

GENERAL NOTES

PART 1

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICE 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 ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". 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 THE BRACING OF ADDITIONAL POLES, OR DAMAGE SHALL BE DEDUCTED FROM THE MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOL. IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION THE CONTRACTOR SHALL HAVE A COPY OF VOL. 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 RESULTS OF THE TEST 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 UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS: STATE HIGHWAY ADMINISTRATION 531-5533, BALTO. GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES 850-4920, BALTO. GAS & ELECTRIC COMPANY - UNDERGROUND DAMAGE CONTROL 859-9004, BALTO. GAS & ELECTRIC COMPANY - TROUBLE SHOOTING 298-9001, MISS UTILITY 1-(301) 559-0100, COLONIAL PIPELINE 795-1390 BUREAU OF UTILITIES, HOWARD COUNTY DEPT. OF PUBLIC WORKS 313-4900, C & P TELEPHONE 1-(800) 257-7777.
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE DAMAGED OR REMOVED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OR THE MAIN.
- PLACE REGULATION "MEN WORKING" WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATIONS MANUAL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.

PART 2

- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 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 ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 & 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE INSIDE METER SETTINGS UNLESS OTHERWISE NOTED.
- ALL WATER HOUSE CONNECTIONS SHALL COMPLY WITH HOWARD CO. STD. W 3.24.
- MINIMUM CRIMP RADIUS WILL BE SPECIFIED BY PIPE MANUFACTURER.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- SERVICE CLAMPS ARE TO HAVE STAINLESS STRAPS.
- ALL D.I.P. FITTINGS SHALL BE ACCORDANCE WITH AWWA SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.

PART 3

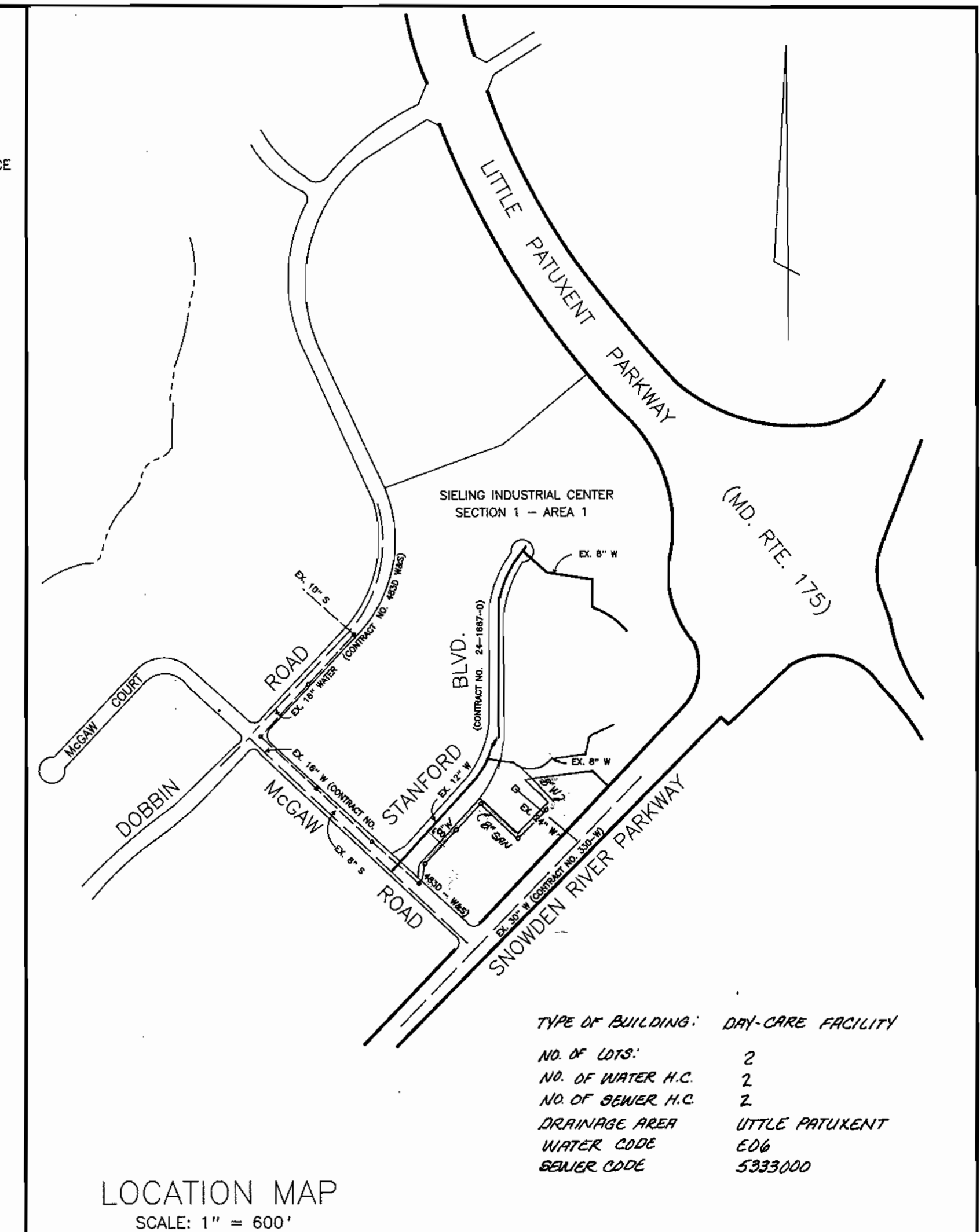
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., OR PVC UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED WITHIN THE 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 NOTED ON DRAWINGS.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G5.51.
- THE CONTRACTOR SHALL ARRANGE TO HAVE THE EXISTING UNDERGROUND CABLE FIELD-LOCATED PRIOR TO ANY EXCAVATION FOR THE SEWER MAIN.

QUANTITIES			
ITEM	ESTIMATED	AS-BUILT	MATERIAL/SUPPLIER
8" SANITARY SEWER	834 L.F.	371'	JM MFC / BELAIR ROAD SUPPLY
STD. SAN. MANHOLE	6 EA.	6	ATLANTIC CONCRETE
6" SANITARY SEWER	20 L.F.	10'	JM MFC / BELAIR ROAD SUPPLY
8" WATER MAIN	155 L.F.	151'	GRIFFIN PIPE / BELAIR ROAD SUPPLY
6" WATER MAIN	52 L.F.	51'	GRIFFIN PIPE / BELAIR ROAD SUPPLY
STD. FIRE HYDRANT	1 EA.	1	MUELLER / BELAIR ROAD SUPPLY
20" STEEL CASING	185 L.F.	187'	SEVERN STEEL
8" x 6" TEE	1 EA.	1	GRIFFIN PIPE / BELAIR ROAD SUPPLY
8" x 8" TAPPING SLEEVE & VALVE	1 EA.	1	MUELLER / " "
6" VALVE	1 EA.	1	MUELLER / " "
8" x 6" REDUCER	1 EA.	1	GRIFFIN PIPE / " "
1/8" HORIZ. BEND	1 EA.	1	GRIFFIN PIPE / " "
8" SEWER D.I.P.	195 L.F.	600'	GRIFFIN PIPE / " "

BENCH MARK

BM # 234401 ELEV. 307.49
STANDARD CONCRETE MONUMENT SET FLUSH WITH SURFACE
NORTH 491333.018 EAST 858206.723

BM # 2343001 ELEV. 288.24
3/4" RB SET 0.3' BELOW THE SURFACE
NORTH 492140.801 EAST 857226.671



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

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

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP 91-95 & SDP 95-97.

James M. Helms 5/15/91
U.S. SOIL CONSERVATION SERVICES DATE

John L. Robertson 5/15/91
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS

ENGINEER
GEORGE WILLIAM STEPHENS JR.
AND ASSOCIATES, INC.

658' KENILWORTH DRIVE
SUITE 100
TOWSON, MARYLAND 21204
(301) 825-8120



DESIGNED: KJ/ME
DRAWN: M.E.
CHECKED: K.J.

BY	NO	REVISION	DATE
GW	1	REVISED QUANTITIES	3/16/93

GENERAL NOTES.
FOR
PROPOSED WATER MAIN
& SANITARY SEWER

CONTRACT NO. 24-3128-D

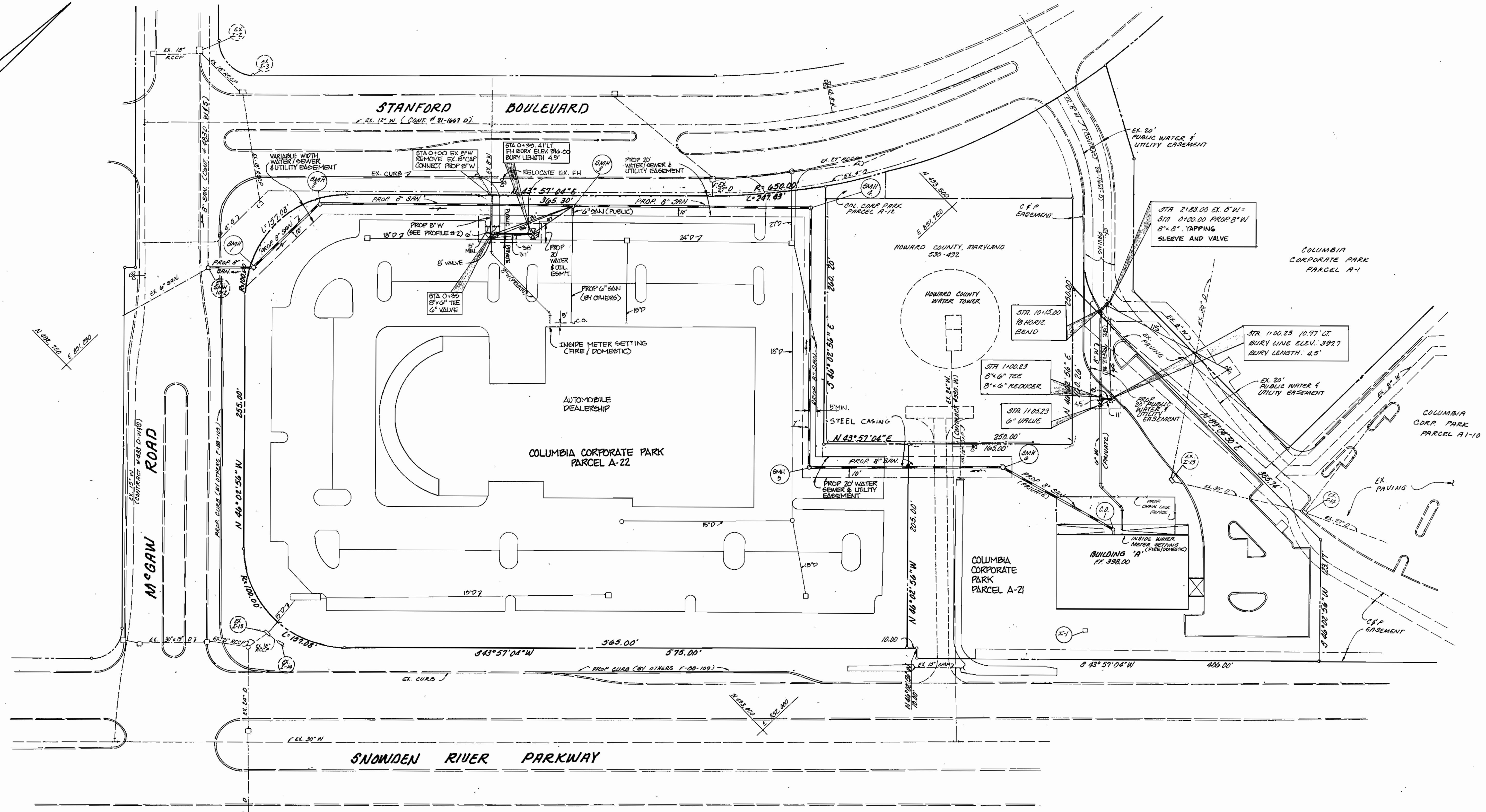
PROPOSED DAY-CARE CENTER AND CAR DEALERSHIP
COLUMBIA CORPORATE PARK
PARCEL A-21 & A-22

HOWARD COUNTY, MARYLAND

ELECTION DIST. 6

SCALE: AS SHOWN

SHEET NO. 1 OF 3



PLAN
SCALE: 1"=50'

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

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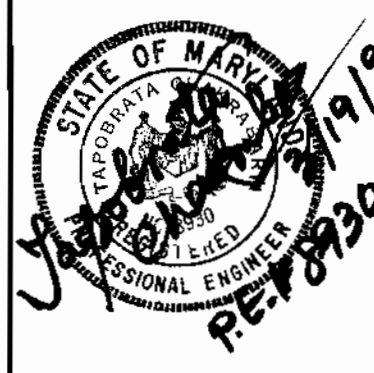
James M. Helm 5/15/91
U.S. SOIL CONSERVATION SERVICES DATE

John L. Robertson 5/15/91
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS

ENGINEER
GEORGE WILLIAM STEPHENS JR.
AND ASSOCIATES INC.

658 KENILWORTH DRIVE
SUITE 100
TOWSON, MARYLAND 21204
(301) 825-8120



DESIGNED: K.J./M.E.
DRAWN: M.E.
CHECKED: K.J.

BY	NO	REVISION	DATE
G.W.S.	1	REVISED LAYOUT ON PARCEL A-22, ADDED 8" & 6" SAN CONNECTION TO AUTO DEALERSHIP - REMOVED PROP VIEWS BY OTHERS	3/16/92

PLAN FOR
PROPOSED WATER MAIN
AND SANITARY SEWER

CONTRACT NO. 24-3128-D
600' SCALE MAP NO. 30
BLK. NO. 23184

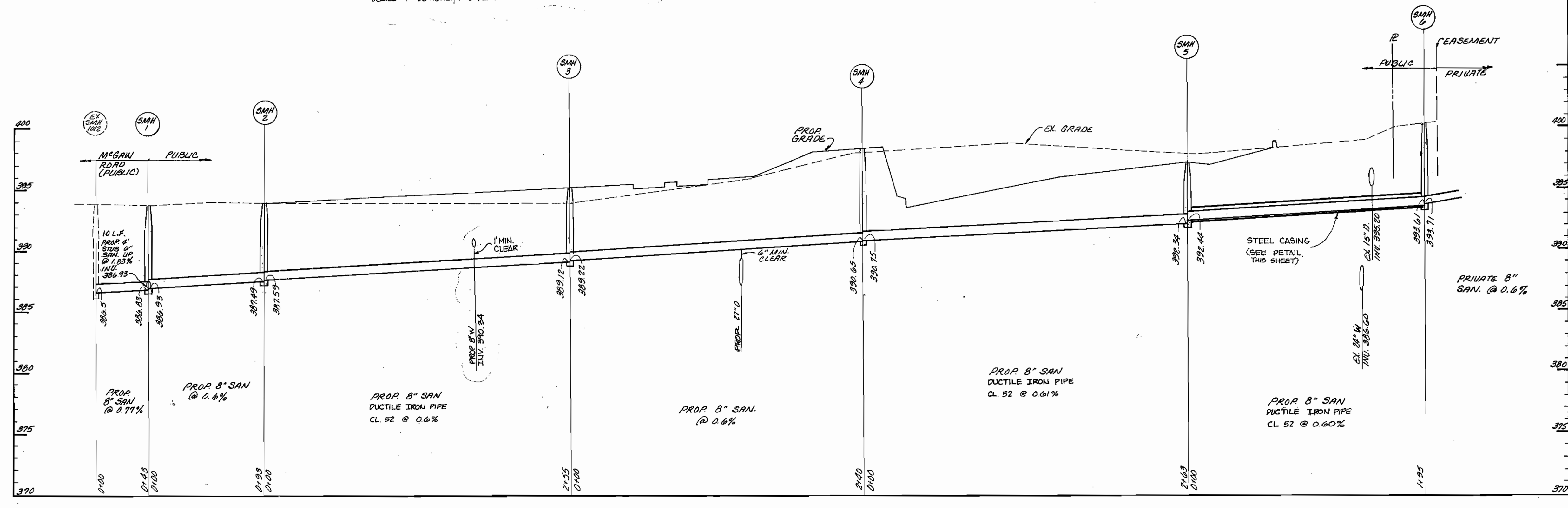
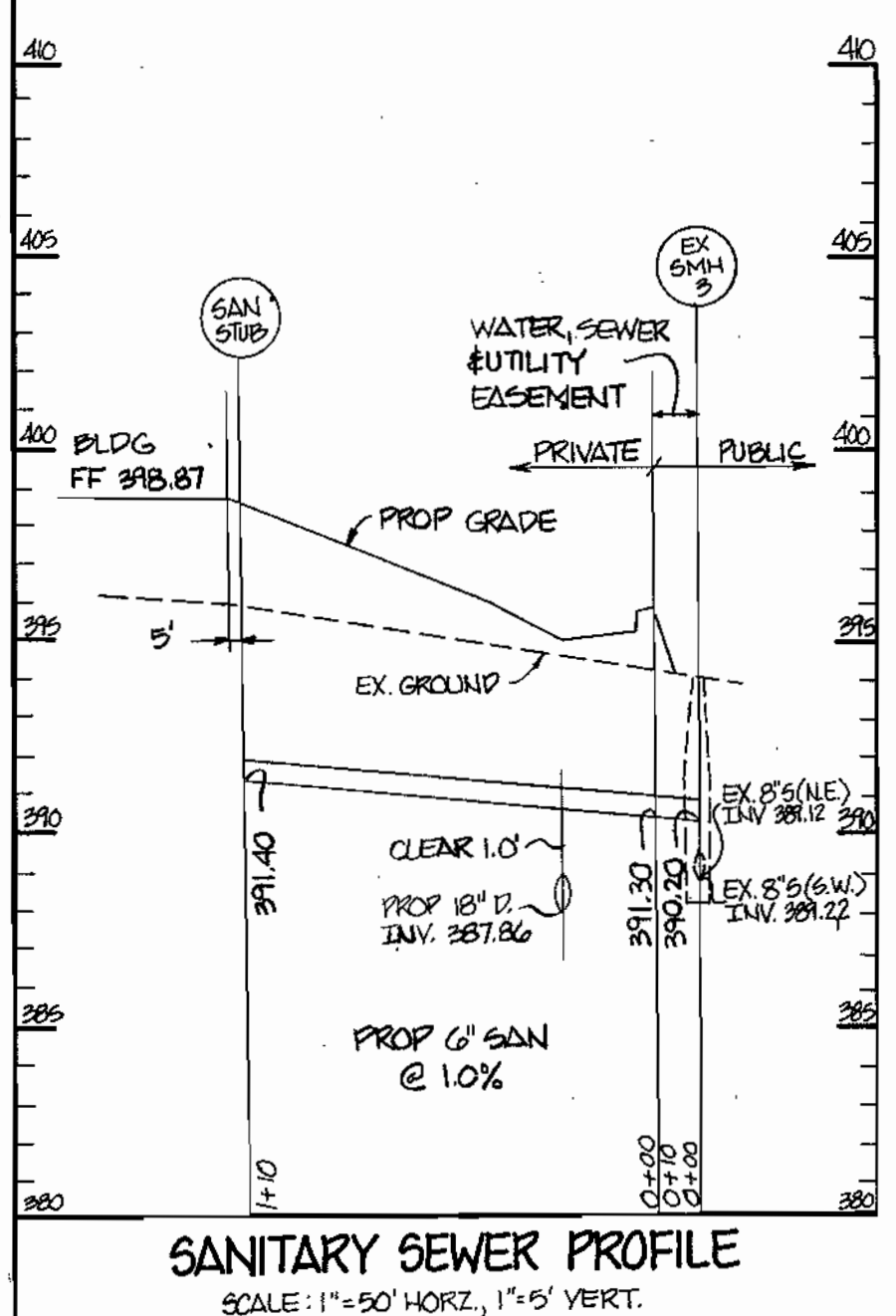
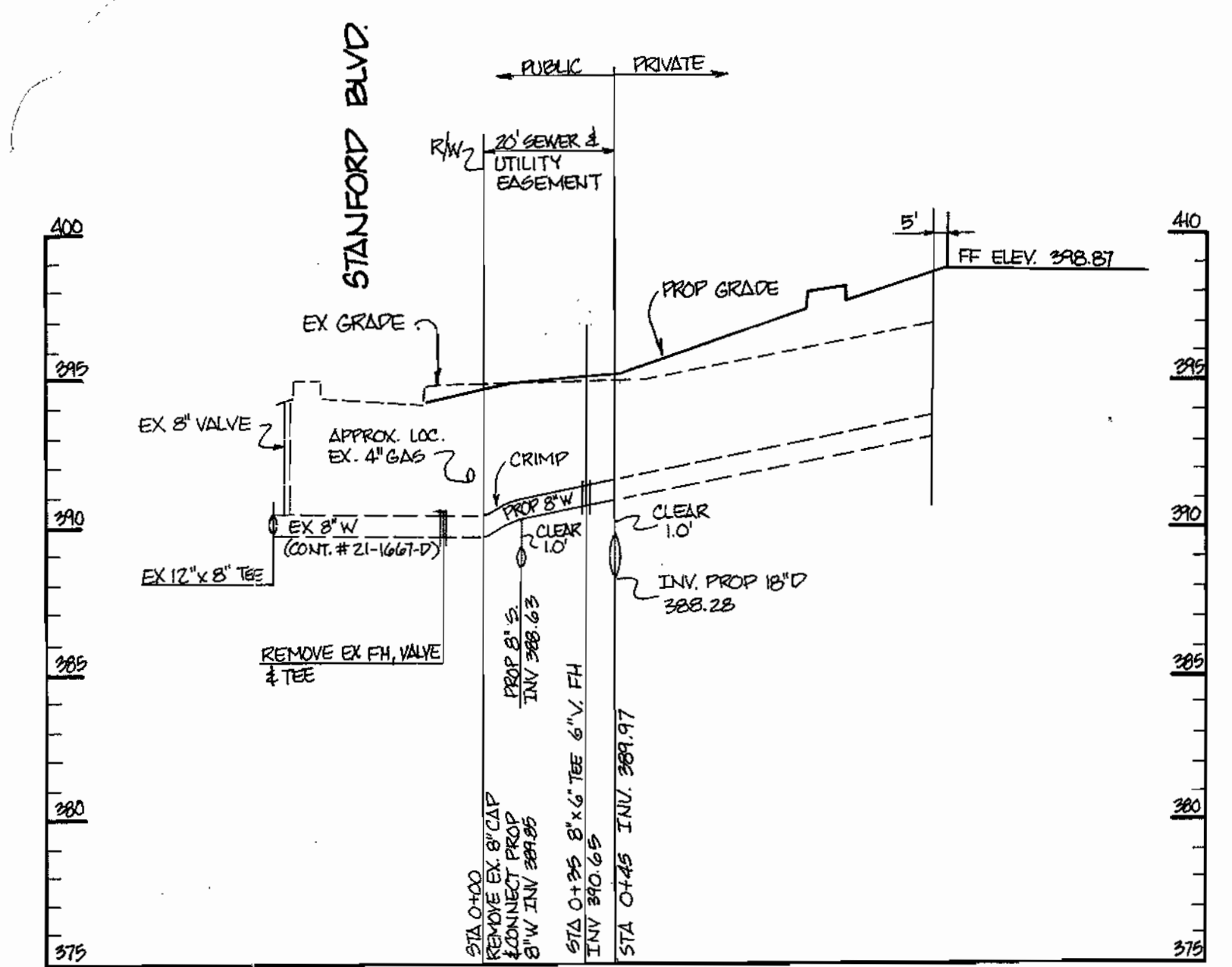
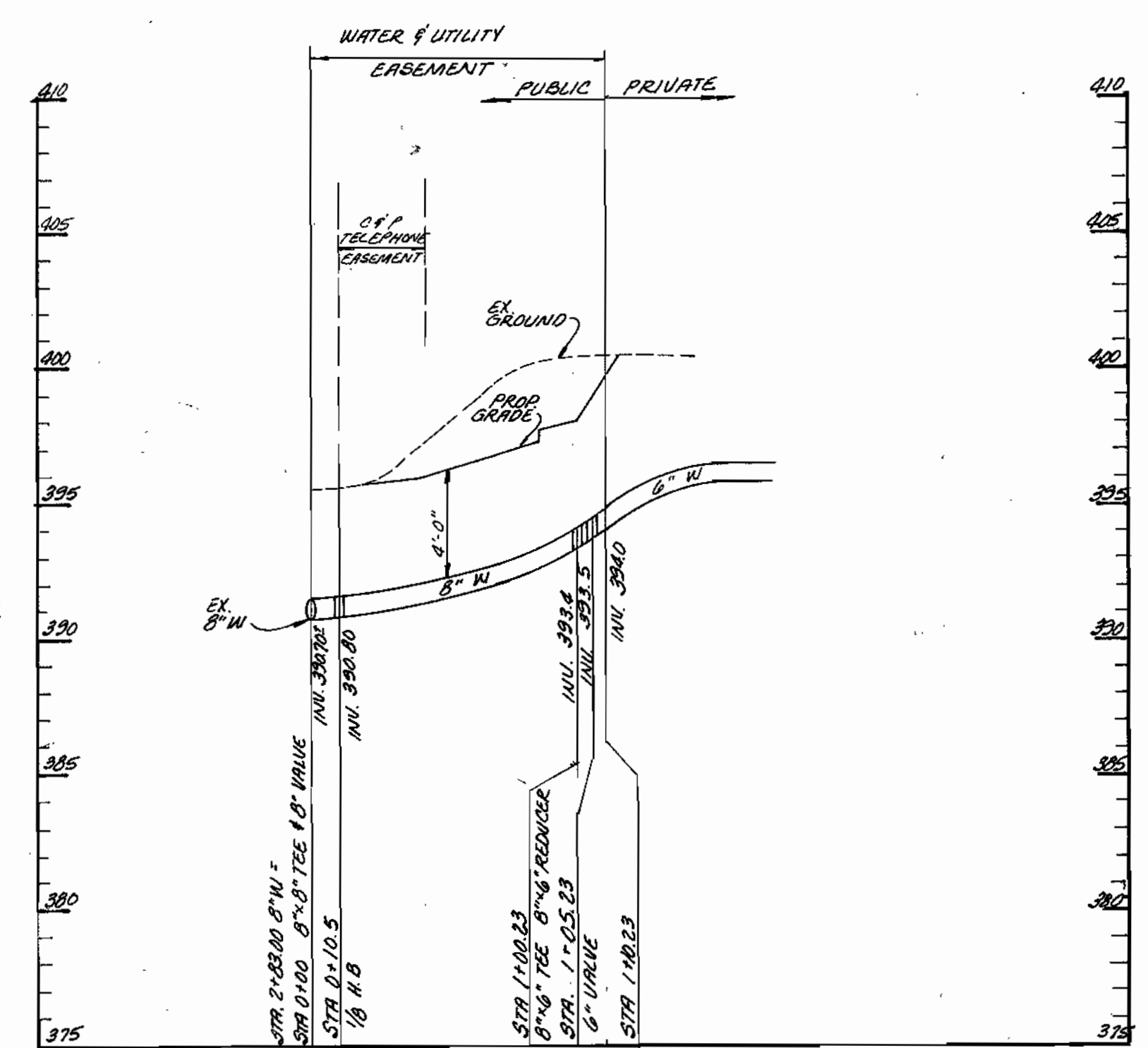
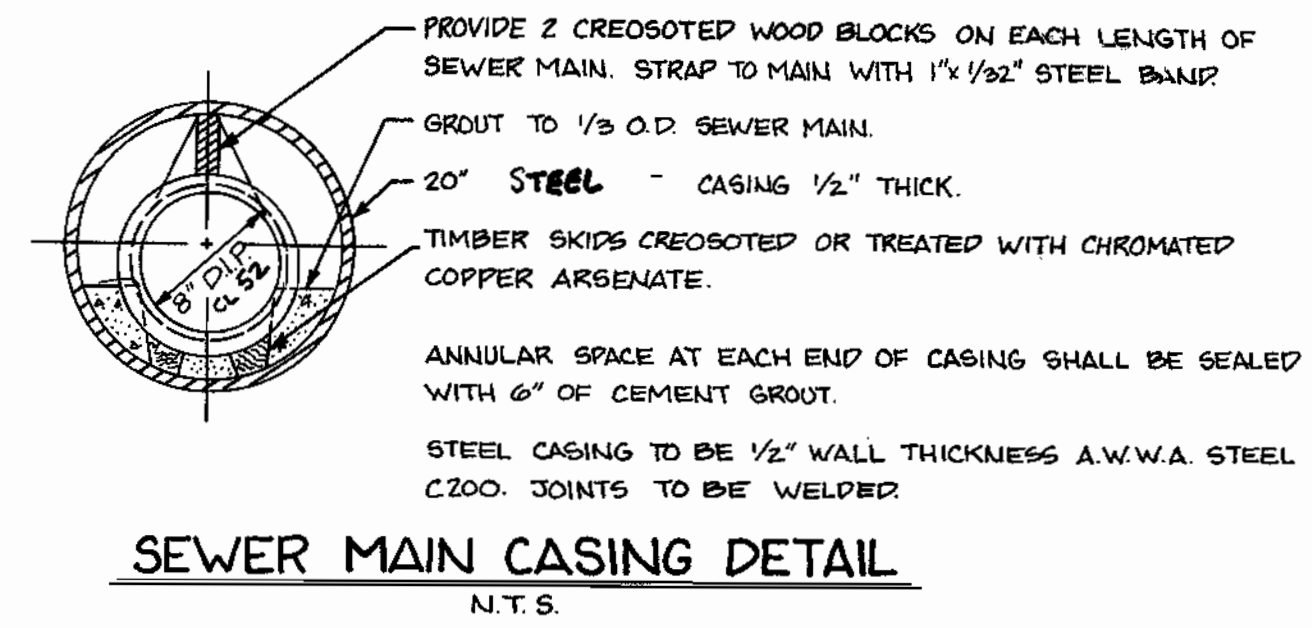
PROPOSED DAY-CARE CENTER & CAR DEALERSHIP
COLUMBIA CORPORATE PARK
PARCEL A-21 & A-22

HOWARD COUNTY, MARYLAND

ELECTION DIST. 6

SCALE:
AS SHOWN

SHEET NO.
2 OF 3



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

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

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James M. Helm 5/15/91 U.S. SOIL CONSERVATION SERVICES DATE

John R. Robertson 5/15/91 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS

James J. ... 5/17/91 DIRECTOR OF PUBLIC WORKS DATE

Robert ... 5-9-91 CHIEF, BUREAU OF UTILITIES DATE

William ... 5/15/91 CHIEF, BUREAU OF ENGINEERING DATE

John M. ... 5/15/91 CHIEF, LAND DEVELOPMENT DIVISION DATE

ENGINEER

GEORGE WILLIAM STEPHENS JR. AND ASSOCIATES, INC.

658 KENILWORTH DRIVE
SUITE 100
TOWSON, MARYLAND 21204

(301) 825-8120



DESIGNED: W.J.M.
DRAWN: M.E.
CHECKED: K.J.

BY	NO	REVISION	DATE
GW	1	ADDED WATER PROFILE #7 & SANITARY SEWER CONNECTION TO BUILDING	3/16/93

PROFILES FOR PROPOSED WATER MAIN & SANITARY SEWER

CONTRACT NO. 24-3128-D

600' SCALE MAP NO. 36

BLK NO. 23 F 24

PROPOSED DAY-CARE CENTER & CAR DEALERSHIP

COLUMBIA CORPORATE PARK

PARCEL A-21 & A-22

HOWARD COUNTY, MARYLAND ELECTION DIST. 0

MARCH, 1989

SCALE: AS SHOWN

SHEET 3 OF 3