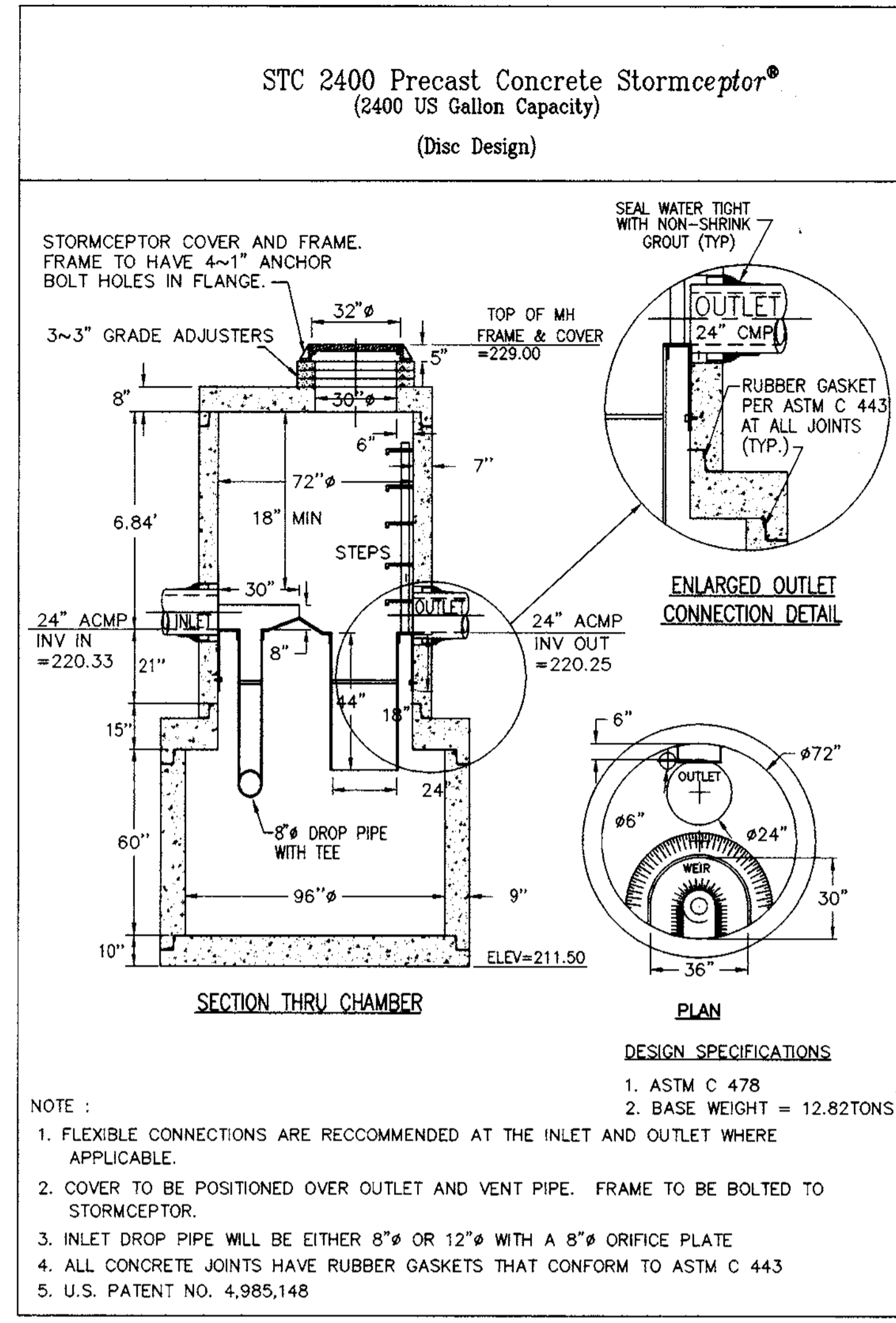
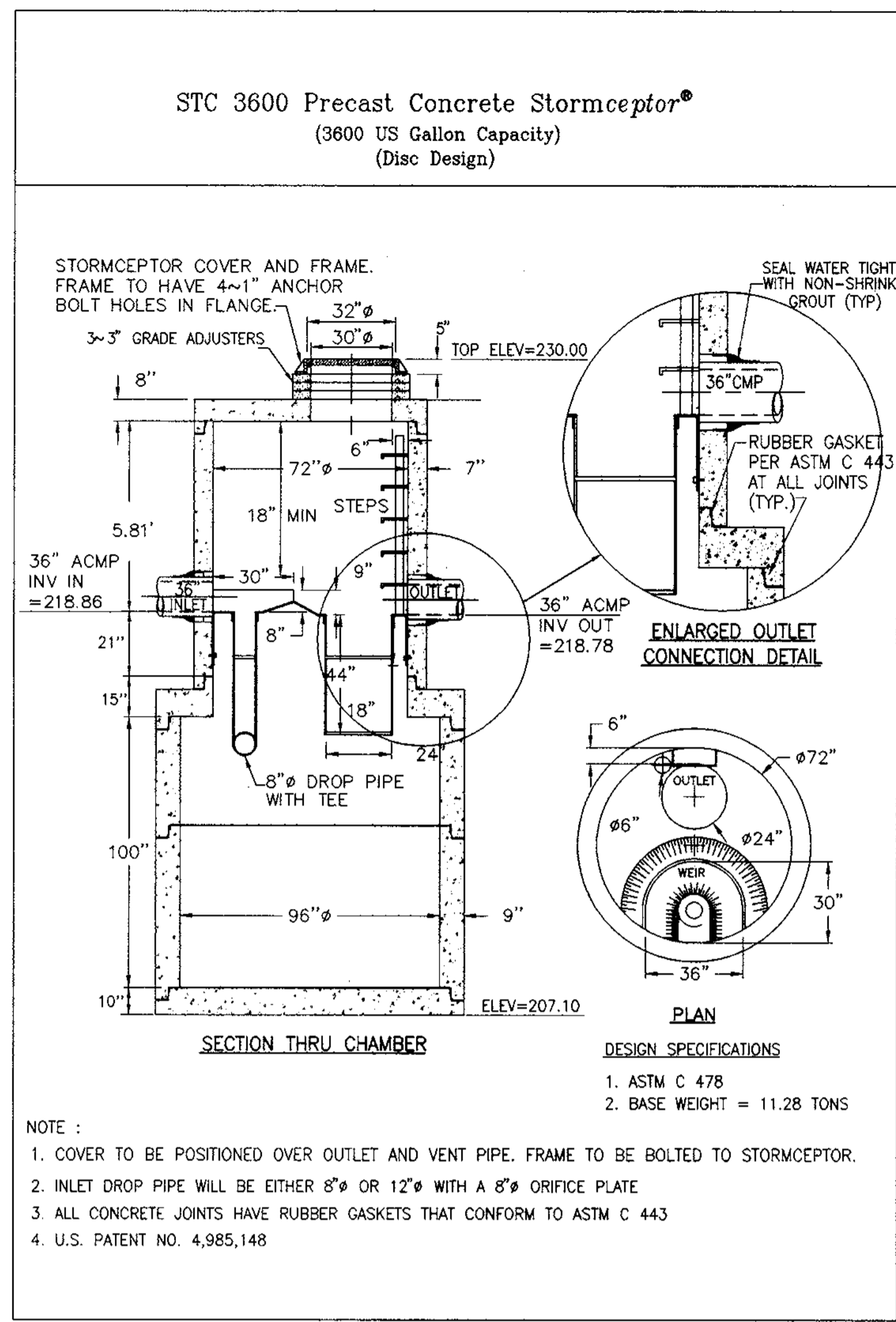
TITLE: UTILITY PROFILES OFFICE WAREHOUSE BUILDING 'B'

ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS

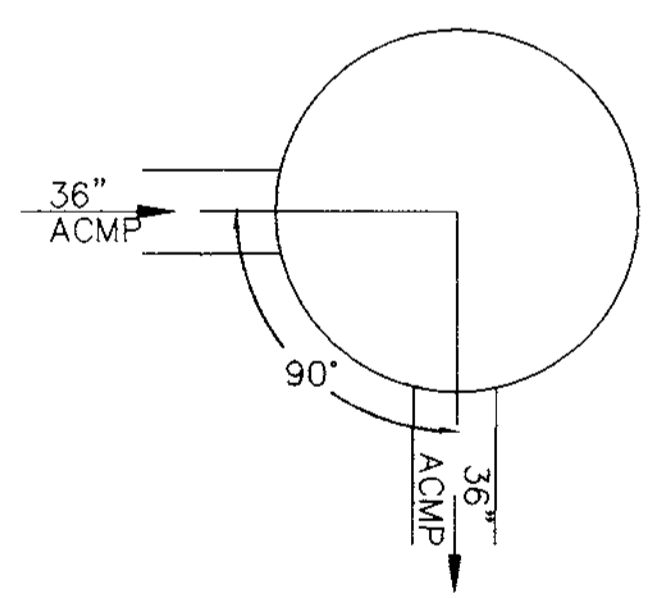
WKA INCORPORATED  
 8180 GREENSBORO DRIVE, SUITE 200 ■ MCLEAN, VIRGINIA 22102  
 (703) 442-7800 ■ FAX (703) 761-2787  
 MCLEAN, VA BETHESDA, MD

DATE: 4/21/98  
 SDP-98-59  
 DESIGNED BY: SC  
 DRAWING BY: KY  
 PROJECT/FILE NO. 5457  
 DATE: SEPT. 1997  
 SCALE: HORIZ. 1" = 50'  
 VERT. 1" = 5'  
 DRAWING No. 9 OF 16

CHARLES A. IRISH #1217



SC - 1  
NOT TO SCALE



SC-1  
PIPE ORIENTATION  
NOT TO SCALE

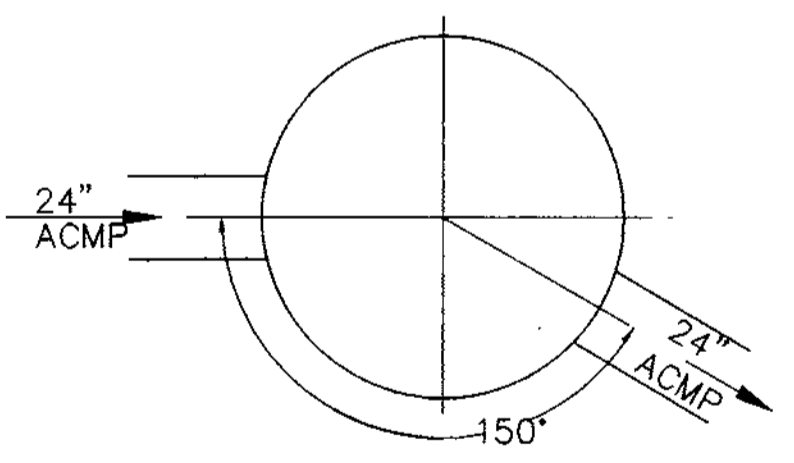
STORMCEPTOR DESIGN

| STRUCTURE NO. | IMPERVIOUS AREA (AC.) | PIPE DIA. (IN.) | ACTUAL FLOWRATE (C.F.S.) | STORMCEPTOR MODEL | MIN OPENING ABOVE WEIR (IN.) |
|---------------|-----------------------|-----------------|--------------------------|-------------------|------------------------------|
| SC-12         | 2.90 AC.              | 24"ØMP          | 21.30 CFS                | STC 3600          | 8"                           |

NOTES:

1. BASED ON TABLE 7 OF THE STORMCEPTOR® TECHNICAL MANUAL, JUNE 1996 USING STANDARD AREA.
2. TO ORDER STORMCEPTORS® CALL 1-800-999-2278.

SC - 2  
NOT TO SCALE



SC-2  
PIPE ORIENTATION  
NOT TO SCALE

STORMCEPTOR DESIGN

| STRUCTURE NO. | IMPERVIOUS AREA (AC.) | PIPE DIA. (IN.) | ACTUAL FLOWRATE (C.F.S.) | STORMCEPTOR MODEL | MIN OPENING ABOVE WEIR (IN.) |
|---------------|-----------------------|-----------------|--------------------------|-------------------|------------------------------|
| SC-2          | 1.77 AC.              | 24"ØMP          | 12.83 CFS                | STC 2400          | 8"                           |

NOTES:

1. BASED ON TABLE 7 OF THE STORMCEPTOR® TECHNICAL MANUAL, JUNE 1996 USING STANDARD AREA.
2. TO ORDER STORMCEPTORS® CALL 1-800-999-2278.

### Concrete Stormceptor® Order Request Form

**Contractor Information**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Zip Code \_\_\_\_\_  
Contact \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax \_\_\_\_\_

**Owner Information**

Name \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax \_\_\_\_\_

**Stormceptor Model**

|      |                          |      |                                     |
|------|--------------------------|------|-------------------------------------|
| 900  | <input type="checkbox"/> | 3600 | <input checked="" type="checkbox"/> |
| 1200 | <input type="checkbox"/> | 4800 | <input type="checkbox"/>            |
| 1800 | <input type="checkbox"/> | 6000 | <input type="checkbox"/>            |
| 2400 | <input type="checkbox"/> | 7200 | <input type="checkbox"/>            |

**\*Insert Size**

|        |                          |
|--------|--------------------------|
| 22"    | <input type="checkbox"/> |
| 32"    | <input type="checkbox"/> |
| 44"    | <input type="checkbox"/> |
| Custom | <input type="checkbox"/> |

**Manhole Number** \_\_\_\_\_  
**Top Elevation (ft)** \_\_\_\_\_  
**Inlet Pipe Invert (ft)** \_\_\_\_\_  
**Outlet Pipe Invert (ft)** \_\_\_\_\_  
**Pipe Type:** \_\_\_\_\_  
**Pipe Inside Diameter (in) [ID]** \_\_\_\_\_  
**Pipe Outside Diameter (in) [OD]** \_\_\_\_\_

**Project Name:** WHISKEY BOTTOM PHASE II  
**Approximate time frame until required delivery (weeks)** \_\_\_\_\_  
**Delivery Address:** Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
**Designer Company** \_\_\_\_\_  
**Designer Contact** \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

Please fax this sheet back to Hydro Conduit c/o Conduit (412) 795-2933  
 Attention: Andrew Vitrostek Phone: (412) 795-8224

For Technical Assistance Please call Stormceptor Corporation at (804) 762-8361 or toll free at 1-800-762-4703

\* TO BE INCLUDED ON SITE PLAN BY DESIGNER.

UNDERGROUND STORMWATER MANAGEMENT FACILITY SUMMARY

|                                |              |
|--------------------------------|--------------|
| MAINTENANCE                    | PRIVATE      |
| DRAINAGE AREA TO FACILITY      | 5.10 ACRES   |
| 2 YEAR ALLOWABLE RELEASE RATE  | 2.99 CFS     |
| 10 YEAR ALLOWABLE RELEASE RATE | 9.86 CFS     |
| 2 YEAR PEAK INFLOW             | 13.19 CFS    |
| 10 YEAR PEAK INFLOW            | 24.91 CFS    |
| 2 YEAR PEAK OUTFLOW            | 1.92 CFS     |
| 10 YEAR PEAK OUTFLOW           | 5.69 CFS     |
| 2 YEAR PEAK ELEVATION          | 218.65       |
| 10 YEAR PEAK ELEVATION         | 222.35       |
| 2 YEAR PEAK VOLUME             | 0.29 AC.FT.  |
| 10 YEAR PEAK VOLUME            | 0.57 AC. FT. |

FOR TECHNICAL INFORMATION CALL STORMCEPTOR CORPORATION AT 1-800-762-4703.  
 TO ORDER AND FOR DELIVERY CONTACT CSR-HYDRO CONDUIT, VIRGINIA  
 PRECAST AT 1-800-999-2278 AT LEAST 4 WEEKS PRIOR TO NEEDED DELIVERY.

### Concrete Stormceptor® Order Request Form

**Contractor Information**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Zip Code \_\_\_\_\_  
Contact \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax \_\_\_\_\_

**Owner Information**

Name \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax \_\_\_\_\_

**Stormceptor Model**

|      |                          |      |                          |
|------|--------------------------|------|--------------------------|
| 900  | <input type="checkbox"/> | 3600 | <input type="checkbox"/> |
| 1200 | <input type="checkbox"/> | 4800 | <input type="checkbox"/> |
| 1800 | <input type="checkbox"/> | 6000 | <input type="checkbox"/> |
| 2400 | <input type="checkbox"/> | 7200 | <input type="checkbox"/> |

**\*Insert Size**

|        |                          |
|--------|--------------------------|
| 22"    | <input type="checkbox"/> |
| 32"    | <input type="checkbox"/> |
| 44"    | <input type="checkbox"/> |
| Custom | <input type="checkbox"/> |

**Manhole Number** \_\_\_\_\_  
**Top Elevation (ft)** \_\_\_\_\_  
**Inlet Pipe Invert (ft)** \_\_\_\_\_  
**Outlet Pipe Invert (ft)** \_\_\_\_\_  
**Pipe Type:** \_\_\_\_\_  
**Pipe Inside Diameter (in) [ID]** \_\_\_\_\_  
**Pipe Outside Diameter (in) [OD]** \_\_\_\_\_

**Project Name:** WHISKEY BOTTOM PHASE II  
**Approximate time frame until required delivery (weeks)** \_\_\_\_\_  
**Delivery Address:** Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
**Designer Company** \_\_\_\_\_  
**Designer Contact** \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

Please fax this sheet back to Hydro Conduit c/o Conduit (412) 795-2933  
 Attention: Andrew Vitrostek Phone: (412) 795-8224

For Technical Assistance Please call Stormceptor Corporation at (804) 762-8361 or toll free at 1-800-762-4703

\* TO BE INCLUDED ON SITE PLAN BY DESIGNER.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING ZONING.

Director: \_\_\_\_\_ DATE: 5/11/98  
 Chief, Development Engineering Division: \_\_\_\_\_  
 Chief, Division of Land Development: \_\_\_\_\_

DATE No. \_\_\_\_\_ REVISION \_\_\_\_\_

OWNER: WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP  
 C/O GINGERY DEVELOPMENT GROUP  
 1001 ROCKVILLE PIKE SUITE 503  
 ROCKVILLE, MARYLAND 20852  
 (301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL "B"

AREA: TAX MAP No. \_\_\_\_\_ PARCEL B  
 SIXTH (6) ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE: STORMCEPTOR DETAILS

ENGINEERS: PLANNERS: LANDSCAPE ARCHITECTS: SURVEYORS: CONSTRUCTORS: \_\_\_\_\_

8180 GREENSBORO DRIVE, SUITE 200 ■ McLEAN, VIRGINIA 22102  
 (703) 442-7800 ■ FAX (703) 781-2787  
 McLEAN, VA ■ BETHESDA, MD

DATE: 4/21/98  
 SDP# 98-59  
 DESIGNED BY: PSC  
 DRAWING BY: FTC  
 PROJECT/FILE NO. \_\_\_\_\_  
 DATE: SEPT. 1997  
 SCALE: NO SCALE  
 DRAWING No. 10  
 CHARLES A. IRISH #11217

CONTRACTOR INSTALLATION INSTRUCTIONS:  
PRECAST CONCRETE STORMCEPTOR

STC PIPE INSTALLATION PROCEDURE:

- PRECONSTRUCTION MEETING.
- STAKEOUT THE LOCATION OF THE STORMCEPTOR AND EXCAVATE HOLE. EXCAVATE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO UNIT. SECURE INSPECTOR APPROVAL OF SUBGRADE. INSTALL A 12" DEEP (OR AS REQUIRED) LAYER OF COMPACTED AGGREGATE SUBBASE AT BOTTOM OF EXCAVATION. INSTALL TRENCHBOX OR SHORING, AS NEEDED.
- CHECK ELEVATION OF UNIT BY MEASURING ITS SECTIONS FROM BASE OF THE STORAGE CHAMBER (BOTTOM OF UNIT'S SLAB) TO THE INVERT OF STORMCEPTOR BYPASS CHAMBER INLET ELEVATION (FIBERGLASS INSERT). SUBTRACT THIS DISTANCE FROM DESIGN INVERT ELEVATION TO DETERMINE TOP OF SUBBASE ELEVATION. CHECK ELEVATION OF INSTALLED SUBBASE AND ADJUST AS NEEDED.
- SECURE INSPECTOR APPROVAL OF SUBBASE. ALL LIFTING APARATUS IS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR.
- INSTALL STORAGE CHAMBER. (INSTALL SCREW INSERTS INTO BASE OF STORAGE CHAMBER.) ATTACH CABLES OR CHAINS TO ALL 3 LIFTING LUGS ON THE BASE SLAB. USING LARGE EQUIPMENT OR CRANE, LIFT AND PLACE THE BASE SECTION OF THE STORAGE CHAMBER IN THE EXCAVATED HOLE ON THE SUBBASE. MAKE SURE THAT THE BASE IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS NOT REQUIRED. INSTALL RUBBER GASKET ON BASE UNIT AND COAT WITH LUBRICATING GREASE (PROVIDED IN SHIPMENT), IF NOT PRELUBRICATED. INSTALL ADDITIONAL STORAGE CHAMBER SECTIONS, AS REQUIRED (PROCEDURE IS SAME AS STEP 9.)  
  
(FOR STORMCEPTOR MODELS STS-900, STC-1200 AND STC-1800, SKIP STEP 6 AND GO TO STEP 7.)
- INSTALL REDUCING SLAB. (STORMCEPTOR MODELS STC-2400, STC-3600, STC-4800, STC-6000 AND STC-7200) CHECK THAT SECTION IS SET FLUSH, LEVEL AND IS AT THE PROPER ELEVATION. INSTALL RUBBER GASKET ON THE TRANSITION SLAB SPIGOT AND COAT WITH LUBRICATING GREASE (PROVIDED IN SHIPMENT).
- INSTALL BYPASS CHAMBER OF STORMCEPTOR WITH FACTORY INSTALLED STORMCEPTOR INSERT. LIFT BYPASS SECTION AND INSTALL, WHILE CHECKING ALIGNMENT AND GRADE OF INLET AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH, LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS SECTION MUST BE ORIENTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIRS (INSIDE INSERT). INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICATING GREASE, IF NOT PRELUBRICATED.
- INSTALL STORMCEPTOR DROP PIPES ACCORDING TO STC PIPE INSTALLATION PROCEDURE. SEE NOTES THIS SHEET.
- INSTALL RISER SECTION. LIFT RISER SECTION AND INSTALL, WHILE CHECKING THAT SECTION IS SET FLUSH AND IS AT PROPER ELEVATION AND THAT UNIT IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS REQUIRED IF STEP(S) ARE INCLUDED. ALIGN STEPS ABOVE OUTLET INSPECTION PORT. NOTE: FOR SHALLOW INSTALLATIONS, THIS SECTION MAY NOT BE REQUIRED.
- INSTALL TOP SLAB WITH OPENING FOR STORMCEPTOR FRAME & COVER. IF OPENING IS OFFSET (NOT CENTERED), THE TOP CAP OPENING SHOULD BE ORIENTED ABOVE THE STORMCEPTOR OUTLET INSPECTION PORT (PLUG).
- BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL SHOULD BE COMPACTED TO MEET LOCAL/STATE REQUIREMENTS.
- INSTALL AND SET GRADE ADJUSTING RINGS, AS NEEDED. PLUG ALL LIFT HOLES WITH TAPERED FLEXIBLE PLUG AND KNOCK INTO PLACE. PLUGS IN STORAGE CHAMBER MUST BE GROUTED INSIDE AND OUTSIDE WITH GROUT.
- INSTALL AND SET STORMCEPTOR FRAME AND COVER.
- INSTALL INLET AND OUTLET STORM DRAIN PIPES. CONNECT INLET AND OUTLET STORM DRAIN PIPES WITH FLEXIBLE BOOTS (WHEN PROVIDED) AND WITH NON-SHRINK GROUT WHEN NO FLEXIBLE BOOTS ARE PROVIDED. THE INVERT OF THE INLET AND OUTLET PIPE IS TO MATCH WITH THE INVERT OF THE STORMCEPTOR INSERT. FLEXIBLE BOOT INSTALLATION PROCEDURES: CENTER THE PIPE IN THE BOOT OPENING. LUBRICATE THE OUTSIDE OF THE PIPE AND/OR THE INSIDE OF THE BOOT, IF THE PIPE OUTSIDE DIAMETER IS THE SAME AS THE INSIDE DIAMETER OF THE BOOT. POSITION THE PIPE CLAMP IN THE GROOVE OF THE BOOT WITH THE SCREW AT THE TOP. TIGHTEN THE PIPE CLAMP SCREW TO 60 INCH POUNDS. IF THE PIPE IS MUCH SMALLER THAN THE BOOT, LIFT THE BOOT SUCH THAT IT CONTACTS THE BOTTOM OF THE PIPE WHILE TIGHTENING THE CLAMP TO ENSURE EVEN CONTRACTION OF THE RUBBER. MOVE THE PIPE HORIZONTALLY AND/OR VERTICALLY TO BRING IT TO GRADE.
- THE STORMCEPTOR SHOULD BE PUMPED OUT WHEN THE SEDIMENT CONTROL MEASURES ARE REMOVED (SITE PERMANENTLY STABILIZED). SEDIMENT AND DEBRIS TO BE DISPOSED OF PROPERLY.
- FINAL INSPECTION.

- DROP PIPES ARE TO BE INSTALLED ONCE THE RISER SECTION CONTAINING THE INSERT HAS BEEN INSTALLED ON THE STORAGE CHAMBER.
- ENTER THE STORAGE CHAMBER AND INSTALL THE INLET DROP PIPE FROM UNDERNEATH THE INSERT. THE INLET DROP PIPE IS EASILY IDENTIFIABLE BY THE T-SECTION FITTING. THE TEE IS ORIENTED SUCH THAT IT IS PERPENDICULAR TO THE DIRECTION OF FLOW IN THE UPSTREAM STORM SEWER. FOR THE SMALLER MODELS(<2000)THE INLET DROP PIPE IS CEMENTED INTO THE COUPLING THAT IS PROVIDED USING THE SUPPLIED PVC CEMENT. FOR THE LARGER MODELS(>=2000)THE INLET DROP PIPE IS CONNECTED INTO A GASKETED COUPLING USING THE SUPPLIED PIPE LUBRICANT. ONCE THE INLET DROP PIPE HAS BEEN INSTALLED, THE CONNECTION SHOULD ALSO BE CAULKED USING THE SUPPLIED(CHEMREX 948 OR BULLDOG PREMIUM PL)SEALANT TO ENSURE AN OIL/WATER TIGHT CONNECTION.
- THE LARGE 24"(610mm)RISER PIPE IS INSERTED INTO THE PROVIDED OUTLET SLEEVE FROM ABOVE WHILE STANDING ON THE INSERT. A FLANGE IS PROVIDED ON THE OUTLET RISER PIPE TO PREVENT IT FROM FALLING INTO THE STORAGE CHAMBER. THE UNDERSIDE OF THE FLANGE MUST BE CAULKED WITH THE PROVIDED CHEMREX 948 SEALANT TO ENSURE AN OIL/WATER TIGHT CONNECTION.
- A 6"(150mm)COUPLING IS PROVIDED ON THE INSERT FOR THE 6"(150mm)SUPPLIED PVC VENT PIPE. THE VENT PIPE SHOULD BE ATTACHED TO THE COUPLING USING THE SUPPLIED PVC CEMENT. ONCE THE CEMENT HAS SET, THE CONNECTION SHOULD ALSO BE CAULKED USING THE SUPPLIED CHEMREX 948 SEALANT TO ENSURE AN OIL/WATER TIGHT CONNECTION.

STORMCEPTOR NOTES AND SPECIFICATIONS

- THE STORMCEPTOR<sup>®</sup> IS PROTECTED BY U.S. PATENT NO. 4,985,148.
- CAST IRON FRAME & COVER TO BE APPROVED BY STORMCEPTOR CORPORATION "STORMCEPTOR" TO BE EMBOSSED ON COVER.
- BEDDING, BACKFILL AND GENERAL INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND A PROFESSIONAL ENGINEER BASED ON SITE SPECIFIC SOIL CONDITIONS, SUBJECT TO THE APPROVAL OF THE REGULATORY AGENCIES.
- SIZING OF THE STORMCEPTOR<sup>®</sup> SHALL BE IN ACCORDANCE WITH THE GUIDELINES PROVIDED BY STORMCEPTOR CORPORATION, SUBJECT TO THE APPROVAL OF THE REGULATORY AGENCIES.
- THE STORMCEPTOR<sup>®</sup> SHOULD BE MAINTAINED ANNUALLY AND/OR IMMEDIATELY FOLLOWING ANY KNOWN SPILLS.
- THE STORMCEPTOR<sup>®</sup> CONFORMS TO ASTM C 478 DESIGN SPECIFICATIONS/STANDARDS.
- MINIMUM NUMBER OF STEPS IS TO BE USED IN THE ACCESS WAY. DEPENDS UPON LOCAL REQUIREMENTS.
- COVER TO BE OFFSET 9" FROM ACCESS WALL ADJACENT TO 24" Ø OUTLET RISER PIPE AND 6" Ø VENT PIPE.
- NON-SMOOTH WALL O.D. PIPE TO BE GROUTED IN PLACE.
- MINIMUM OF 1" FALL FROM INLET TO OUTLET.
- FURTHER TECHNICAL INFORMATION IS AVAILABLE FROM STORMCEPTOR CORPORATION 1 (800) 762-4703.

INSPECTION NOTES:

- PRIOR TO START OF INSTALLING THE STORMCEPTOR<sup>®</sup> THE MCDPS INSPECTOR MUST BE CALLED 48 HOURS IN ADVANCE AT 217-6301 (PRE-CONSTRUCTION MEETING.)
- THE MCDPS INSPECTOR MUST BE NOTIFIED (217-6301) AT EACH OF THE FOLLOWING STAGES:
  - APPROVAL OF SUBGRADE: PREPARE A COMPACTED GRAVEL BED AT THE BOTTOM OF THE EXCAVATION (TYP. 6" DEEP). COMPACT GRANULAR MATERIAL.
  - PLACE STORMCEPTOR IN EXCAVATION AT CORRECT ELEVATION AND AT CORRECT ALIGNMENT AND GRADE FOR INLET/OUTLET STORMDRAINS. LEVEL UNIT, INSTALL BASE AND LOWER TANK, MIDDLE SECTION WITH STORMCEPTOR INSERT, RISER SECTION TOP SLAB WITH PERSONWAY, LEVELING RINGS AND MANHOLE FRAME AND COVER.
  - BACKFILL STORMCEPTOR WITH SUITABLE NATIVE SOIL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8" LIFTS. BACKFILL SHOULD RECEIVE COMPACTIVE EFFORT.
  - WHEN SITE IS PERMANENTLY STABILIZED AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED & STABILIZED, THEN THE STORMCEPTOR WILL BE PUMPED OUT AND CLEANED AND PLACED IN STORMWATER OPERATION.
  - FINAL INSPECTION.

MAINTENANCE NOTES  
(WATER QUALITY STRUCTURE WASTE)

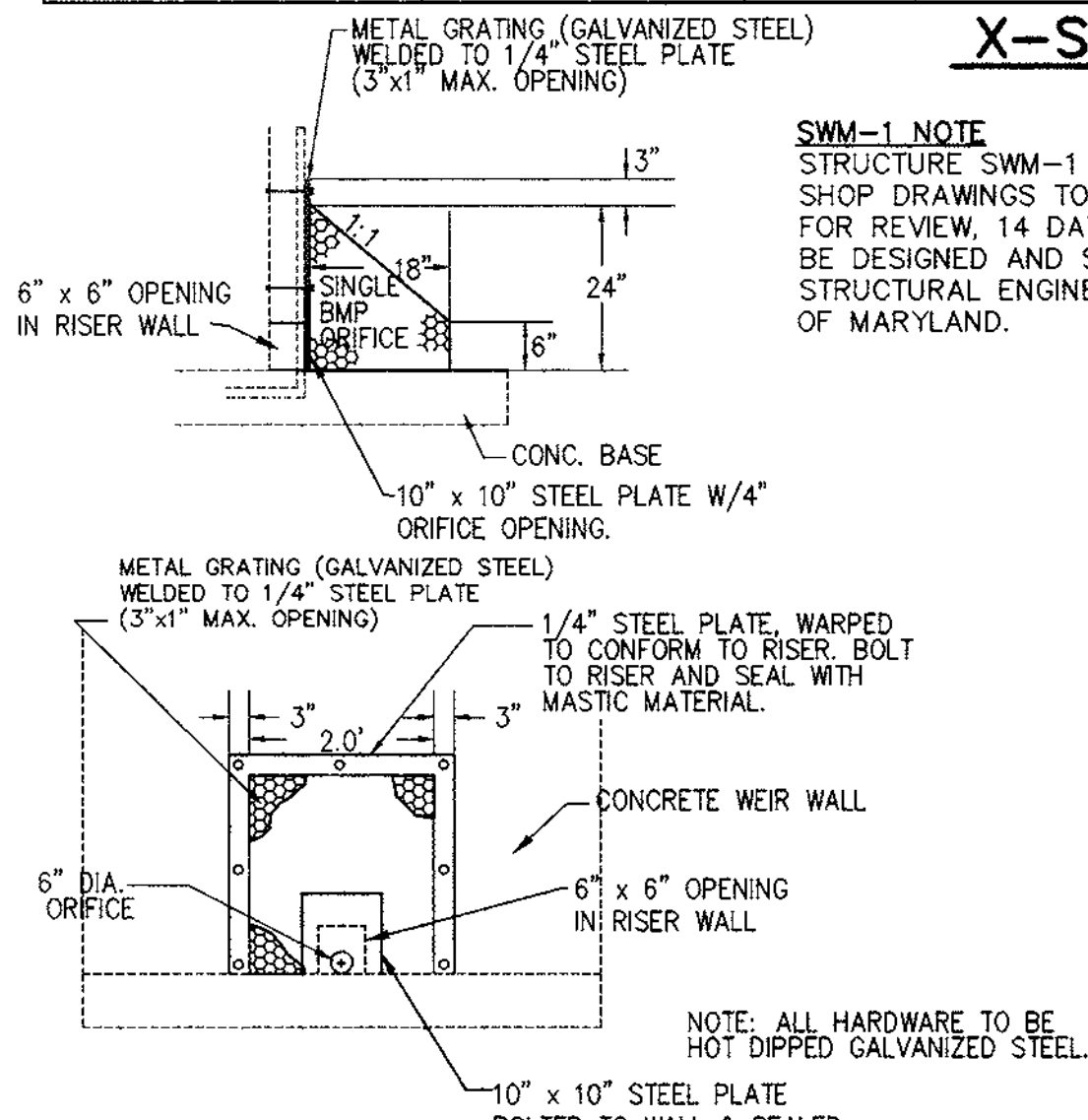
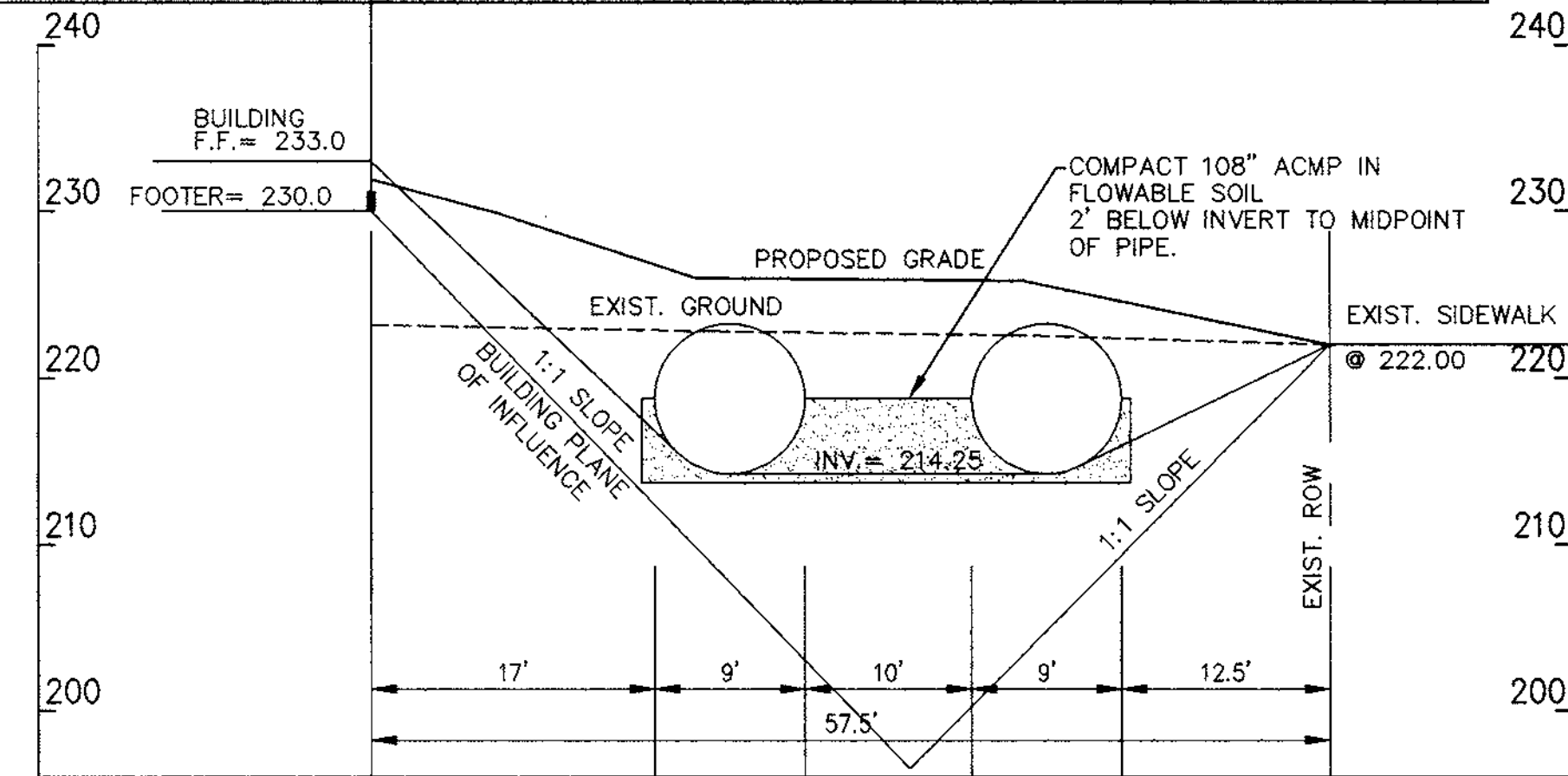
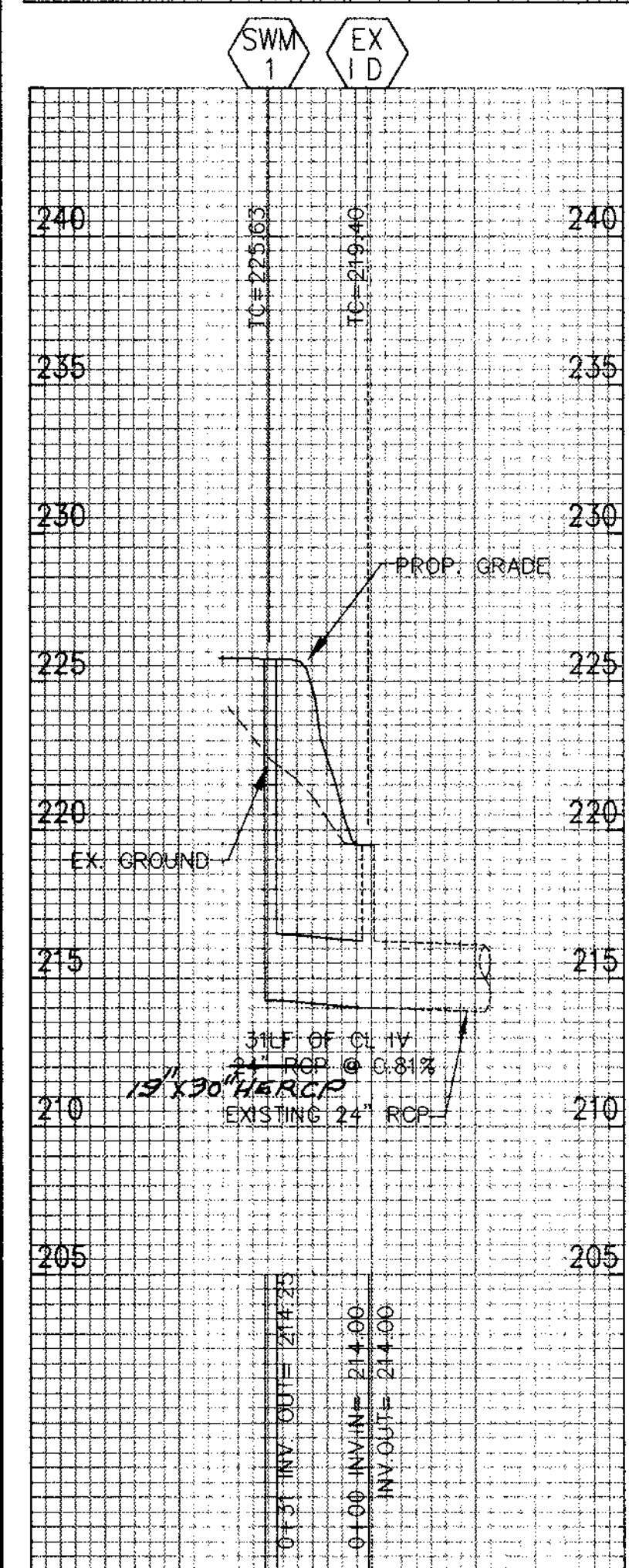
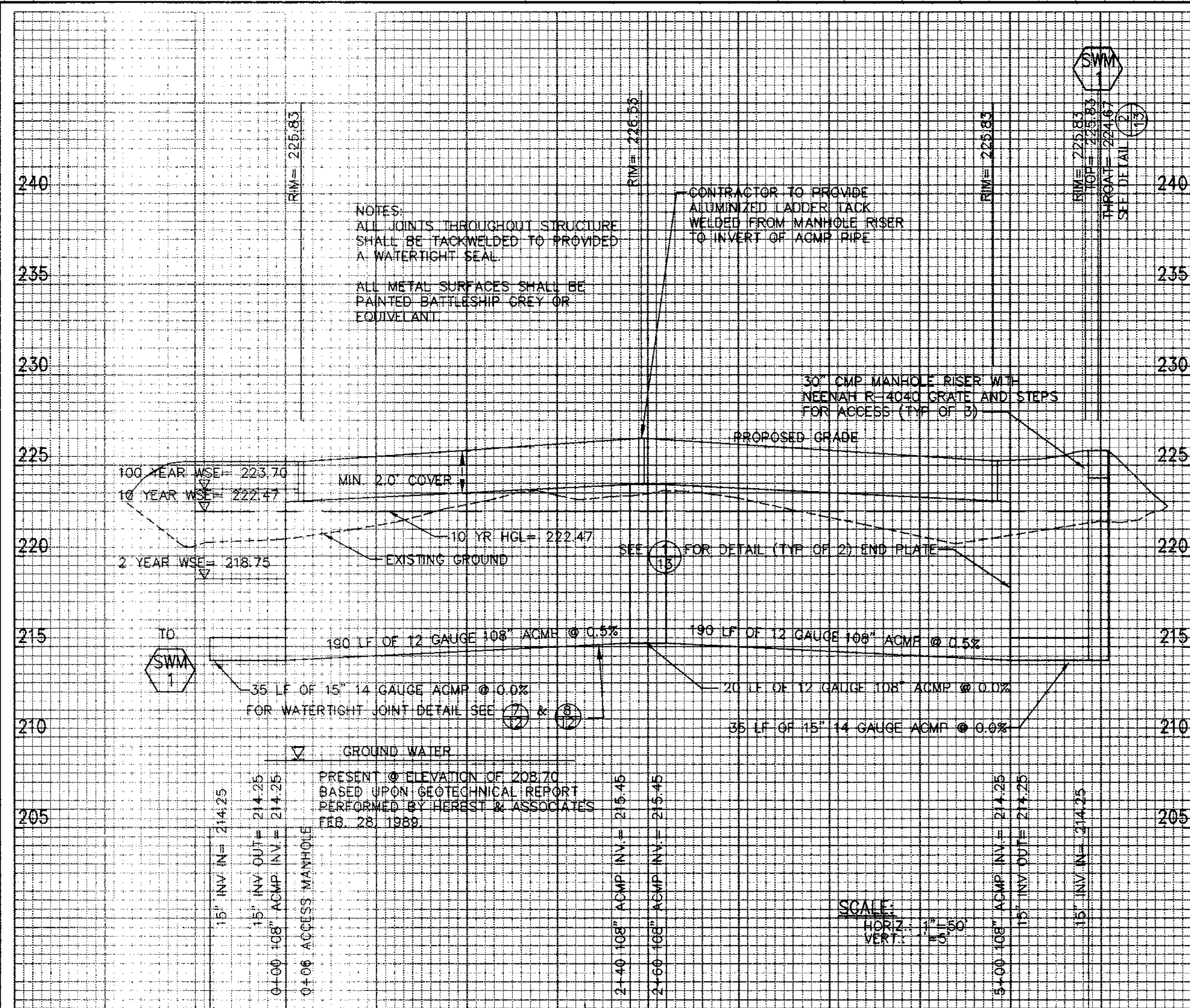
- WATER QUALITY STRUCTURES WILL REQUIRE PERIODICAL CLEANING. OWNERS OF THESE FACILITIES WILL HAVE TO CLEAN THEM AS NEEDED.
- MAINTENANCE OF THESE FACILITIES WILL CONSIST OF CLEANING OUT THE STORMCEPTOR AND DISPOSAL OF THE WASTE AND THE REPAIR OF THE FACILITY AS NEEDED. PERIODIC INSPECTIONS OF THESE FACILITIES WILL BE MADE BY THE OWNER.
- THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHALL BE AS FOLLOWS:
  - ALL LIQUID MATERIAL IN THE STORMCEPTOR<sup>®</sup> SHALL BE PUMPED INTO A SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.
  - THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.
- THE INLET PIPES, AND STRUCTURAL PARTS SHALL BE REPAIRED AS NEEDED.
- STORMCEPTOR<sup>®</sup> INLET AND OUTLET ASSEMBLY SHALL BE PERIODICALLY INSPECTED. BLOCKAGES SHALL BE REMOVED AND DISPOSED OF AS REQUIRED IN 3B ABOVE.

CONSTRUCTION NOTES:

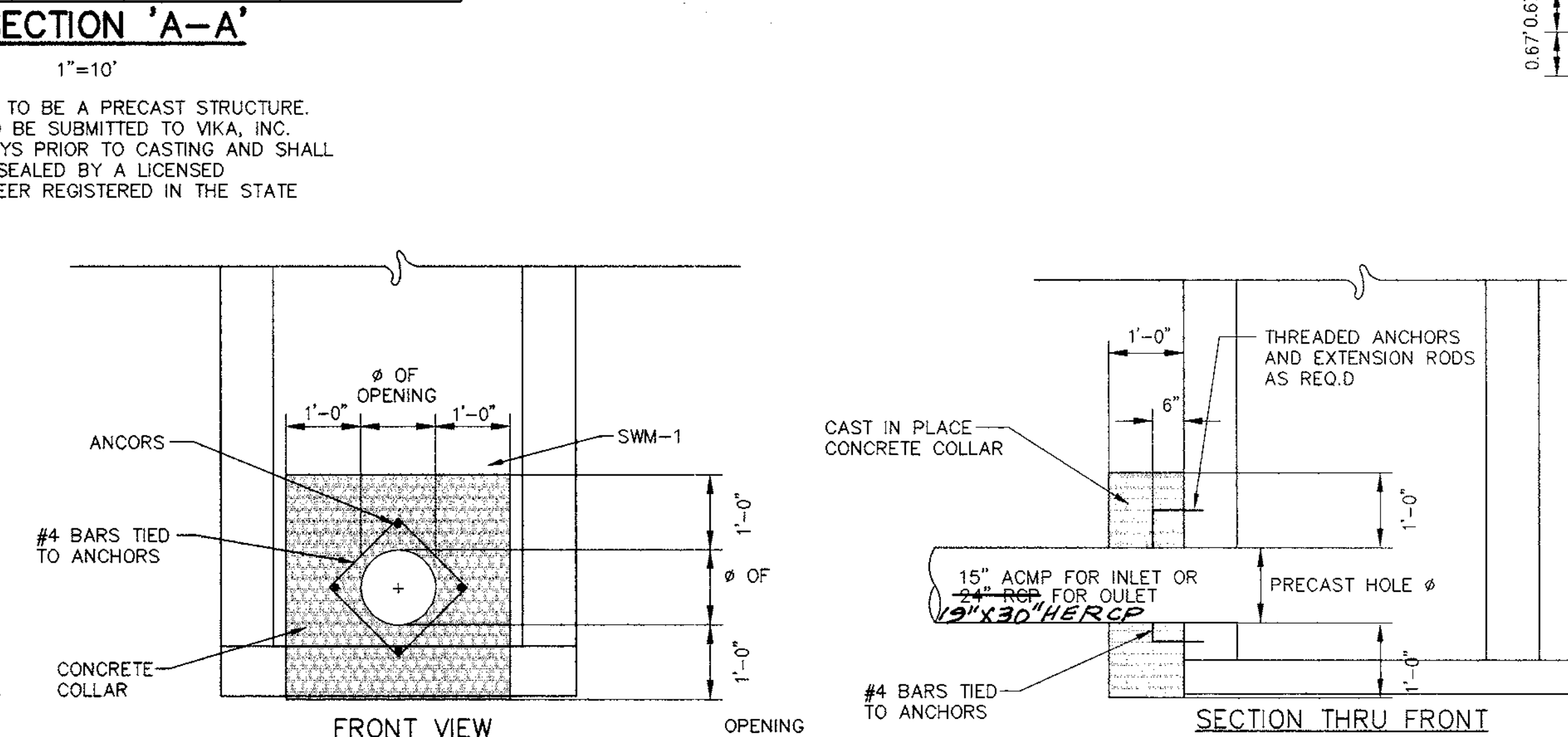
- SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STORMCEPTOR<sup>®</sup> UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED. SILT MAY BE ALLOWED TO ENTER STORMCEPTOR IF IT IS BEING USED AS A FINAL SEDIMENT CONTROL FILTERING DEVICE.
- ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- THE STORMCEPTOR MUST BE PUMPED OUT AND CLEANED AT THE END OF THE CONSTRUCTION OF THE PROJECT.
- AT THE CONTRACTOR'S OPTION THE STORMCEPTOR<sup>®</sup> MAY BE INSTALLED DURING PHASE I INSTALLATION OF STORM DRAINS OR MAYBE INSTALLED UPON STABILIZATION OF THE UPSTREAM CONTRIBUTORY DRAINAGE AREA. IF THE CONTRACTOR ELECTS THE FORMER IT SHALL BE HIS RESPONSIBILITY TO REPAIR / REPLACE STORMCEPTOR<sup>®</sup> STRUCTURE / APPURTANCES OF ANY DAMAGE DUE TO ITS USE DURING CONSTRUCTION AND SHALL BE RENDERED FULLY FUNCTIONAL AT NO ADDITIONAL COST TO OWNER. IF THE LATER OPTION IS CHOSEN CONTRACTOR SHALL INSTALL TEMPORARY CMP AT STORMCEPTOR<sup>®</sup> LOCATION IN LINE AND ON GRADE. TEMPORARY CMP TO BE REMOVED UPON INSTALLTION OF STORMCEPTOR<sup>®</sup>.

FOR TECHNICAL INFORMATION CALL STORMCEPTOR CORPORATION AT 1-800-762-4703.  
TO ORDER AND FOR DELIVERY CONTACT CSR-HYDRO CONDUIT, VIRGINIA  
PRECAST AT 1-800-999-2278 AT LEAST 4 WEEKS PRIOR TO NEEDED DELIVERY.

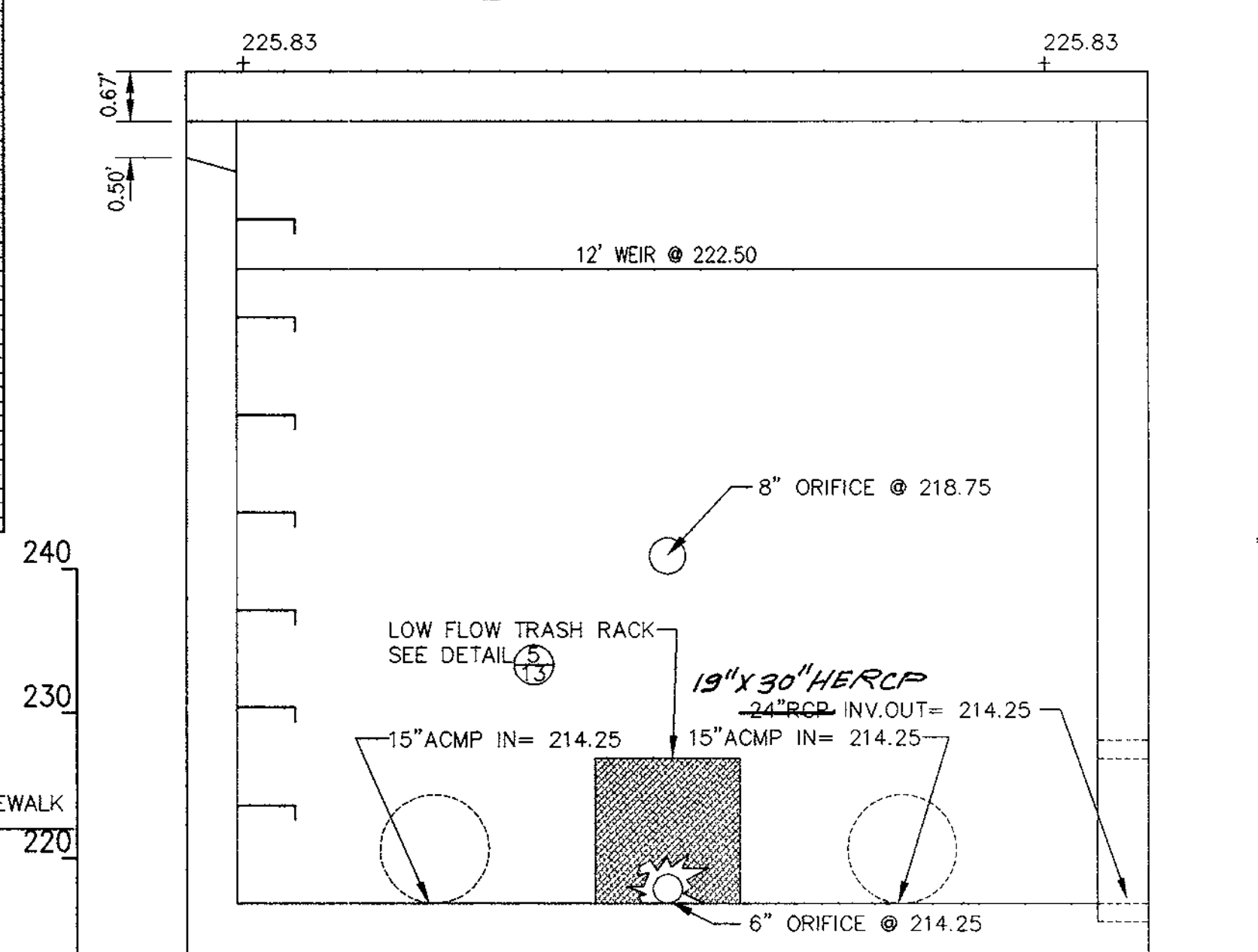
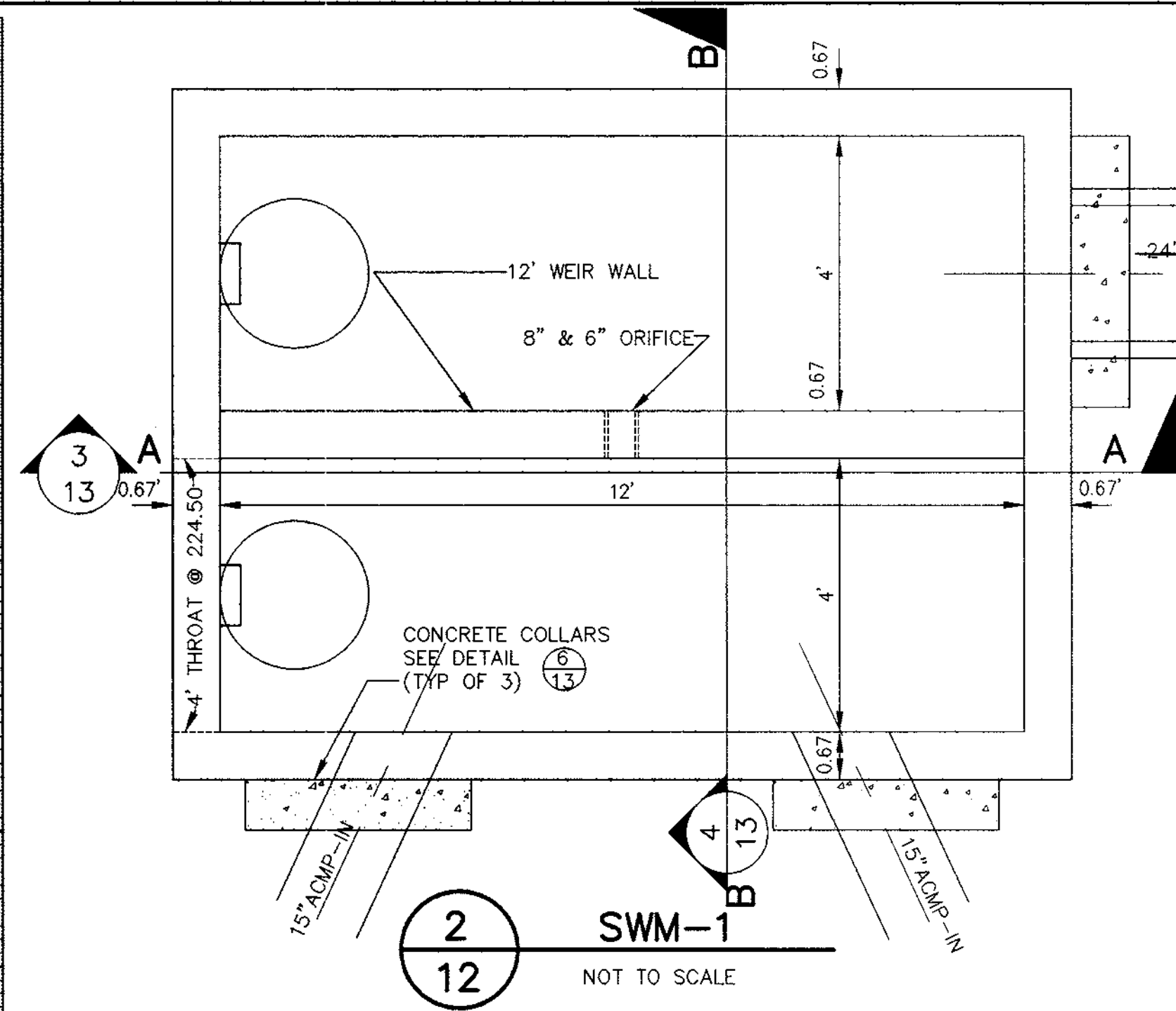
|   |  |
|---|--|
| APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.   |  |
| <i>Howard County</i><br>DIRECTOR  | 5/11/98<br>DATE  |
| <i>Charles A. Irish</i><br>CHIEF, DEVELOPMENT ENGINEERING DIVISION  | 5/11/98  |
| <i>Candy Hanetta</i><br>CHIEF, DIVISION OF LAND DEVELOPMENT   | 5/11/98<br>RB  |
| DATE  | REVISION   |
| OWNER: WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP<br>C/O GINGERY DEVELOPMENT GROUP<br>1001 ROCKVILLE PIKE SUITE 503<br>ROCKVILLE, MARYLAND 20852<br>(301) 424-3600 |  |
| PROJECT WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL "B"   |  |
| AREA  | TAX MAP No. PARCEL B<br>SIXTH (6) ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND |
| TITLE STORMCEPTOR NOTES   |  |
| <b>VIFA</b>   |  |
| ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS   |  |
| 8150 GREENSBORO DRIVE SUITE 200 ■ MGLEAN, VIRGINIA 22102<br>(703)442-7800 ■ FAX (703)781-2787<br>MGLEAN, VA ■ BETHESDA, MD  |  |
| 4/21/99<br>DATE   | SDP-98-59  |
|   | DESIGNED BY: PSC   |
|   | DRAWING BY: FTC  |
|   | PROJECT/FILE NO. 5457  |
|   | DATE: SEPT. 1997   |
|   | SCALE: NO SCALE  |
| CHARLES A IRISH #11217  | DRAWING No. 11 OF 16   |



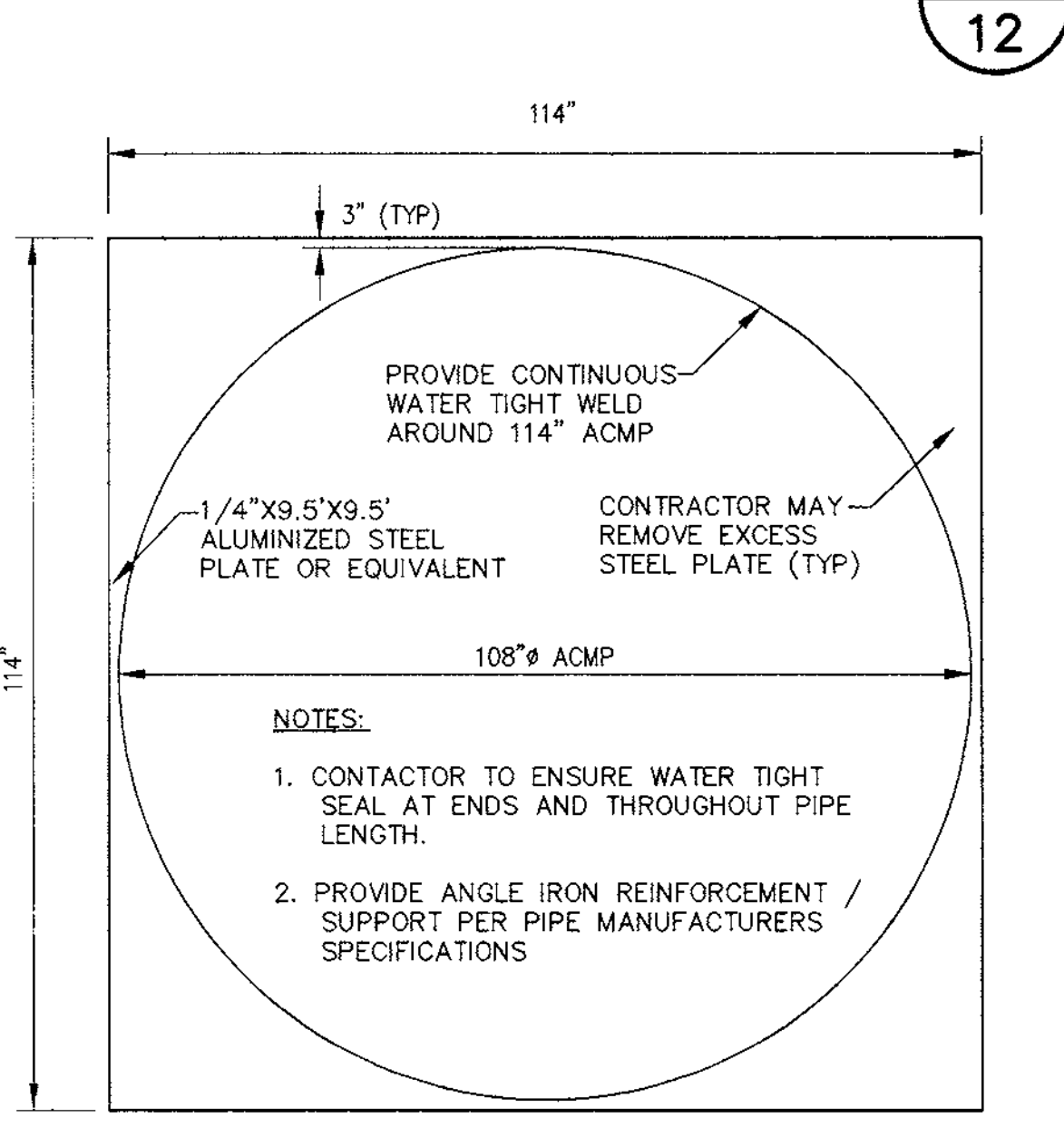
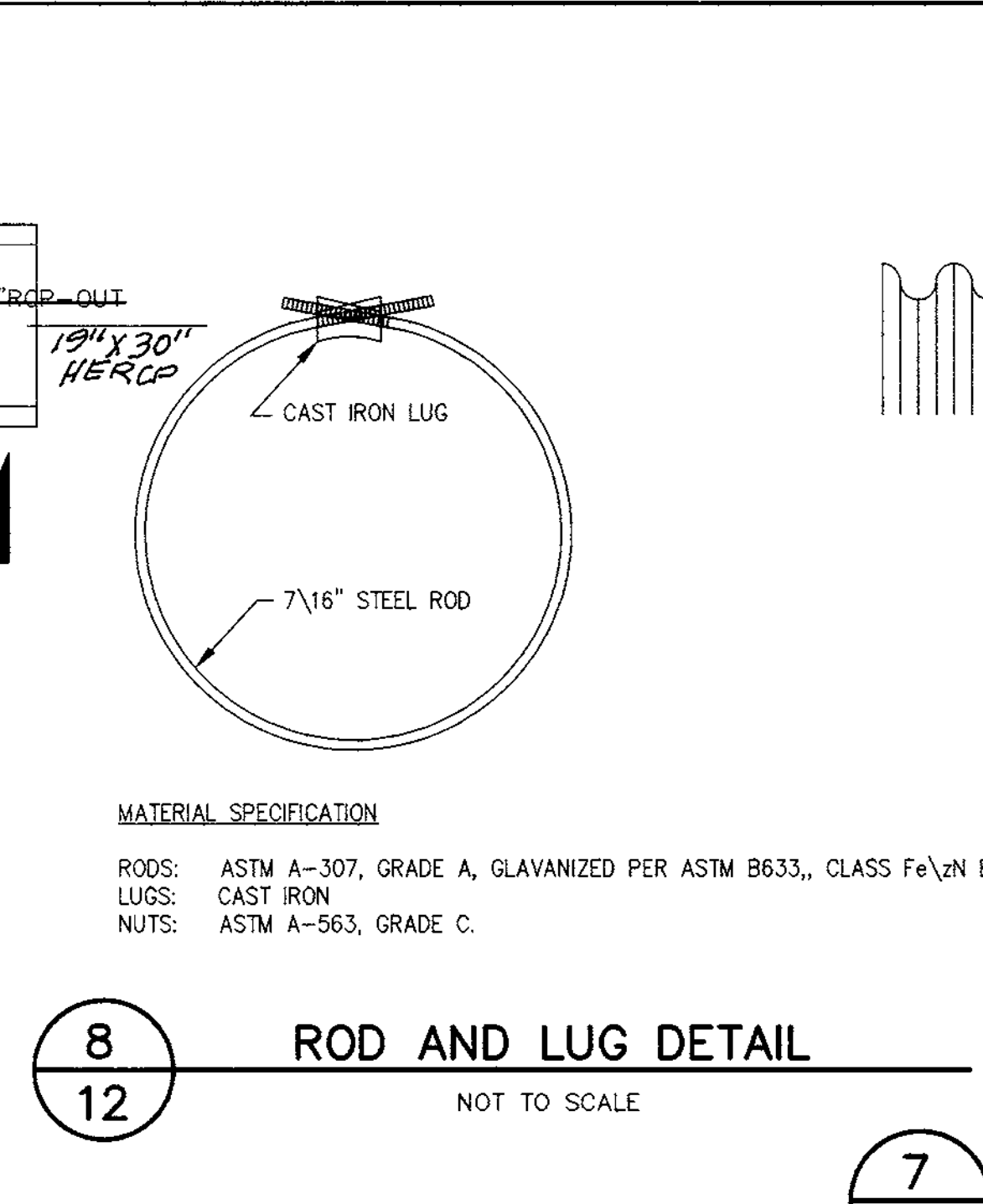
5  
12  
LOW FLOW TRASH RACK  
NOT TO SCALE



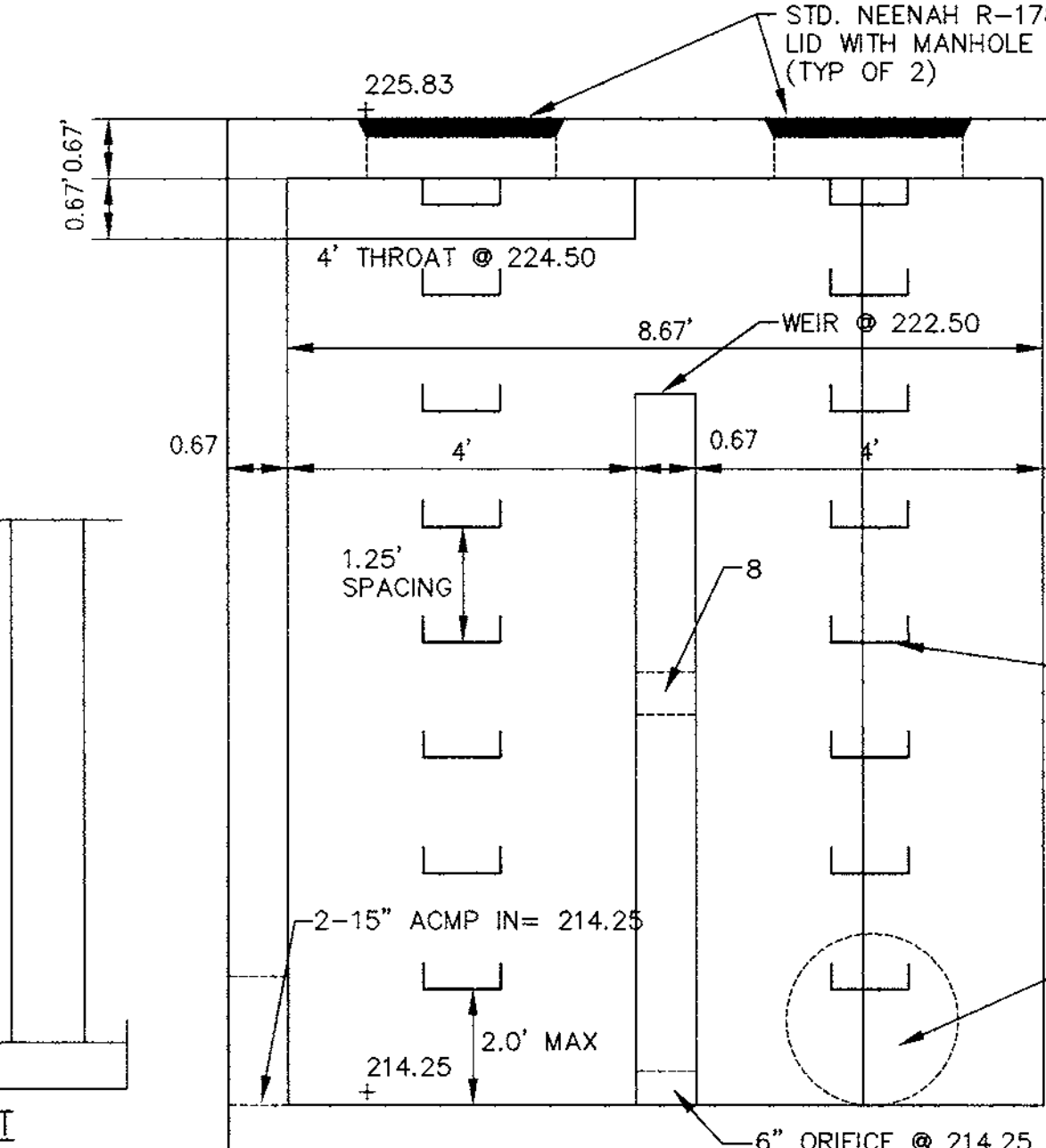
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CONCRETE COLLARS  
NOT TO SCALE



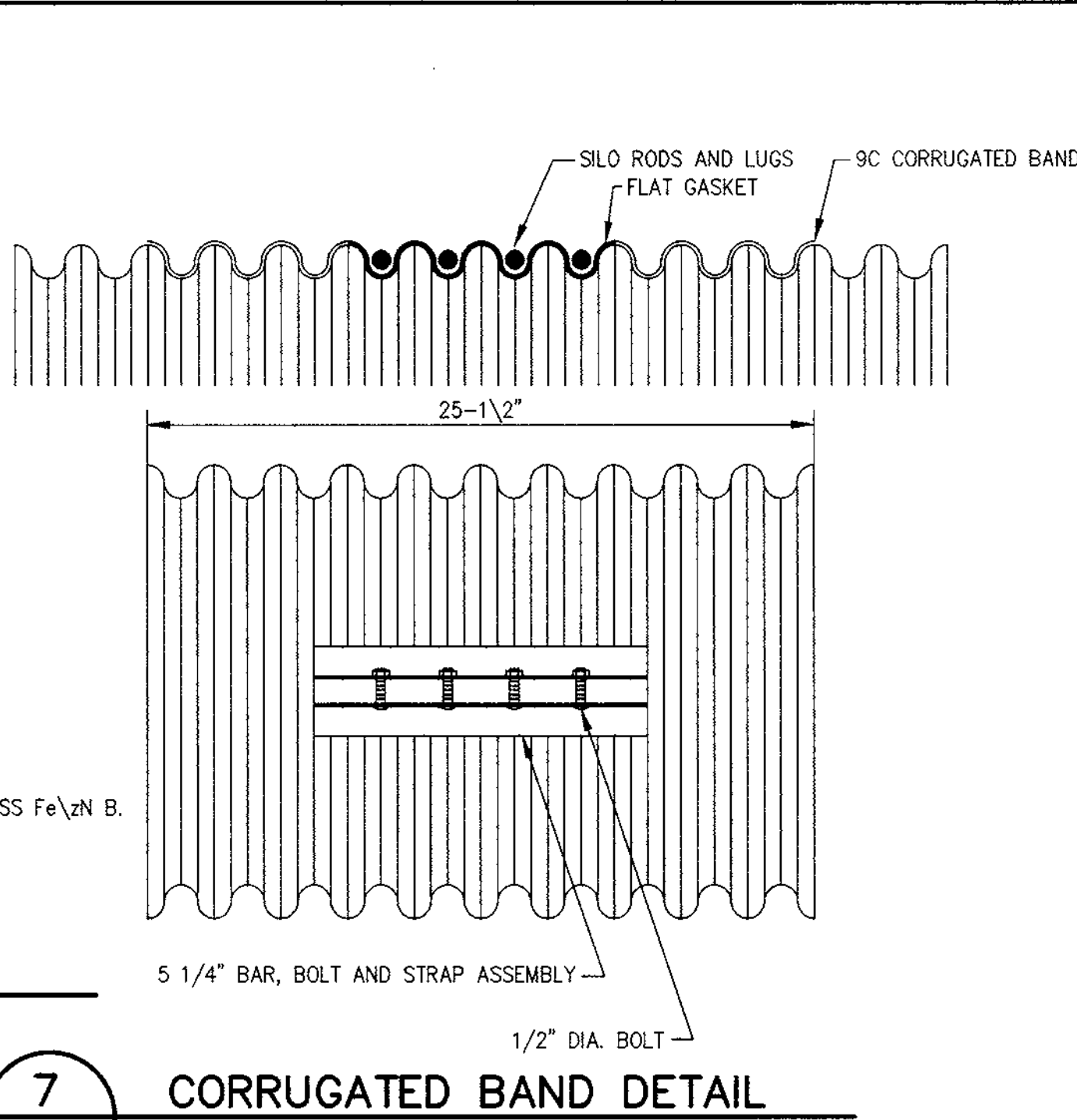
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12  
SWM-1 SECTION 'A-A'  
NOT TO SCALE



1  
12  
108" ACMP END PLATE DETAIL  
NOT TO SCALE



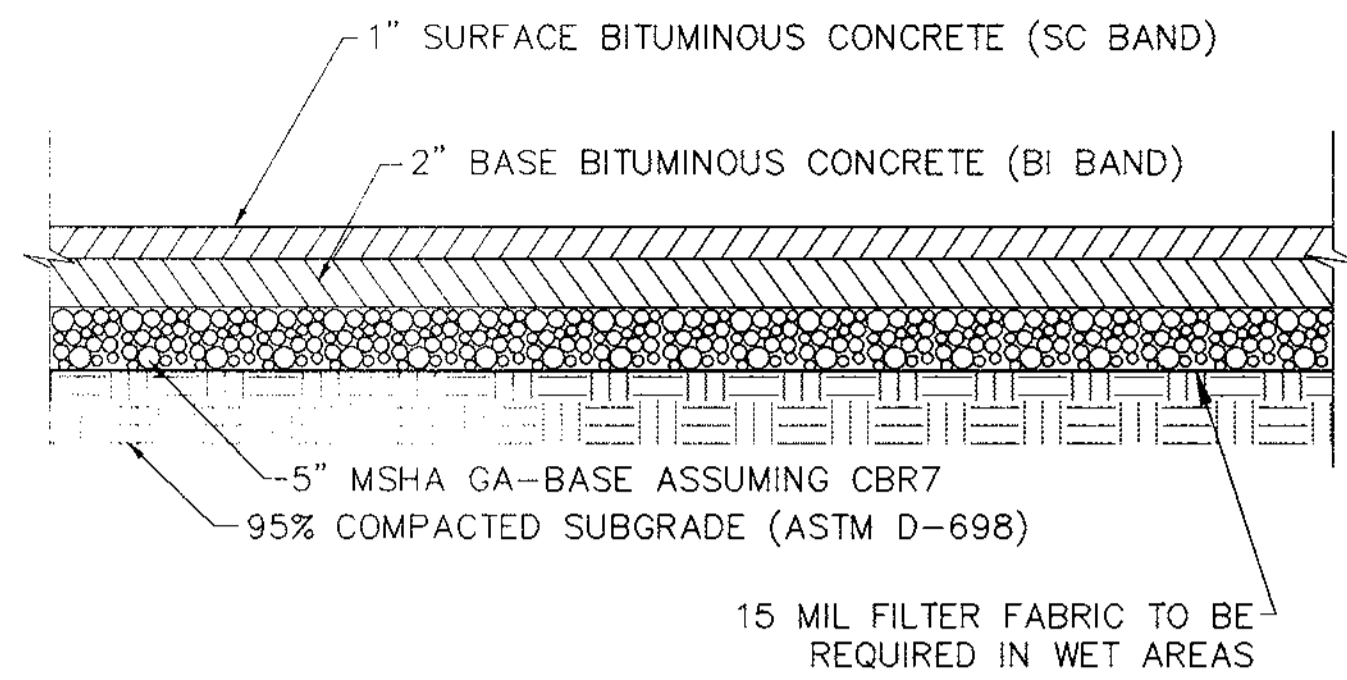
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12  
SWM-1 SECTION 'B-B'  
NOT TO SCALE



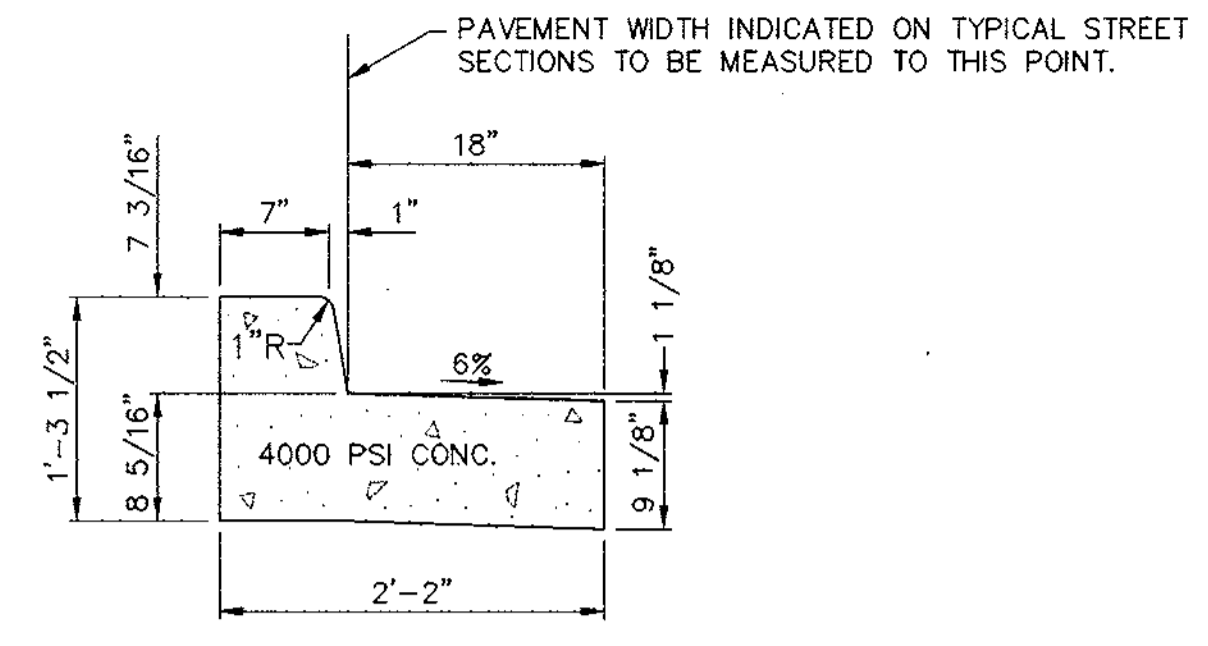
7  
12  
CORRUGATED BAND DETAIL  
NOT TO SCALE

- GENERAL NOTES
- FLAT GASKET TO BE 3/8" THICK X 12" WIDE CLOSED CELL NEOPRENE GASKET, ASTM SPEC D-1056, GRADE SCE-43-L SKINNED ALL FOUR SIDES, OF ONE PIECE CONSTRUCTION. GASKET MAY BE OVERLAPPED EACH END & TAPED FOR INSTALLATION ASSISTANCE.
  - SIL ROADS AND LUGS ARE REQUIRED. A TOTAL OF FOUR PER BAND (2 EACH SIDE OF JOINT).
  - JOINTS TO BE WRAPPED WITH 36" WIDE NON-WOVEN FABRIC (CONTECH C-40 NONWOVEN OR EQUAL) TO EXTEND 6" BEYOND EACH BAND.
- STORMWATER MANAGEMENT PIPE SPECIFICATIONS
- CORRUGATED METAL SWM PIPE TO BE 108" DIAMETER, 12 GA., LOCKSEAM, ALUMINIZED TYPE II WITH 5" X 1" CORRUGATIONS.
  - ALL WELDED JOINTS TO BE WATER TIGHT.
  - WRAP ALL JOINTS EXTERNALLY WITH NON-WOVEN FILTER FABRIC TO EXTEND 6" BEYOND THE EDGE OF EACH BAND.
  - FOUR (4) SIL ROADS AND LUGS ARE REQUIRED FOR EACH 24" WIDE CONNECTING BAND.
  - EACH CONNECTING BAND REQUIRES A 12"-3/8" THICK NEOPRENE GASKET.
- DETAILS 7 AND 8 FROM CONTECH CONSTRUCTION PRODUCTS INC. SUPPLIED TO VKA, INC. BY BH RUNYON AND ASSOCIATES 1-(703) 820-1600

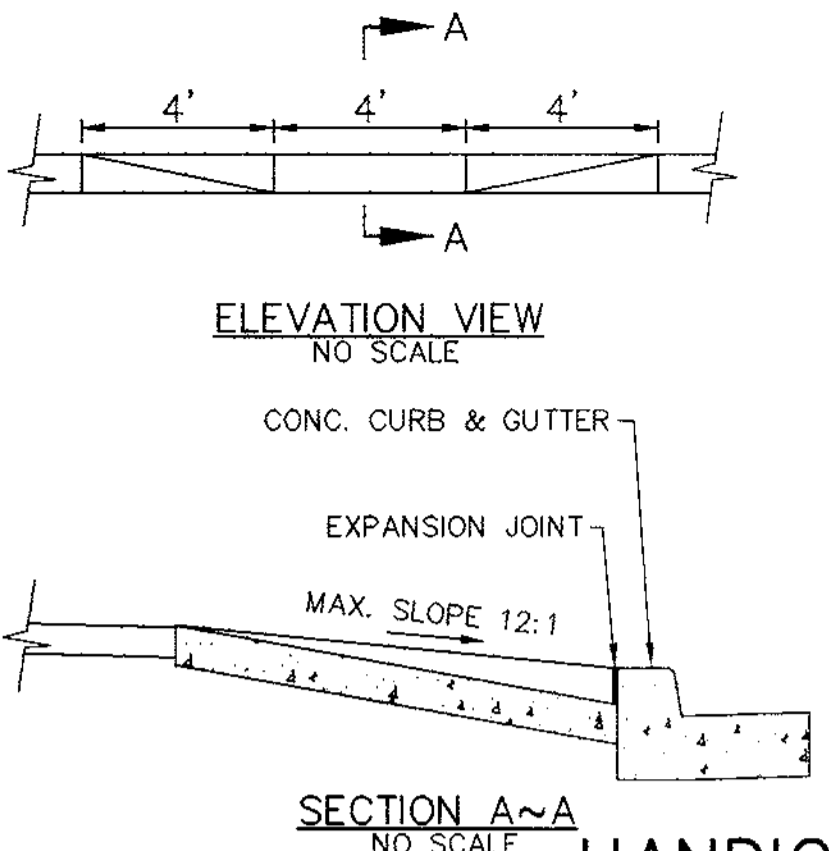
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|---|--|
| APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.                       |  |
| DIRECTOR  | 5/11/98 DATE   |
| CHIEF, DEVELOPMENT ENGINEERING DIVISION   | 5/11/98  |
| CHIEF, DIVISION OF LAND DEVELOPMENT   | 5/11/98  |
| 2/11/99   | CHANGED 24" RCP TO 19" X 30" HERCP REVISION  |
| OWNER:  | WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP<br>C/O GINGERY DEVELOPMENT GROUP<br>1001 ROCKVILLE PIKE SUITE 503<br>ROCKVILLE, MARYLAND 20852<br>(301) 424-3600 |
| PROJECT   | WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL B  |
| AREA  | TAX MAP No. PARCEL B<br>SIXTH (6) ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND   |
| TITLE   | STORMWATER MANAGEMENT POND DETAILS   |
| ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS | VKA INCORPORATED<br>8180 GREENSBORO DRIVE, SUITE 200 ■ McLEAN, VIRGINIA 22102<br>(703) 442-7800 ■ FAX (703) 781-2787<br>McLEAN, VA                                 |
| DATE  | 4/21/98  |
| SDP-98-59   | DESIGNED BY: PSC   |
|   | DRAWING BY: FTC  |
|   | PROJECT/FILE NO. 5457  |
|   | DATE: SEPT. 1997   |
|   | SCALE: N/A   |
| CHARLES A. IRISH #11217   | DRAWING No. 12 OF 15   |



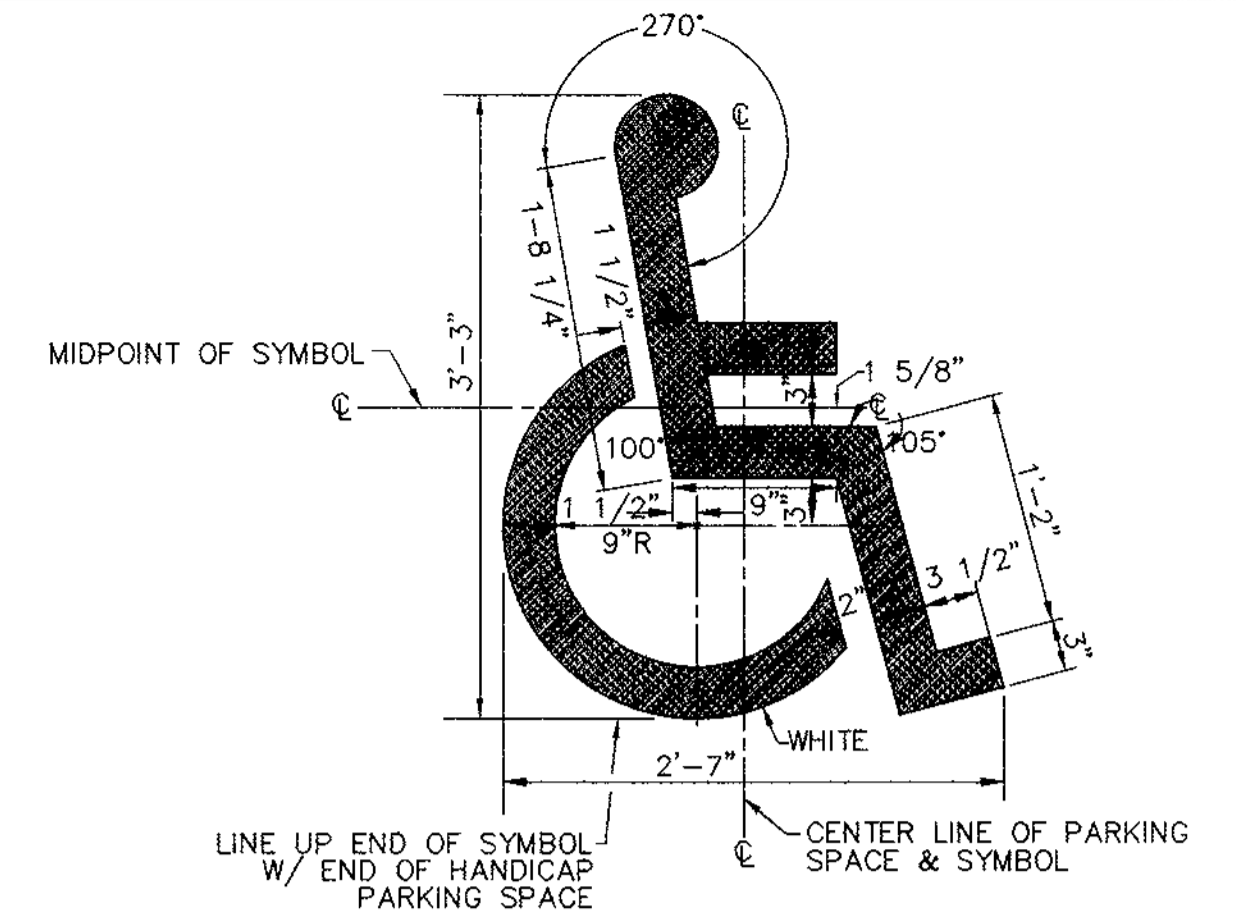
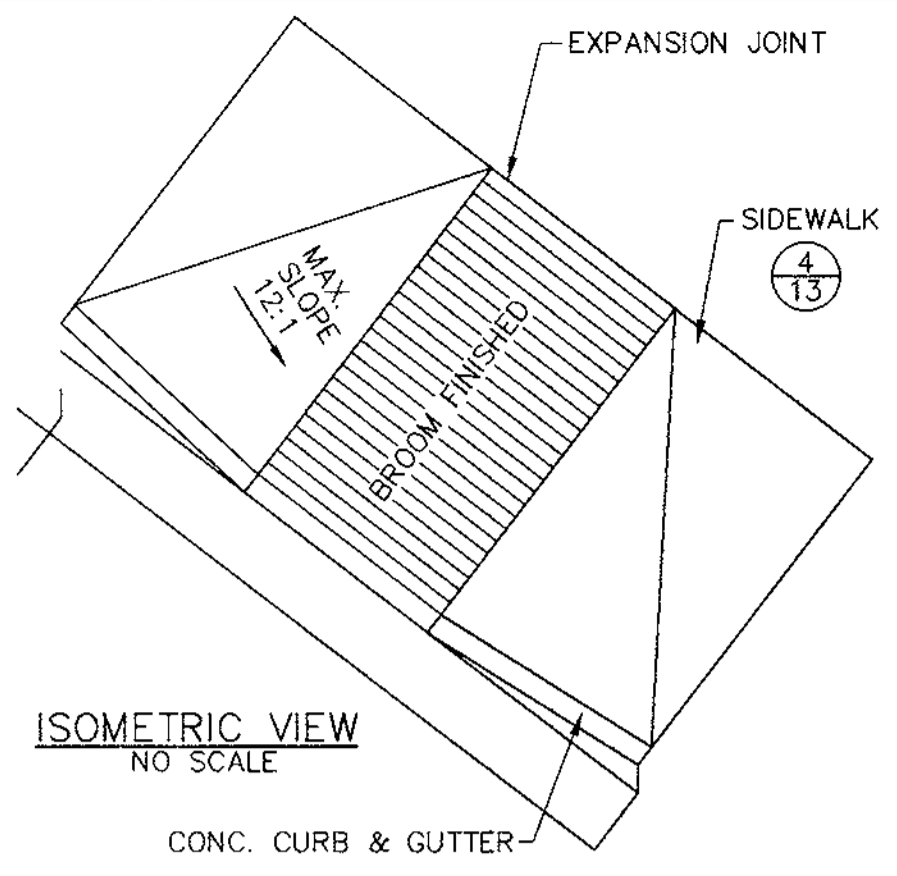
**1**  
**13** LIGHT DUTY PAVING SECTION  
NOT TO SCALE



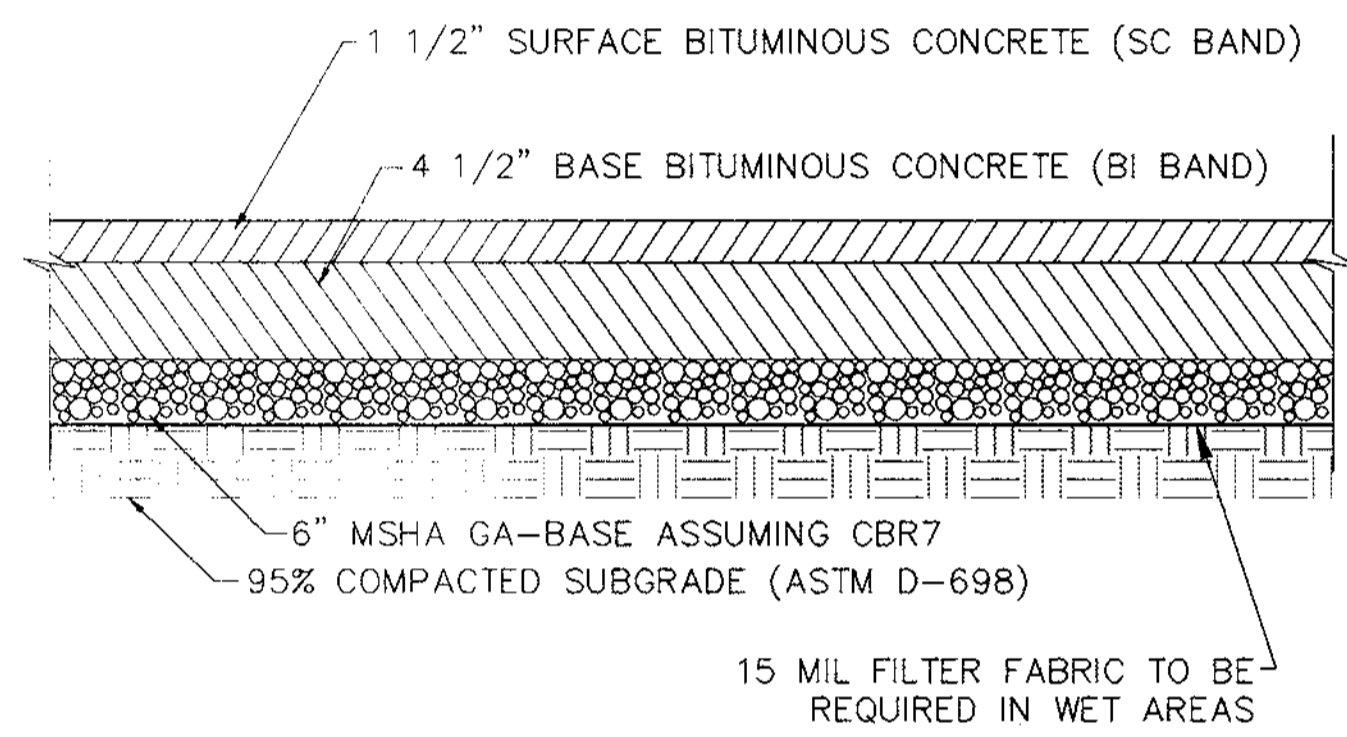
**5**  
**13** CONCRETE COMBINATION  
REVERSE CURB & GUTTER  
HO. CO. DETAIL R-3.01  
NOT TO SCALE



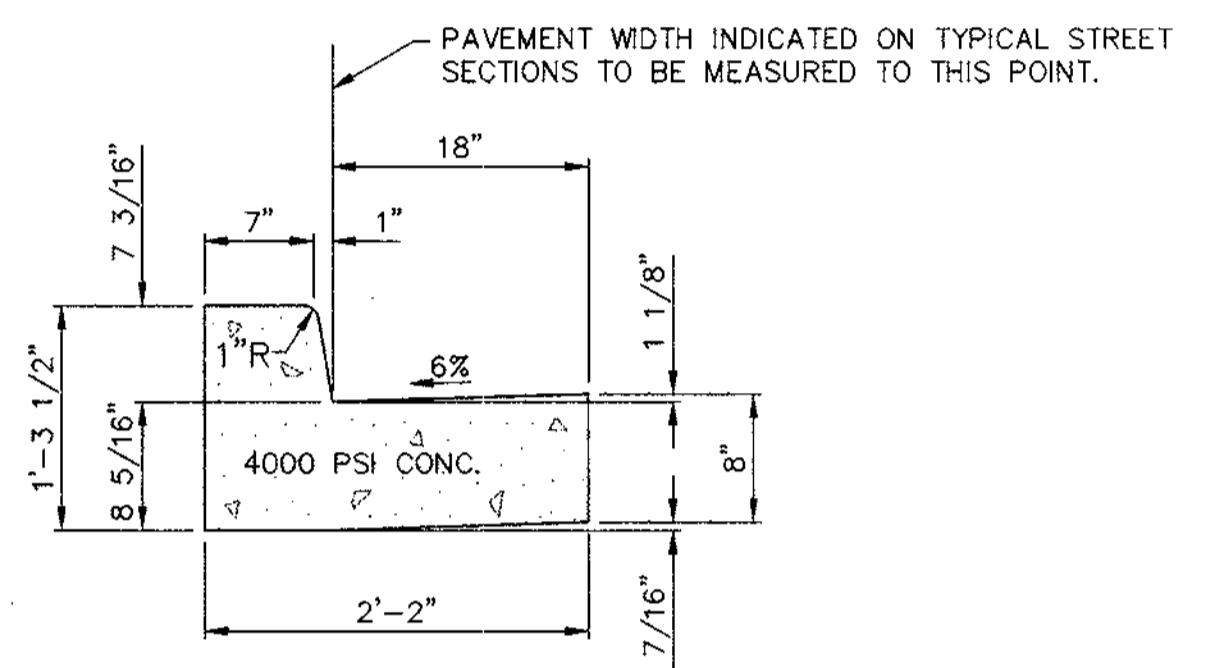
**8**  
**13** HANDICAP RAMP  
HO. CO. DETAIL R-4.01  
NOT TO SCALE



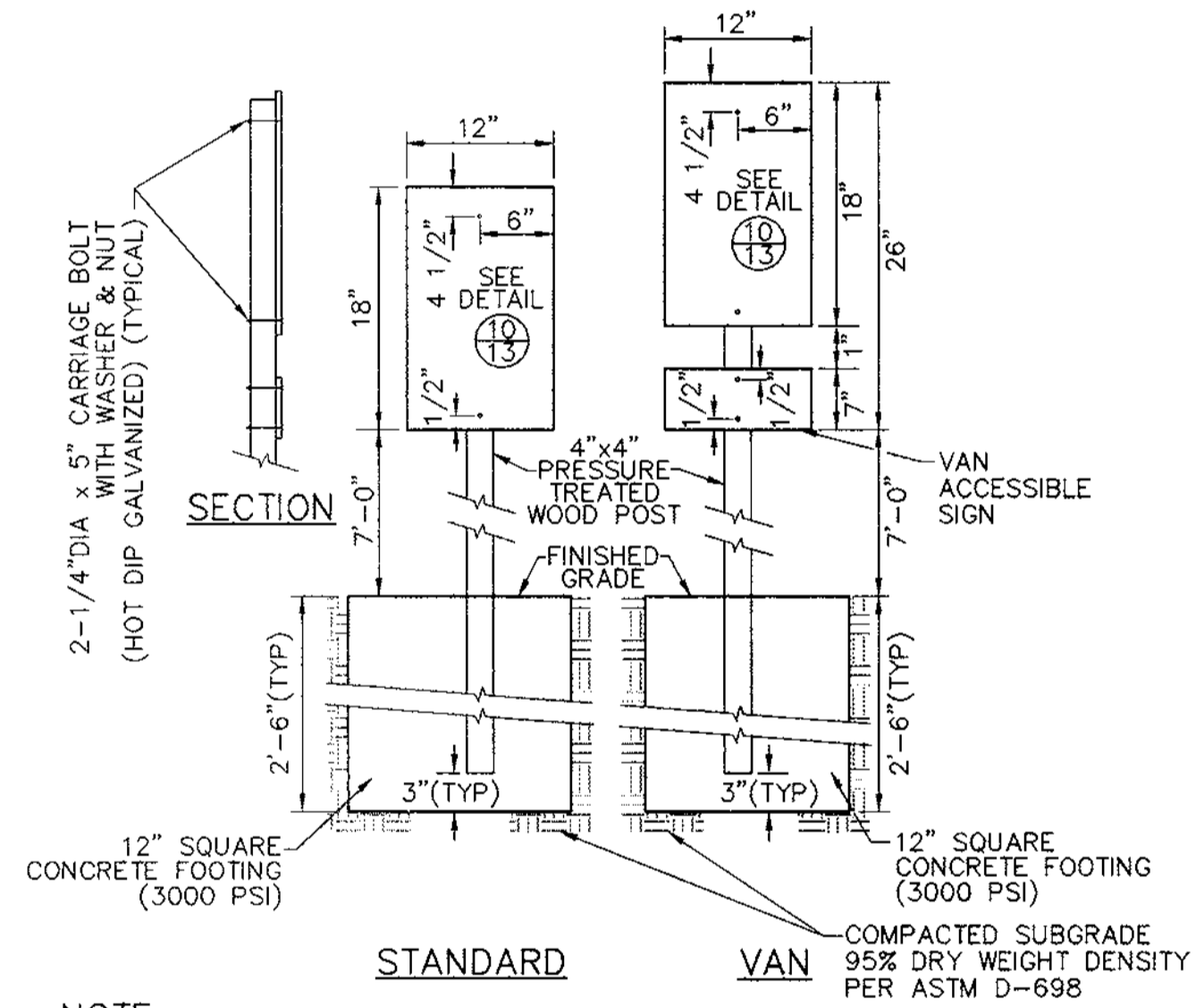
**11**  
**13** HANDICAP ACCESS STENCIL LAYOUT  
NOT TO SCALE



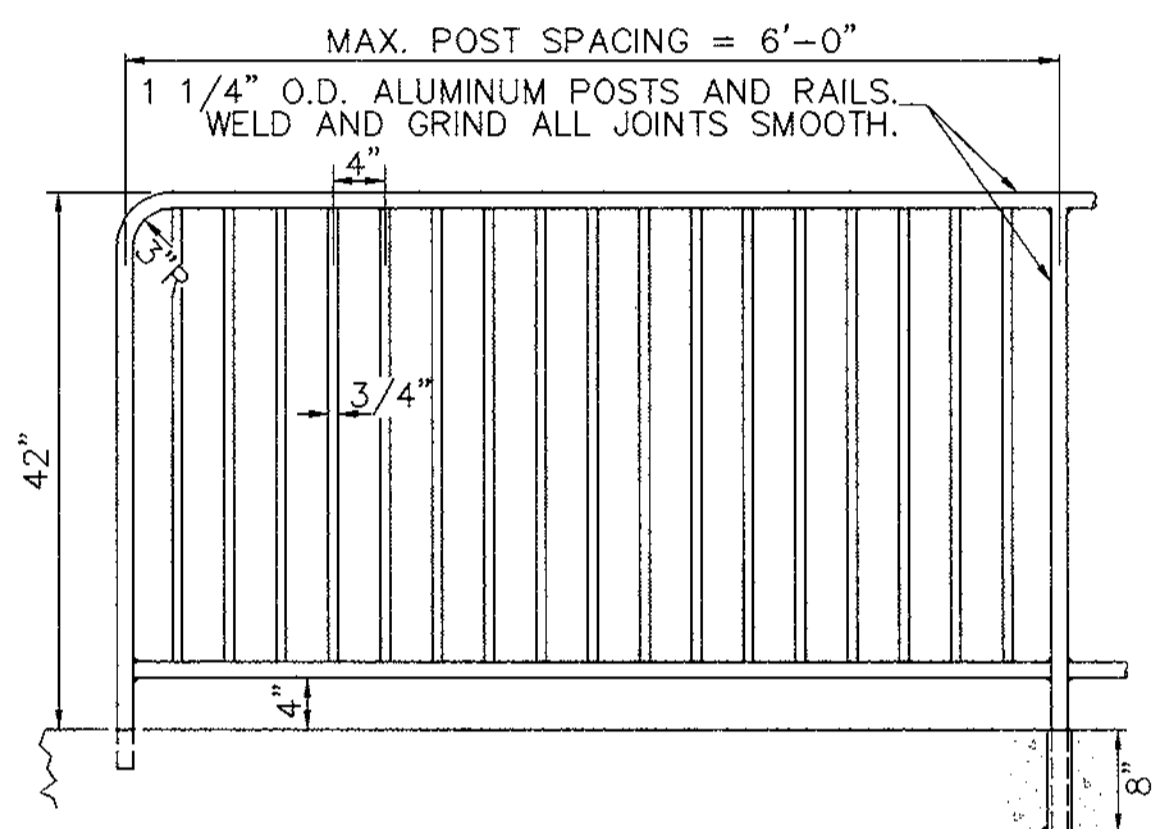
**2**  
**13** HEAVY DUTY PAVING SECTION  
NOT TO SCALE



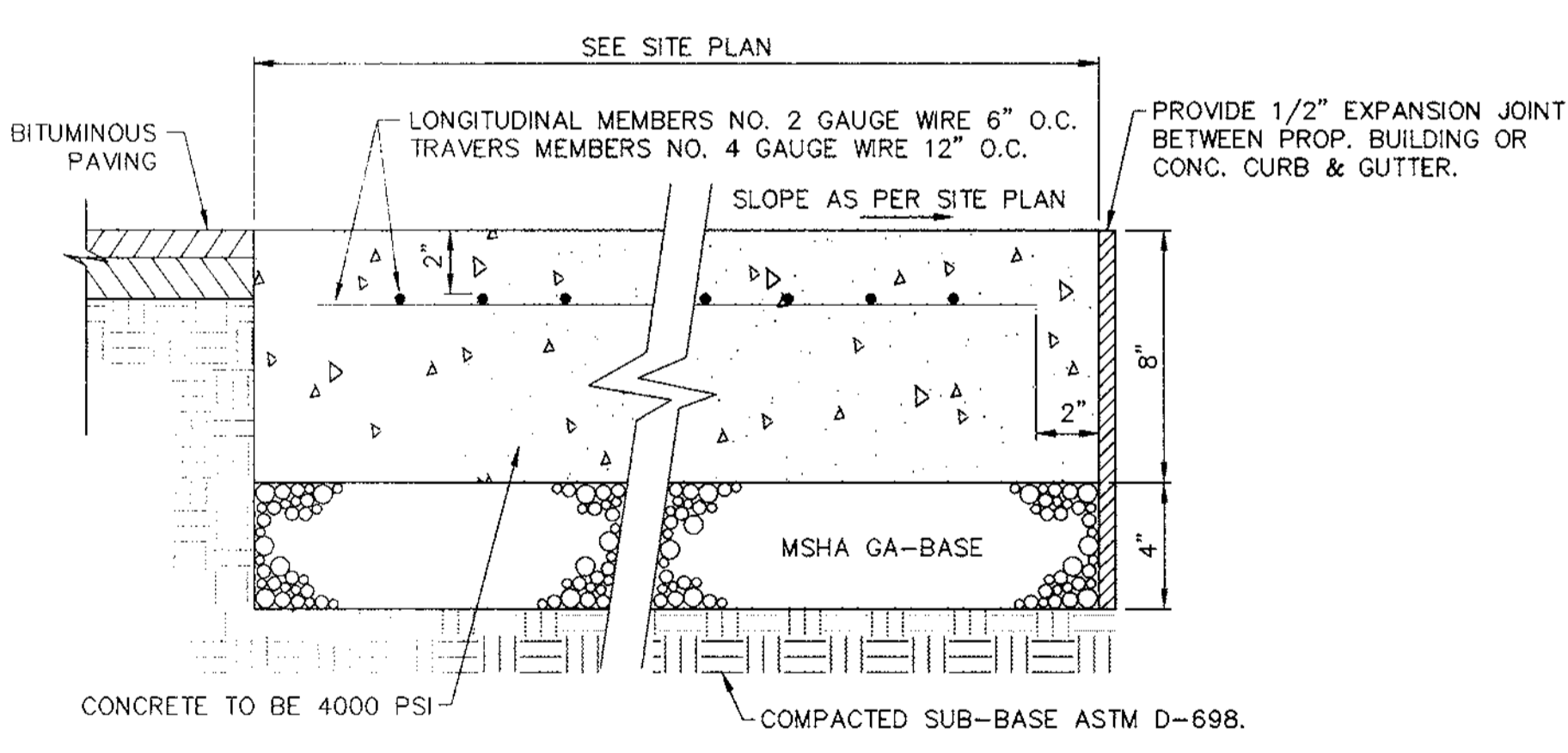
**6**  
**13** CONCRETE COMBINATION  
CURB & GUTTER  
HO. CO. DETAIL R-3.01  
NOT TO SCALE



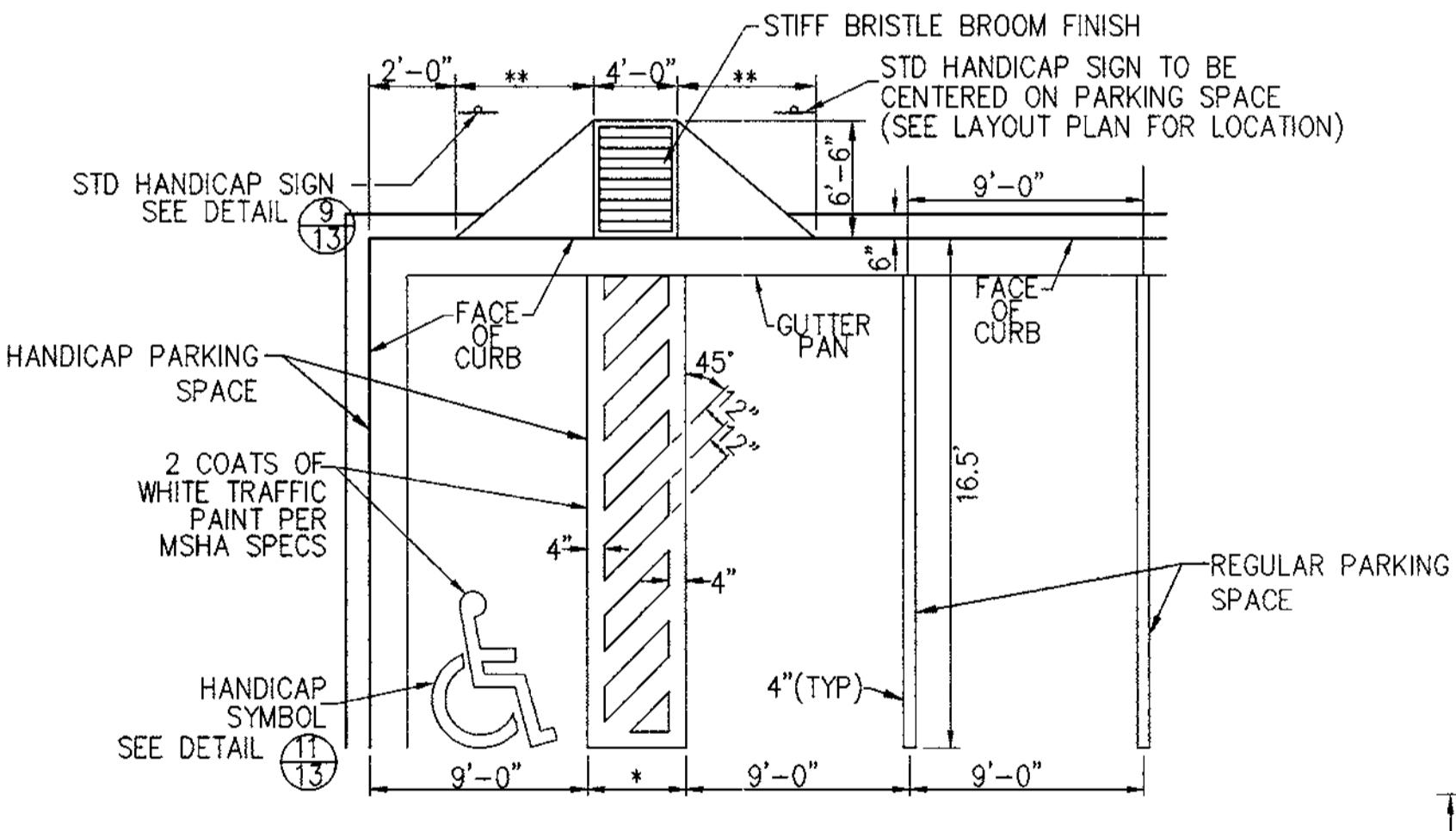
**9**  
**13** HANDICAP SIGN AND POST DETAIL  
NOT TO SCALE



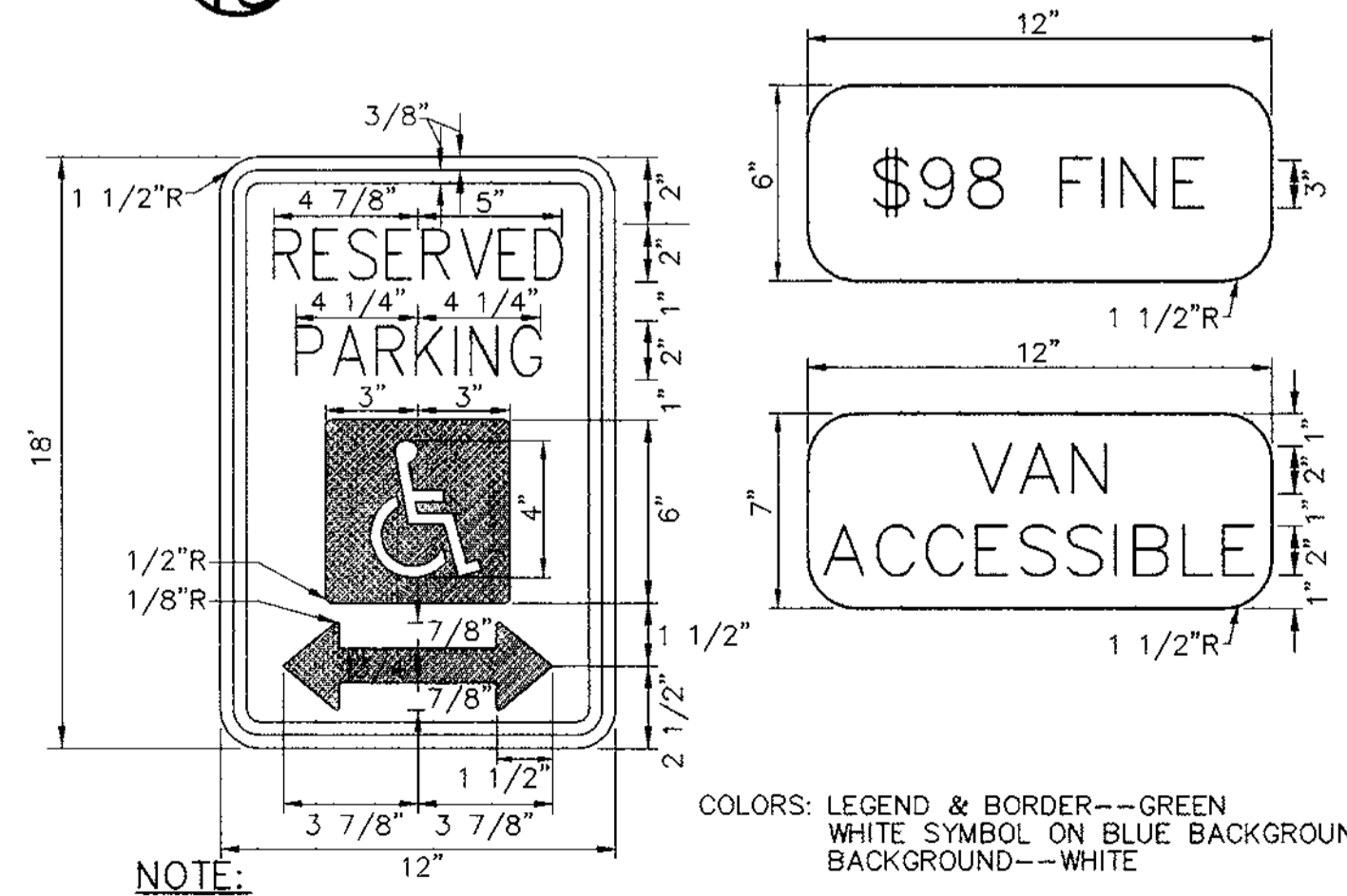
**12**  
**13** METAL SAFETY RAIL  
NOT TO SCALE



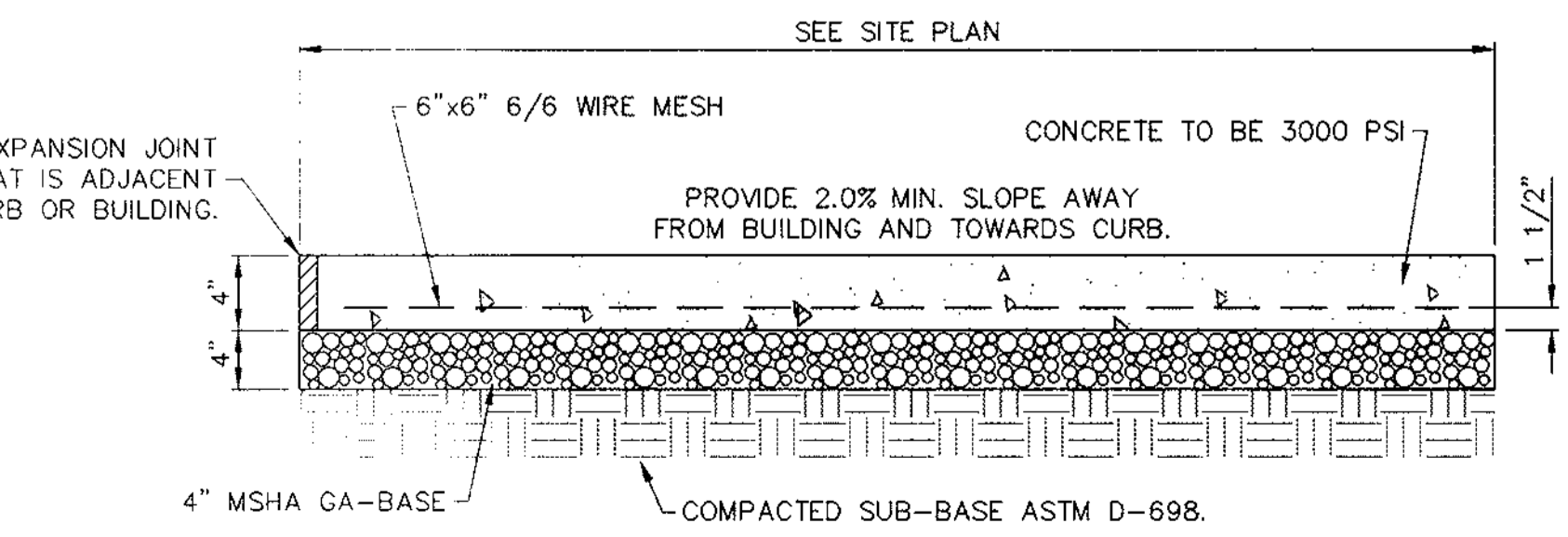
**3**  
**13** CONCRETE PAVEMENT  
NOT TO SCALE



**7**  
**13** HANDICAP PARKING STALL AND  
REGULAR PARKING STALL LAYOUT  
NOT TO SCALE



**10**  
**13** HANDICAP SIGN LAYOUT  
NOT TO SCALE



**4**  
**13** SIDEWALK DETAIL  
NOT TO SCALE

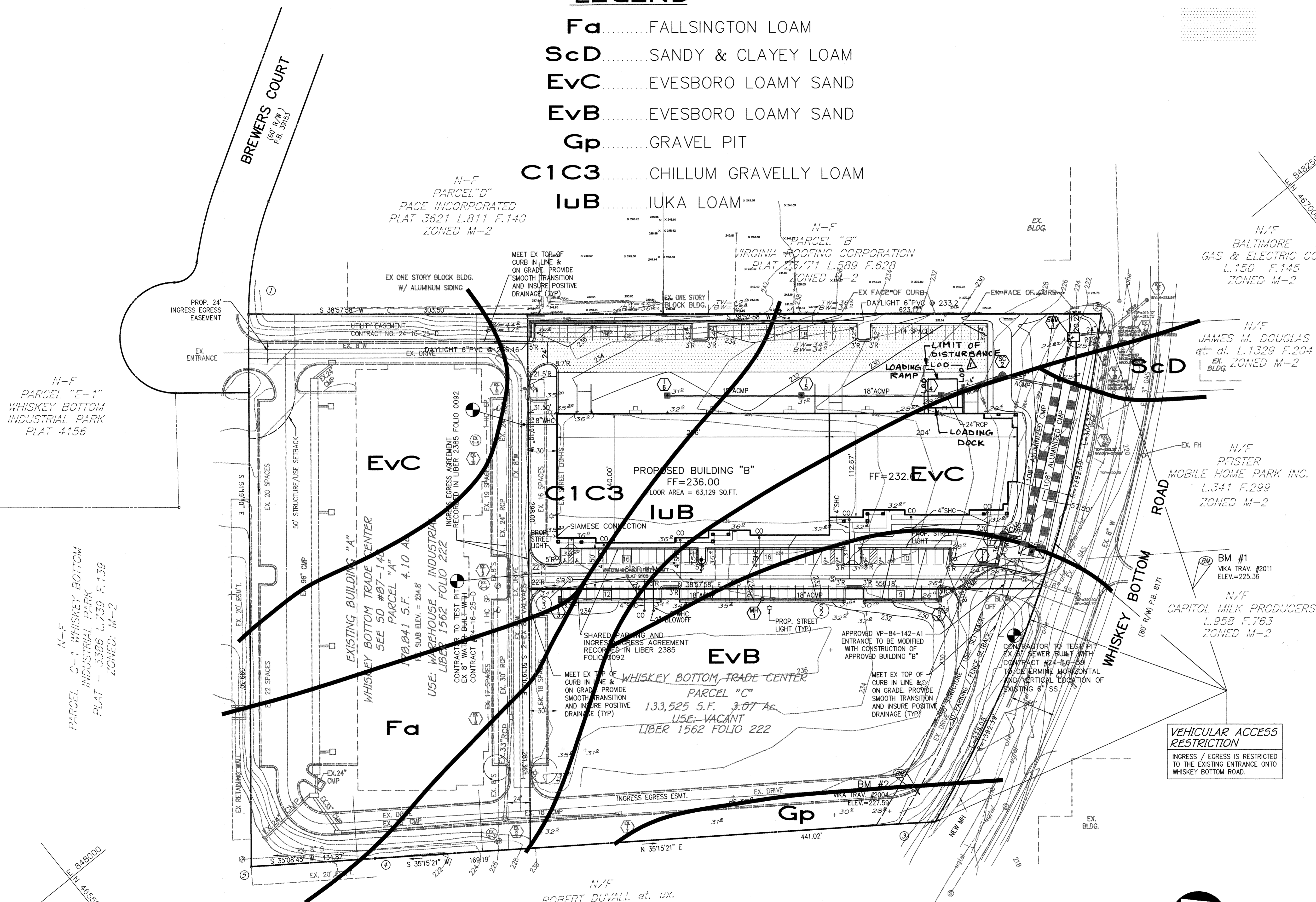
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|---|---------|
| APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. |         |
| DIRECTOR  | 5/11/98 |
| DATE  |         |
| CHIEF, DEVELOPMENT ENGINEERING DIVISION                     | 5/6/98  |
| CHIEF, DIVISION OF LAND DEVELOPMENT                         | 5/11/98 |

|         |  |          |
|---------|--|----------|
| DATE    | No.  | REVISION |
| OWNER:  | WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP<br>C/O GINGERY DEVELOPMENT GROUP<br>1001 ROCKVILLE PIKE SUITE 503<br>ROCKVILLE, MARYLAND 20852<br>(301) 424-3600 |          |
| PROJECT | WHISKEY BOTTOM TRADE CENTER<br>SITE PLAN PHASE II<br>PARCEL B  |          |
| AREA    | TAX MAP No. PARCEL B<br>SIXTH (6) ELECTION DISTRICT<br>HOWARD COUNTY, MARYLAND   |          |
| TITLE   | SITE DETAILS   |          |

|  |            |
|--|------------|
|  |            |
| ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS  |            |
| VITA INCORPORATED<br>8190 GREENSBORO DRIVE SUITE 200 ■ MGLEAN, VIRGINIA 22102<br>(703)442-7800 ■ FAX (703)781-2787<br>MGLEAN, VA |            |
| DATE   | SDP-98-59  |
| DESIGNED BY:   | PSC        |
| DRAWING BY:  | KY         |
| PROJECT/FILE NO.   | 5457       |
| DATE:  | SEPT. 1997 |
| SCALE:   | 1"=1'      |
| DRAWING No.  | 13 OF 16   |

# LEGEND

- Fa ..... FALLSINGTON LOAM
- ScD ..... SANDY & CLAYEY LOAM
- EvC ..... EVESBORO LOAMY SAND
- EvB ..... EVESBORO LOAMY SAND
- Gp ..... GRAVEL PIT
- C1C3 ..... CHILLUM GRAVELLY LOAM
- IuB ..... IUKA LOAM



BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND 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 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *[Signature]* DATE: 4/19/98

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.

ENGINEER: *[Signature]* DATE: 4/21/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE DATE: \_\_\_\_\_

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

HOWARD SOIL CONSERVATION DISTRICT DATE: \_\_\_\_\_

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: *[Signature]* DATE: 5/11/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 5/11/98

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 5/11/98

OWNER: WHISKEY BOTTOM TRADE CENTER B L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II  
PARCEL B

AREA: TAX MAP No. PARCEL B  
SIXTH (6) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: SOILS MAP

ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS

VKA INCORPORATED  
8180 GREENSBORO DRIVE, SUITE 200 ■ MGLEAN, VIRGINIA 22102  
(703) 442-7800 ■ FAX (703) 761-2787  
MGLEAN, VA BETHESDA, MD

DATE: 4/20/98

SDP-98-59

DESIGNED BY: PSC

DRAWING BY: PSC

PROJECT/FILE NO. 5457

DATE: SEPT. 1997

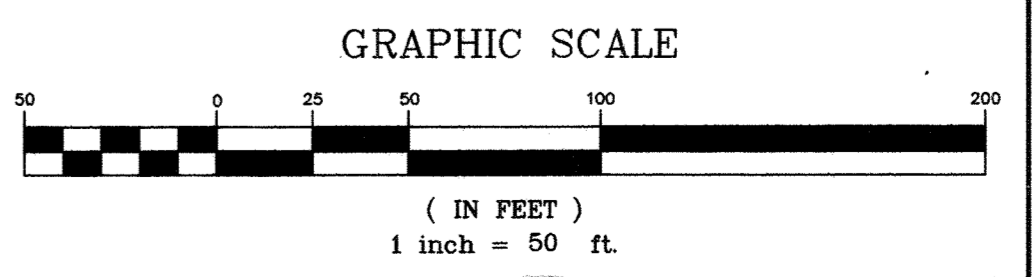
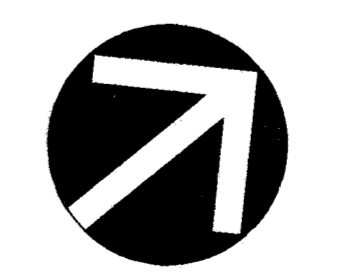
SCALE: 1"=50'

DRAWING No. 14 OF 16

CHARLES A. IRISH #11217

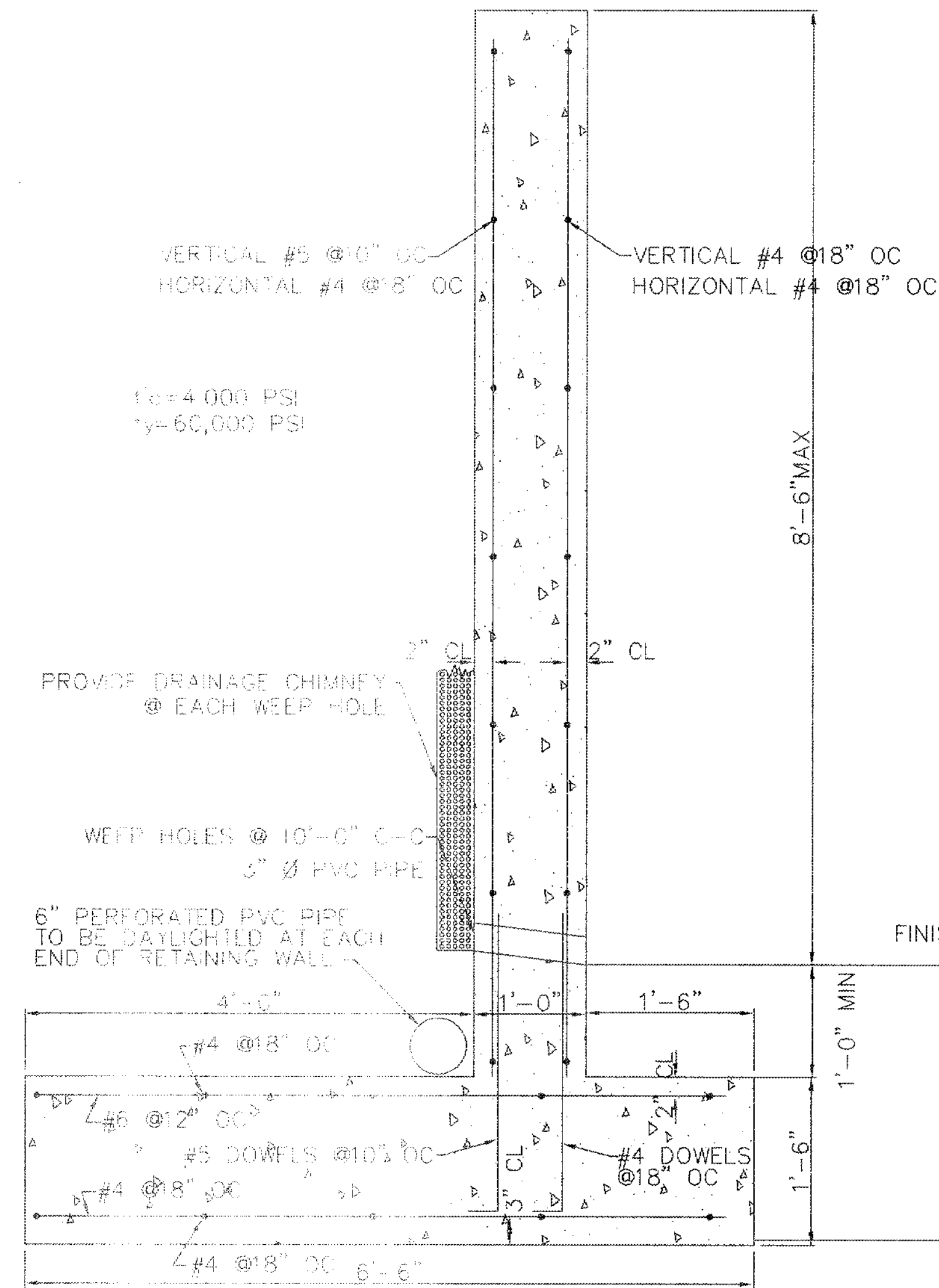
**VEHICULAR ACCESS RESTRICTION**

INGRESS / EGRESS IS RESTRICTED TO THE EXISTING ENTRANCE ONTO WHISKEY BOTTOM ROAD.

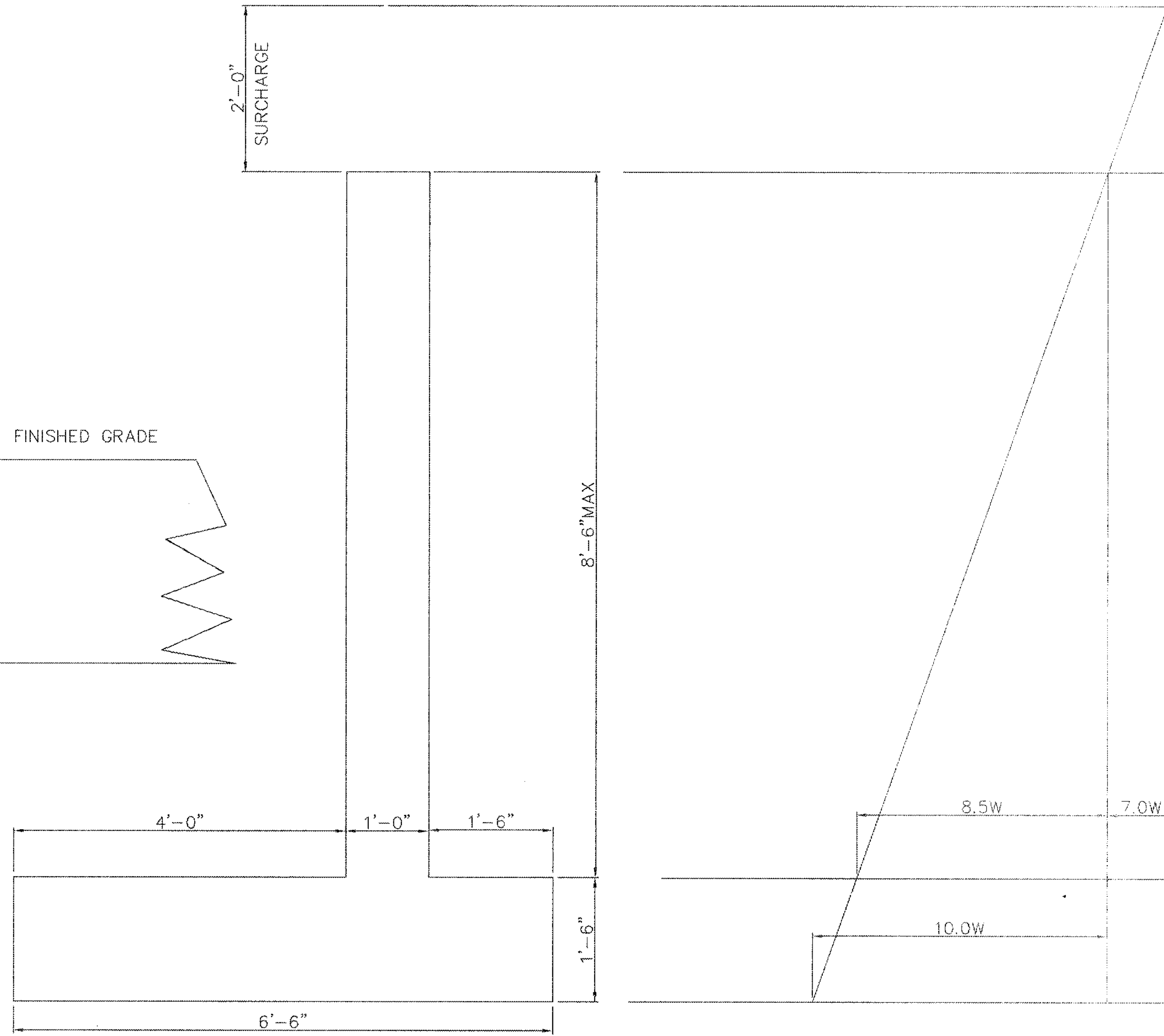


### RETAINING WALL CONSTRUCTION NOTES

- The owner must retain the services of a Registered Geotechnical Engineer to determine that the foundation of the retaining wall, either in natural earth or controlled fill, is capable of supporting a load of 3,000 lbs./square foot. The actual calculated bearing of this wall is considerably less than that.
- The fill shall be compacted in accordance with the following requirements taken from the report of Herbst and Associates.
  - The fill material shall be placed in layers which before compaction shall not exceed 8" in thickness. Each layer shall be spread uniformly and evenly and shall be thoroughly blade mixed during the spreading to insure uniformity of materials in each layer.
  - After each layer has been placed, mixed and spread evenly, it shall be thoroughly compacted to not less than 95% of the maximum dry density as determined by ASTM D 1557.
  - The moisture content of the fill shall be as required in order to attain the degree of compaction specified.
  - Compaction shall be by approved multiple-wheel pneumatic tired rollers, vibratory rollers, or other types of acceptable rollers, except that all compaction within 2' of the wall must be accomplished with hand-held equipment.
  - The filling operation shall be continued as specified above until the fill has been brought to the grade shown on the plans.
  - The fill shall be constructed in such a manner that the surface will be sloped to drain at all times, and all fill shall be deposited to prevent excessive moisture accumulation from rainwater.
  - Compaction of the soil shall be monitored by the geotechnical engineer.
- Before commencing the placement of concrete for the retaining wall at areas shown on the site plan where the new construction will be close to the existing construction, the latter must be protected by sheeting to retain the excavation. Such sheeting shall comply with all requirements of the federal and state OSHA's and shall be designed by the contractor. After completing construction of the wall, the sheeting shall be drawn or left in place at the option of the contractor with fill compacted in accordance with the preceding requirements to complete the grading.
- The concrete shall have a 28-day strength of 4,000 lbs./square inch and the reinforcing bars shall be of ASTM A615, Grade 60 steel. The contractor shall submit test reports for the concrete to the engineer.
- Construction of the retaining wall shall be performed under the observation of a Professional Engineer registered in the State of Maryland.



**1** RETAINING WALL DETAIL  
NOT TO SCALE



**2** RETAINING WALL DIAGRAM  
NOT TO SCALE

### RETAINING WALL COMPUTATIONS

ASSUME  $\alpha=30^\circ$   $W_e=130$ pcf FOR OVERTURNING AND 120 pcf FOR STABILITY  
 $p=130 \cdot (1 - (\sin 30^\circ)^2) / (1 + (\sin 30^\circ)^2) = 43.3$  pcf ELP  
 M ON WALL =  $\left( \frac{2 \cdot 43.3 \cdot 8.5^2}{2} + \frac{43.3 \cdot 8.5^3}{6} \right) \cdot \frac{1.70}{1000} = 12.85$  1k  
 M ON FOOTING =  $\left( \frac{2 \cdot 43.3 \cdot 10.0^2}{2} + \frac{43.3 \cdot 10.0^3}{6} \right) / 1000 = 11.55$  1k  
 $H = (2 \cdot 43.3 \cdot 10.0 + \frac{43.3 \cdot 10.0^2}{2}) / 1000 = 3.03$  1k

|       |              |      |       |
|-------|--------------|------|-------|
| STEM  | 0.15*8.50    | 1.28 | 2.00  |
| FTG   | 0.225*6.50   | 1.46 | 3.25  |
| EARTH | 0.12*8.5*4.0 | 4.08 | 4.50  |
|       |              | 6.82 | 3.76  |
|       |              |      | 25.67 |

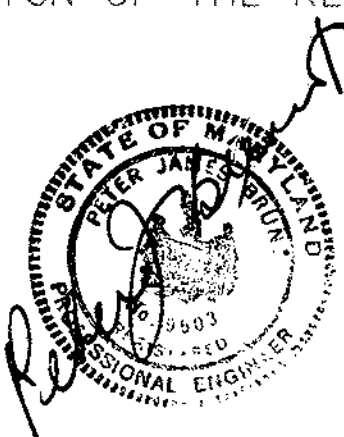
$e = 3.25 - 3.76 = 0.51 < \frac{L}{6}$   
 $S = (6.50^2 / 6) = 7.04$

$FS_{ot} = (25.67 / 11.55) = 2.22$   
 HORIZ PRESS ON FTG =  $4.0 \cdot 1.5 = 6.0$  KLF  
 $FS_1 = (6.82 \cdot 4.5 + 6.0) / 3.03 = 2.07$   
 STEM REINFORCEMENT  $d = 9.55 \pm$   $A_u = 4.24$   
 $A_s = 12.85 / (9.50 \cdot 4.2) = 0.32^D$  / FT  
 $MIN = 0.002 \cdot 9.5 \cdot 12 = 0.228^D$  / FT }  
 HEEL REINFORCEMENT  $M = (0.12 \cdot 8.5 \cdot 4.0^2) / 2 \cdot 1.45 = 11.42$  K  
 $d = 15.5$   $A_s = 1.42 / (15.5 \cdot 4.2) = 0.175$  " / FT  
 $A_s MIN = 0.002 \cdot 15.5 \cdot 12 = 0.37^D$  / FT  
 $A_s MIN = \#6 @ 12$   
 $q = 6.82 / 6.50 (1 + (0.51 / 7.04)) = 1.12$  KSF < 4.0  
 TOE REINFORCEMENT NOMINAL

### SITE INSPECTION NOTE

SITE INSPECTED JANUARY 14TH 1998 BY PETER J. BRUNT P.E. AT THE REQUEST OF VIKI, INC. THE DESIGN ASSUMPTIONS, SHOWN ON THIS DRAWING, SHEET 15 OF 16, PROJECT #5457, ARE REASONABLE AND ACCEPTABLE AS SEEN ON THIS INSPECTION. ANY EXPOSURE OF CONSIDERABLE DIFFERENT GROUND CONDITIONS CAN BE INCORPORATED WITHIN THE DESIGN OF THE RETAINING WALL, SHOULD THIS OCCUR.

SEALED THIS DAY JANUARY 16TH 1998



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: *[Signature]* DATE: 5/11/98  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* 5/10/98  
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 5/11/98

DATE: No. REVISION

OWNER: WHISKEY BOTTOM TRADE CENTER B LIMITED PARTNERSHIP  
 c/o GINGERY DEVELOPMENT GROUP  
 1001 ROCKVILLE PIKE SUITE 503  
 ROCKVILLE, MARYLAND 20852  
 (301) 424-3600

PROJECT: WHISKEY BOTTOM TRADE CENTER SITE PLAN PHASE II PARCEL "B"

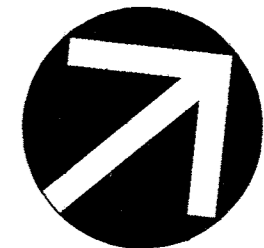
AREA: TAX MAP No. PARCEL B SIXTH (6) ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: RETAINING WALL DETAILS & COMPUTATIONS

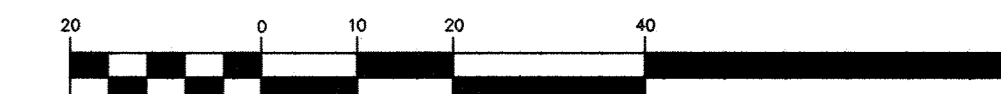
ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS  
 VIKI INCORPORATED  
 8180 GREENSBORO DRIVE SUITE 200 ■ MLEAN, VIRGINIA 22102  
 (703) 442-7800 ■ FAX (703) 761-2787  
 MLEAN, VA BETHESDA, MD

Feb. 3 1998 DATE  
 STATE OF MARYLAND  
 ALVIN R. SCHWAB #2244

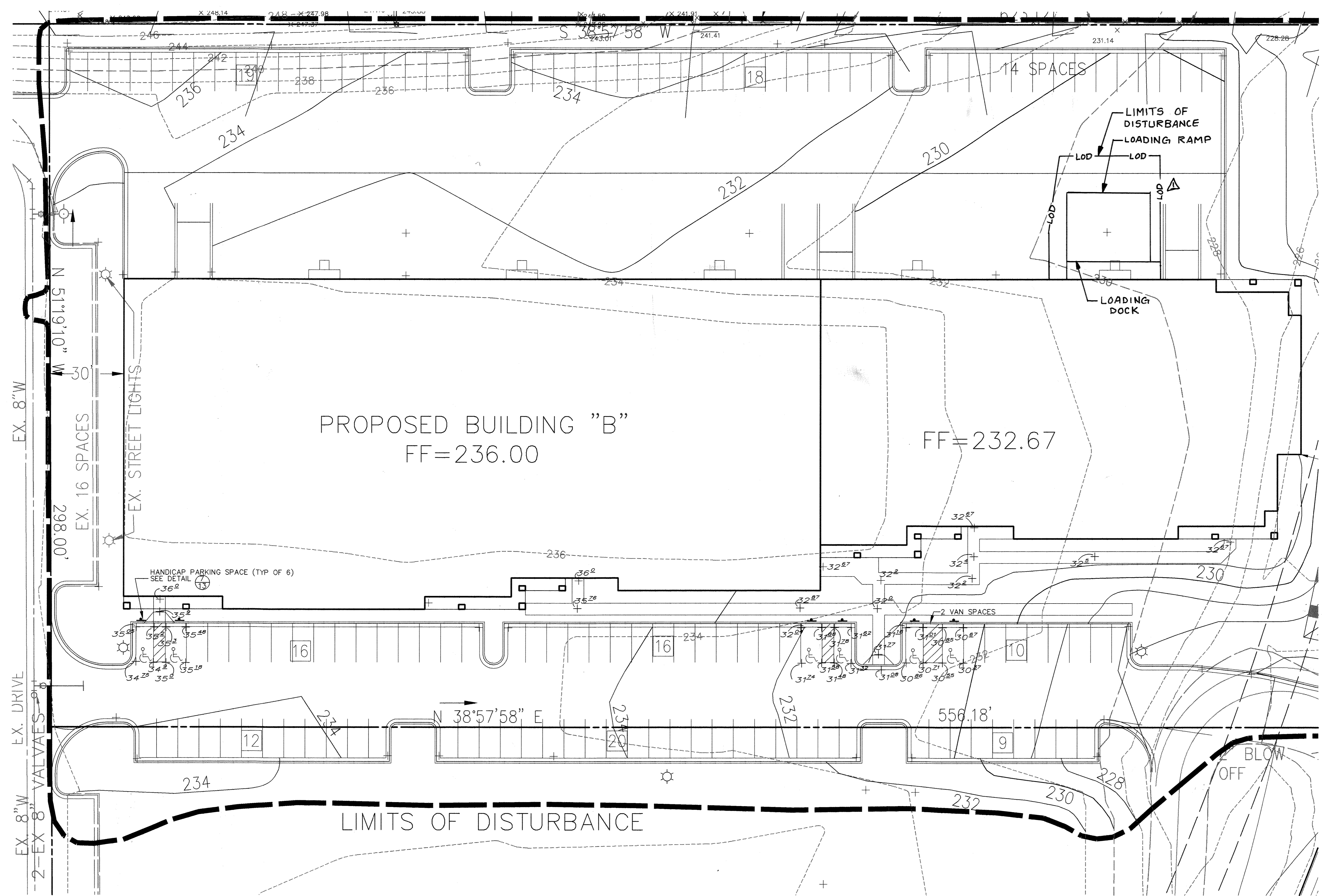
SDP-98-59  
 DESIGNED BY: ATLANTIC ENGINEERS  
 DRAWING BY: PSC  
 PROJECT/FILE NO. 5457  
 DATE: SEPT. 1997  
 SCALE: 1"=1'  
 DRAWING No. 15 OF 16



GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.



APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

|   |         |
|---|---------|
| <i>Scott Smith</i>                      | 5/11/98 |
| DIRECTOR                                | DATE    |
| <i>William D. Williams</i>              | 5/12/98 |
| CHIEF, DEVELOPMENT ENGINEERING DIVISION | DATE    |
| <i>Cathy Hamilton</i>                   | 5/11/98 |
| CHIEF, DIVISION OF LAND DEVELOPMENT     | DATE    |

7/1/98 1 Add loading docks.  
DATE No. REVISION

OWNER: WHISKEY BOTTOM TRADE CENTER B L.P.  
C/O GINGERY DEVELOPMENT GROUP  
1001 ROCKVILLE PIKE SUITE 503  
ROCKVILLE, MARYLAND 20852  
(301) 424-3600

PROJECT WHISKEY BOTTOM TRADE CENTER  
SITE PLAN PHASE II  
PARCEL B

AREA TAX MAP No. PARCEL B  
SIXTH (6) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE HANDICAP ACCESSIBILITY PLAN

**VIA**

ENGINEERS ■ PLANNERS ■ LANDSCAPE ARCHITECTS ■ SURVEYORS ■ CONSTRUCTION INSPECTORS

VIA INCORPORATED  
8180 GREENSBORO DRIVE SUITE 200 MCLEAN, VIRGINIA 22102  
(703)442-7800 ■ FAX (703)761-2787  
MCLEAN, VA BETHESDA, MD

|                         |                       |
|-------------------------|-----------------------|
| 4/21/98<br>DATE         | SDP-98-59             |
| <i>Charles A. Irish</i> | DESIGNED BY: PSC      |
|                         | DRAWING BY: PSC       |
|                         | PROJECT/FILE NO. 5457 |
|                         | DATE: SEPT. 1997      |
|                         | SCALE: 1"=20'         |
| CHARLES A. IRISH #11217 | DRAWING No. 16 OF 16  |