

GENERAL NOTES

1. THE APPROXIMATE LOCATION OF ALL UTILITIES IS SHOWN BASED ON INFORMATION OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL LOCATE, PROTECT AND SUPPORT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER/INSPECTOR, AT THE CONTRACTOR'S EXPENSE.
2. CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
3. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.  
STATE HIGHWAY ADMINISTRATION - 531-5533  
BALTIMORE GAS & ELECTRIC COMPANY - 561-2585 (CONTRACTOR SERVICES)  
BALTIMORE GAS & ELECTRIC COMPANY - 234-6313 (UNDERGROUND DAMAGE CONTROL)  
BALTIMORE GAS & ELECTRIC COMPANY - 298-9013 (TROUBLE SHOOTING)  
"MISS UTILITY" - 800-257-7777  
CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 725-9976  
BUREAU OF UTILITIES/HOWARD COUNTY - 992-2366
4. ALL DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAILS.
5. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY SPECIFICATIONS AND HOWARD COUNTY DESIGN MANUAL, VOLUME IV.
6. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
7. TREES SHALL BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT POSSIBLE. TREES SIX INCH (6") DIAMETER OR GREATER (MEASURED FOUR FEET (4') ABOVE EXISTING GRADE) ADJACENT TO THE LIMITS OF CONSTRUCTION SHALL NOT BE REMOVED OR DAMAGED BY THE CONTRACTOR.
8. ALL HORIZONTAL AND VERTICAL CONTROLS ARE BASED ON MARYLAND STATE PLANE COORDINATES SYSTEM PROVIDED BY HOWARD COUNTY.
9. TOPOGRAPHY TAKEN FROM MAPS PREPARED BY PHOTOGRAMMETRY BY "AERIAL SURVEYS" IN 1984. TOPOGRAPHY FIELD CHECKED 1986.
10. ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
11. CLEAR ALL UTILITIES BY A MINIMUM OF 12" CLEAR. CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR EXCAVATION AND SHALL BE INCLUDED IN UNIT PRICES BID FOR EXCAVATION BACKFILL.
12. ALL PIPE BEDDING SHALL BE CLASS B.
13. ROAD RIGHT OF WAY INFORMATION IS SHOWN ON THE RECORD PLATS.
14. SPOT ELEVATIONS SHOWN ARE TOP OF CURB UNLESS OTHERWISE NOTED.
15. SHADED AREAS INDICATE WATER, SEWER, UTILITY, DRAINAGE AND/OR ACCESS EASEMENT(S).

LANDSCAPING NOTES:

1. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO PLANTING (SEE NOTE #3 ON SHEET #1).
2. ALL PLANT MATERIAL AND PLANTING SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARD FOR NURSERY STOCK" BY THE A.A.N.
3. SUBSTITUTIONS MAY BE PERMITTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, (762-2220).
4. PLACE "GREEN VASE ZELKOVA" AND "SUMMER SHADE MAPLE" AT RADIUS POINTS ON THE PARKING ISLANDS AND 5' BEHIND THE SIDEWALK ALONG THE ROADWAYS.
5. PLACE "REGENT SCHOLAR TREE", "GREENSPIRE LINDEN", AND "HEDGE MAPLE" 3' BEHIND SIDEWALK.

INDEX TO DRAWINGS

| SHEET # | DESCRIPTION  |
|---------|--|
| 1       | TITLE SHEET  |
| 2       | PAVING & STORM DRAINAGE PLAN                         |
| 3       | PAVING & STORM DRAINAGE SECTIONS, DETAILS & PROFILES |
| 4       | DRAINAGE AREA MAP                                    |
| 5       | EROSION & SEDIMENT CONTROL - DETAIL SHEET            |
| 6       | EROSION & SEDIMENT CONTROL PLAN                      |

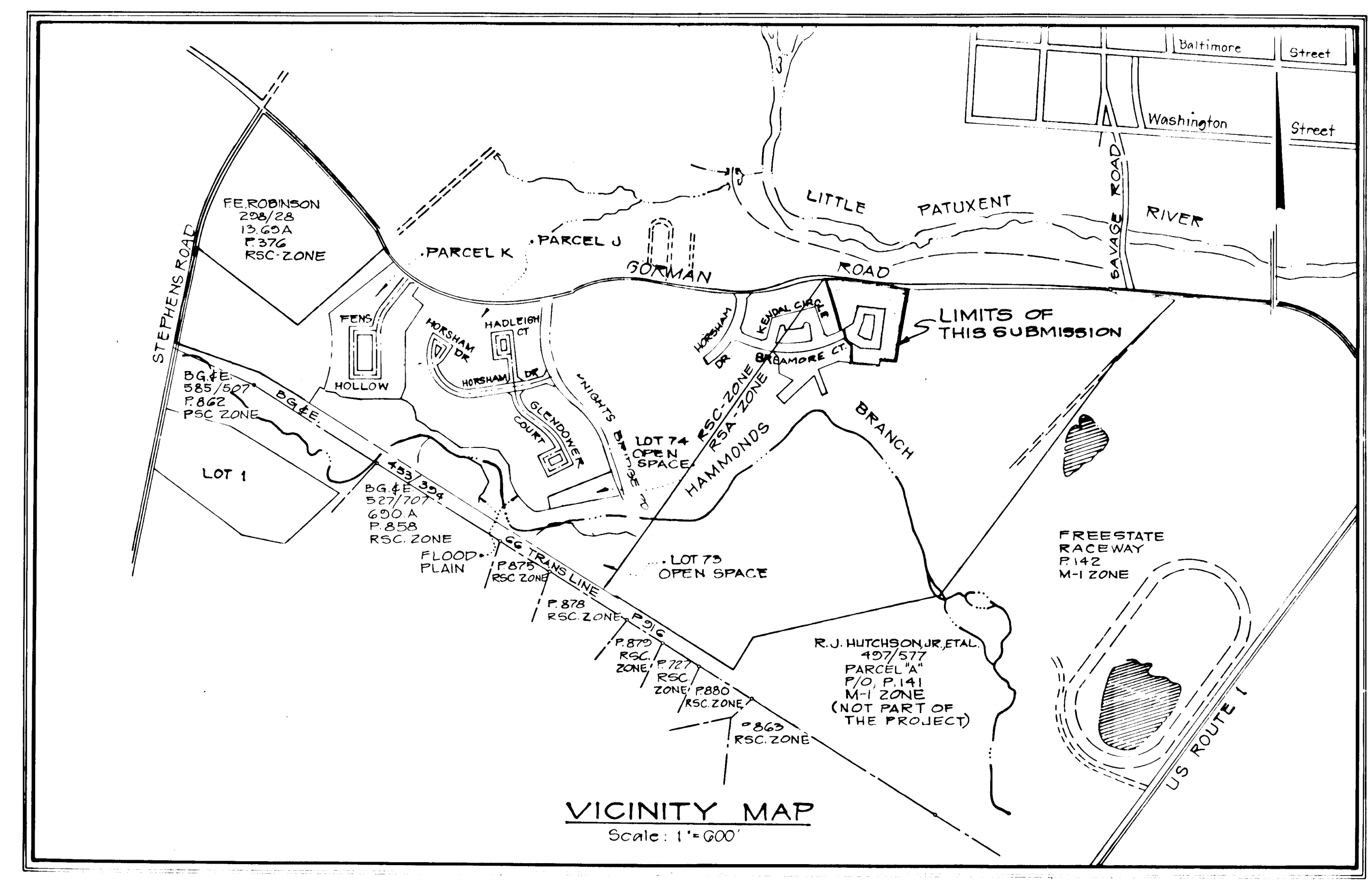
STRUCTURE SCHEDULE

| NO. | TYPE | INV. IN | INV. OUT | UPPER END | LOWER END | HQ.CO.STD | LOCATION |
|-----|------|---------|----------|-----------|-----------|-----------|----------|
| I-1 | A-10 |         | 232.63   | 236.25    | 236.15    | S.D. 402  | 8+05     |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |
|     |      |         |          |           |           |           |          |

# SECTION 3, AREA 2

## BOWLING BROOK FARMS

### LOTS E-28 THRU E-67, LOTS 221 & 222



**LEGEND**

STORM DRAIN PROPOSED & PROPOSED R/W

LIMITS OF SUBMISSION

EASEMENT

HC HANDICAP PKG SPACE

FLARED END SECTION HANDICAP RAMP

HCR

NO. OF PARKING SPACES IN PARKING BAY

250 WATT MERCURY VAPOR LAMP PENDANT MOUNTED ON 30 FOOT GALVANIZED STEEL POLE

175 WATT MERCURY VAPOR LAMP POST TOP FIXTURE ON 14 FOOT GRAY FIBERGLASS POLE

## PAVING AND STORM DRAIN CONSTRUCTION PLANS

### HOWARD COUNTY, MARYLAND

PIPE SCHEDULE

| DIA. | MATERIAL | CLASS | LENGTH (FT.) |
|------|----------|-------|--------------|
| 15"  | RCP      | I     | 83           |
|      |          |       |              |
|      |          |       |              |
|      |          |       |              |
|      |          |       |              |
|      |          |       |              |
|      |          |       |              |
|      |          |       |              |
|      |          |       |              |

PLANT SCHEDULE

| KEY | PLANT NAME                      | SIZE          | QUANTITY | REMARKS |
|-----|---------------------------------|---------------|----------|---------|
| Z   | ZELKOVA SERRATA "GREEN VASE"    | 2 1/2"-3" CAL | 12       | B & B   |
|     | GREEN VASE ZELKOVA              | 12-14' HT.    |          |         |
| P   | ACER PLATANOIDES "SUMMER SHADE" |               | 12       |         |
|     | SUMMER SHADE MAPLE              |               |          |         |
| S   | SOPHORA JAPONICA "REGENT"       |               | 5        |         |
|     | REGENT SCHOLAR TREE             |               |          |         |
| T   | TILIA CORDATA "GREENSPIRE"      |               | 4        |         |
|     | GREENSPIRE LINDEN               |               |          |         |
| C   | ACER CAMPESTRE                  |               | 4        |         |
|     | HEDGE MAPLE                     |               |          |         |

OWNER/DEVELOPER

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Land Development Division

Chief, Bureau of Highways

Chief, Bureau of Engineering

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Chief, Division of Community Planning & Land Development

HOWARD S C D

NO. DESCRIPTION DATE APPROVED DATE

|   |                       |         |  |  |
|---|-----------------------|---------|--|--|
| 1 | SUBMITTED TO H.C.C.   | 6/21/88 |  |  |
| 2 | REVISOR'S CORRECTIONS | 6/22/88 |  |  |
| 3 | REVISOR'S CORRECTIONS | 6/22/88 |  |  |
| 4 | REVISOR'S CORRECTIONS | 6/22/88 |  |  |
| 5 | REVISOR'S CORRECTIONS | 6/22/88 |  |  |

REVISION APPROVED BY

TITLE SHEET

Patton Harris Rust and Associates

A Professional Corporation

Engineers, Surveyors, Planners and Landscape Architects

7609 Standish Place Rockville, Maryland 20855 (301)762-2220

**BOWLING BROOK FARMS**

SECTION 3, AREA 2

LOTS E-28 THRU E-67, LOTS 221 & 222

A RESTORATION OF BOWLING BROOK, LOT 2

TAX MAP 47 PARCEL M1

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SURVEY \_\_\_\_\_ DATE \_\_\_\_\_

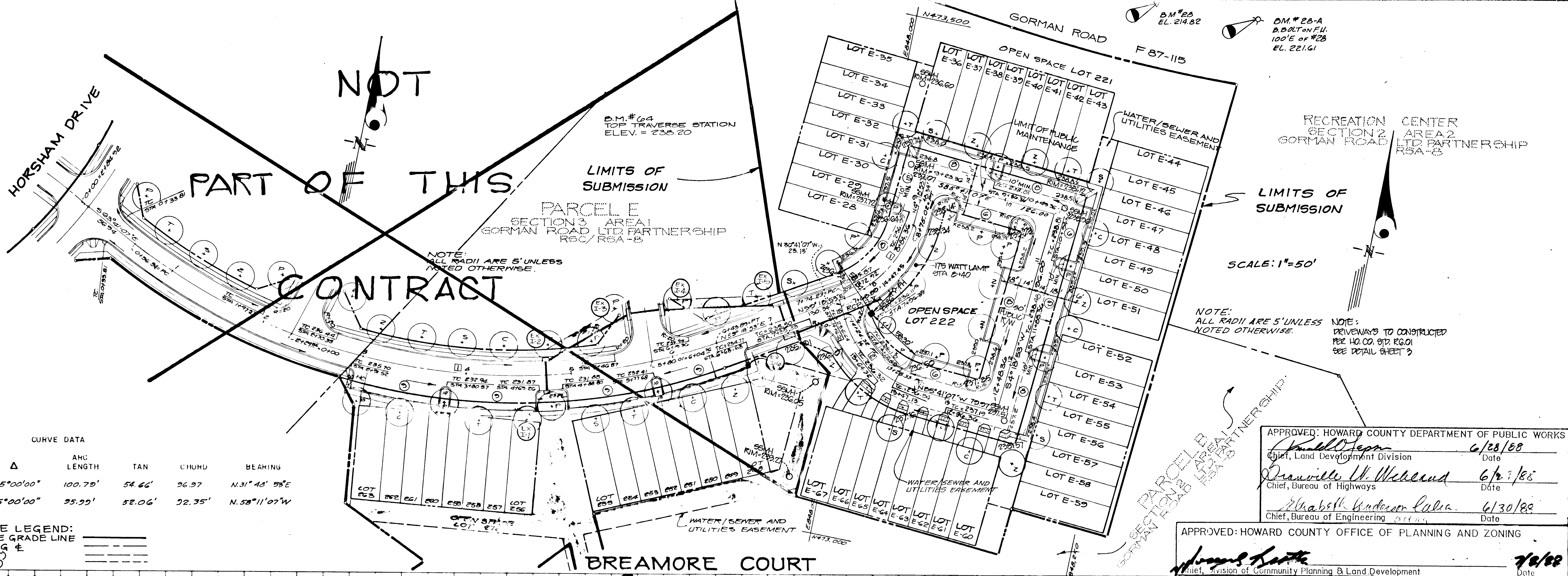
DESIGN \_\_\_\_\_

DRAWN C.N.II SHEET \_\_\_\_\_

CHECKED K.O.R. 1 OF 6

SCALE AS SHOWN FILE NO. 2184-1-4



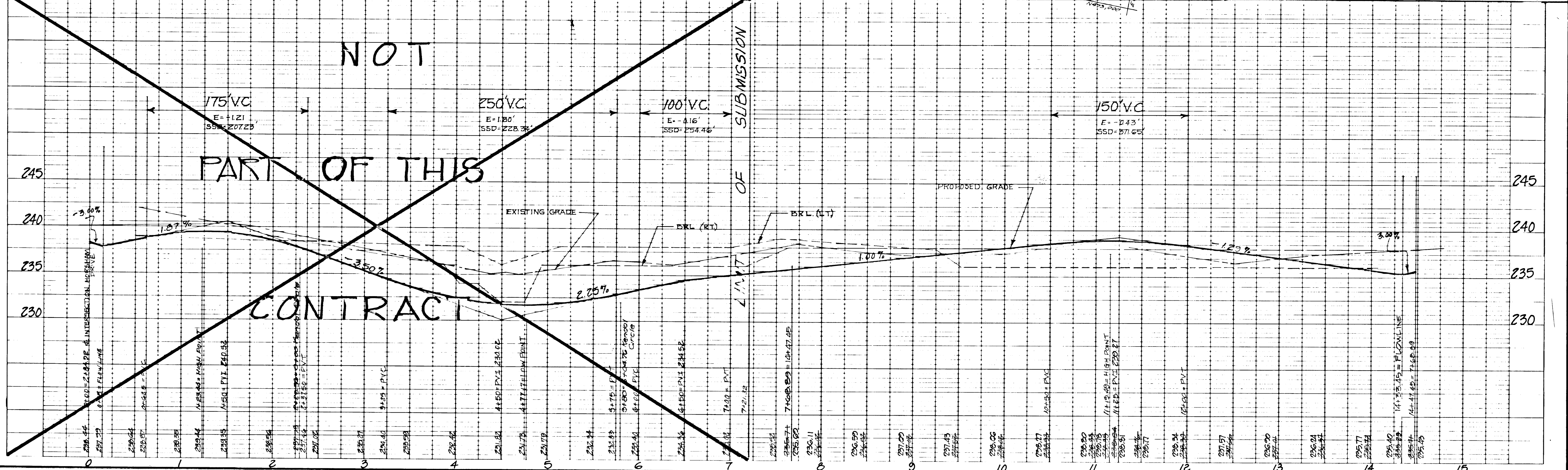


**CURVE DATA**

| CURVE NO. | PC TO PT             | RADIUS  | Δ         | ARC LENGTH | TAN    | CHORD  | BEARING      |
|-----------|----------------------|---------|-----------|------------|--------|--------|--------------|
| 1         | 7+74.23 TO 8+75.02   | 105.00' | 55°00'00" | 100.79'    | 54.66' | 96.97' | N.31°45'58"E |
| 2         | 13+28.33 TO 14+24.32 | 100.00' | 55°00'00" | 25.99'     | 52.06' | 92.35' | N.58°11'07"W |

**PROFILE SCALE:**  
 HORIZ.: 1"=50'  
 VERT.: 1"=5'

**PROFILE LEGEND:**  
 PROFILE GRADE LINE  
 EXISTING E  
 BRL (RT)  
 BRL (LT)



1271

| NO. | DESCRIPTION               | DATE    | APPROVED | DATE |
|-----|---------------------------|---------|----------|------|
| 1   | SUBMITTED TO HO. CO.      | 2/24/88 |          |      |
| 2   | FLX. PER HO. CO. COMMENTS | 6/17/88 |          |      |
| 3   | REVISED                   | 10/6/88 |          |      |
| 4   | AS-BUILT REVISIONS        | 5-6-91  |          |      |

REVISION APPROVED BY



**PAVING & STORM DRAINAGE CONSTRUCTION PLANS**  
**BREAMORE COURT**  
**BOWLING BROOK FARMS**

**Patton Harris Rust and Associates**  
 A Professional Corporation  
 Engineers, Surveyors, Planners and Landscape Architects  
 7609 Standish Place, Rockville, MD 20855 (301)762-2220

**BOWLING BROOK FARMS**  
 SECTION 3, AREA 2  
 LOTS E-28 THRU E-67, LOTS 221 & 222  
 A RESUBDIVISION OF BOLLING BROOKE, LOT 2  
 TAX MAP 47 PARCEL 141  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**SURVEY OTHERS**  
 DESIGN MJK  
 DRAWN MJK  
 CHECKED K.O.R.  
 SCALE 1"=50' H  
 1"=5' V

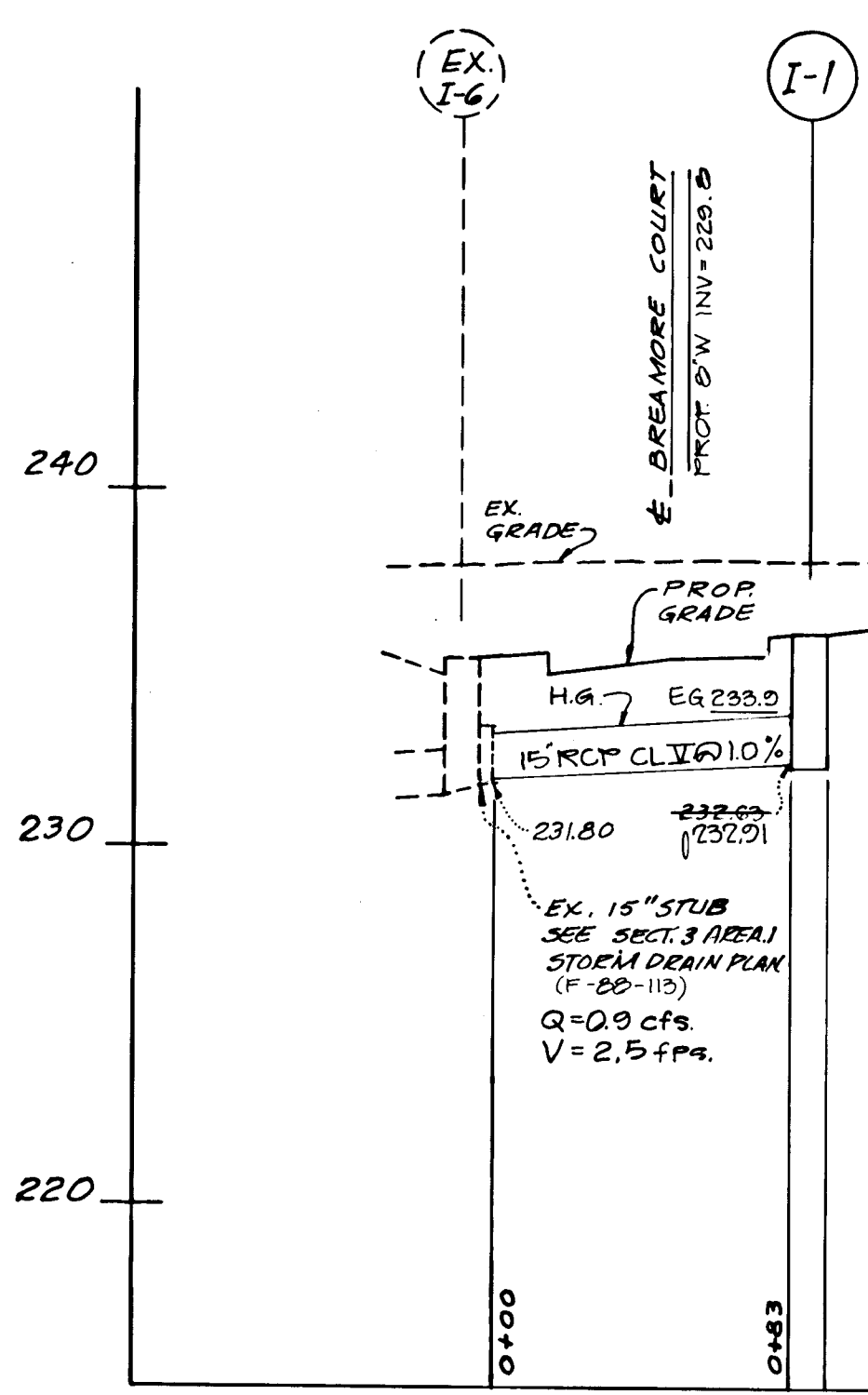
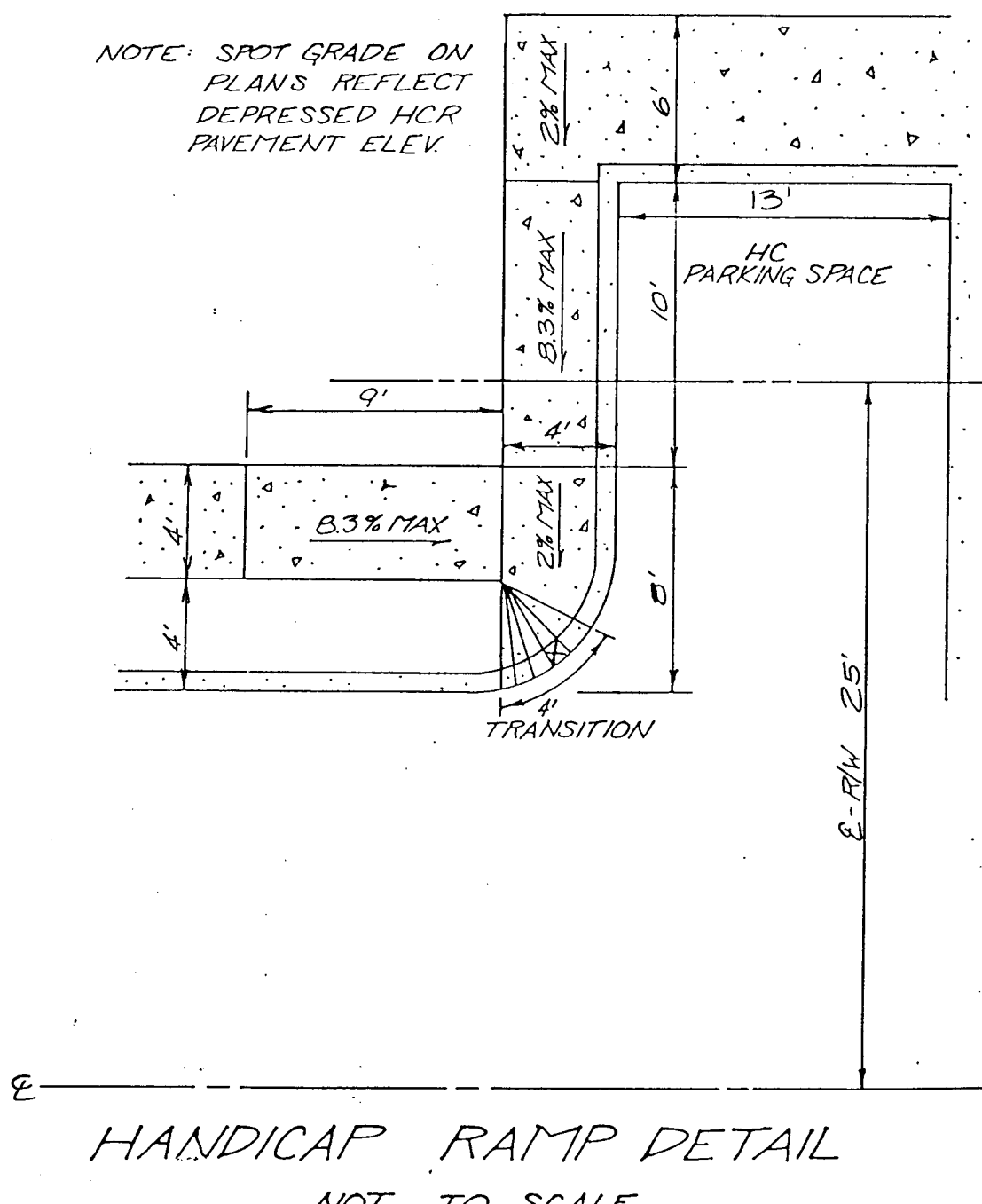
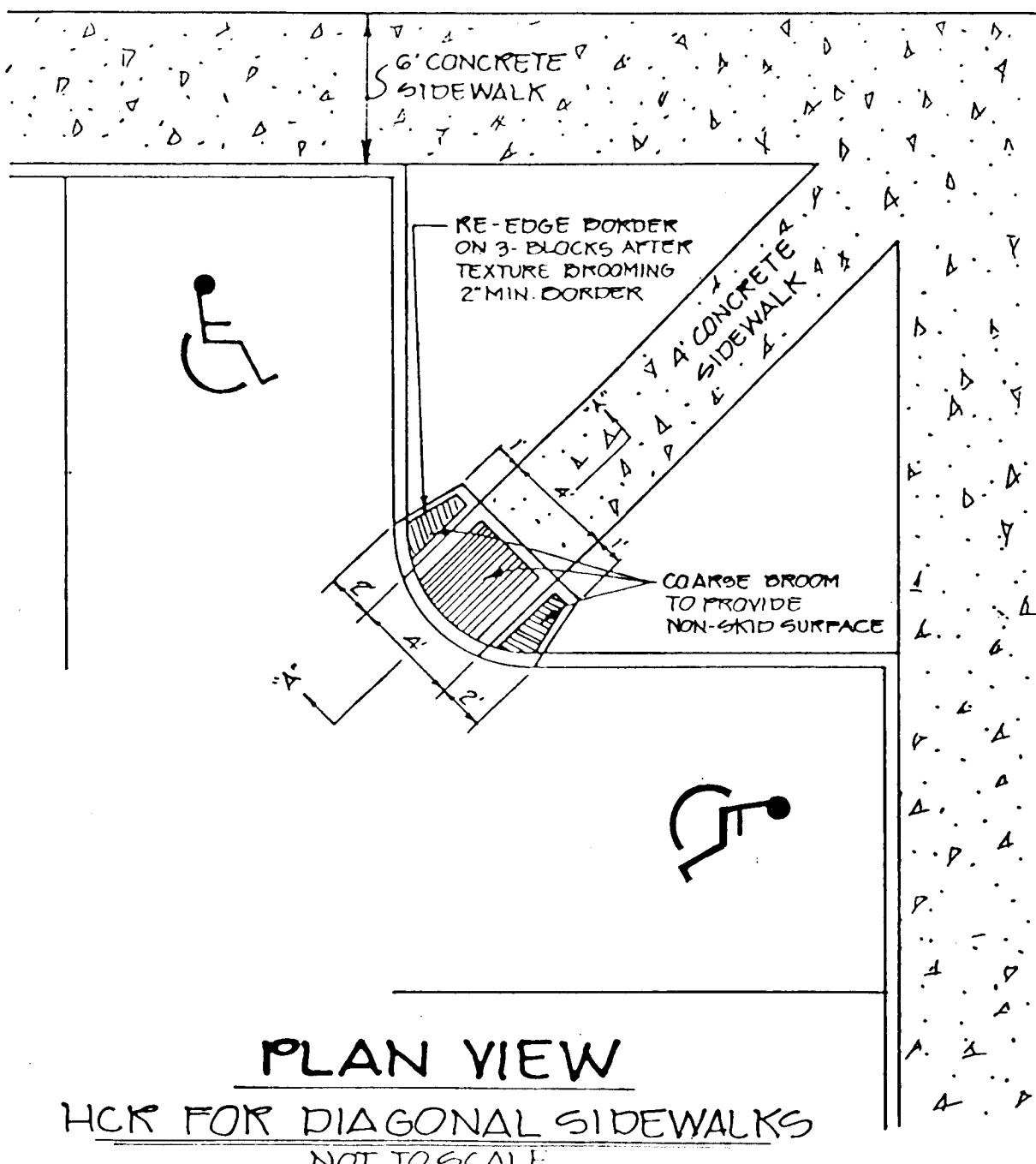
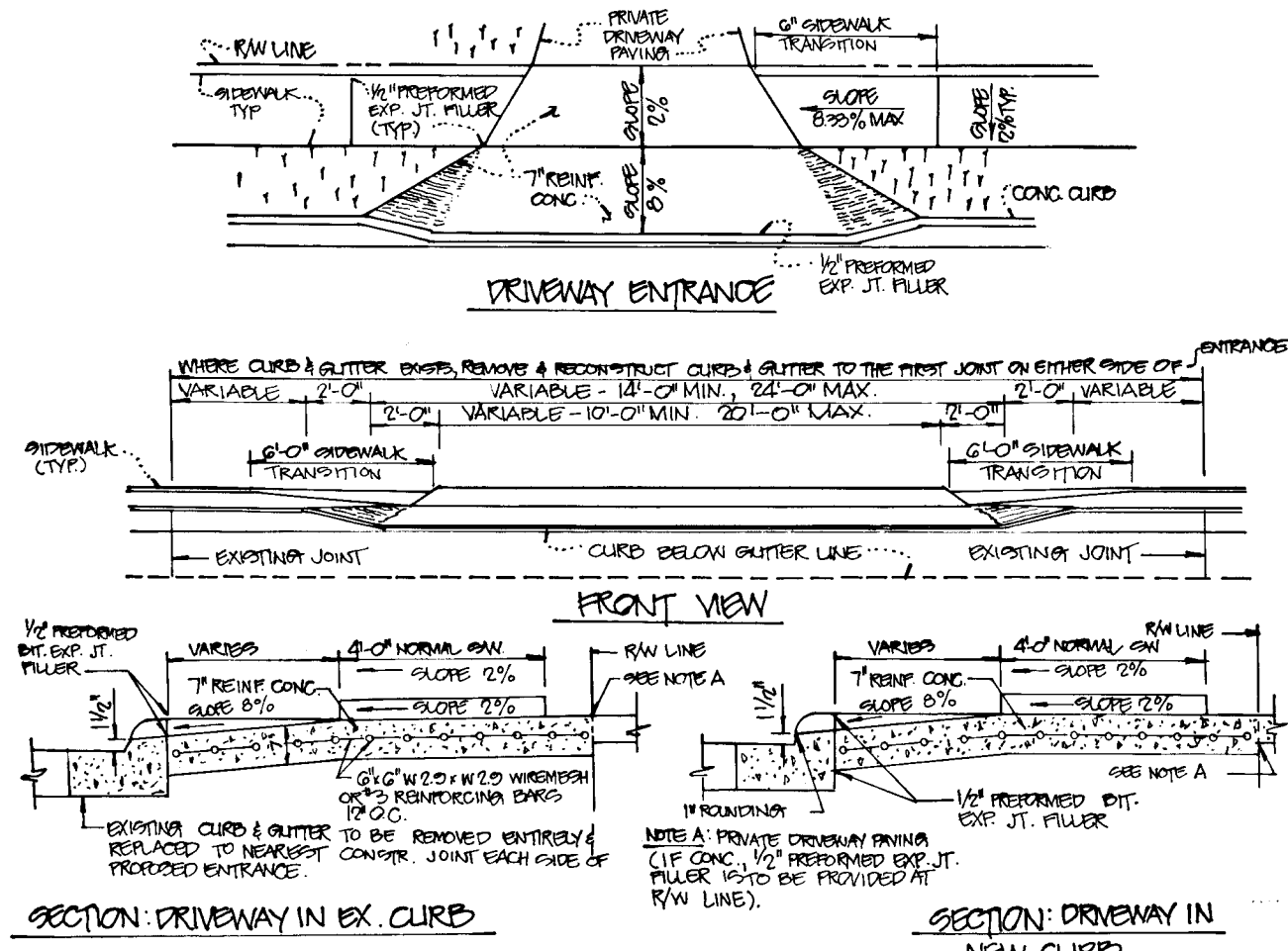
**DATE**  
 5/24/87

**SHEET**  
 2 OF 6

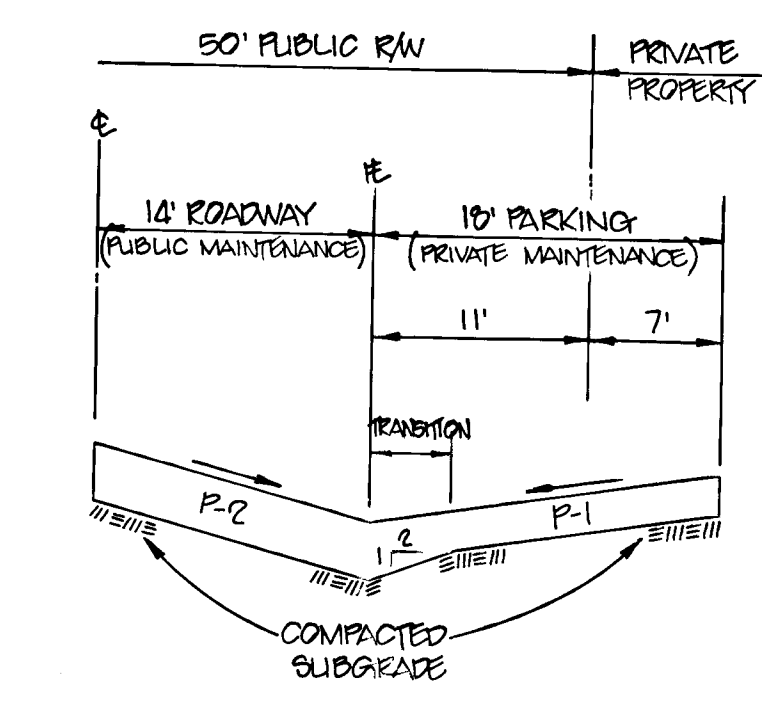
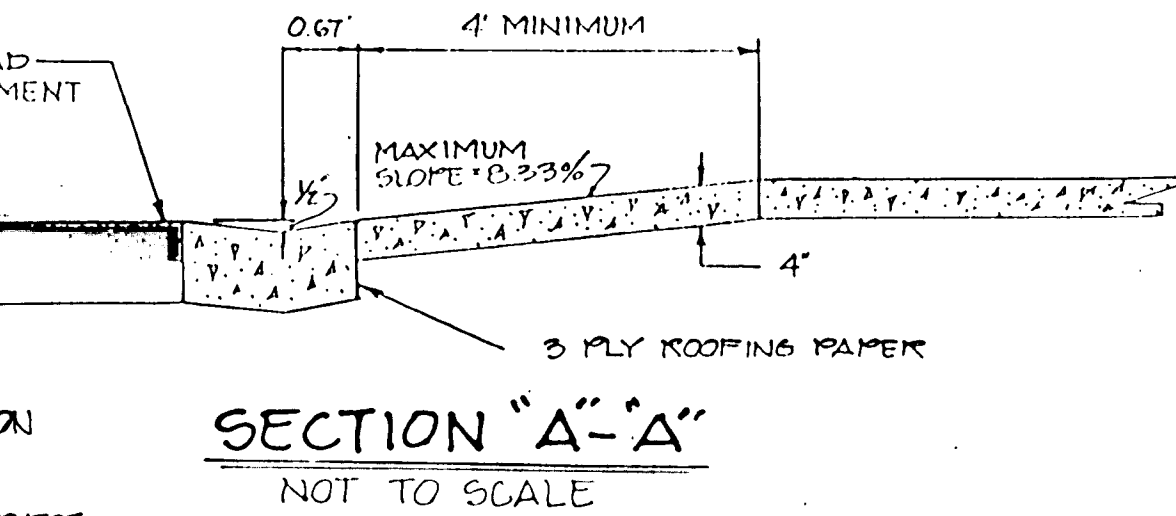
**FILE NO**  
 2184-1-4

AS-BUILT



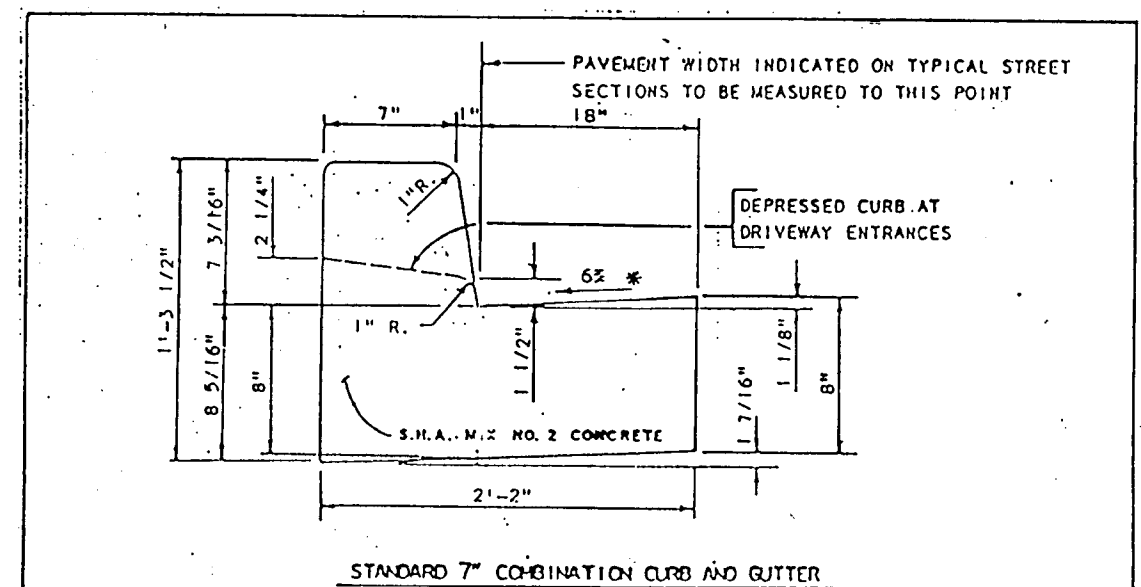
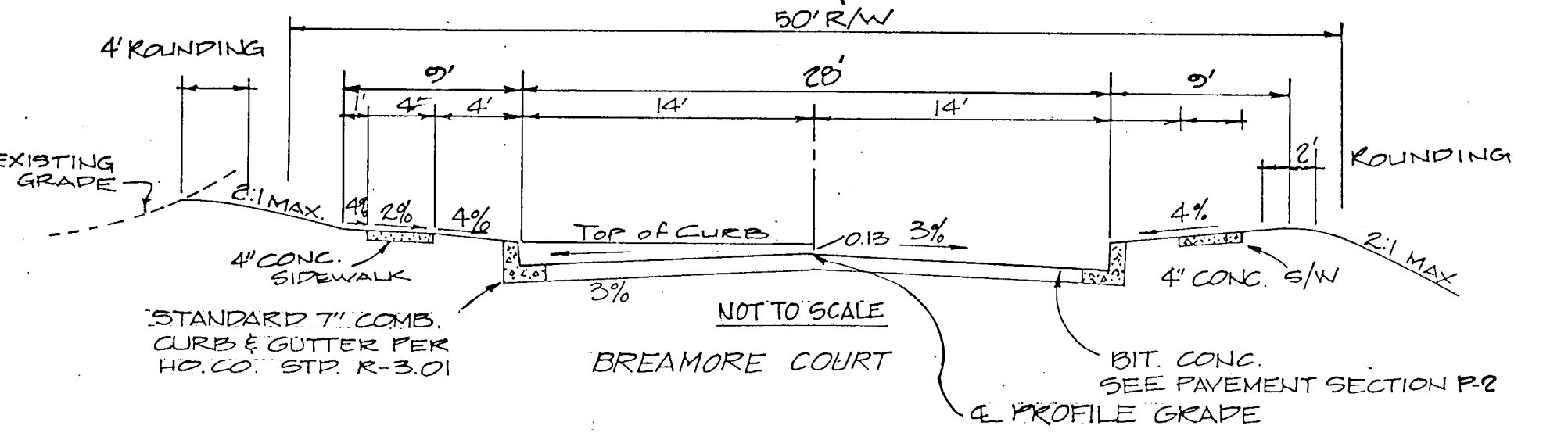
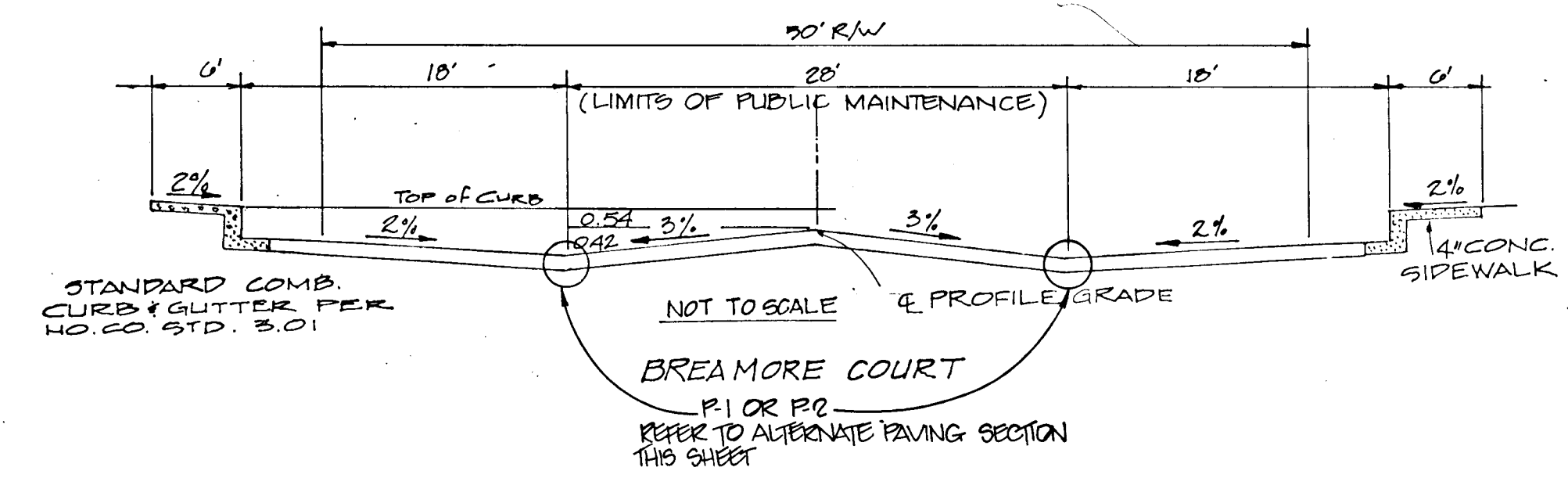


NOTE:  
STORM DRAIN PIPE BEDDING TO BE CLASS 'B'

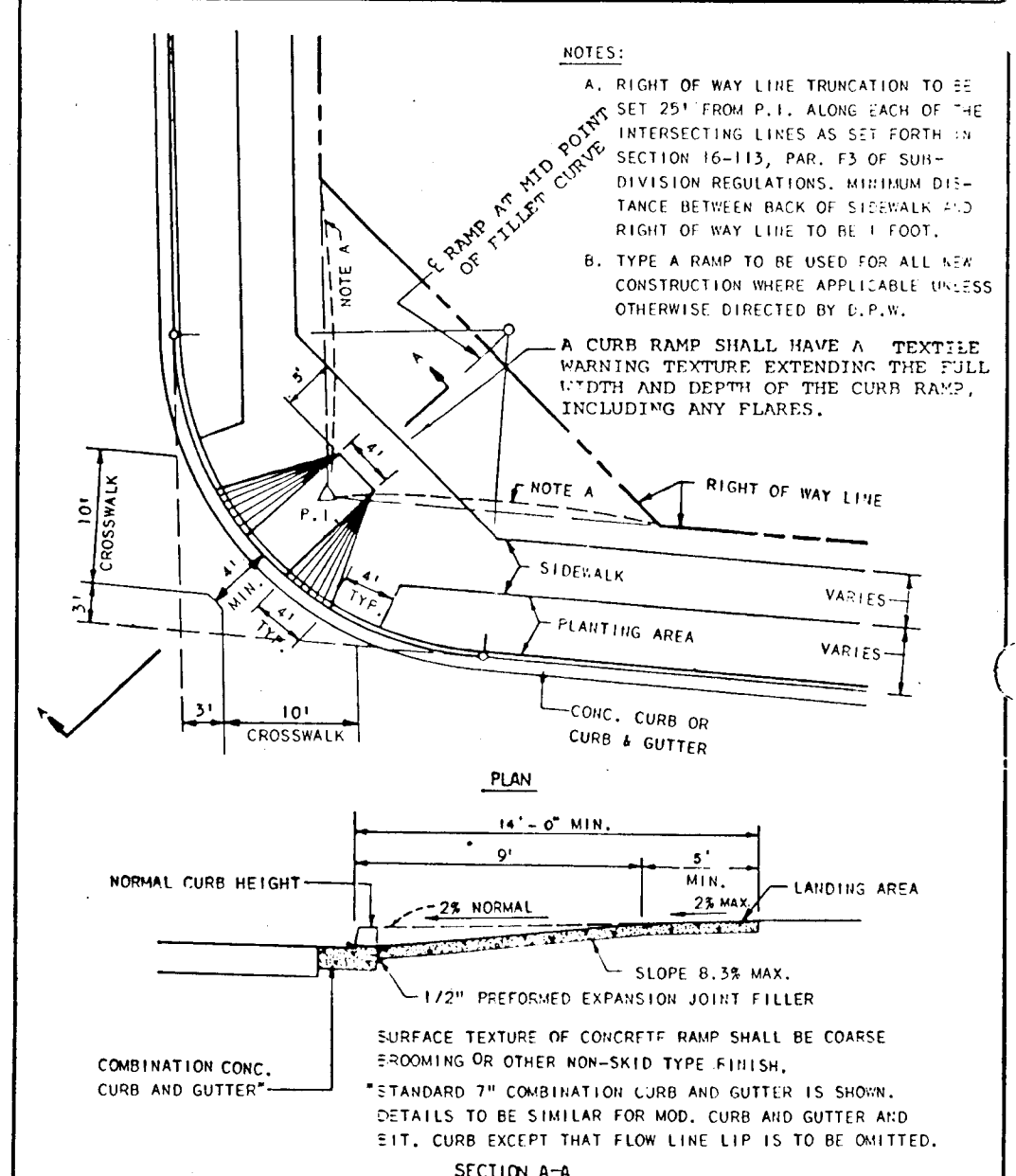


NOTE:  
IF THE P-1 PAVEMENT SECTION IS USED WITHIN THE PRIVATE PARKING AREA, IT SHALL BE USED THROUGHOUT THE ENTIRE PROJECT. ONE PAVEMENT SECTION (FULL DEPTH BITUMINOUS CONCRETE PAVEMENT OR BITUMINOUS CONCRETE PAVEMENT OVER GRANULAR BASE) SHALL BE USED THROUGHOUT THE ENTIRE PROJECT.

ALTERNATE PAVING SECTION  
NOT TO SCALE



\* GUTTER PAV. AT THE MEDIAN EDGE OF INTERMEDIATE AREAS ON THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.



SECTION A-A  
SIDEWALK RAMP TYPE A

| SECTION NO. | ROAD & STREET CLASSIFICATION  | PAVEMENT MATERIALS                            | GRANULAR BASE ALT.  |
|-------------|---|---|---|
| P-1         | PARKING AREAS AND TRAVELWAYS AFTER AND COMMERCIAL INDUSTRIAL ZONES WITH NO HEAVY TRUCKS   | 1" BIT. CONG. SURFACE<br>4" BIT. CONG. BASE   | 1" BIT. CONG. SURFACE<br>1" BIT. CONG. BASE<br>PRIME<br>5" CRUSHER RUN BASE<br>COURSE OR 4" CRUSHED STAB.<br>AGGREGATE BASE COURSE                        |
| P-2         | RESIDENTIAL ZONES LOCAL CL. TO 600 OPS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS. PARKING AREAS APARTMENTS AND COMMERCIAL INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY. | 1 1/2" BIT. CONG. SURF.<br>5" BIT. CONG. BASE | 1 1/2" BIT. CONG. SURFACE<br>2 1/2" BIT. CONG. SURFACE<br>PRIME<br>5" CRUSHER RUN BASE<br>COURSE (2 COURSES) OR 4" CRUSHED STAB.<br>AGGREGATE BASE COURSE |

TYPICAL PAVEMENT SECTIONS  
Not to Scale  
ONE PAVEMENT SECTION SHALL BE USED THROUGHOUT THE WORK.

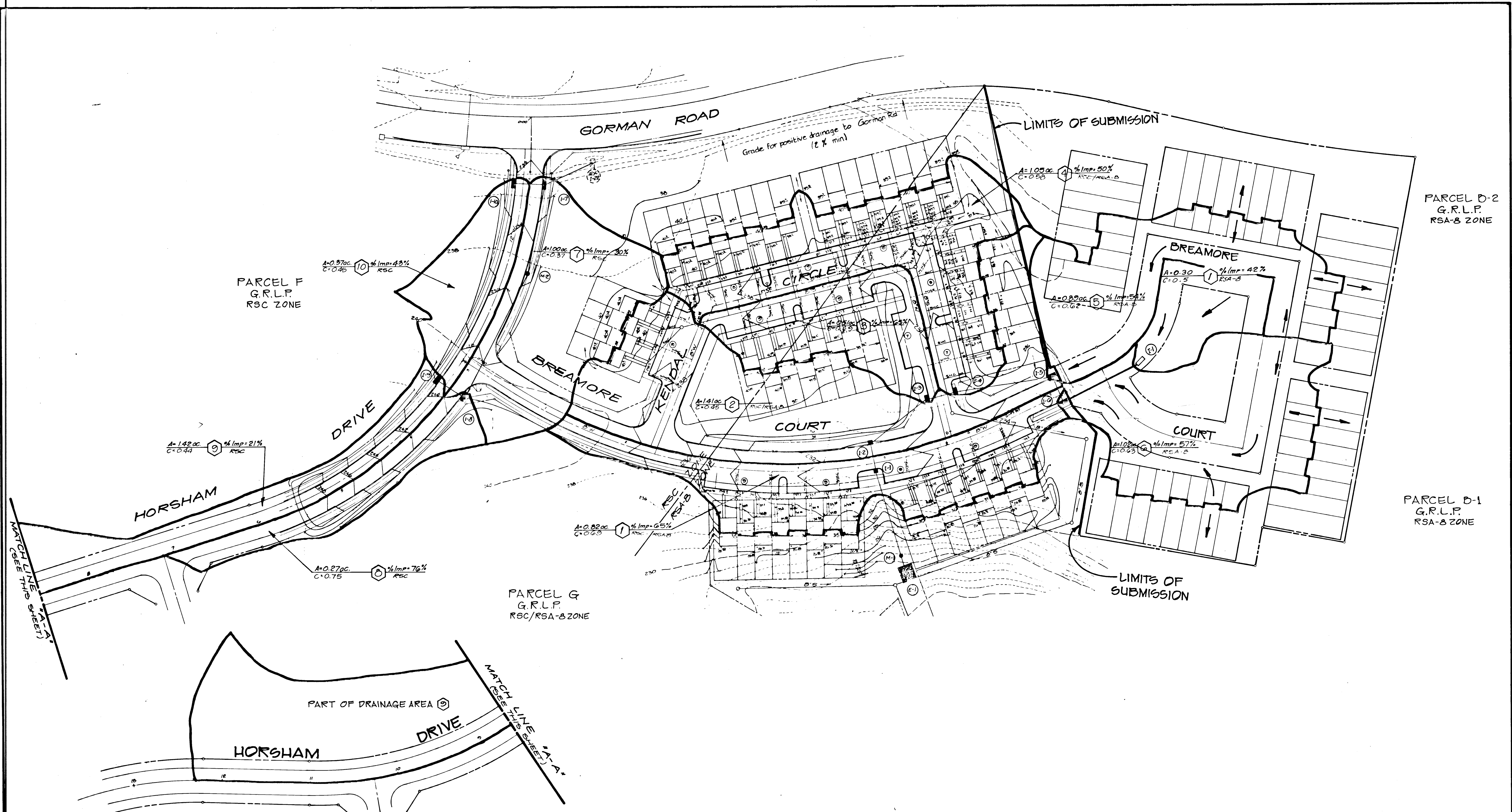
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Howard County* 6/28/88  
 Chief, Land Development Division  
*Granville W. McLeod* 6/29/88  
 Chief, Bureau of Highways  
*Robert G. Calia* 6/30/88  
 Chief, Bureau of Engineering  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Robert G. Calia* 7/0/88  
 Chief, Division of Community Planning & Land Development

| NO. | DESCRIPTION                  | DATE | APPROVED | DATE    |
|-----|------------------------------|------|----------|---------|
| 4   | AS-BUILT REVISIONS           | BP   |          | 5-0-91  |
| 3   | REVISE REVISIONS & REVISIONS |      |          | 10-0-90 |
| 2   | REV PER HO CO COMMENTS       |      |          | 6-17-88 |
| 1   | SUBMITTED TO HO CO           |      |          | 2-24-88 |

PAVING & STORM DRAINAGE SECTIONS, DETAILS & PROFILE

Patton Harris Rust and Associates  
 A Professional Corporation  
 Engineers, Surveyors, Planners and Landscape Architects  
 7609 Standish Place Rockville, Maryland 20855 (301)762-2220

BOWLING BROOK FARMS  
 SECTION 3, AREA 2  
 LOTS E-28 THRU E-67, LOTS 221 & 222  
 A RESUBDIVISION OF BOLLING BROOKE, LOT 2  
 TAX MAP 47 PARCEL 141  
 SURVEY: \_\_\_\_\_ DATE: 9-24-87  
 DESIGN: KOR SHEET: 3 OF 6  
 DRAWN: C.N.II  
 CHECKED: KOR  
 SCALE: AS SHOWN FILE NO: 2104-1-4  
 AS-BUILT



PARCEL D-2  
G.R.L.P.  
RSA-8 ZONE

PARCEL F  
G.R.L.P.  
RSC ZONE

PARCEL D-1  
G.R.L.P.  
RSA-8 ZONE

PARCEL G  
G.R.L.P.  
RSC/RSA-8 ZONE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James E. Keane* 6/28/88  
 Chief, Land Development Division Date  
*Lawrence W. Whelan* 6/29/88  
 Chief, Bureau of Highways Date  
*Elizabeth Anderson Calia* 6/30/88  
 Chief, Bureau of Engineering Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Joseph Smith* 7/8/88  
 Chief, Division of Community Planning & Land Development Date

|                      |                          |      |          |         |
|----------------------|--------------------------|------|----------|---------|
| NO.                  | DESCRIPTION              | DATE | APPROVED | DATE    |
| 2                    | REV. PER. HP CO COMMENTS |      |          | 6-17-88 |
| 1                    | SUBMITTED TO HP CO       |      |          | 2-24-88 |
| REVISION APPROVED BY |                          |      |          |         |



REVISION

**DRAINAGE AREA MAP**

**Patton Harris Rust and Associates**  
 A Professional Corporation  
 Engineers, Surveyors, Planners and Landscape Architects  
 7609 Standish Place Rockville, Maryland 20855 (301) 762-2220

**BOWLING BROOK FARMS**  
 SECTION 3, AREA 2  
 LOTS E-28 THRU E-67, LOTS 221 & 222  
 A RESUBDIVISION OF BOLLING BROOKE, LOT 2  
 TAX MAP 47 PARCEL 141  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

|                  |          |
|------------------|----------|
| SURVEY BY OTHERS | DATE     |
| DESIGN K.O.R.    | 9-87     |
| DRAWN E.C.       | SHEET    |
| CHECKED K.O.R.   | 4 OF 6   |
| SCALE 1"=50'     | FILE NO  |
| C.I. 2           | 2184-1-4 |

1271

Parcel E Sect. 3, Area 2







**NO PART OF THIS CONTRACT**

1. The contractor shall be responsible for the design and construction of all erosion and sediment control measures shown on this plan. The contractor shall be responsible for the maintenance and repair of all erosion and sediment control measures during the construction period.

2. The contractor shall be responsible for the removal of all erosion and sediment control measures after the completion of construction.

3. The contractor shall be responsible for the replacement of any erosion and sediment control measures that are damaged or destroyed during the construction period.

4. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the specifications and standards of the Howard Soil Conservation District.

5. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the approved plan.

6. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the approved plan.

7. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the approved plan.

8. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the approved plan.

9. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the approved plan.

10. The contractor shall be responsible for the installation of all erosion and sediment control measures in accordance with the approved plan.

**DEVELOPER'S/BUILDER'S CERTIFICATE**

I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic onsite inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

*Kim T. van Paris*  
Signature of Developer/Builder  
6/16/88 Date

**ENGINEER'S CERTIFICATE**

I hereby 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.

*John S. ...*  
Signature of Engineer  
6/16/88 Date

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

*James McHelm*  
U.S. Soil Conservation Service  
6/22/88 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Donald ...*  
Chief, Land Development Division  
6/28/88 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Dravies W. ...*  
Chief, Bureau of Highways  
6/29/88 Date

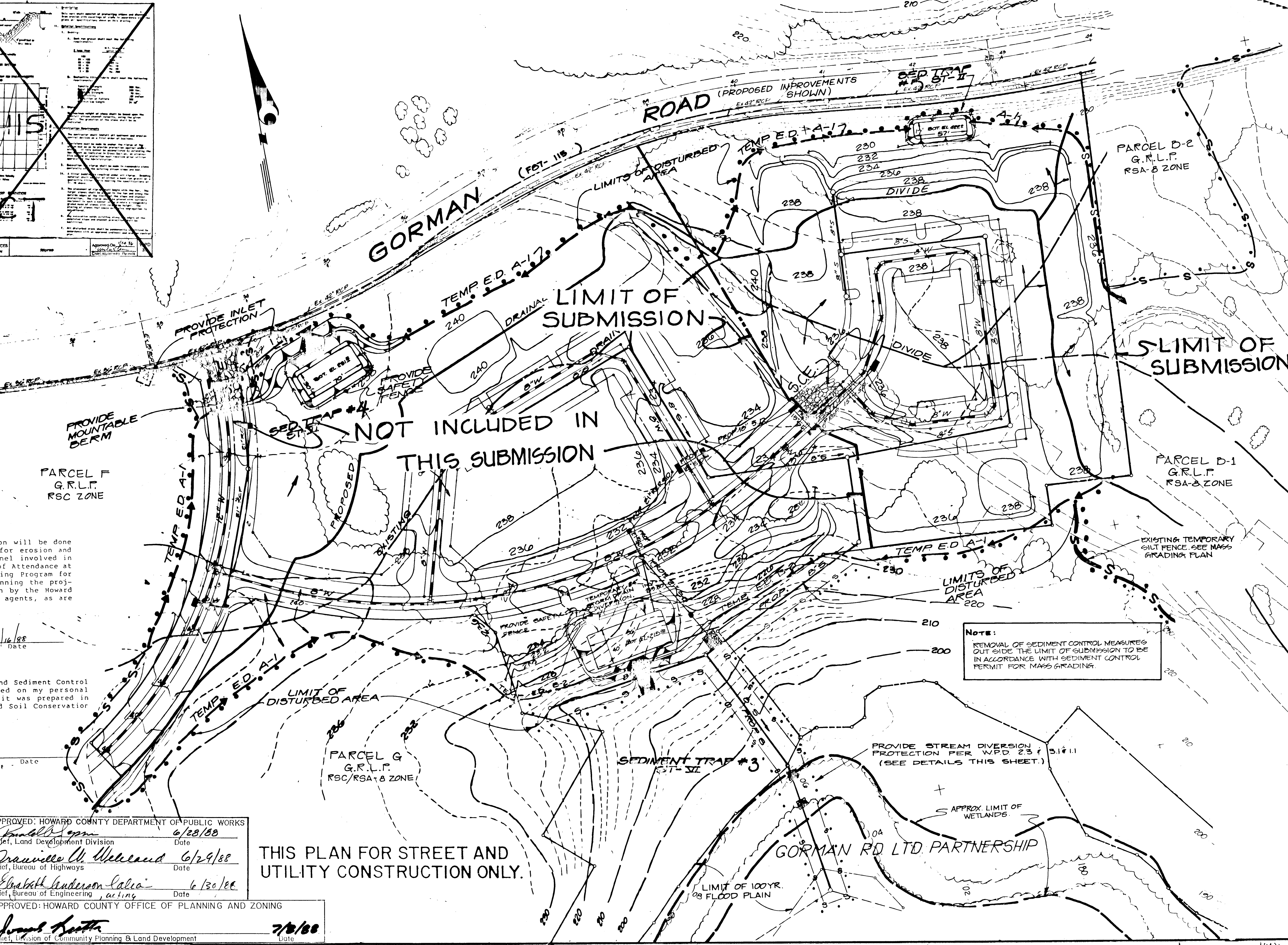
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Elizabeth Anderson ...*  
Chief, Bureau of Engineering  
6/30/88 Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*James ...*  
Chief, Division of Community Planning & Land Development  
7/8/88 Date

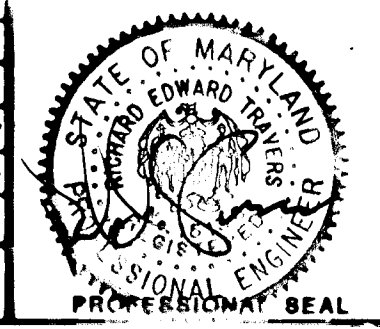
PLAN NUMBER

REVISION APPROVED BY

| NO. | DESCRIPTION         | DATE    | APPROVED | DATE |
|-----|---------------------|---------|----------|------|
| 2   | REVISION            | 6/16/88 |          |      |
| 1   | SUBMITTED TO H.C.D. | 2/24/88 |          |      |



**NOTE:**  
REMOVAL OF SEDIMENT CONTROL MEASURES OUTSIDE THE LIMIT OF SUBMISSION TO BE IN ACCORDANCE WITH SEDIMENT CONTROL PERMIT FOR MASS GRADING.



**EROSION and SEDIMENT CONTROL PLAN**

**Patton Harris Rust and Associates**  
A Professional Corporation  
Engineers, Surveyors, Planners and Landscape Architects  
7609 Standish Place Rockville, Maryland 20855 (301) 762-2220

**BOWLING BROOK FARMS**  
SECTION 3, AREA 2  
LOTS E-28 THRU E-67, LOTS 221 & 222  
A RESUBDIVISION OF BOWLING BROOKE, LOT 2  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

|                |          |
|----------------|----------|
| SURVEY OTHERS  | DATA     |
| DESIGN EIC     | 28487    |
| DRAWN EIC      | SHEET    |
| CHECKED KOR    | G of G   |
| SCALE 1" = 40' | FILE NO. |
| C.I. 2         | 21841-4  |