

ws/1 M.J.F. FARMS 3361

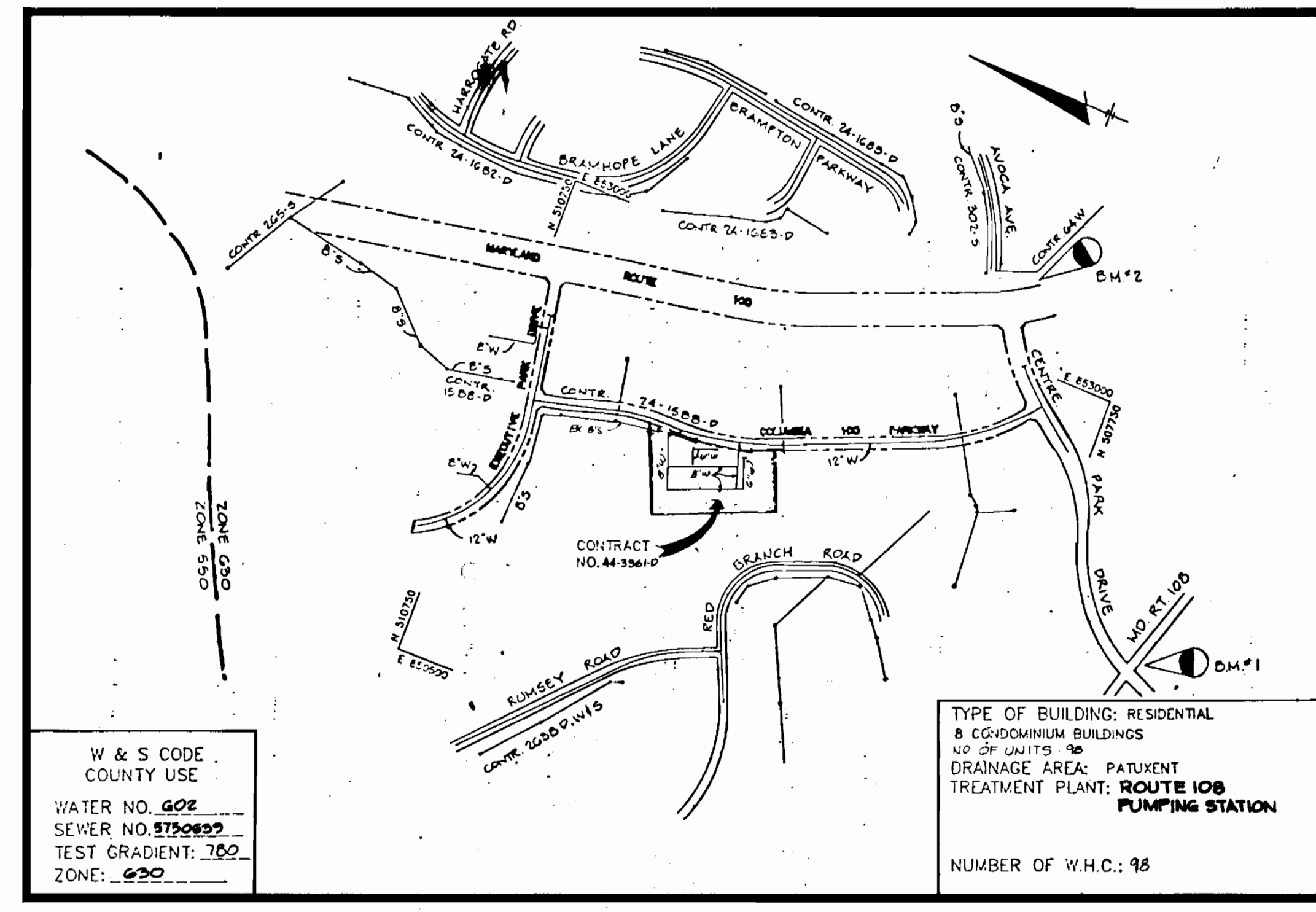
AS-BUILT			
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	AS-BUILT
8" WATER	1270 L.F.	1090 L.F.	8" 1/2 DUCTILE IRON PIPE CL 32
6" WATER	485 L.F.	462 L.F.	6" 1/2 DUCTILE IRON PIPE CL 32
8" x 6" TEE	1EA.	1EA.	M.J. COMPACT D.I. TEE
8" x 6" REDUCER	1EA.	1	M.J. COMPACT D.I. REDUCER
8"-1/16 BEND	1EA.	4	M.J. COMPACT D.I. BEND
8"-1/8 BEND	1EA.	1	M.J. COMPACT D.I. BEND
6"-1/4 BEND	2EA.	2	M.J. COMPACT D.I. BEND
8" VALVE	6EA.	6	RESILIENT SEAT OR M.S. GATE VALVE
6" VALVE	2EA.	2	RESILIENT SEAT OR M.S. GATE VALVE
6" CAP & BUTTRESS	2EA.	6	
FIRE HYDRANT	1EA.	1	METROPOLITAN FIRE HYDRANT
8"-1/4 BEND	2EA.	2	COMPACT D.I. BEND
8"x6" FHT	1EA.	1	COMPACT D.I. FIRE HYDRANT TEE
8"x8" TEE	3EA.	3	M.J. COMPACT D.I. TEE
1 1/2" WHC	305 L.F.	300 L.F.	1 1/2" H-15,000 GAL CORR.
1" WHC	576 L.F.	270 L.F.	1" H-15,000 GAL CORR.
4" WATER	9 L.F.		
BLOW OFF HYDRANT	1 EA.		
8" SAN. SEWER	80 L.F.		
TYPE 'B' DROP MH	2 EA.		

ITEM	QUANTITY	TYPE	MANUFACTURER
8" SEWER	1580 L.F.	8" 1/2 PVC SDR-35	J.M. MANUFACTURER CO.
TYPE 'B' DROP MH	1EA.	24" SANDY MH FRAME	COMPELL FOUNDRY
BLOW OFF HYDRANT	1EA.	HYDRANT	J.S. PIPE AND FOUNDRY

# WATER EXTENSION M.J.F. FARMS SECTION II CONTRACT No. 24-3361-D 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

NAME OF UTILITY CONTRACTOR: KASCO (CHESAPEAKE) CONTRACTORS, INC.

CHECK BOX	
AS-BUILT DATE	
SURVEY AND DRAFTING DIVISION	



VICINITY MAP  
SCALE: 1"=600'

- GENERAL NOTES:**
- PART 1**
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the contractor's expense.
  - All horizontal controls are based on Maryland State coordinates.
  - All vertical controls are based on U.S.G.S. data.
  - All pipe elevations shown are invert elevations.
  - Clear all utilities by a minimum of 8'. Clear all poles by 2' - 0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall coordinate with the utility companies to schedule the bracing of the poles.
  - For details not shown on the drawings, and for materials and construction methods use Howard County Design Manual, Volume IV, Standards Specifications and Detail for Construction (Latest Edition). The contractor shall have a copy of Volume IV on the job.
  - Where test pits have been made on existing utilities, they are noted by the symbol at the location of the test pit. A note or notes containing the results of the test pit or pits is included on the drawings. Existing utilities in the vicinity of the proposed work for which test pits have not been dug shall be located by the contractor two weeks in advance of construction operations at his own expense.
  - Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans.
 

State Highway Administration	531-5533
BC&E Co. Contractor Services	850-4620
BC&E Co. Under Ground Damage Control	787-9088
Miss Utility	1-800-237-7777
Colonial Pipe Co.	785-1390
Howard County Department of Public Works Bureau of Utilities	313-4900
  - Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the Contractor.
  - Contractor shall remove trees, stumps, and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
  - The Contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval for these drawings will constitute compliance with DPW requirements for Section 18-114(a) of the Howard County Codes.
- PART II - WATER**
- All water mains to be D.I.P. Class 52 unless otherwise noted.
  - Top of all water mains to have a minimum 3-1/2' cover unless otherwise noted.
  - Valves adjacent to tees shall be strapped to tees.
  - All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
  - Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained, as per STD Details W.1.11 and W.2.13 and buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard and Specifications.
  - The contractor shall not operate any water main valves on the existing water system.
  - All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
  - All single water house connections to be 1" with 3/4" meters. Twin water house connections shall be 1 1/2" inlet as per Standard Details W 3.23.
- PART III - SEWER**
- All sewer mains shall be DIP, RCP, VCPX, CSPX, RCCP, and P.V.C. unless otherwise noted.
  - All manholes shall be 4' - 0" inside diameter unless otherwise noted.
  - Force mains shall be D.I.P. only.
  - Manholes shown with 12" and 18" walls are for brick manholes only.
  - Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight manhole frame and cover is used, set top of frame 1' - 6" above finished grade unless otherwise noted on the drawings.
  - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
  - All sewer house connections to be 4".

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-94-76

*John K. Robertson* 6/23/94  
HOWARD SOIL CONSERVATION DISTRICT Date

Reviewed for Howard Soil Conservation District and meets technical requirements.

*J. A. Warfield* 6/23/94  
S.O. SOIL CONSERVATION SERVICE Date

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

*John K. Robertson* 6/23/94  
HOWARD SOIL CONSERVATION DISTRICT Date

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James G. Lewis</i> 6/24/94 DIRECTOR OF PUBLIC WORKS DATE <i>Robert A. Berman</i> 6/21/94 CHIEF, BUREAU OF UTILITIES DATE	<b>Boender Associates</b> ENGINEERS - PLANNERS - DEVELOPERS 3230 BETHANY LANE ELLICOTT CITY, MD. 21042 (410) 465-7777 FAX: (410) 465-7966	PROFESSIONAL SEAL JAMES G. LEWIS CIVIL ENGINEER STATE OF MARYLAND	DESIGNED: JJB DRAWN: JRS CHECKED: JME DATE: MARCH 1994	M.J.F. FARMS SECTION II TAX MAP No. 30, PARCEL 406 2nd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND CONTRACT No. 24-3361-D	SCALE AS SHOWN SHEET 1 OF 3
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3361 w/2 M.J.F. FARMS

COLUMBIA 100  
OFFICE RESEARCH PARK  
SECTION 1, AREA 2  
PARCELS Q-1 AND Q-2  
A RESUBDIVISION OF PARCEL Q  
ZONED: POR  
PARCEL Q-2

COLUMBIA 100  
OFFICE RESEARCH PARK  
SECTION 1, AREA 2  
PARCELS G THRU U  
ZONED: POR

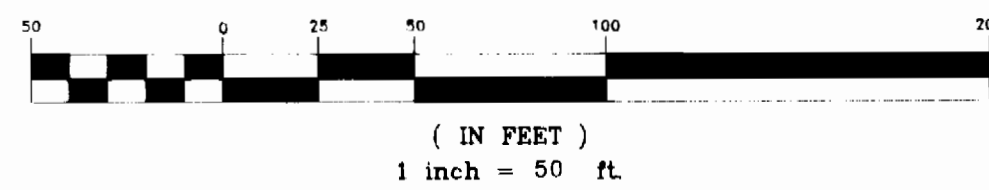
COLUMBIA 100  
OFFICE RESEARCH PARK  
PARCEL X  
ZONED: R-A-15

OAKLAND RIDGE  
INDUSTRIAL PARK  
SECTION 2  
PLAT BOOK 15, PAGE 8  
ZONED: NT-OPEN SPACE

OAKLAND RIDGE  
INDUSTRIAL PARK  
SECTION 2  
PLAT BOOK 15, PAGE 9  
ZONED: NT-EMPLOYMENT CENTER

OAKLAND RIDGE  
INDUSTRIAL PARK  
SECTION 2  
PLAT BOOK 15, PAGE 8  
ZONED: NT-EMPLOYMENT CENTER

GRAPHIC SCALE



Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-94-75

HOWARD SOIL CONSERVATION DISTRICT \_\_\_\_\_ Date \_\_\_\_\_

Reviewed for Howard Soil Conservation District and meets technical requirements.

*J.A. Wayfield* 6/23/94  
U.S. SOIL CONSERVATION SERVICE Date

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

*John R. Roberts* 6/23/94  
HOWARD SOIL CONSERVATION DISTRICT Date

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. Shum* 6/24/94  
DIRECTOR OF PUBLIC WORKS DATE  
*Charles E. Smith* 6/24/94  
CHIEF, BUREAU OF ENGINEERING DATE  
*Robert W. Benjamin* 6/24/94  
CHIEF, BUREAU OF UTILITIES DATE  
*John D. Dawson* 6/24/94  
CHIEF, LAND DEVELOPMENT DATE

**Boender Associates**  
ENGINEERS - PLANNERS - SURVEYORS

3230 BETHANY LANE  
ELLICOTT CITY, MD. 21042  
(410) 465-7777 FAX: (410) 465-7966

*John J. Boender*  
3/24/94

DESIGNED:

JJB

DRAWN:

JRG

CHECKED:

JHE

DATE:

MARCH 1994

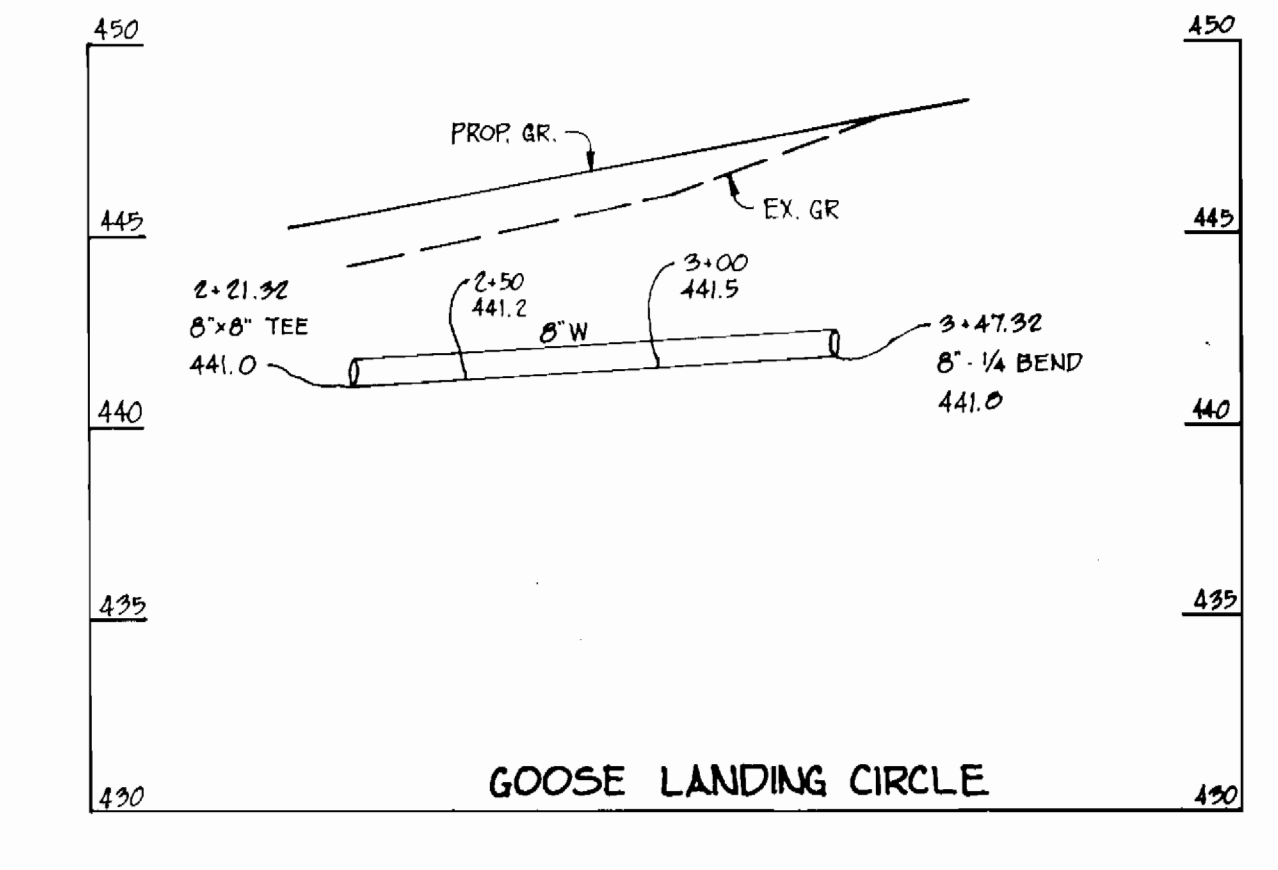
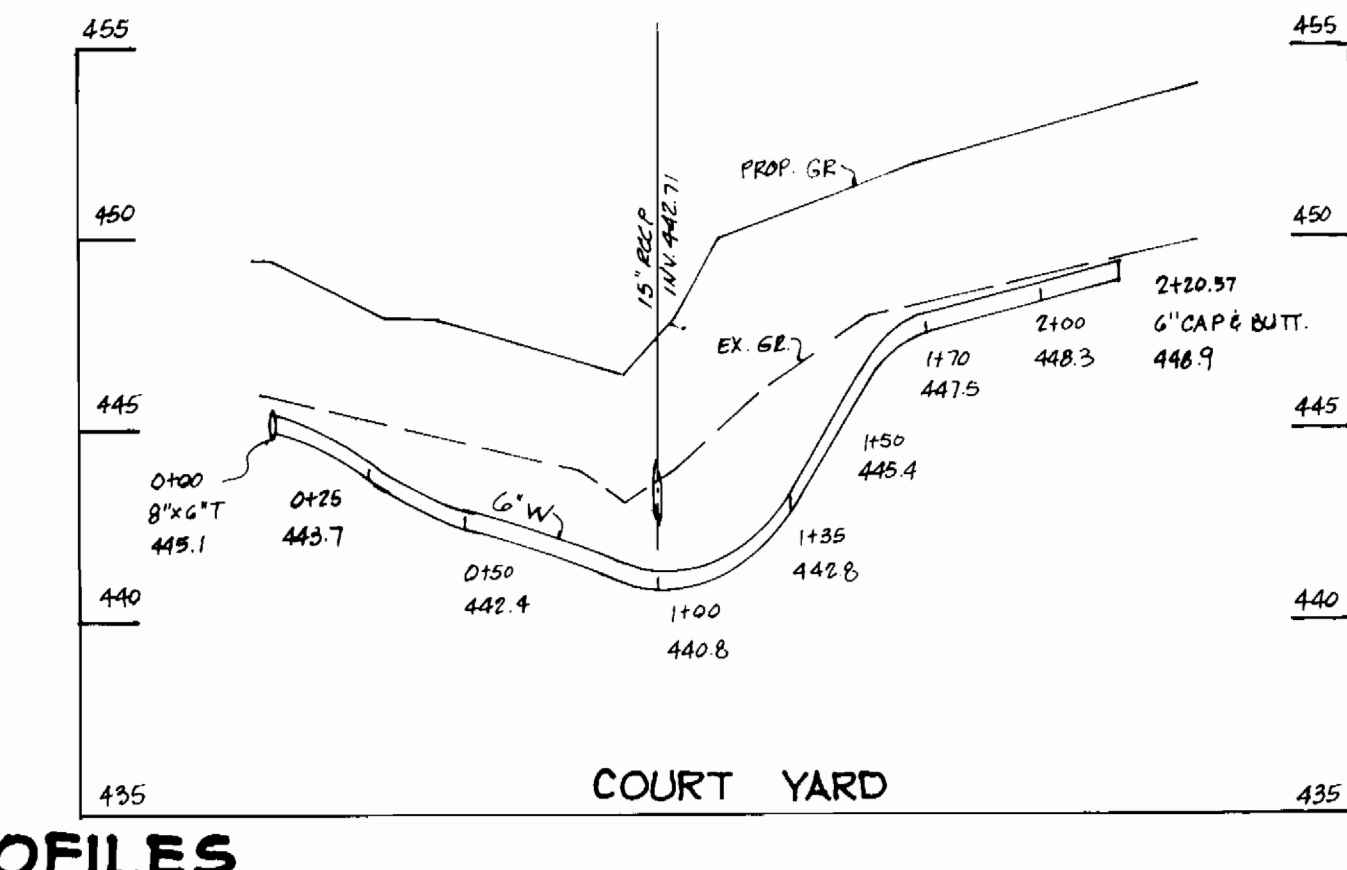
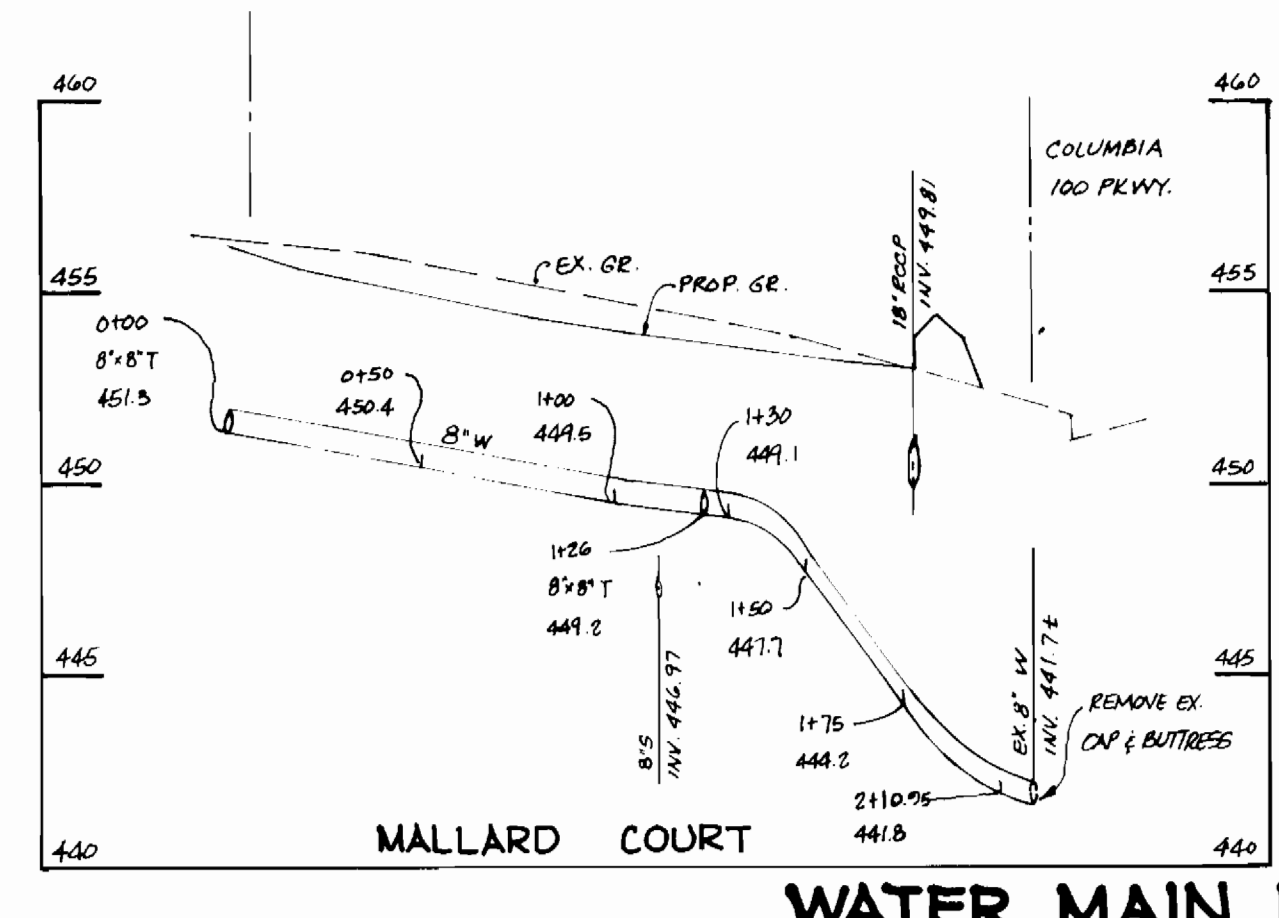
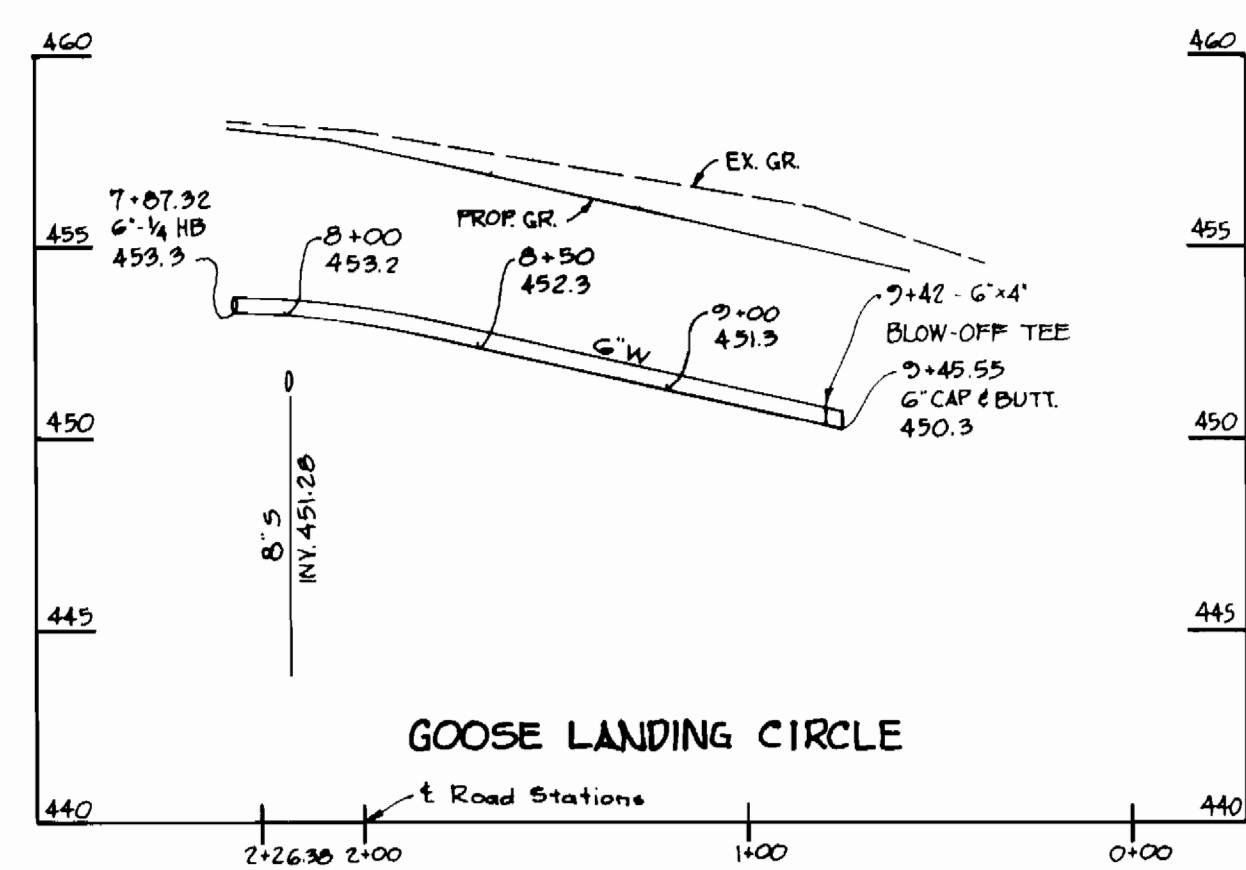
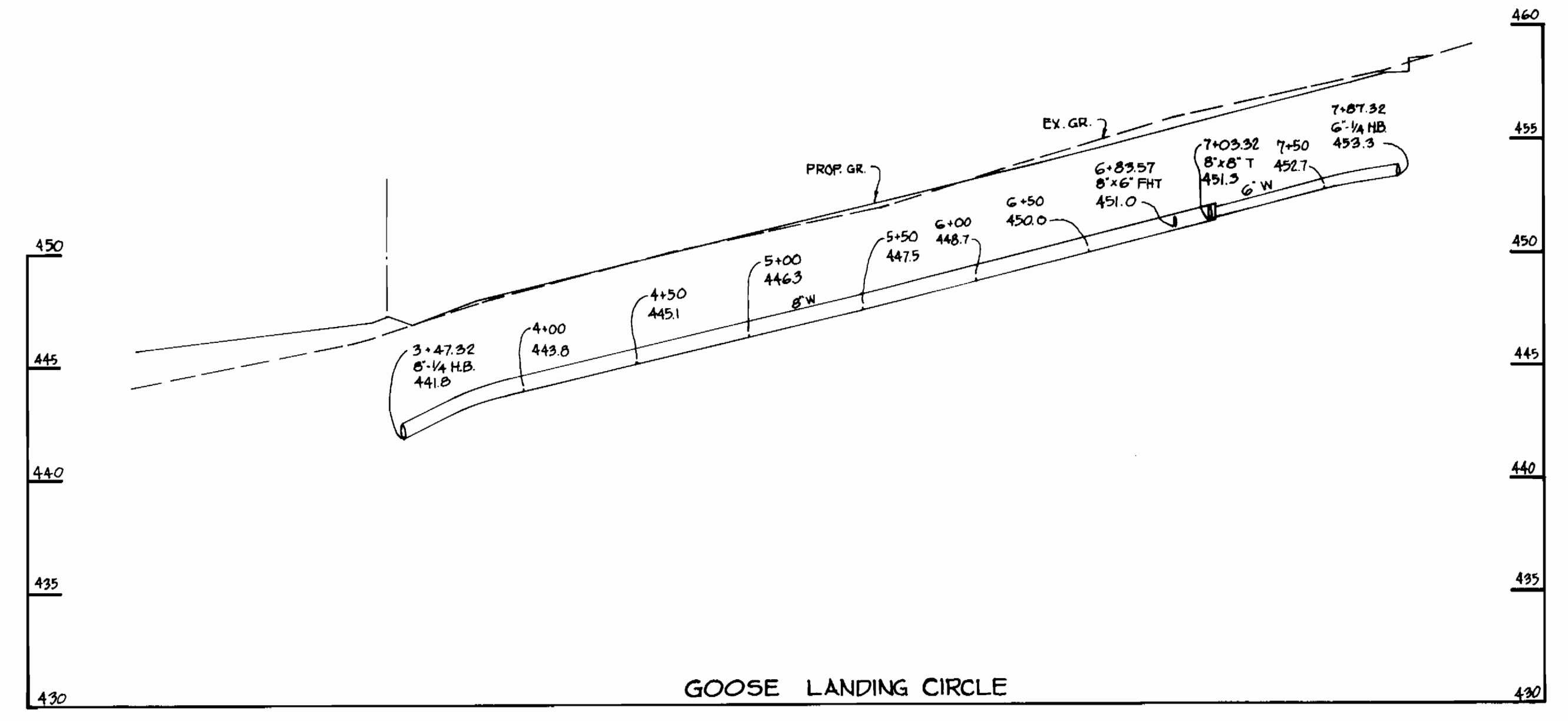
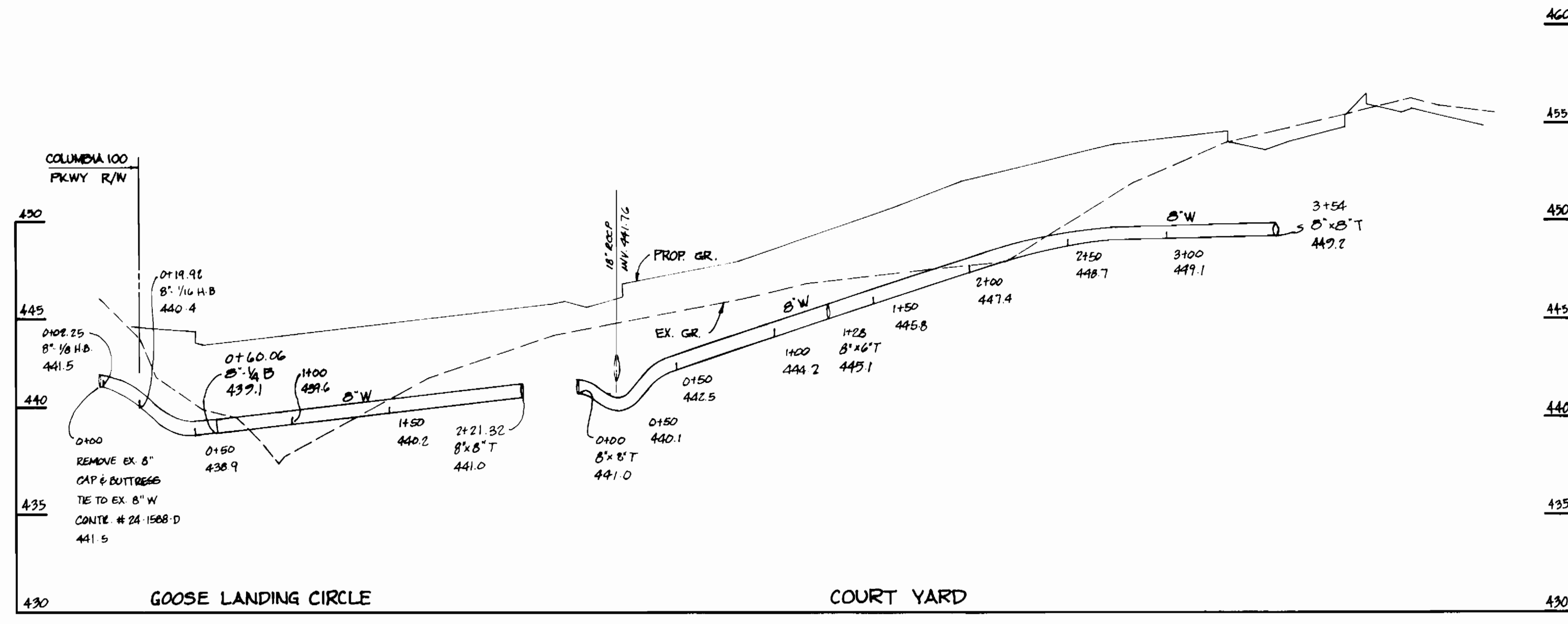
BY	No.	REVISION	DATE
		ADDED SANITARY MANHOLES 14" DIA / CHANGED 6" S TO 8" S	09/04/94

DATE	600' SCALE MAP No.	30	BLOCK No.	10
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**M.J.F. FARMS**  
SECTION II  
TAX MAP No. 30, PARCEL 406  
2nd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
CONTRACT No. : 24-3361-D

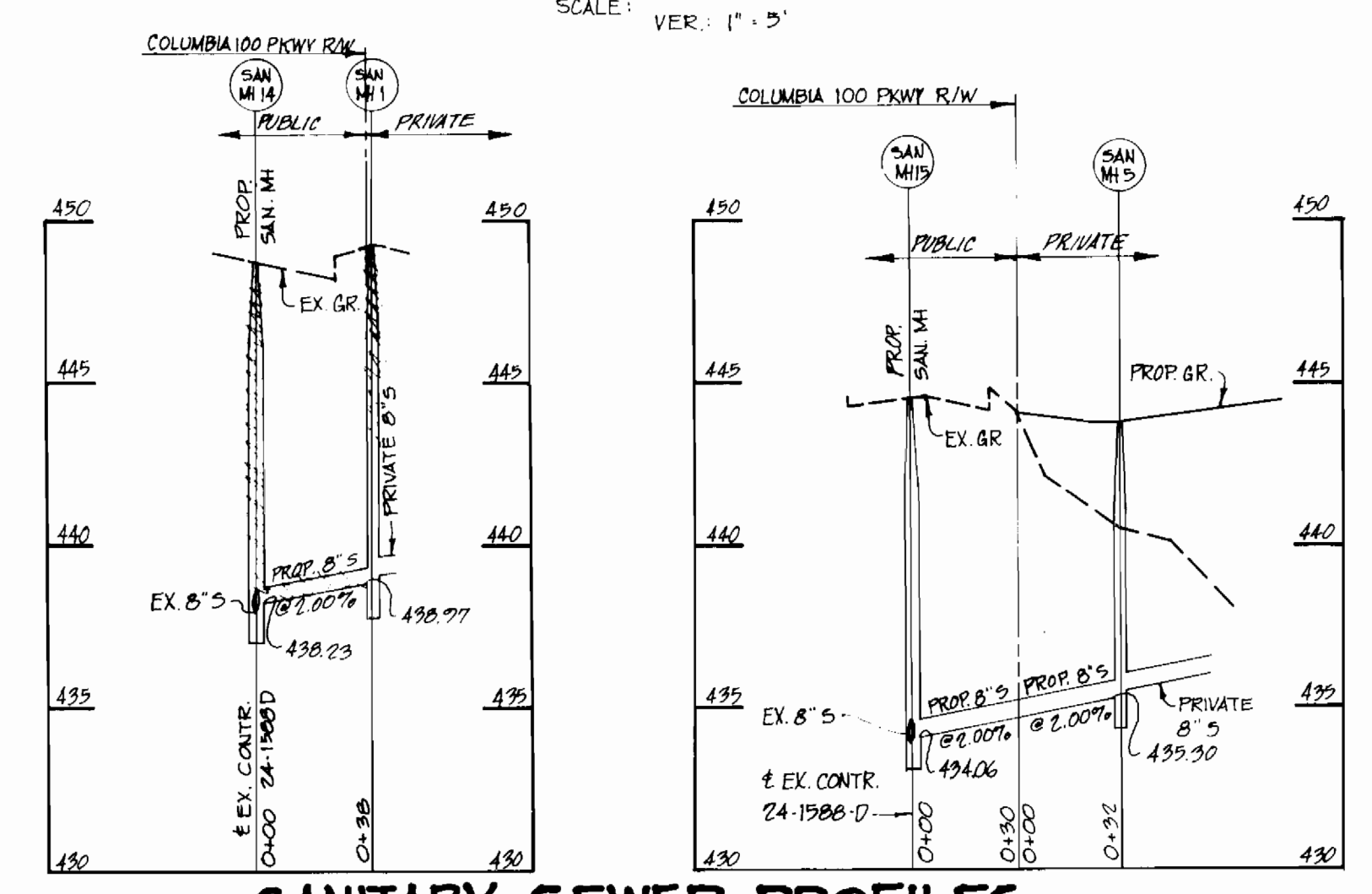
SCALE AS SHOWN  
SHEET 2 OF 3

3361 ws/3 M.J.F. FARMS



**WATER MAIN PROFILES**

SCALE: HOR.: 1" = 30'  
VER.: 1" = 5'



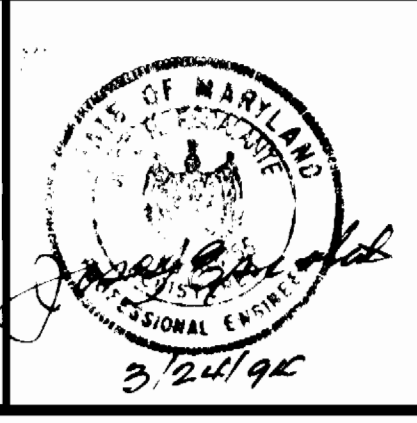
**SANITARY SEWER PROFILES**

SCALE: HOR.: 1" = 30'  
VER.: 1" = 5'

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND AS SHOWN ON SDP-  
HOWARD SOIL CONSERVATION DISTRICT DATE  
REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*J. A. Wardell* 6/23/94  
S.O. SOIL CONSERVATION SERVICE DATE  
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*John K. Robinson* 6/23/94  
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*James J. ...* 6/24/94  
DIRECTOR OF PUBLIC WORKS DATE  
*Robert ...* 6/24/94  
CHIEF, BUREAU OF UTILITIES DATE  
*Charles ...* 6/24/94  
CHIEF, LAND DEVELOPMENT DATE

**Boender Associates**  
ENGINEERS - PLANNERS - SURVEYORS  
3230 BETHANY LANE  
ELLICOTT CITY, MD. 21042  
(410) 465-7777 FAX: (410) 465-7966



DESIGNED:			
DRAWN:			
CHECKED:			
DATE:	WCB	PROVIDED SANITARY SEWER PROFILES	10/04/94
BY:	No.	REVISION	DATE

600' SCALE MAP No. 30 BLOCK No. 1B

**M.J.F. FARMS**  
SECTION II  
TAX MAP No. 30, PARCEL 406  
2nd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
CONTRACT No. 24-3361-D

SCALE AS SHOWN  
SHEET 3 OF 3