| REVISIONS |
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# COLUMBIA

## HOWARD COUNTY, MARYLAND
## 5th ELECTION DISTRICT

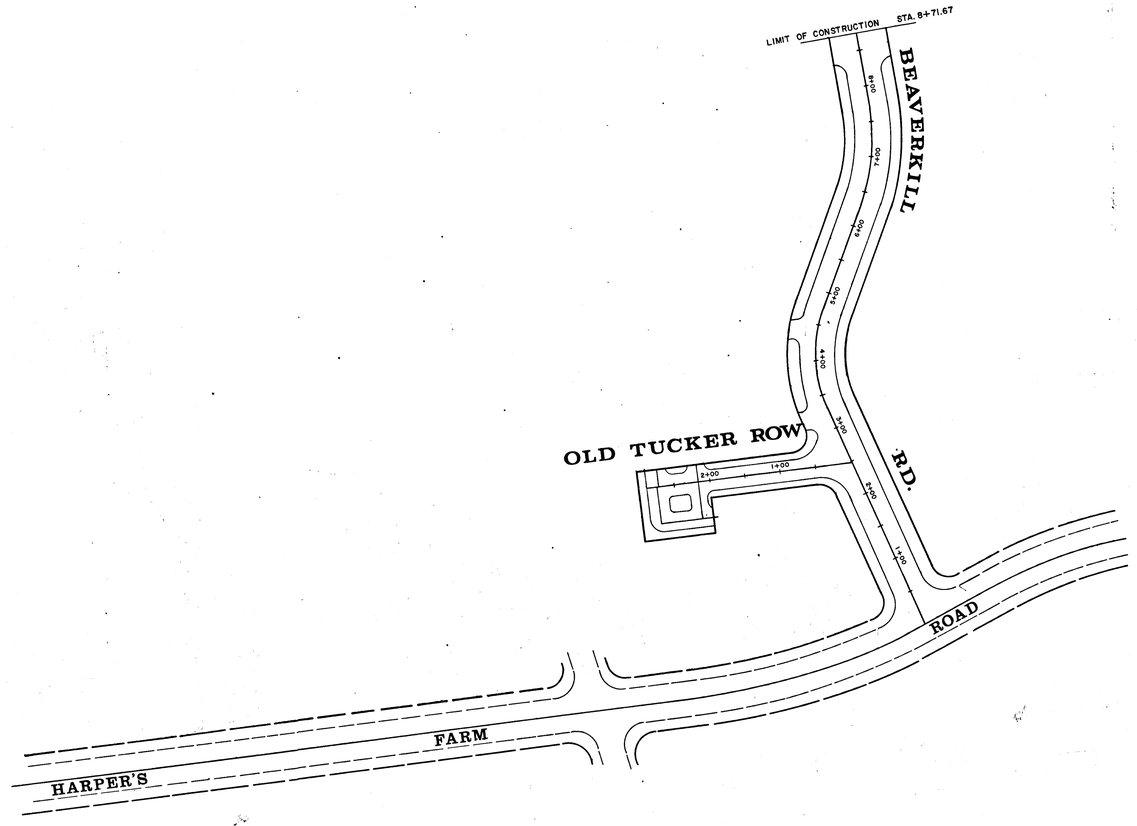
# VILLAGE OF HARPER'S CHOICE SEC. 5
# VILLAGE CENTER AREA 2

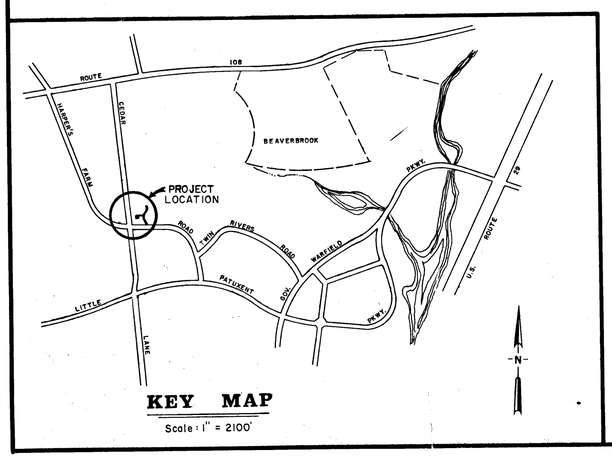
| SHEET INDEX | |
|---|---|
| SHEET NO. | DESCRIPTION |
| 1 | TITLE SHEET |
| 2 | BEAVERKILL ROAD |
| 3 | OLD TUCKER ROW |
| 4 | DRAINAGE EASEMENT |
| 5 | DRAINAGE AREA MAP |
| 6 | DETAILS |

NOTES:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS AS REVISED AUGUST 1968.
2. CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES 48 HOURS PRIOR TO STARTING CONSTRUCTION.

SCALE: 1" = 100'




**KEY MAP**

Scale: 1" = 2100'

## OWNER & DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS
BALTIMORE, MARYLAND

CONSULTING ENGINEERS - PLANNERS
COLUMBIA, MARYLAND

Richard P. Browne 5238

DEPARTMENT OF PUBLIC WORKS

Granville H. Hibbard 3-2-70
CHIEF, BUREAU OF HIGHWAYS DATE

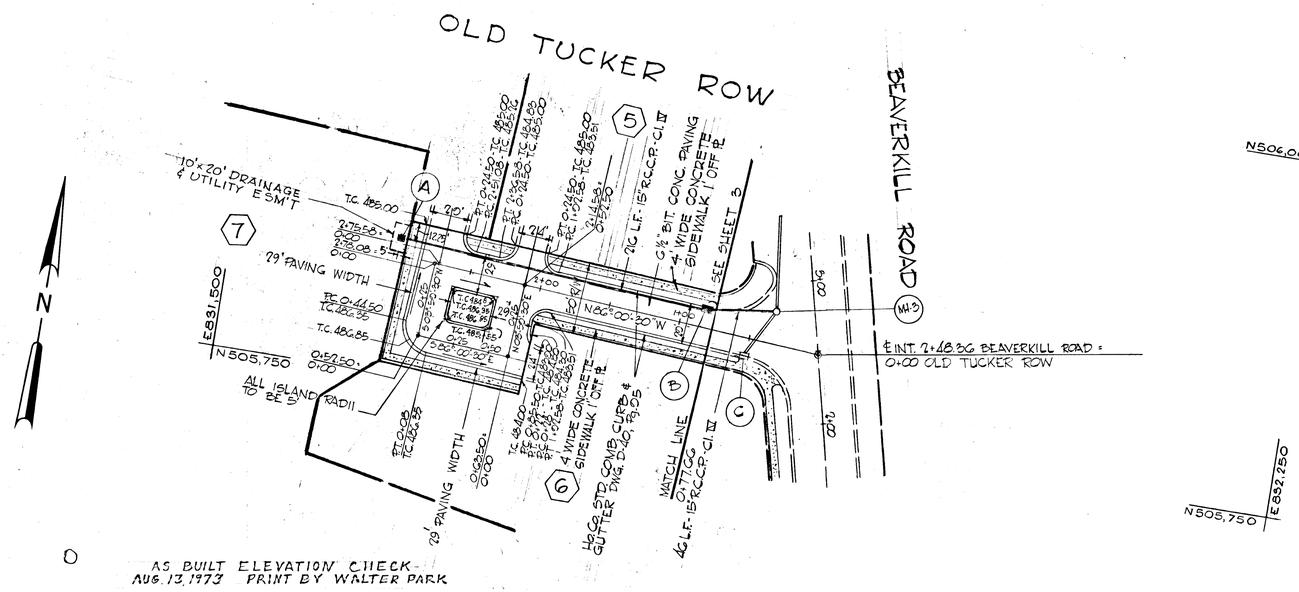
OFFICE OF PLANNING AND ZONING

J. W. Clawson 2-27-70
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

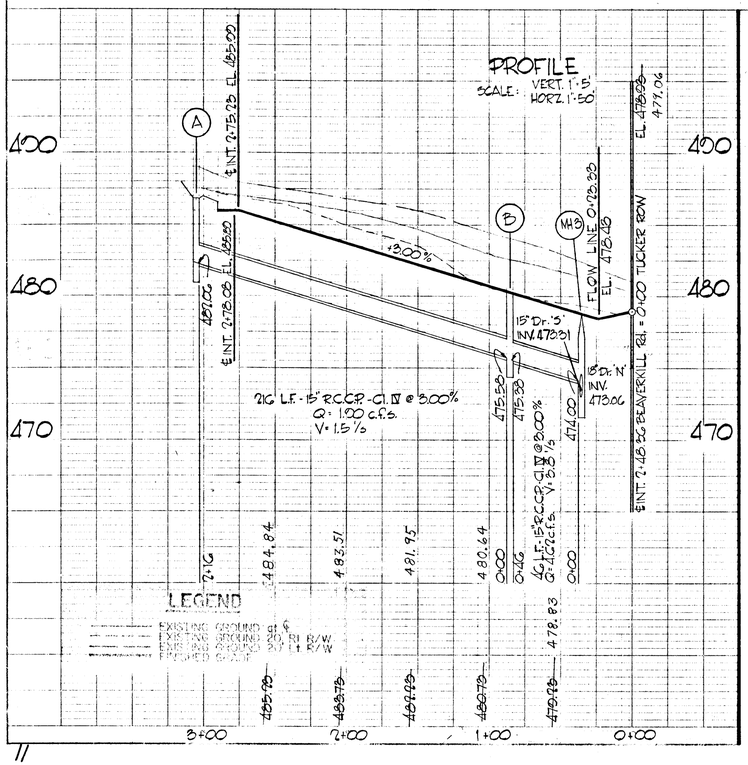
F 3113 F 70-42

## STORM DRAINAGE STRUCTURE SCHEDULE

| NO. | TYPE | LOCATION | INV. IN | INV. OUT | F.C.P. ELEV. | REMARKS |
|---|---|---|---|---|---|---|
| A | STD. CLASS 'S' INLET | SEE PLAN | | 482.06 | TOP GRATE 486.80 | Ho. Co. STD. DWG. D-98 Pg. 153 |
| B | COMB. 'S' INLET SINGLE GRATE | 0+85 Rt. ℄ | 475.58 | 475.38 | 480.28 | SEE DETAIL SHEET |




PLAN
SCALE 1"=50'




STATE OF MARYLAND
RICHARD P. BROWNE
NO. 5238
REGISTERED
PROFESSIONAL ENGINEER & LAND SURVEYOR

Richard P. Browne
RICHARD P. BROWNE #5238

RICHARD P. BROWNE ASSOCIATES
CONSULTING ENGINEERS - PLANNERS
COLUMBIA, MARYLAND

| Rev Date | Rev No | Revision Description |
|---|---|---|
| 29 JAN 70 | 1 | ADD SIDEWALKS OLD TUCKER ROW 29' WIDTH (PAVING) IN TURN-AROUND |

COLUMBIA
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA: VILLAGE OF HARPER'S CHOICE
SECTION 5 VILLAGE CENTER AREA 2

PROJECT TITLE: PLAN & PROFILE
OLD TUCKER ROW

| | | | |
|---|---|---|---|
| Des By T.S. | Scale AS NOTED | Dwg. No. 8 of 6 |
| Drn By F.T. | Date DEC. 19, 1969 | C.C.F. No |
| Chk By P.A.P. | Approved | |

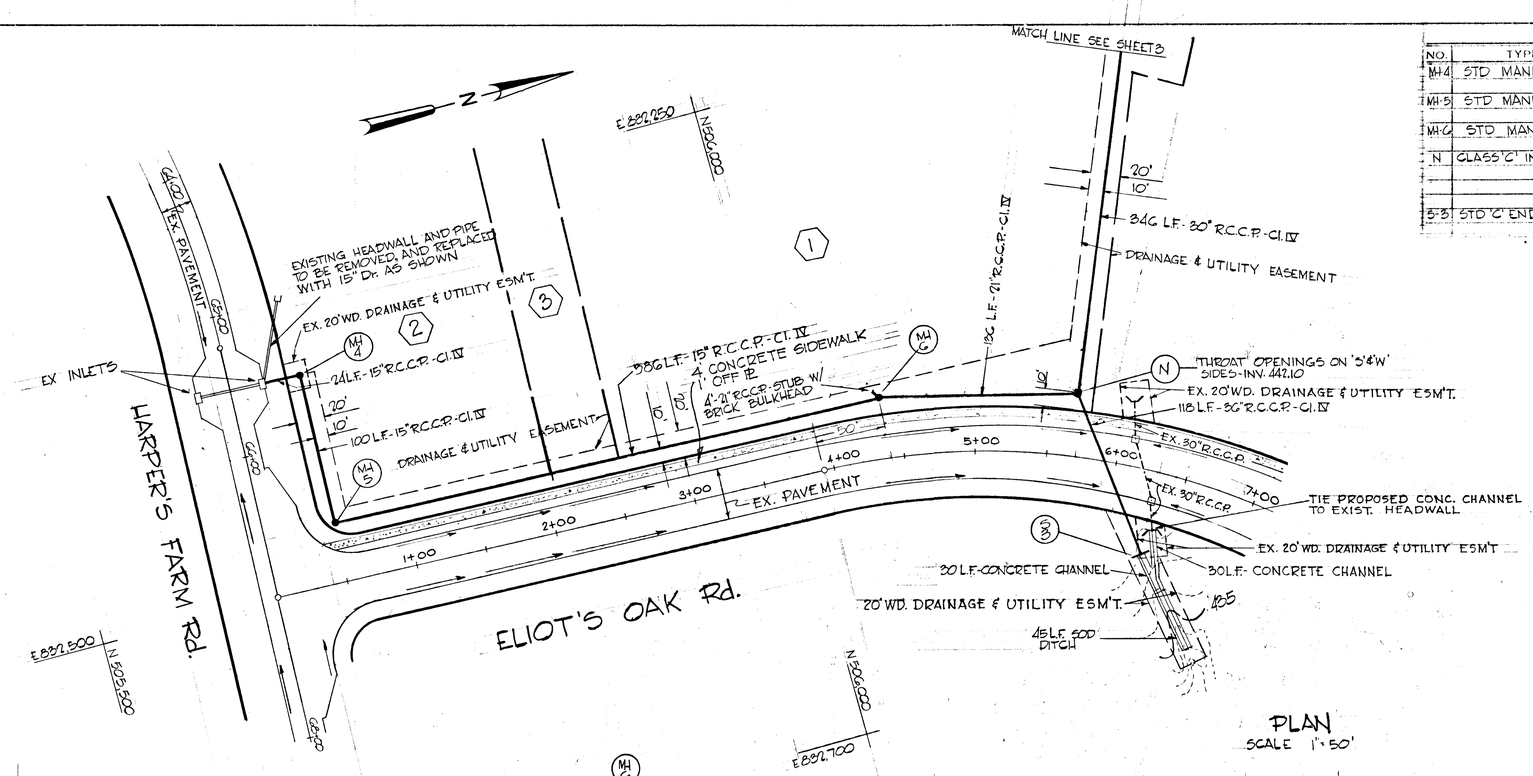
AS BUILT MARCH 5, 1974
J.H.L

#3119 F70-42

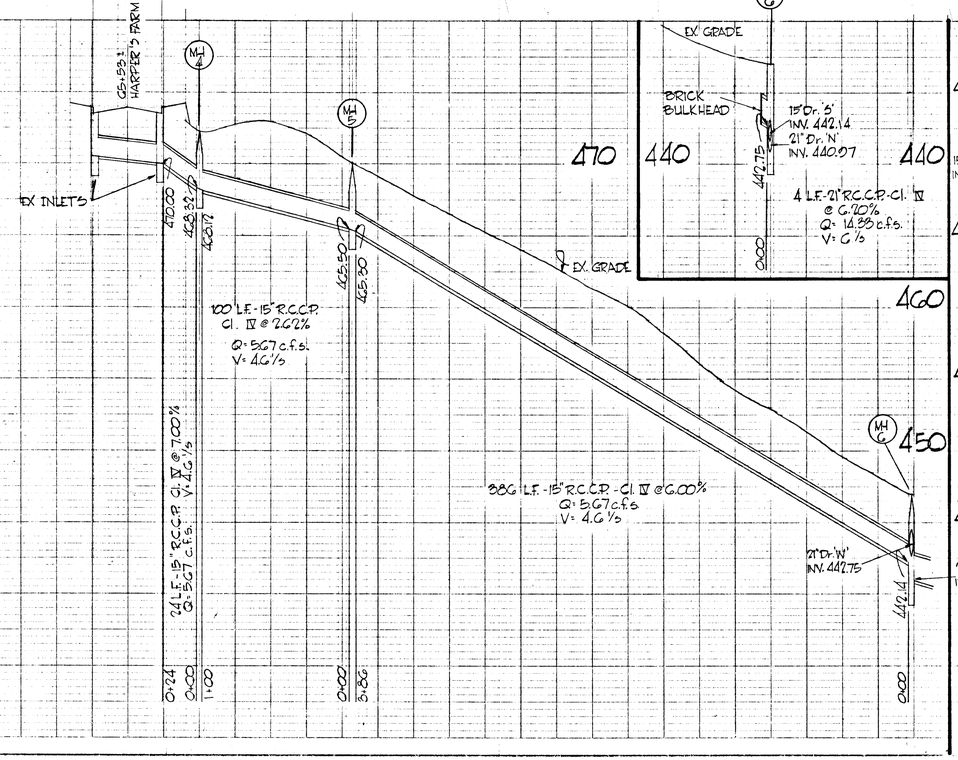
PLATE 1, PLAN PROFILE
KEUFFEL & ESSER CO.
48 7000 ALBANENE TRACING PAPER 29700

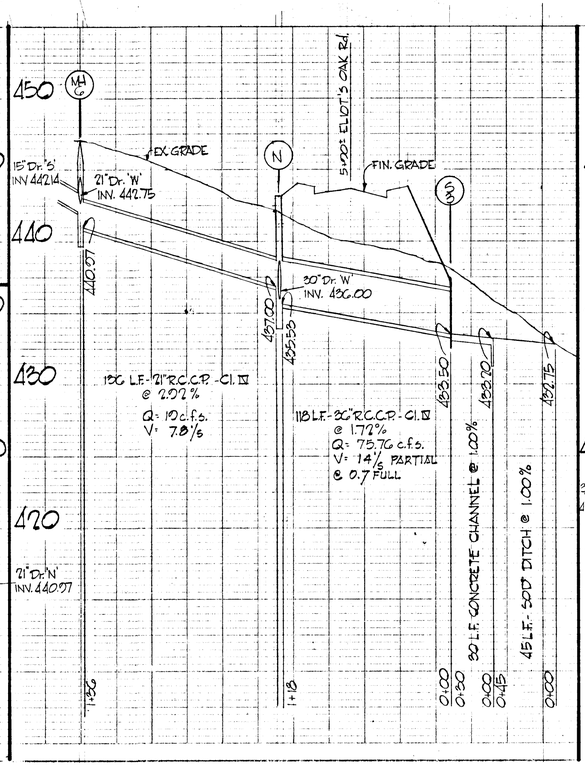
## STORM DRAINAGE STRUCTURE SCHEDULE

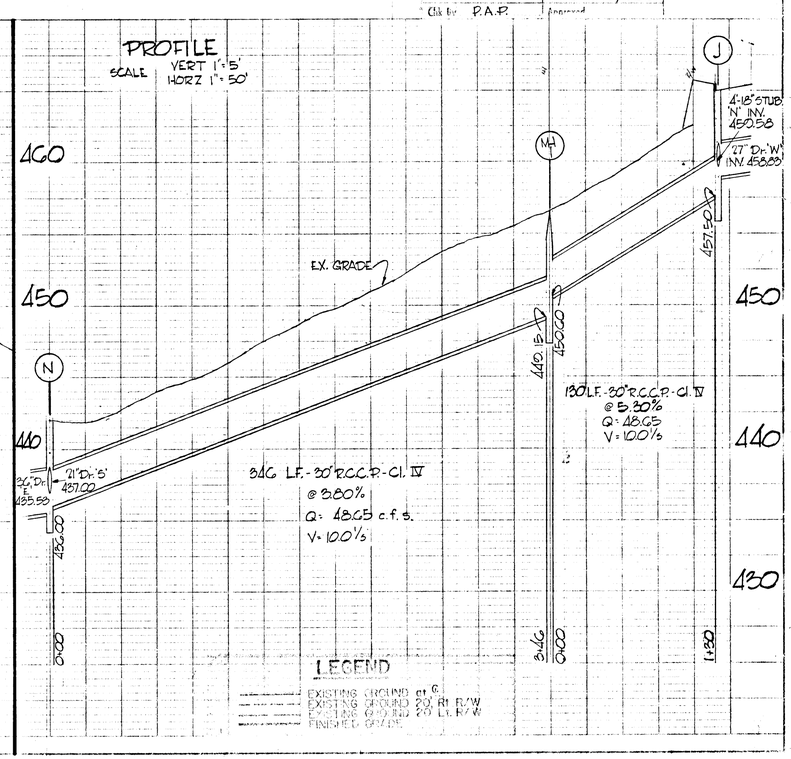
| NO. | TYPE | LOCATION | INV. IN | INV. OUT | T.C.P. ELEV. | REMARKS |
|---|---|---|---|---|---|---|
| MH-4 | STD MANHOLE | SEE PLAN | 468.92 | 468.12 | Top MH 473.25 | Ho.Co. STD. DWG. D-103 Pg. 158 |
| MH-5 | STD MANHOLE | SEE PLAN | 465.30 | 465.30 | Top MH 471.00 | " " |
| MH-C | STD MANHOLE | SEE PLAN | 15" 442.14<br>21" 442.75 | 440.07 | Top MH 447.56 | " " |
| N | CLASS 'C' INLET | SEE PLAN | 21" 457.00<br>30" 456.00 | 455.55 | Top Grate 463.10 | Ho.Co. STD. DWG. D-64-C Pg. 110-C. |
| S-3 | STD 'C' ENDWALL | 6130 60' Rt. ℄ | | 453.50 | | Ho.Co. STD. DWG. D-52 Pg. 107 |




PLAN
SCALE 1" = 50'




STATE OF MARYLAND — RICHARD P. BROWNE — REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR — No. 5238 — REGISTERED

Richard P. Browne
RICHARD P. BROWNE #5238

RICHARD P. BROWNE ASSOCIATES
CONSULTING ENGINEERS - PLANNERS
COLUMBIA, MARYLAND

| Rev Date | Rev No | Revision Description |
|---|---|---|
| 29 JAN '70 | 1 | SIDEWALK WEST SIDE ELIOTS OAK RD. |

COLUMBIA
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OWNED AND DEVELOPED BY
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA
VILLAGE OF HARPER'S CHOICE
SECTION 5 VILLAGE CENTER AREA 2

PROJECT TITLE
DRAINAGE EASEMENT

| | | | |
|---|---|---|---|
| Des By | T.S. | Scale AS NOTED | Dwg. No. 4 of 6 |
| Drn By | F.T. | Date DEC. 10, 1969 | C.C.T. No |
| Chk by | R.A.P. | Approved | |

PLAN
SCALE 1" = 50'
NOTE SHOWN
REVISED
REVISED
REVISED
NO

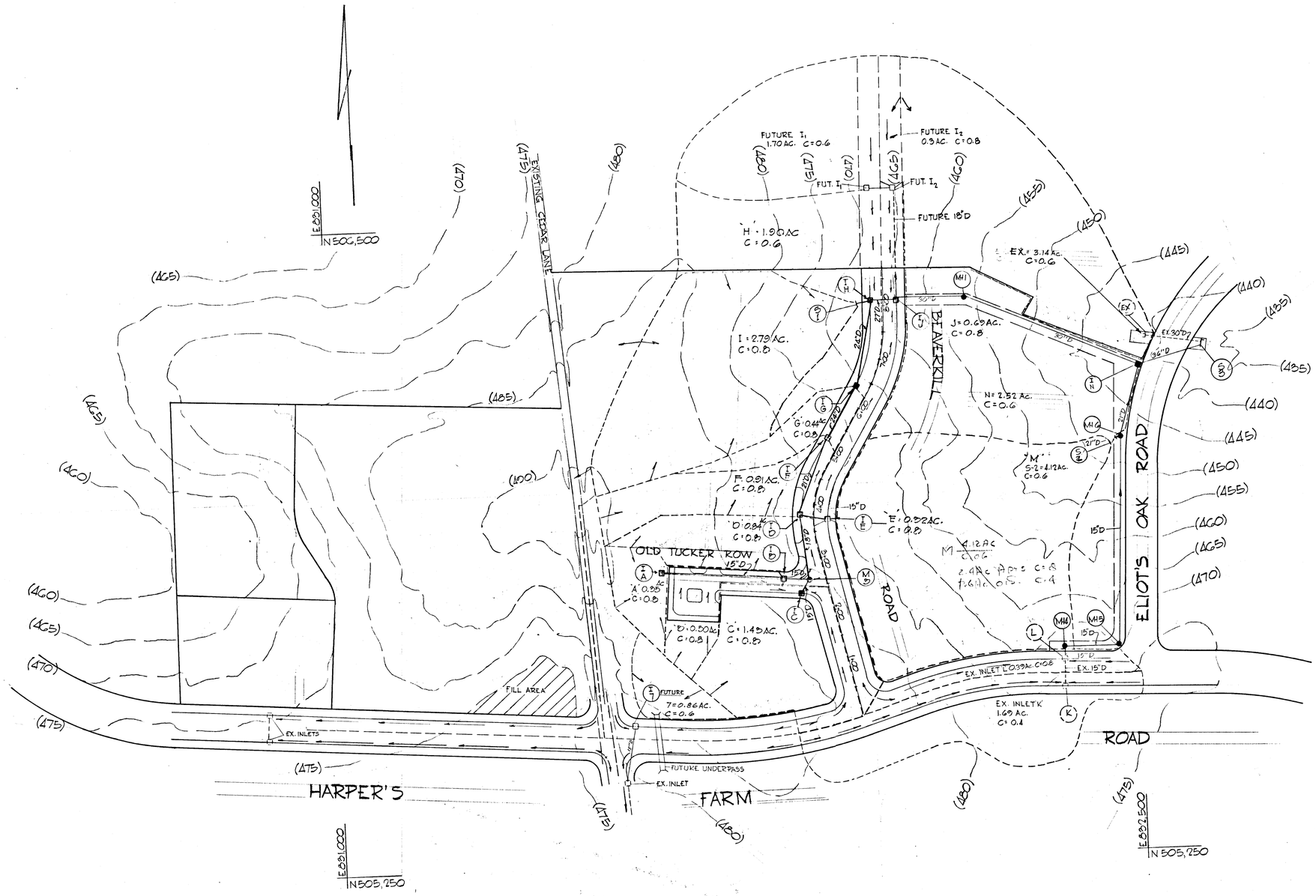
PROFILE
SCALE
NOTE SHOWN
REVISED
REVISED
REVISED
NO

#11

PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

48 7000 ALBANY® TRACING CLOTH

#3119 F 70-42




RICHARD P. BROWNE #5238

RICHARD P. BROWNE ASSOCIATES
CONSULTING ENGINEERS · PLANNERS
COLUMBIA, MARYLAND

| Rev Date | Rev No | Revision Description |
|---|---|---|
| | | |
| | | |
| | | |

# COLUMBIA

5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

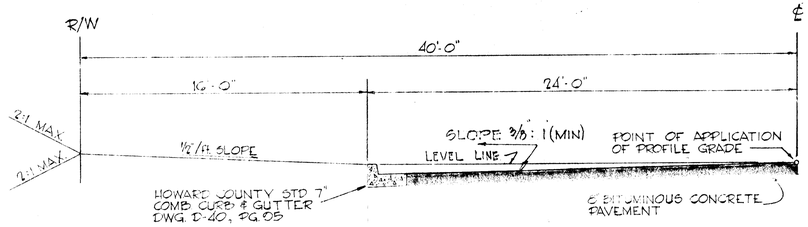
PROJECT AREA
VILLAGE OF HARPER'S CHOICE
SECTION 5 VILLAGE CENTER AREA 2

PROJECT TITLE
DRAINAGE AREA MAP

| | | |
|---|---|---|
| Des By T.S. | Scale 1" = 100' | Dwg No 5 of 6 |
| Drn By F.T. & J.B. | Date DEC. 10, 1969 | C.C.F. No |
| Chk By P.A.F. | Approved | |

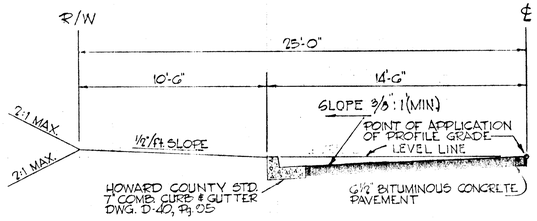
#11

#3119 F 70-42



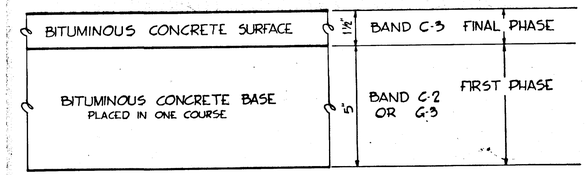

## 80' R/W TYPICAL HALF-SECTION

SCALE 1/4"=1'




## 50' R/W TYPICAL HALF-SECTION

SCALE 1/4"=1'

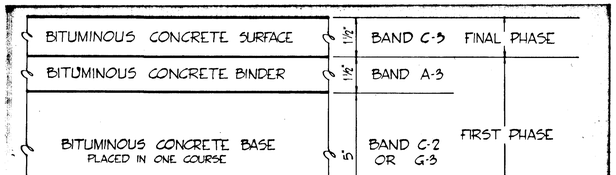



| | |
|---|---|
| CLEARING AND GRADING | ARTICLE C-1 |
| SUBGRADE | ARTICLE C-2 |
| BASE COURSE | ARTICLE C-31 or C-33 |
| SURFACE COURSE | ARTICLE C-31 |

NOTE:
PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DWG. D-113 Pg 165

## 6½" PAVEMENT DETAIL

NO SCALE

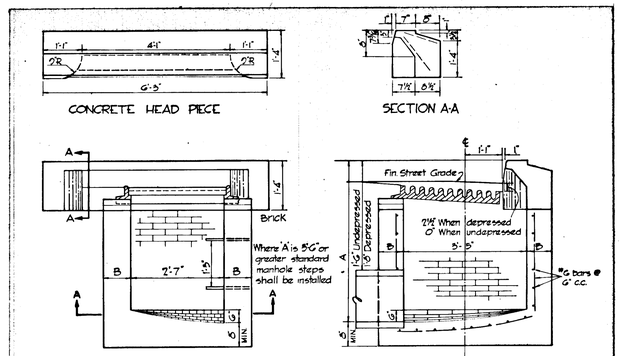



| | |
|---|---|
| CLEARING AND GRADING | ARTICLE C-1 |
| SUBGRADE | ARTICLE C-2 |
| BASE COURSE | ARTICLE C-31 or C-33 |
| BINDER COURSE | ARTICLE C-31 |
| SURFACE COURSE | ARTICLE C-31 |

NOTE:
PAVEMENT TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DWG. D-113 Pg 165

## 8" PAVEMENT DETAIL

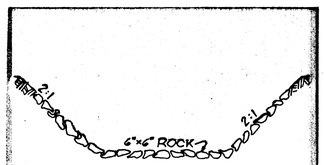
NO SCALE




1. INLETS MAY BE CONSTRUCTED OF BRICK OR REINFORCED CONCRETE. SIZE, TYPE & DIRECTION OF INLET CONNECTION WILL VARY TO SUIT CONDITIONS.
2. THE INVERT SHALL BE BRICK OR CLASS "A" CONCRETE.
3. B'-0" WHERE A IS 7' OR LESS
4. B'-12" WHERE A IS 7' TO 11'
5. TOP 4'-0" OF WALLS SHALL BE MASONRY. ADDITIONAL BRICK SHALL BE USED TO BRING THE GRATE TO GRADE IF REQUIRED.
6. REINFORCEMENT REQUIRED ON OUTSIDE AS WELL AS INSIDE OF WALLS WHEN A IS GREATER THAN 7' SPACING SAME AS INSIDE WALL.
7. PLACE ½" EXPANSION MATERIAL OF SAME TYPE APPROVED FOR PAVEMENT, BETWEEN THE FRAME AND ABUTTING RIGID PAVEMENT AND BETWEEN ENDS OF INLET CURB AND NORMAL CONCRETE CURB.

## MODIFIED 'S' COMBINATION INLET

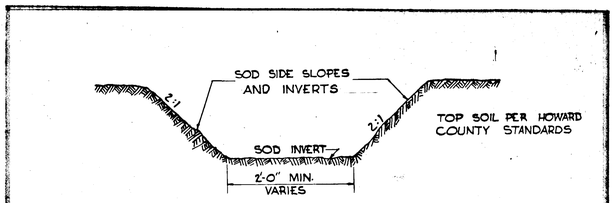
NO SCALE




NOTE:
ALL CONCRETE OUTFALL CHANNELS TO HAVE MIN. 10' RIP RAP SECTION SHALL CONFORM TO CONCRETE CHANNEL SECTION.

## RIP RAP CHANNEL

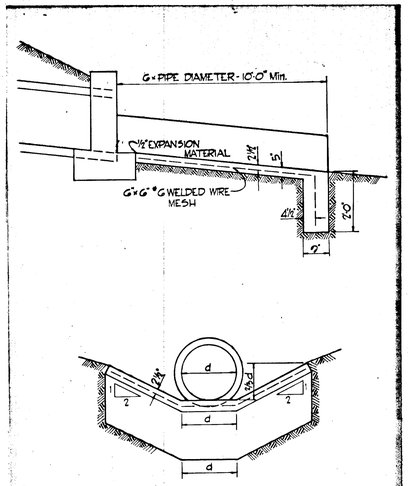
NO SCALE




NOTE: ALL EXISTING DITCHES APPROACHING PROPOSED ENDWALLS SHALL BE TRIMMED IN ACCORDANCE WITH ARTICLE C-6 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.

## TYPICAL DRAINAGE DITCH

NO SCALE




## TYPICAL CONCRETE CHANNEL AND 'CUTOFF WALL

NO SCALE

Richard P. Browne
RICHARD P. BROWNE #5238

**RICHARD P. BROWNE ASSOCIATES**
CONSULTING ENGINEERS - PLANNERS
COLUMBIA, MARYLAND

| Rev Date | Rev No | Revision Description |
|---|---|---|
| 27 JAN 70 | 1 | ADD 2 & 3 MOD. TO PAVING SECTION |

**COLUMBIA**
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OWNER AND DEVELOPER
**HOWARD RESEARCH AND DEVELOPMENT CORP.**
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA
VILLAGE OF HARPER'S CHOICE
SECTION 5 VILLAGE CENTER AREA 2

PROJECT TITLE
DETAILS

| | | |
|---|---|---|
| Des By L.S. | Scale AS NOTED | Dwg No G-2 of G |
| Drn By EVERYONE | Date DEC. 10, 1969 | C.C.F. No |
| Chk By | Approved | |

#11

## STORM DRAINAGE STRUCTURE SCHEDULE

| NO. | TYPE | LOCATION | INV. IN | INV. OUT | T.C. P.ELEV. | REMARKS |
|---|---|---|---|---|---|---|
| C | COMB. '5' INLET DOUBLE GRATE | 0+50.56 Lt. ℄ | | 474.03 | | Ho.Co. STD. DWG. D-99 Pg. 154 |
| M.H.5 | STD. MANHOLE | 2+80 24" Lt. ℄ | 15" 473.31<br>15" 474.00 | 473.06 | 477.96 | Ho. Co STD. DWG. D-103 Pg. 158 |
| D | COMB. '5' INLET DOUBLE GRATE | 3+83 Lt. ℄ | 15" -471.76<br>18"-471.56 | 471.26 | 476.95 | Ho. Co STD. DWG. D-99 Pg. 154 |
| E | COMB. '5' INLET SINGLE GRATE | 3+75 Rt. ℄ | | 472.18 | 477.06 | SEE DETAIL SHEET |
| F | COMB. '5' INLET DOUBLE GRATE | 5+75 Lt. ℄ | 467.75 | 467.50 | 473.05 | Ho.Co. STD. DWG. D-99 Pg. 154 |
| G | COMB. '5' INLET SINGLE GRATE | 6+37 Lt. ℄ | 464.40 | 464.20 | 470.00 | SEE DETAIL SHEET |
| H | COMB. '5' INLET DOUBLE GRATE | 8+15.15 Lt. ℄ | 450.50<br>450.75 | 450.25 | 465.47 | Ho.Co. STD. DWG. D-99 Pg. 154 |
| J | COMB. '5' INLET SINGLE GRATE | 8+15.15 Rt. ℄ | 18"- 450.58<br>17"-458.83 | 457.50 | 465.47 | SEE DETAIL SHEET |
| M.H. | STD. MANHOLE | 8+15.15 - 156.85' Rt. ℄ | 450.60 | 440.15 | | Ho. Co. STD. DWG. D-103 Pg. 158 |

NOTE:
CONTRACTOR TO GRADE AT TURNAROUND SO AS NOT TO TRAP WATER

NOTE
SEE DETAIL 'A' FOR CURB DATA

℄ CURVE DATA
Δ = 20°17'00"
R = 340.00'
T = 61.00'

℄ CURVE DATA
Δ = 44°09'40"
R = 185.00'
T = 75.01'

AS BUILT ELAVATION CHECK
AUG 13, 1973. AS BUILT PRINT BY
WALTER PARK

PLAN
SCALE 1"=50'

DETAIL 'A'
SCALE: 1" = 30'

PROFILE
SCALE: VERT. 1"=5'
HORZ 1"=50'

AS BUILT MARCH 5, 1974
J.H.L

RICHARD P. BROWNE "5738"

RICHARD P. BROWNE ASSOCIATES
CONSULTING ENGINEERS · PLANNERS
COLUMBIA, MARYLAND

| Rev Date | Rev No. | Revision Description |
|---|---|---|
| 29 JAN 74 | 1 | ADD CONC. SIDEWALK BOTH SIDES BEAVERKILL RD |
| 2-26-70 | 2 | REMOVE SERVICE ROAD 'B' |

COLUMBIA
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

PROJECT TITLE
VILLAGE OF HARPER'S CHOICE
SECTION 5 VILLAGE CENTER AREA 2

PROJECT TITLE
PLAN & PROFILE
BEAVERKILL ROAD

| | | | |
|---|---|---|---|
| Des. By T.S. | Scale AS NOTED | Dwg. No. 20 of 6 | |
| Dra. By F.T. | Date DEC. 10, 1969 | C.C.F. No. | |
| Chk. By P.A.P. | Approved | | |

PLAN
PROFILE
SURVEYED
DRAWN
NOTE BOOK
NO.
ALIGNMENT CHECKED
R/W MONUMENTS
LOCATION OF UTILITIES

PLATE 1, PLAN-PROFILE
KIDDER & ASSOC. CO.
46 7008 ALBANY

F70-42 # 3119