

INDEX OF SHEETS

| DRAWING NO. | DESCRIPTION |
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| 1. | TITLE SHEET |
| 2. | PLAN |
| 3. | PLAN |
| 4. | PROFILES |
| 5. | TYPICAL SECTIONS & DETAILS |
| 6. | SEDIMENT CONTROL PLAN |
| 7. | SEDIMENT CONTROL PLAN |

ABBREVIATIONS

| | | | |
|----------|--|-------------|----------------------------------|
| AND | LF | LINEAR FEET | |
| BASELINE | MB | MAILBOX | |
| BM | BENCHMARK | MH | MANHOLE |
| C | CENTERLINE | NO. | NUMBER |
| C&P | CHESAPEAKE & POTOMAC TELEPHONE COMPANY | R | PROPERTY LINE |
| CMP | CORRUGATED MTL. PIPE | R | REMOVE |
| G | GAS LINE | RCCP | REINFORCED CONCRETE CULVERT PIPE |
| GV | GAS VALVE | W | WATER LINE |
| G&E | GAS & ELECTRIC CO. | WM | WATER METER |
| LP | LIGHT POLE | WV | WATER VALVE |
| DD | DIVERSION DIKE | SBD | STRAW BALE DIKE |
| FL | FLOWLINE | SOS | STONE OUTLET STRUCTURE |

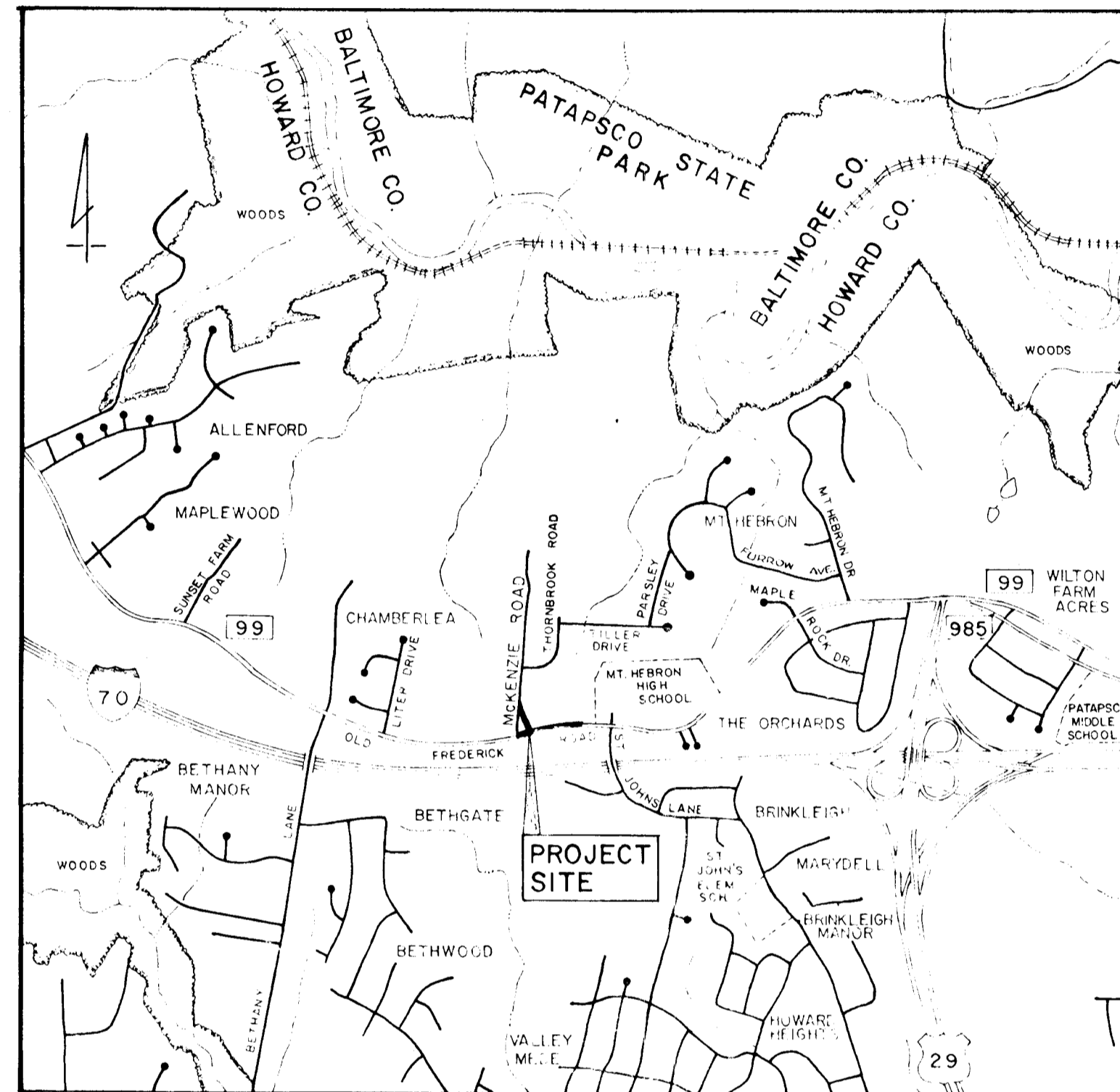
LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|----------|------------------------------------|----------|
| | APPROXIMATE GRADING LIMITS | |
| | BENCHMARK | |
| | BITUMINOUS CONCRETE PAVEMENT | |
| | BITUMINOUS CONCRETE OVERLAY | |
| | CENTERLINE OF CONSTRUCTION | |
| | CHESAPEAKE & POTOMAC TEL. CO. POLE | |
| | CONCRETE GUTTER | |
| 455.6 | CONTOUR | 455.6 |
| | CURB & GUTTER | |
| | EDGE OF ROAD | |
| | EMBANKMENT | |
| | ENDWALL | |
| | FENCE | |
| | FIRE HYDRANT | |
| 6" G | GAS LINE | |
| GV | GAS VALVE | |
| T | GAS & ELECTRIC POLE | |
| | INLET | |
| | JUNCTION BOX | |
| T LP | LIGHT POLE | |
| MB | MAILBOX | MB |
| MH | MANHOLE | MH |
| | PROPERTY LINE | |
| | REMOVAL OF EXISTING PAVEMENT | |
| | RIGHT OF WAY LINE | |
| | SHRUB | |
| | SIGN | |
| | SOD DITCH | |
| | STABILIZED SHOULDER | |
| | STORM DRAIN | |
| | TREE | |
| 6" W | WATER LINE | |
| M | WATER METER | |
| WV | WATER VALVE | |
| | STAIRWAY | |
| OIP | IRON PIPE | |
| | DIVERSION DIKE | |
| | STRAW BALE DIKE | |
| | STONE OUTLET STRUCTURE | |

HOWARD COUNTY, MARYLAND
PROPOSED COUNTY HIGHWAY

McKENZIE ROAD - MD. ROUTE 99 INTERSECTION

CAPITAL PROJECT NO. T-8-7009



LOCATION MAP
SCALE: 1" = 2,000'

| | |
|---|--|
| By the County: "I certify that all construction will be done according to this plan and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary." Signature of Director of Public Works _____ 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 of Engineer <i>Howard S.C.D.</i> _____ Date <i>1/14/82</i> _____ | |
| Reviewed for Howard S.C.D. and meets Technical Requirements Signature _____ Date _____ U.S. Soil Conservation Service | THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT Approved _____ Date _____ Howard S.C.D. |

PREPARED BY
THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND
Tel. No. 363-0150

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE

CHIEF - BUREAU OF ENGINEERING DATE

CHIEF - ROADS, BRIDGES AND STORM DRAINAGE DIVISION DATE

PROJECT NO. T-8-7009

McKENZIE ROAD - MD. ROUTE 99 INTERSECTION

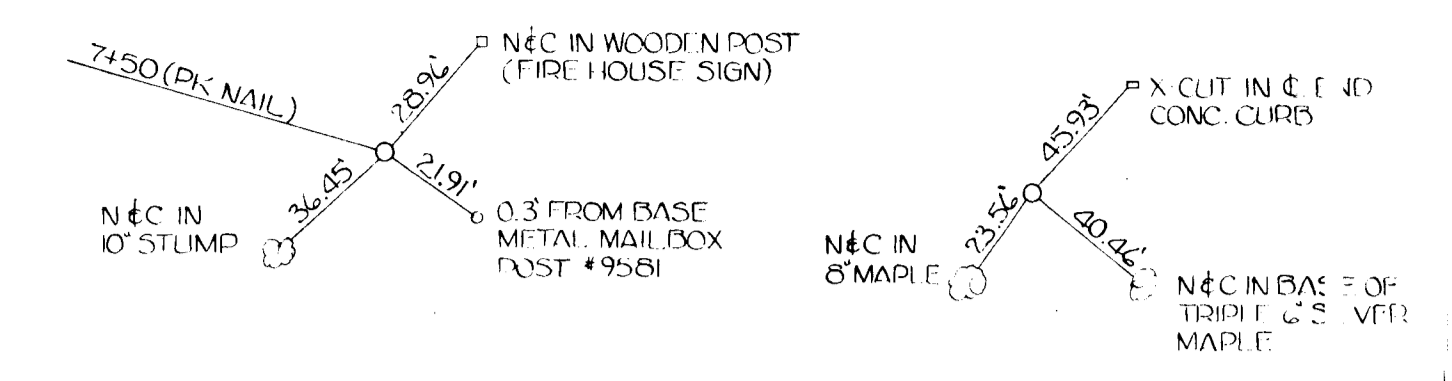
TITLE SHEET

DRAWING NO. 1 OF 7

DATE PREPARED: JAN. 1981

C332A201

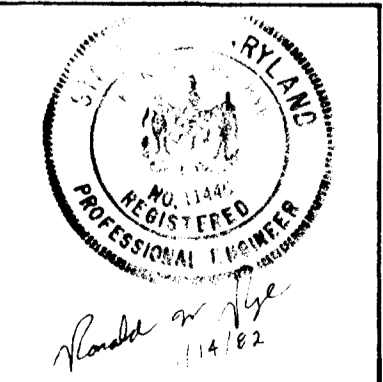
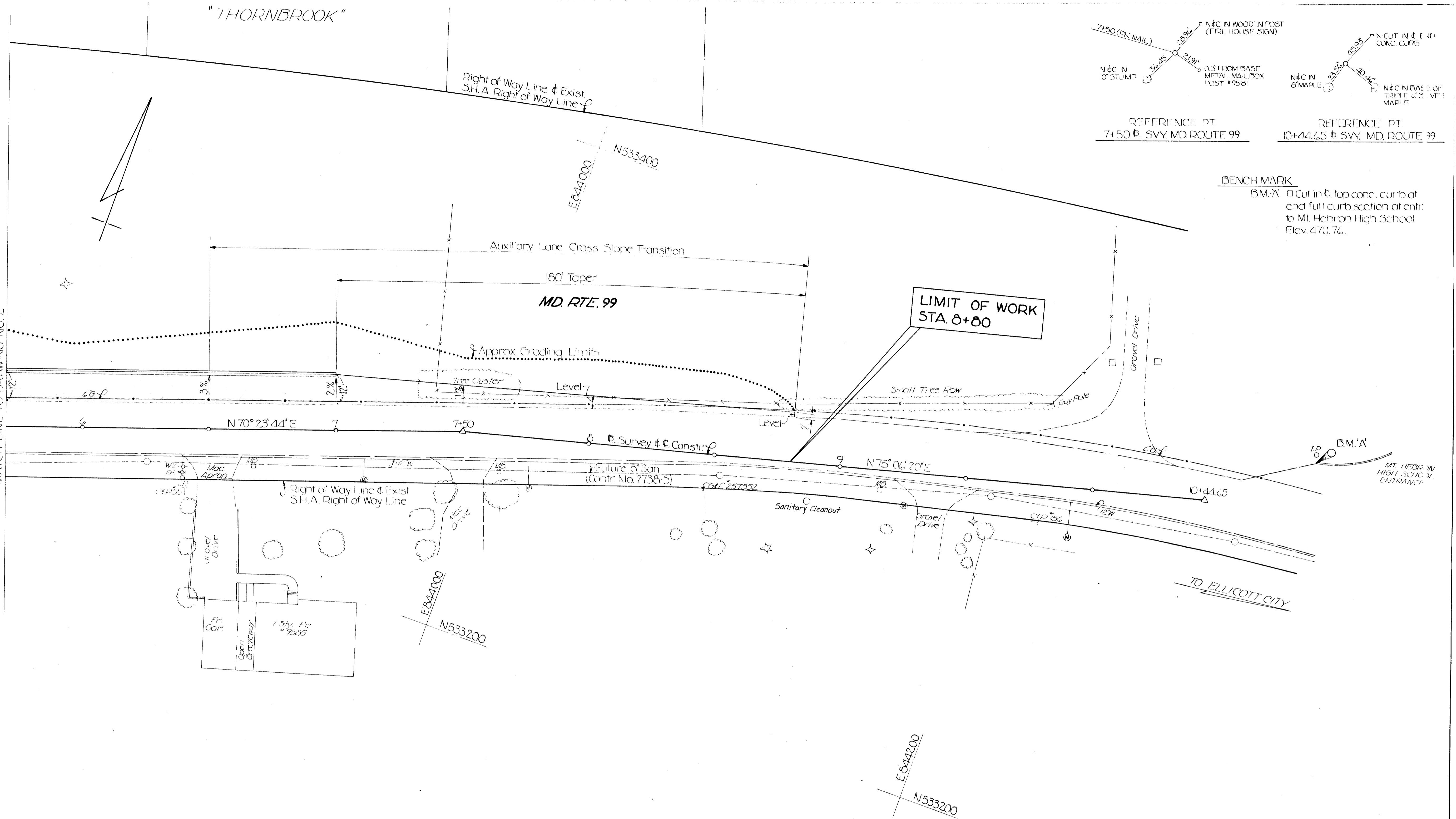
"THORNBROOK"



REFERENCE PT. 7+50 B. SVY. MD. ROUTE 99
 REFERENCE PT. 10+44.65 B. SVY. MD. ROUTE 99

BENCH MARK
 B.M. 'A' □ Cut in & top conc. curb at end full curb section at entry to Mt. Hebron High School Elev. 470.76.

MATCH LINE TO DRAWING NO. 2



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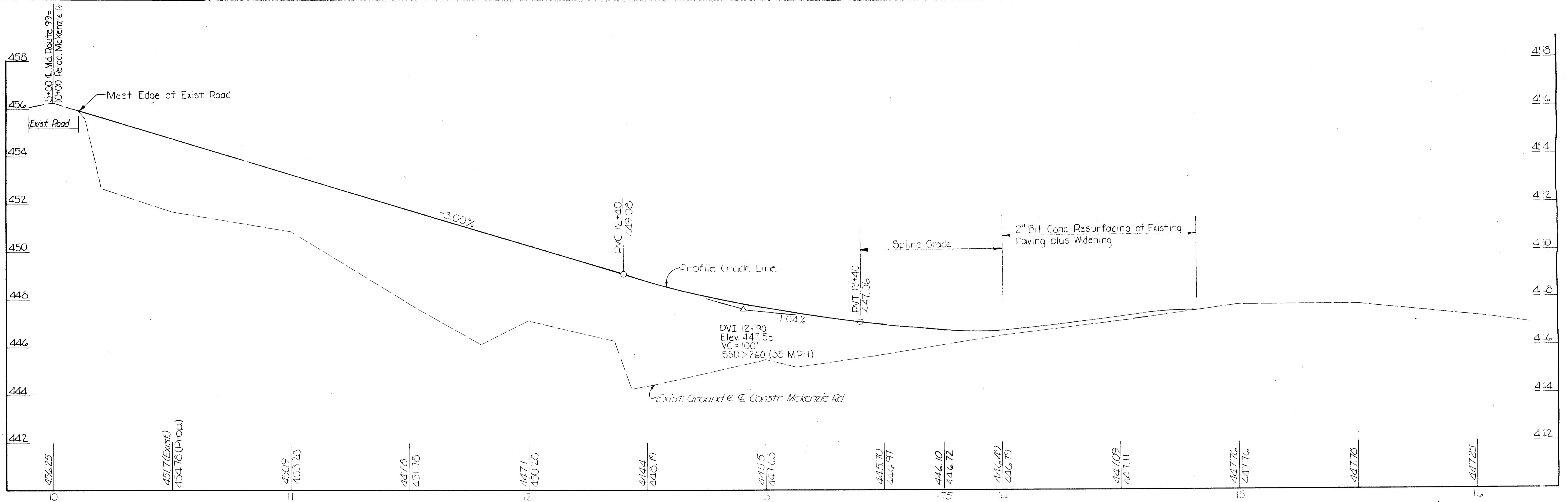
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE: 2/14/02
 CHIEF - BUREAU OF ENGINEERING DATE: 2/14/02
 CHIEF - ROADS, BRIDGES AND STORM DRAINAGE DIVISION DATE: 2/14/02

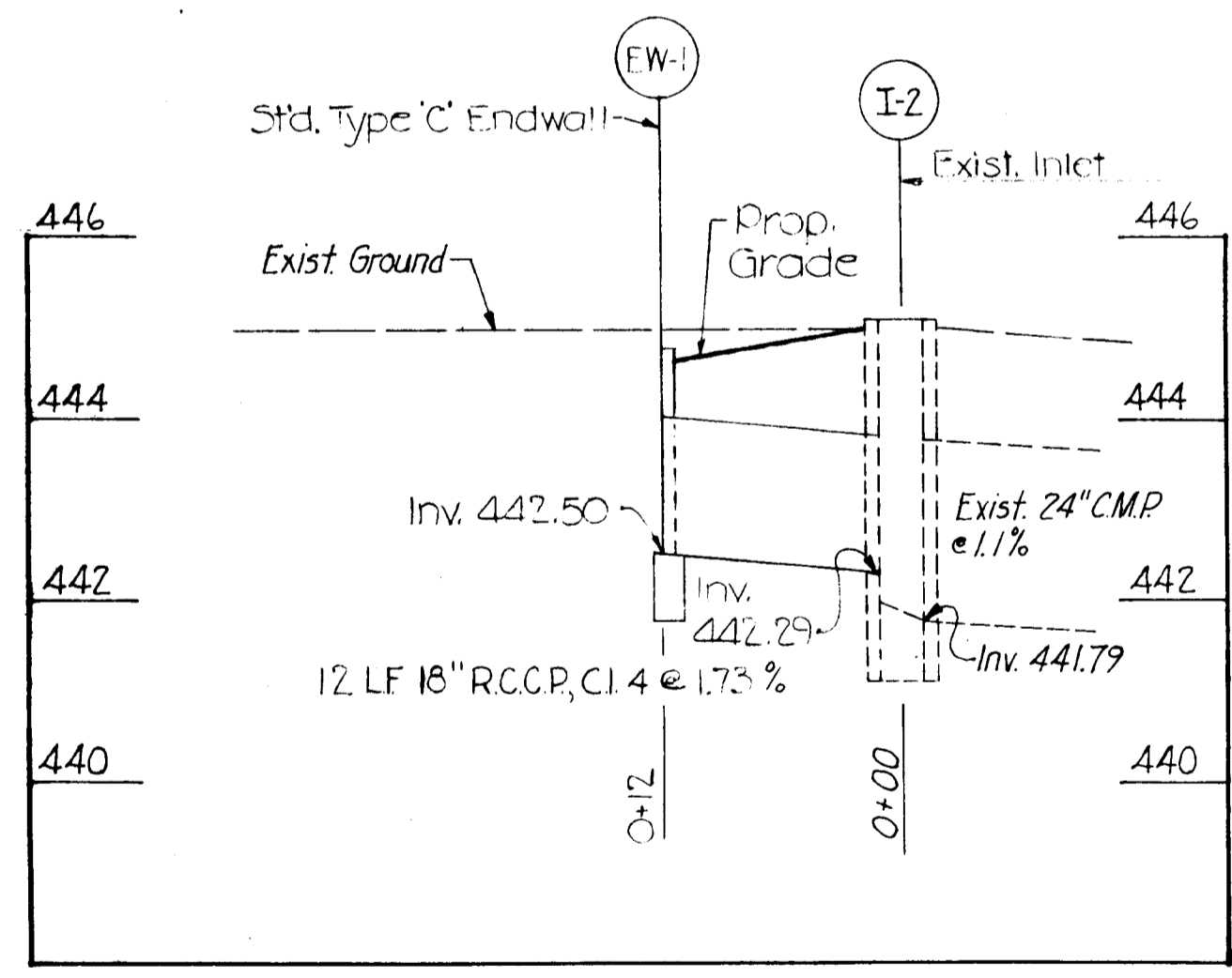
PROJECT NO. T-8-7009

McKENZIE ROAD-MD. ROUTE 99 INTERSECTION
 PLAN

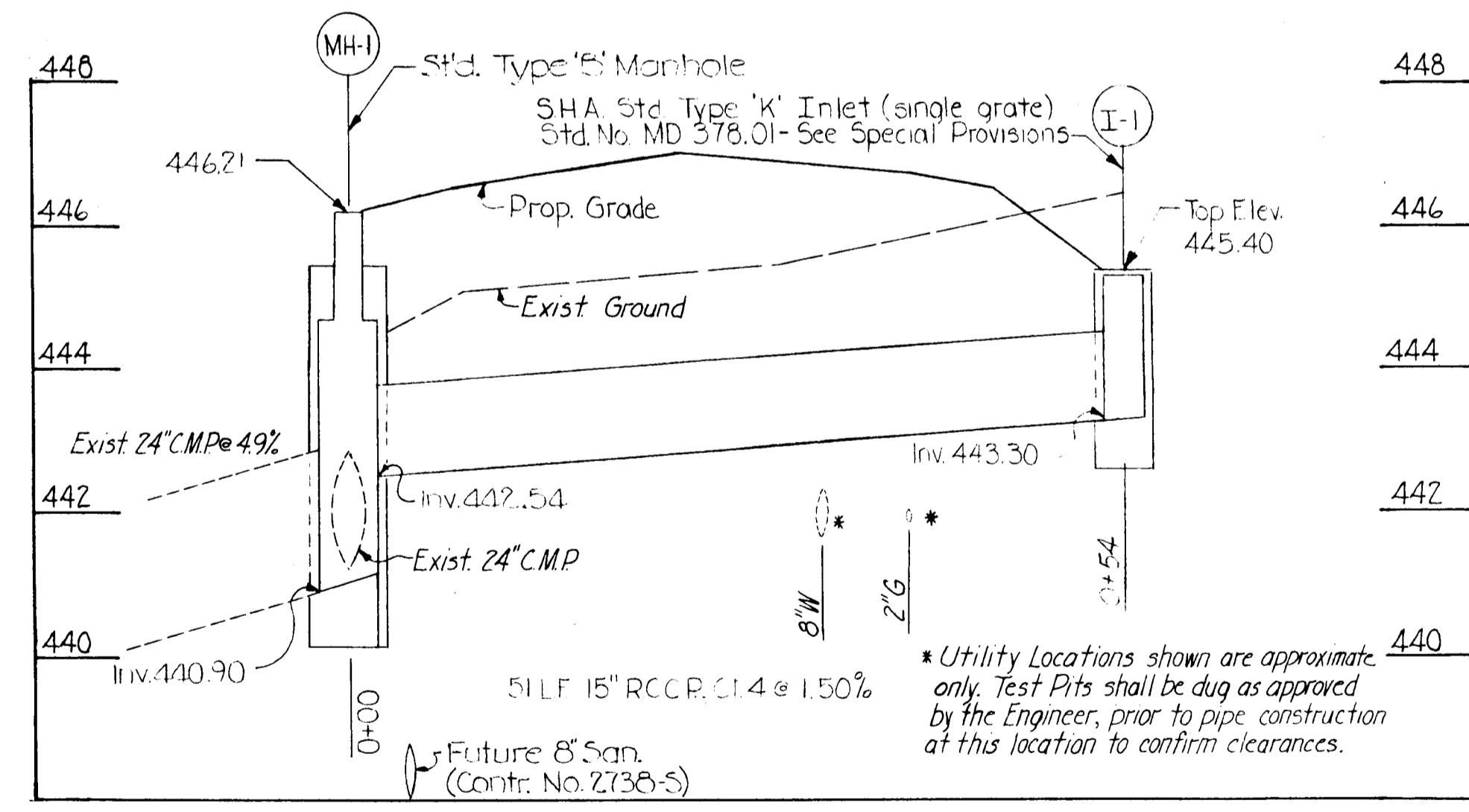
DRAWING NO. 3 OF 7
 SCALE 1" = 20'



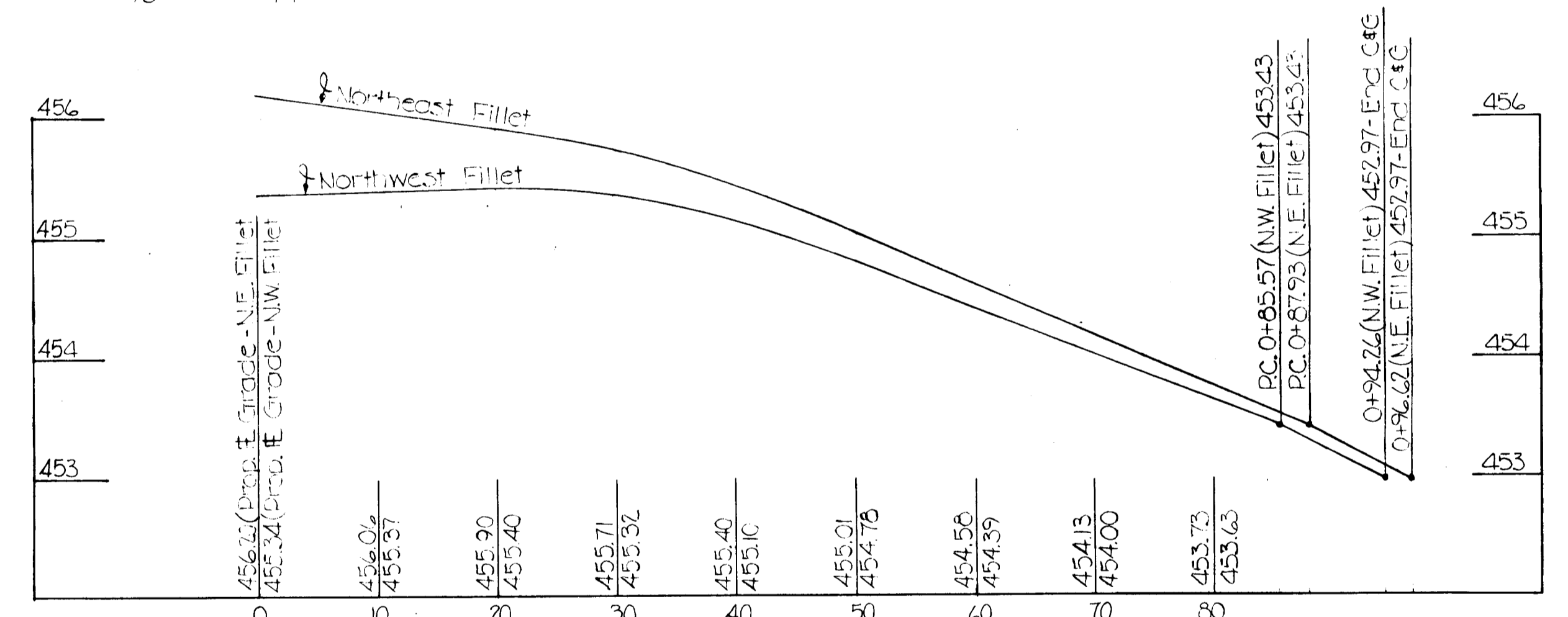
RELOCATED MCKENZIE ROAD
SCALE: 1" = 20' HORIZ., 1" = 2' VERT.



18" R.C.C.P. LT. STA. 12+65± MCKENZIE ROAD
SCALE: 1" = 10' HORIZ., 1" = 2' VERT.



15" R.C.C.P. AT STA. 13+46± MCKENZIE ROAD
SCALE: 1" = 10' HORIZ., 1" = 2' VERT.



FILLETS AT MD. ROUTE 99-RELOCATED MCKENZIE ROAD INTERSECTION
SCALE: 1" = 10' HORIZ., 1" = 1' VERT.

* Utility Locations shown are approximate only. Test Pits shall be dug as approved by the Engineer, prior to pipe construction at this location to confirm clearances.



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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE: 2/4/82
CHIEF - BUREAU OF ENGINEERING DATE: 2/14/82

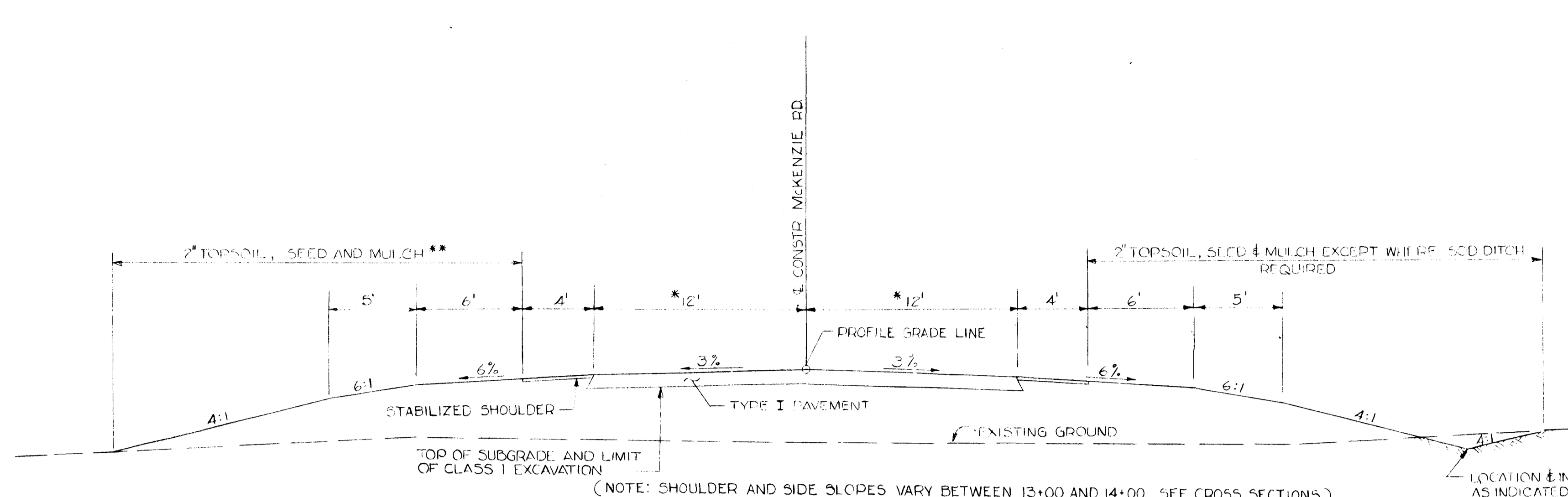
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION DATE: 2/4/82

PROJECT NO. T-8-7009

MCKENZIE ROAD-MD. ROUTE 99 INTERSECTION
PROFILES

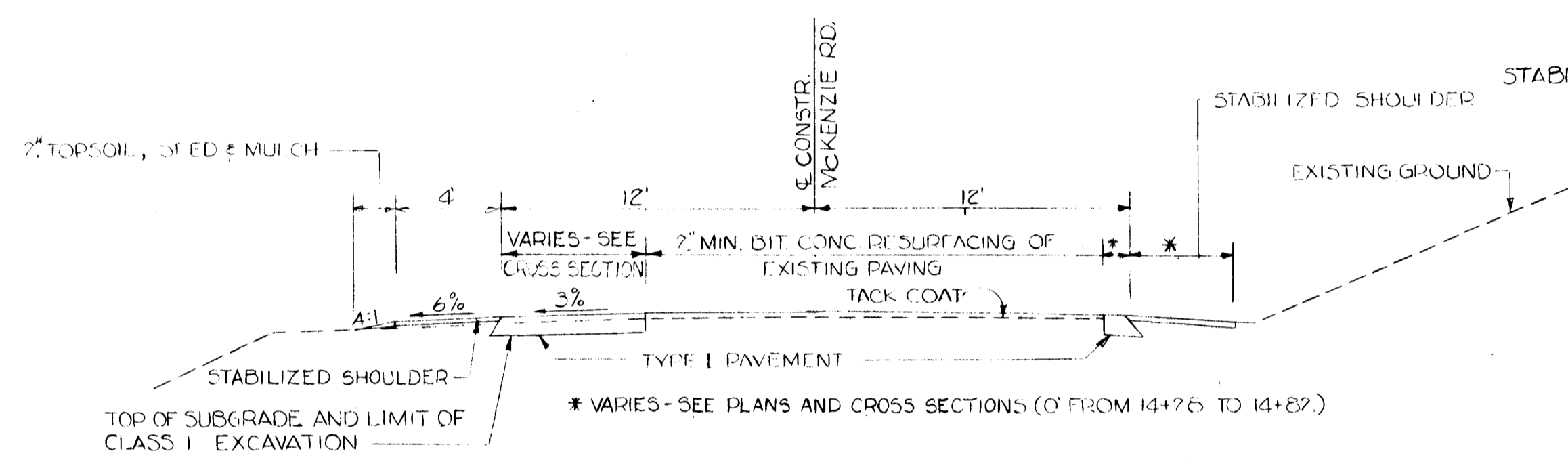
DRAWING NO. 4 OF 7

SCALE AS SHOWN

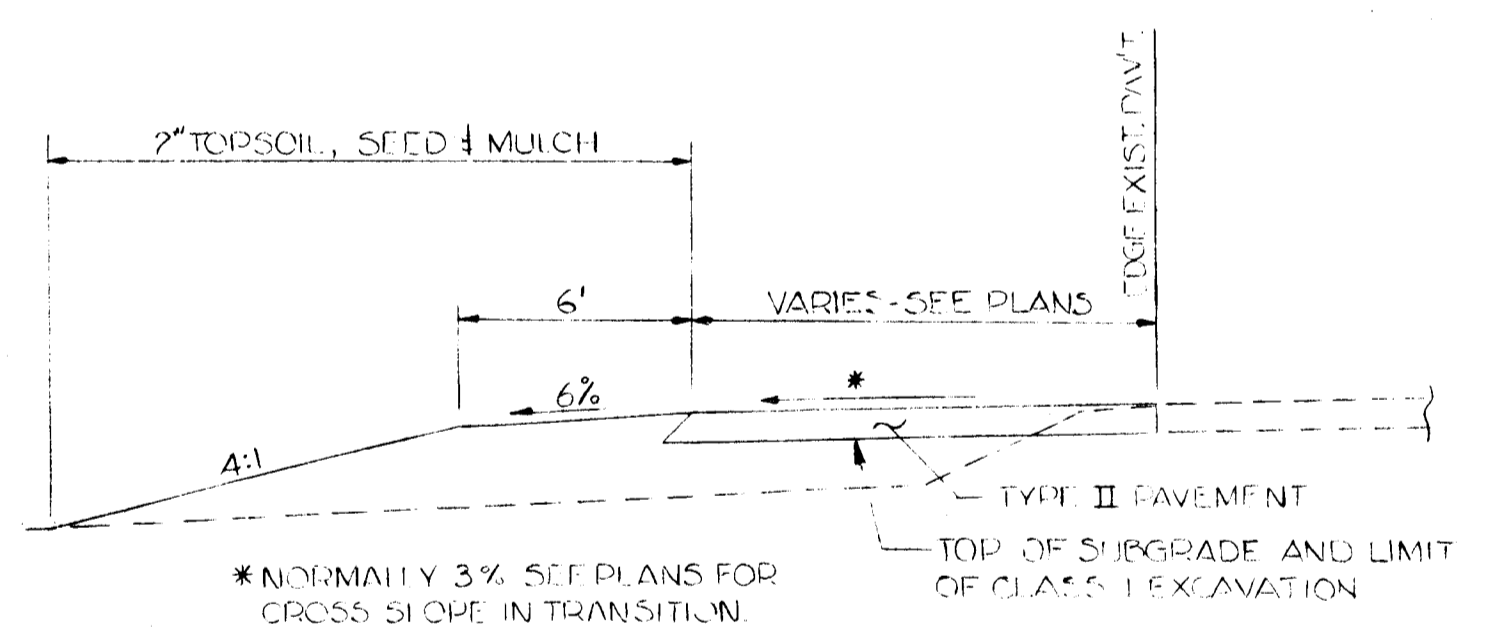


(NOTE: SHOULDER AND SIDE SLOPES VARY BETWEEN 13+00 AND 14+00. SEE CROSS SECTIONS.)
 * VARIES BETWEEN 10+57.63 AND 11+30. SEE PLAN
 ** 2" TOPSOIL AND MULCH BETWEEN 13+50 AND 13+90

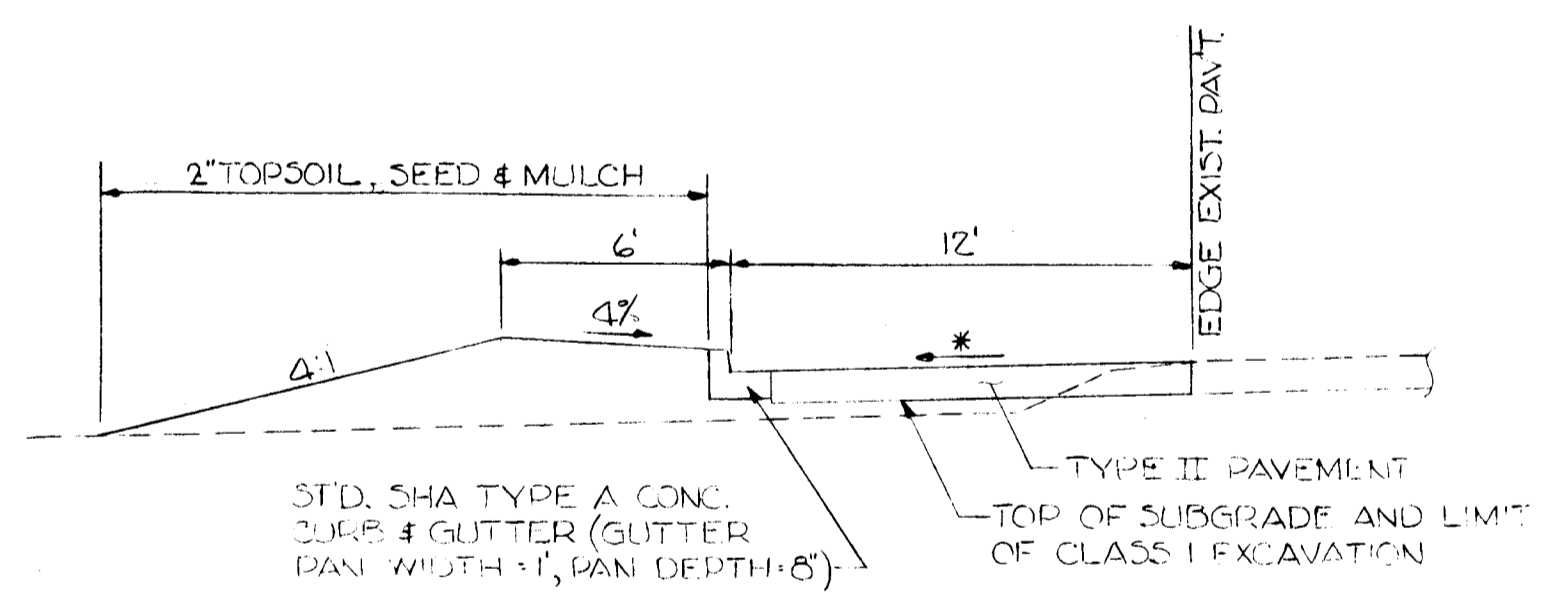
TYPICAL SECTION - MCKENZIE ROAD
 STA. 10+57.63 TO STA. 14+00



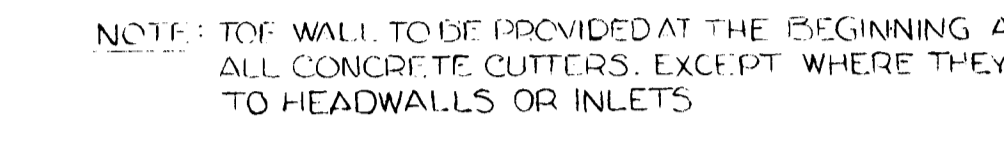
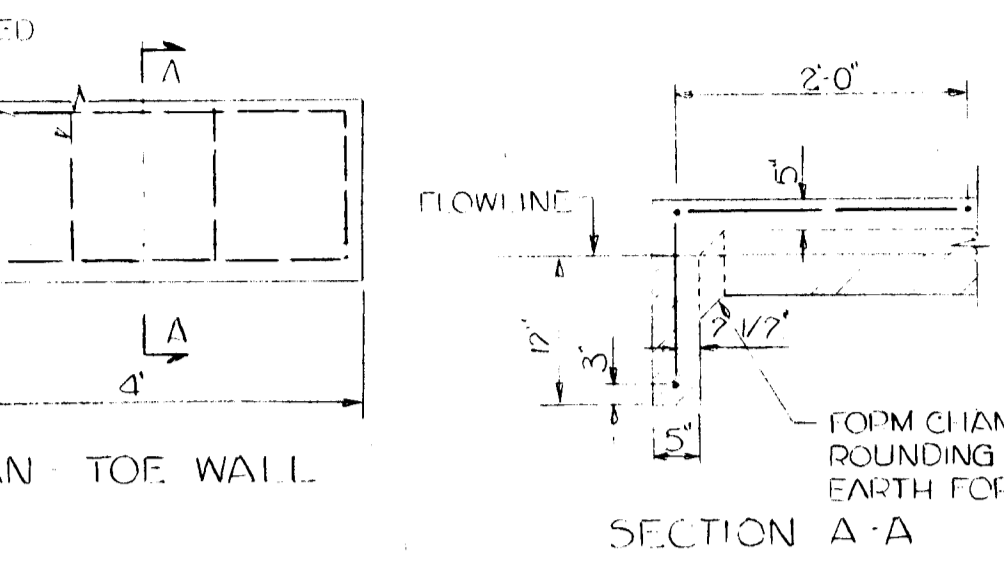
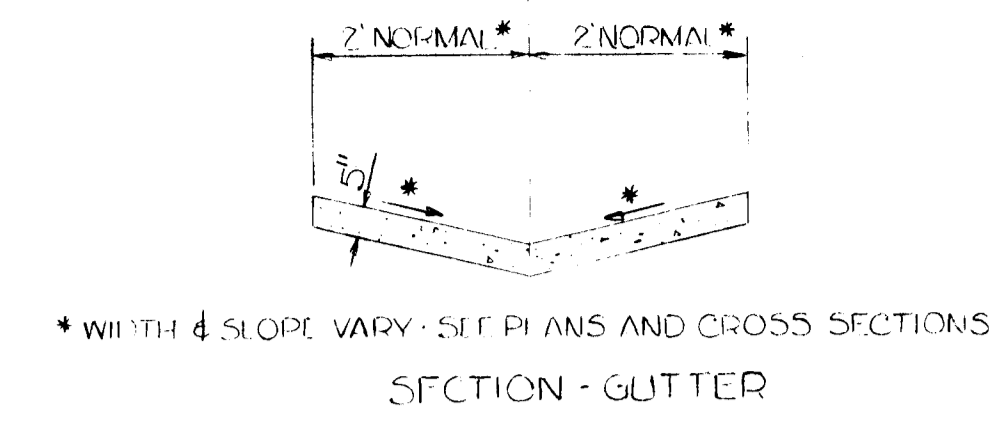
TYPICAL SECTION - MCKENZIE ROAD
 STA. 14+00 TO STA. 14+82



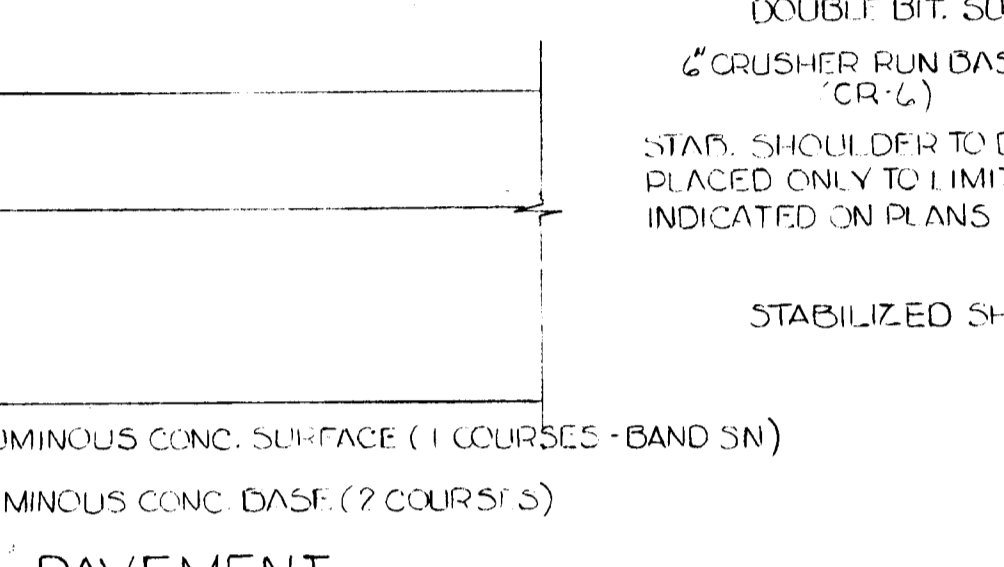
TYPICAL SECTION - MD ROUTE 99 WIDENING
 STA. 3+53± TO STA. 4+39.57
 STA. 7+00 TO STA. 8+80



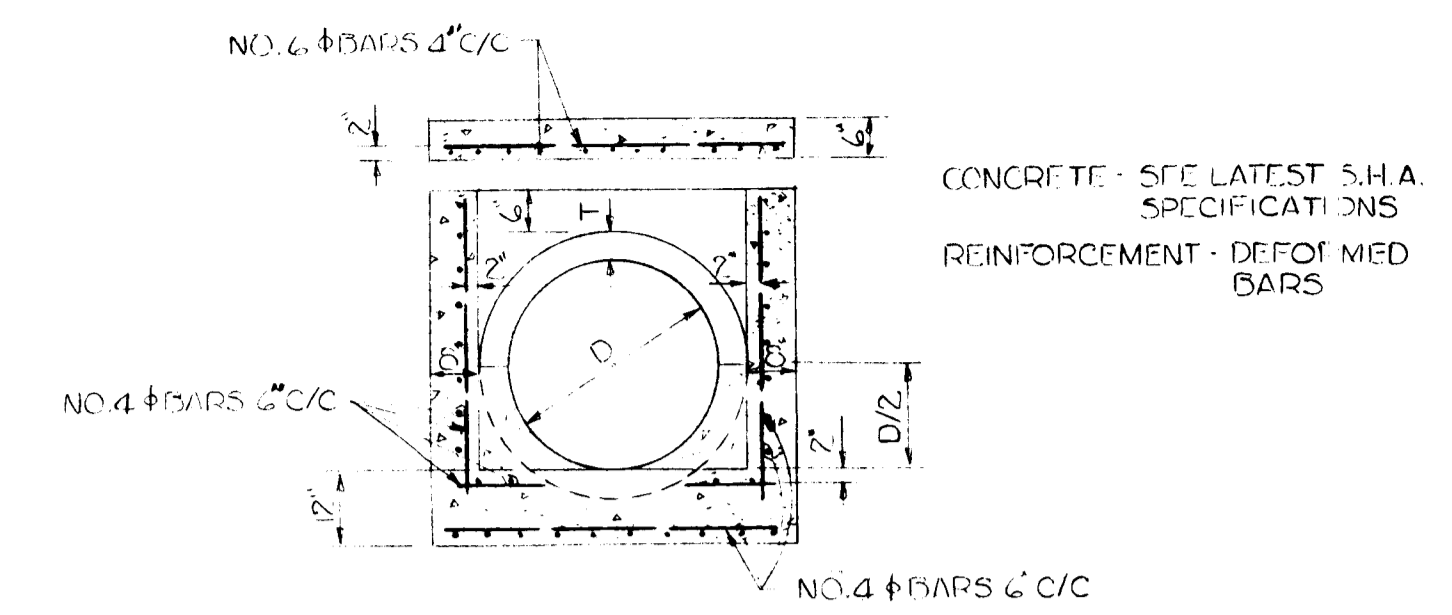
TYPICAL SECTION - MD ROUTE 99 WIDENING
 STA. 4+39.57 TO STA. 7+00



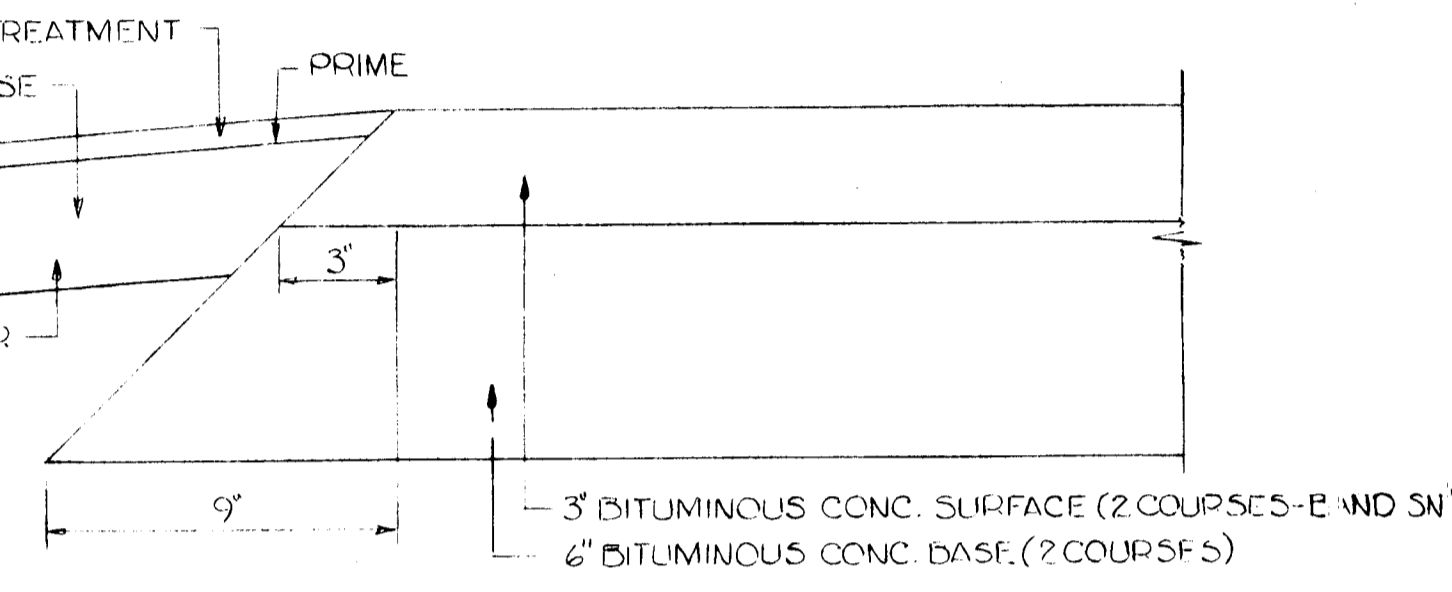
DETAIL - CONCRETE GUTTER



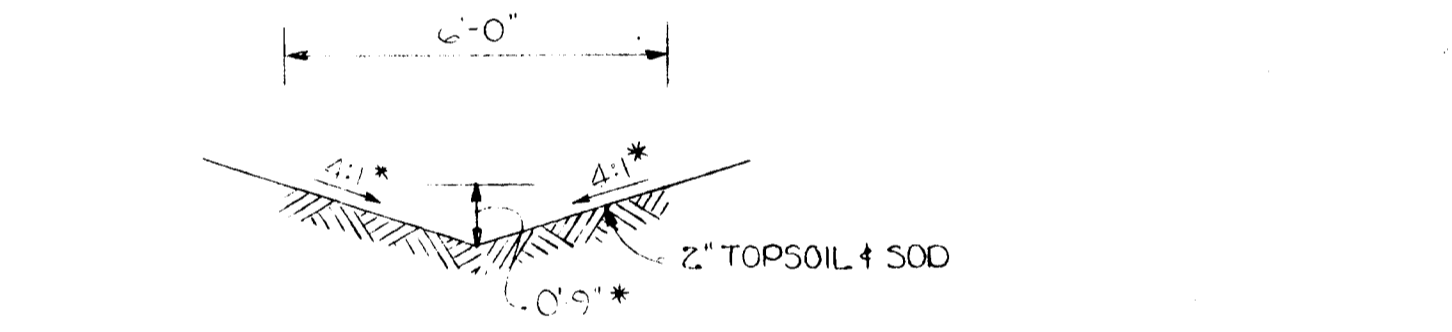
DETAIL - TYPE I PAVEMENT



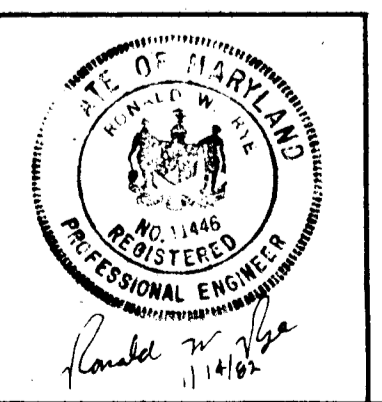
DETAIL - MODIFIED JUNCTION BOX (S-1)



DETAIL - TYPE II PAVEMENT



DETAIL - SOD V-DITCH



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DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *W. F. Newman* 2/4/82
 Chief - Bureau of Engineering: *W. J. ...* 2/4/82

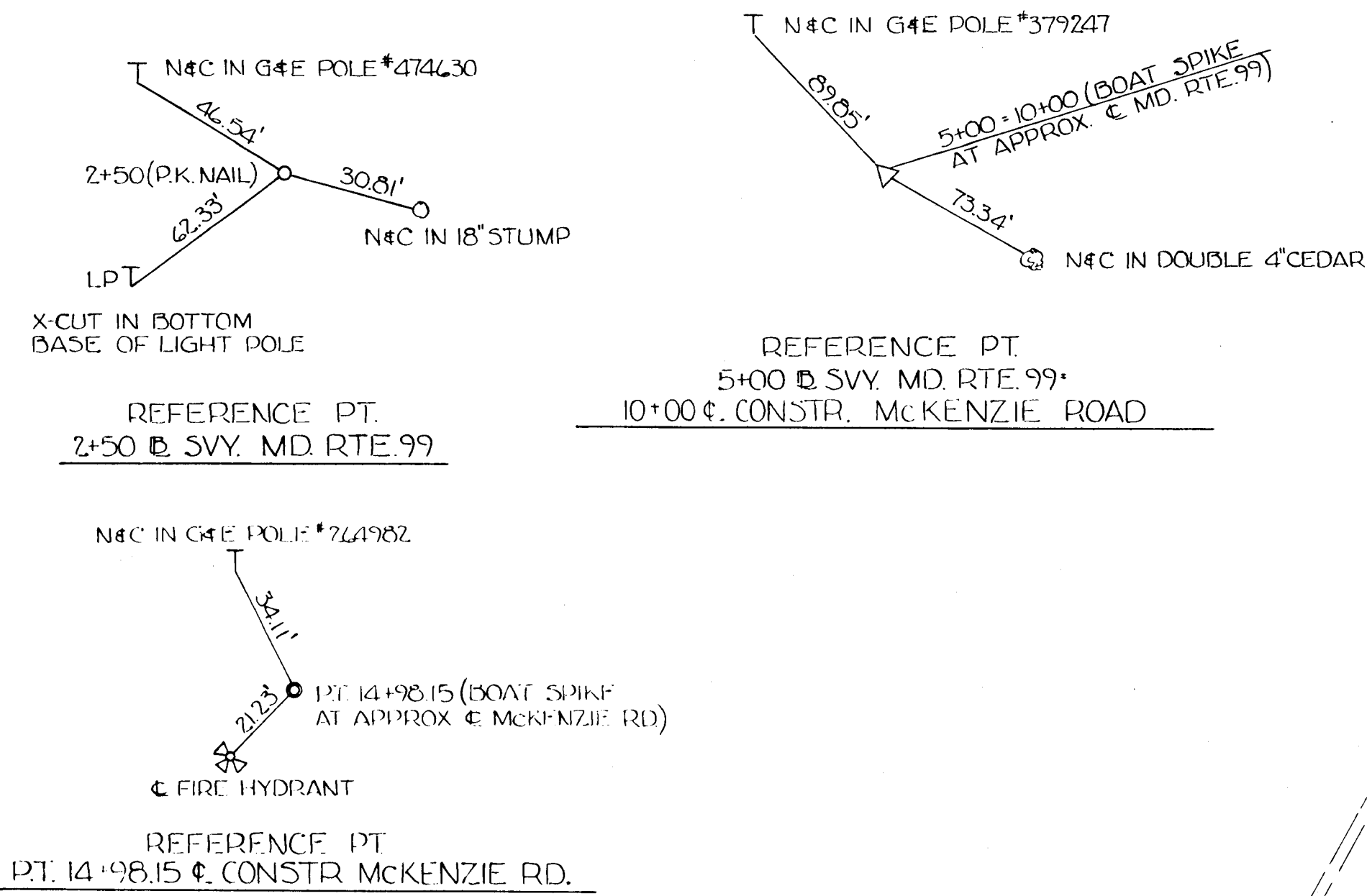
Chief - Roads, Bridges and Storm Drainage Division: *Charles B. ...* 2/4/82
 PROJECT NO. T-8-7009

MCKENZIE ROAD-MD ROUTE 99 INTERSECTION
 TYPICAL SECTIONS

DRAWING NO. 5 OF 7
 SCALE NONE

NOTES REGARDING SEQUENCE OF CONSTRUCTION

1. Manhole MH-1, inlet I-1, and the 15" RCCP connecting them shall be constructed as the first item of work.
2. The sediment control devices shown on this plan, with the exception of the straw bale dike leading to EW-1, shall be installed prior to commencement of the grading.
3. The embankment for Relocated McKenzie Road shall be constructed to the extent possible without encroaching on existing McKenzie Road, at which time traffic shall be diverted from existing to Relocated McKenzie Road, and construction completed. It is pointed out that the existing 18" CMP left of Station 12+60± may be cut back to maintain flow and permit construction of as much of the Relocated McKenzie Road embankment as possible prior to the diversion of traffic.
4. As construction of the Relocated McKenzie Road embankment proceeds, a straw bale dike shall be maintained around it.
5. Two lanes of traffic shall be maintained on McKenzie Road until traffic is diverted to Relocated McKenzie Road, at which time at least one lane shall be maintained.
6. Two lanes of traffic shall be maintained on Md. Route 99 at all times.

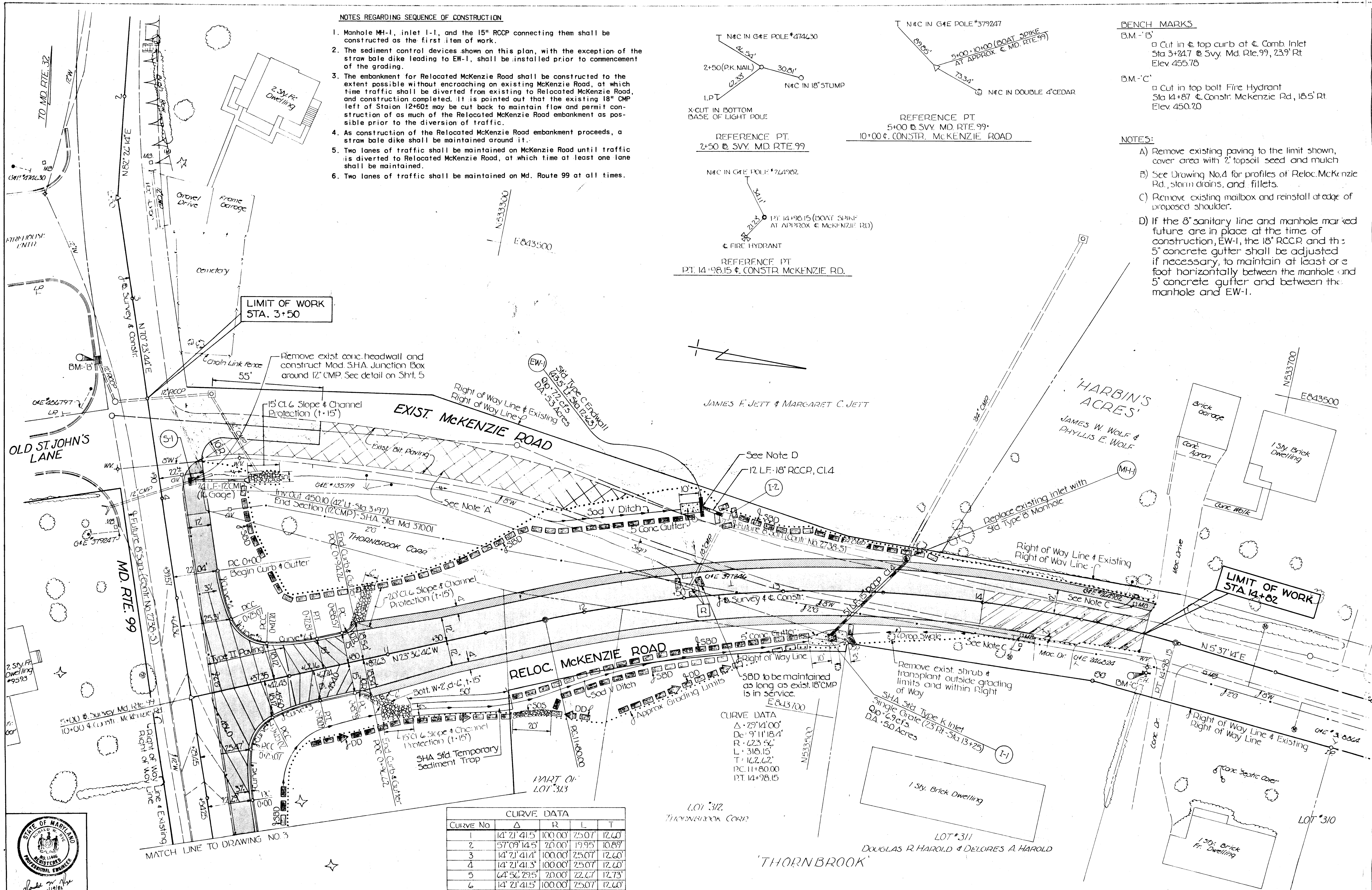


BENCH MARKS

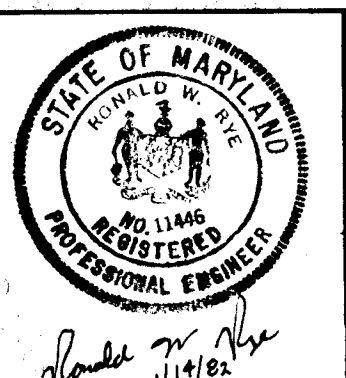
- B.M. - 'B'
 - Cut in @ top curb at Comb. Inlet Sta 3+24.7 @ Sv. Md. Rte. 99, 23.9' Rt. Elev. 455.78
- B.M. - 'C'
 - Cut in top bolt Fire Hydrant Sta 14+87 @ Constr. McKenzie Rd., 18.5' Rt. Elev. 450.70

NOTES:

- A) Remove existing paving to the limit shown, cover area with 2" topsoil seed and mulch
- B) See Drawing No. 4 for profiles of Reloc. McKenzie Rd., storm drains, and fillets.
- C) Remove existing mailbox and reinstall at edge of proposed shoulder.
- D) If the 8" sanitary line and manhole marked future are in place at the time of construction, EW-1, the 18" RCCP, and the 5" concrete gutter shall be adjusted if necessary, to maintain at least one foot horizontally between the manhole and 5" concrete gutter and between the manhole and EW-1.



| CURVE NO. | Δ | R | L | T |
|-----------|---------------|---------|--------|--------|
| 1 | 14° 21' 41.5" | 100.00' | 25.07' | 12.60' |
| 2 | 57° 09' 14.5" | 20.00' | 19.95' | 10.89' |
| 3 | 14° 21' 41.4" | 100.00' | 25.07' | 12.60' |
| 4 | 14° 21' 41.3" | 100.00' | 25.07' | 12.60' |
| 5 | 64° 56' 29.5" | 20.00' | 22.67' | 12.73' |
| 6 | 14° 21' 41.5" | 100.00' | 25.07' | 12.60' |



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DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director: Robert F. Neuman 2-4-82
 Chief - Bureau of Engineering: [Signature] 2/4/82
 Chief - Roads, Bridges and Storm Drainage Division: [Signature] 2/4/82

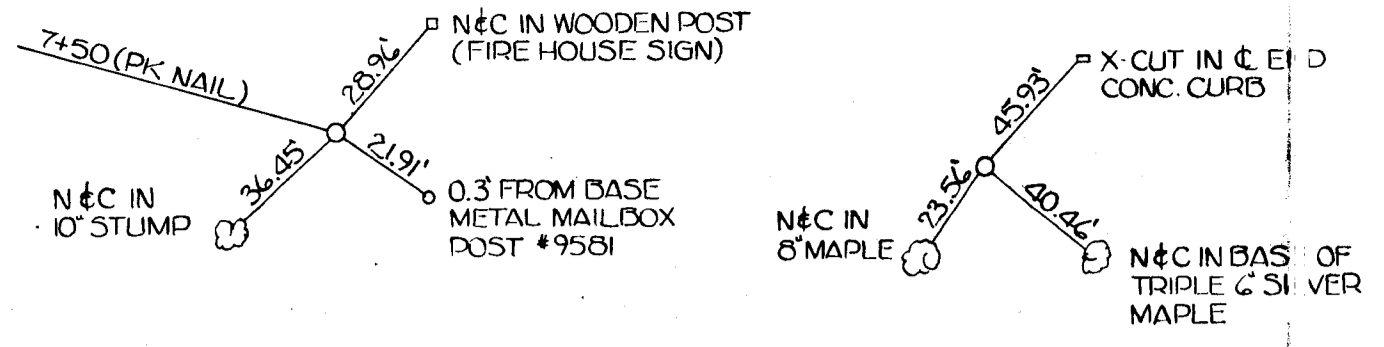
PROJECT NO. T-8-7009

MCKENZIE ROAD-MD. ROUTE 99 INTERSECTION
 PLAN - SEDIMENT CONTROL

DRAWING NO. 6 OF 7
 SCALE 1" = 20'

"THORNBROOK"

Right of Way Line & Exist. S.H.A. Right of Way Line



REFERENCE PT. 7+50 SVY MD. ROUTE 99

REFERENCE PT. 10+44.65 SVY MD. ROUTE 99

BENCH MARK
 B.M.'A: Cut in c. top conc. curb at end full curb section at entrance to Mt. Hebron High School Elev. 470.76.

MATCH LINE TO DRAWING NO. 2

Auxiliary Lane Cross Slope Transition

180' Taper

MD. RTE. 99

Approx. Grading Limits

LIMIT OF WORK STA. 8+80

N 70° 23' 44" E

N 75° 06' 20" E

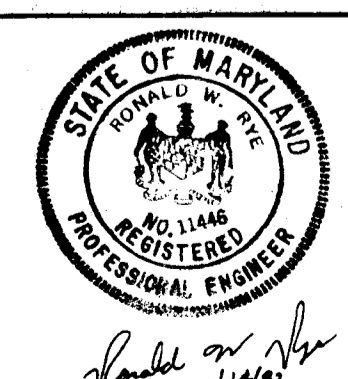
Right of Way Line & Exist. S.H.A. Right of Way Line

Future 8" San (Contr. No. 2738-5)

Sanitary Cleanout

TO ELLICOTT CITY

MT. HEBRON HIGH SCHOOL ENTRANCE



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Tel. No. 363-0150

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director: *James F. Neuman* 2-4-82
 Chief - Bureau of Engineering: *William S. ...* 2-14-82
 Chief - Roads, Bridges and Storm Drainage Division: *Elizabeth Anderson-Lucia* 2/4/82

PROJECT NO. T-8-7009

McKENZIE ROAD-MD. ROUTE 99 INTERSECTION
 PLAN - SEDIMENT CONTROL

DRAWING NO. 7 OF 7

SCALE 1" = 20'