

Legend

- EXISTING 4" HP GAS LINE
- EXISTING 8" STREAM
- EXISTING EDGE OF PAVEMENT
- PROP. 8" S
- PROP. 12" W
- PROP. 15" RCOF
- PROP. 4" W
- PROP. SEWER LINE (BY OTHERS)
- PROP. WATER LINE (BY OTHERS)
- PROP. STORM DRAINS (BY OTHERS)
- PROPOSED SANITARY HOUSE CONNECTION
- LIMIT OF DISTURBANCE

MATCH LINE SHEET 3 OF 7

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

3.9.05

CHIEF - BUREAU OF UTILITIES - DATE

CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft-McCune-Walker, Inc.

A Team of Land Planners,
Landscape Architects,
Civil/Structural Engineers,
Engineers, Surveyors &
Environmental Professionals

200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

DESIGN BY:
MAT

DRAWN BY:
KDE/MAT

CHECKED BY:

DATE:
12/16/04

BY	NO.	REVISION	DATE
			600 SCALE MAP NO. 31
			BLOCK NO. 10, 11, 16, 17

FINAL WATER & SEWER PLAN

**OWENS PROPERTY PHASE I, LOTS 1-38
ELLIS LANE AT LANDING ROAD**

OWNER:
Parcel 243
Edmund Broderick
et. al.
7720 Millstone Ct.
Ellicott City, MD 21043

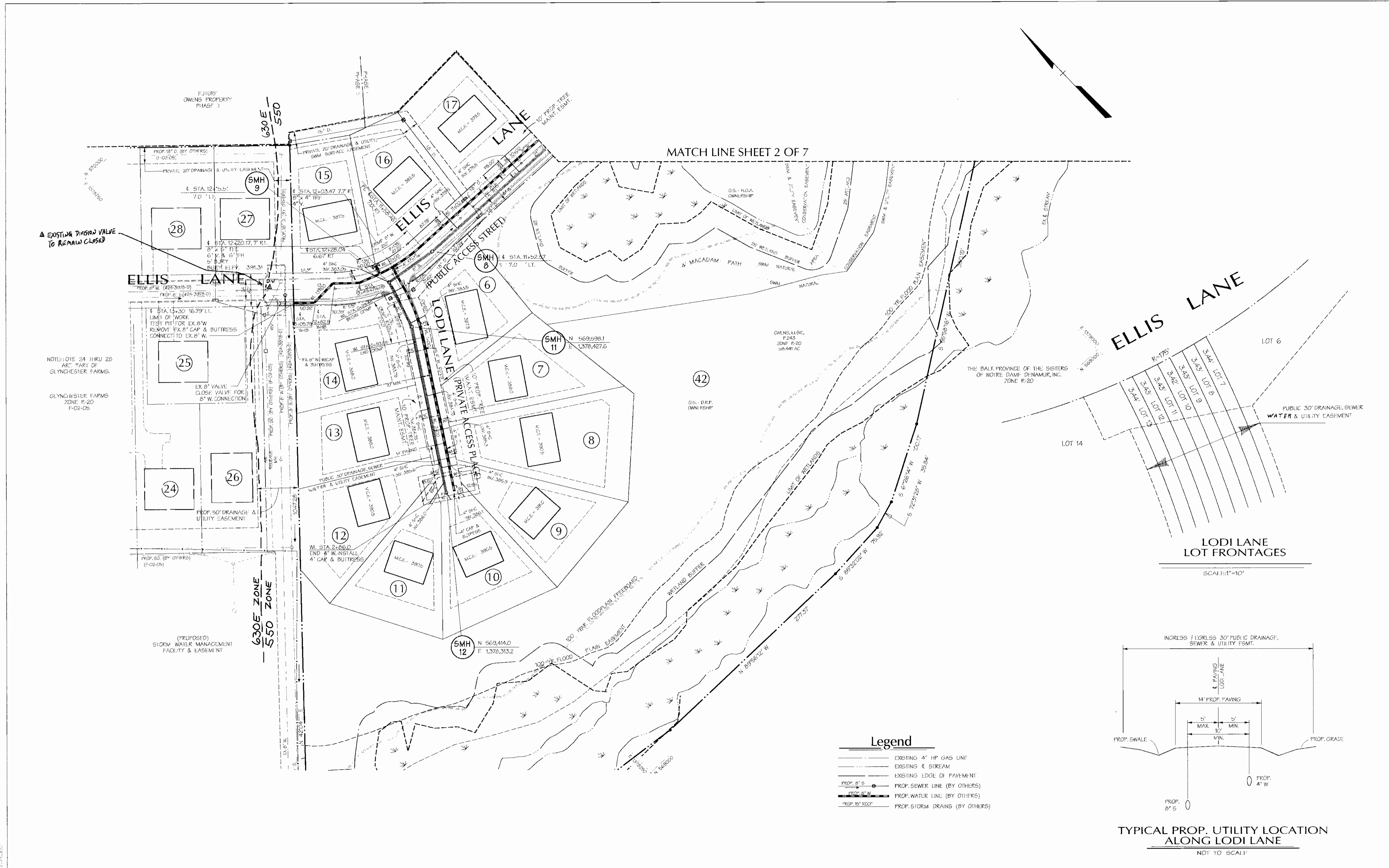
Parcel 572
Zhen Owens
5016 Landing Road
Ellicott City, MD 21075

DEVELOPER:
James Keely and Co., Inc.
P.O. Box 5226
61 E. Paconia Road,
Timonium, MD 21093

SCALE:
1" = 50'

SHEET
2 of 7

CONTRACT NO. 14-4099-D



EXISTING DIVISION VALVE TO REMAIN CLOSED

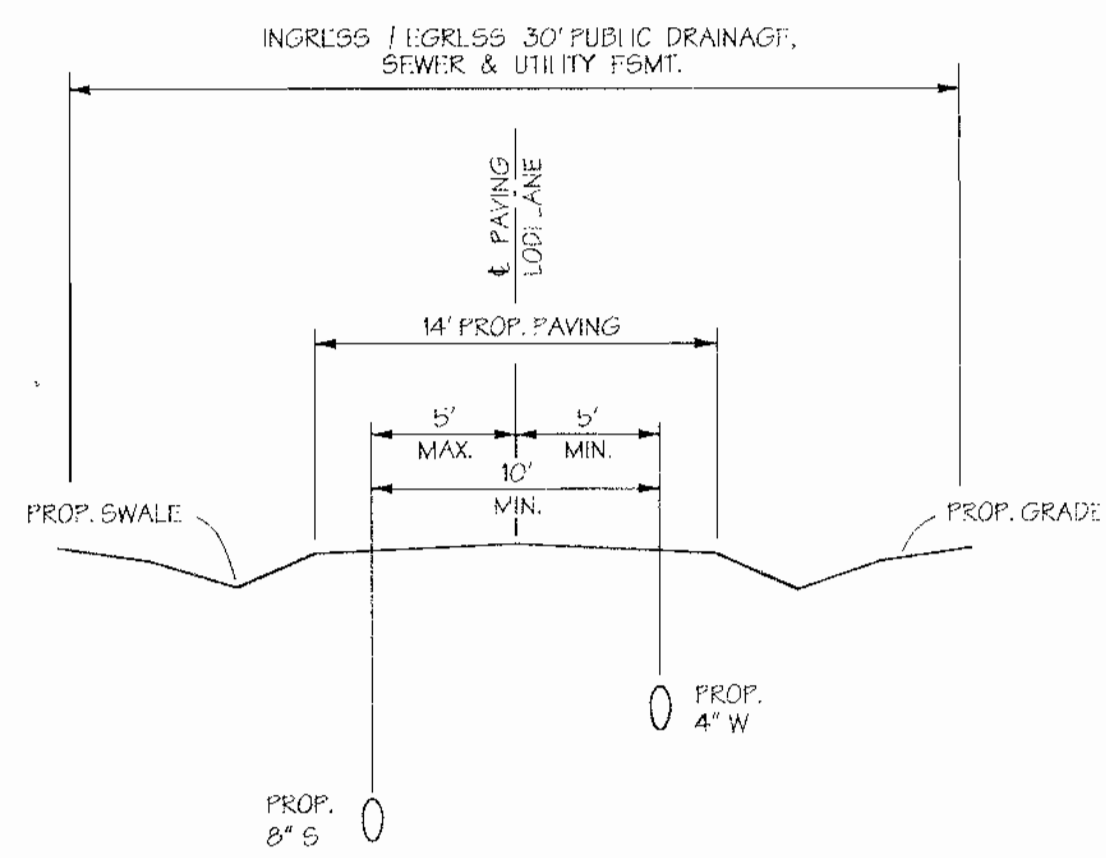
NOTE: LOTS 24 THRU 28 ARE PART OF GLYNCHESTER FARMS. GLYNCHESTER FARMS ZONE R-20 F-02-05

(PROPOSED) STORM WATER MANAGEMENT FACILITY & EASEMENT

MATCH LINE SHEET 2 OF 7

SCALE: 1"=10'

- Legend**
- EXISTING 4" HP GAS LINE
 - EXISTING STREAM
 - EXISTING EDGE OF PAVEMENT
 - PROP. 8" S
 - PROP. 8" W
 - PROP. 15" RCP
 - PROP. SEWER LINE (BY OTHERS)
 - PROP. WATER LINE (BY OTHERS)
 - PROP. STORM DRAINS (BY OTHERS)



TYPICAL PROP. UTILITY LOCATION ALONG LODI LANE
NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Ruth Benjamin 1-11-05
CHIEF BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature] 2/1/05
CHIEF DEVELOPMENT ENGINEERING DIVISION DATE

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DATE:	12/16/04	BY	NO.	REVISION	DATE

FINAL WATER & SEWER PLAN

600 SCALE MAP NO. 31 BLOCK NO. 10, 11, 15, 17

**OWENS PROPERTY PHASE I, LOTS 1-38
ELLIS LANE AT LANDING ROAD**

OWNER: Parcel 243 Edmund Broderick et alia 7720 Millstone Ct. Elkridge City, MD 21043

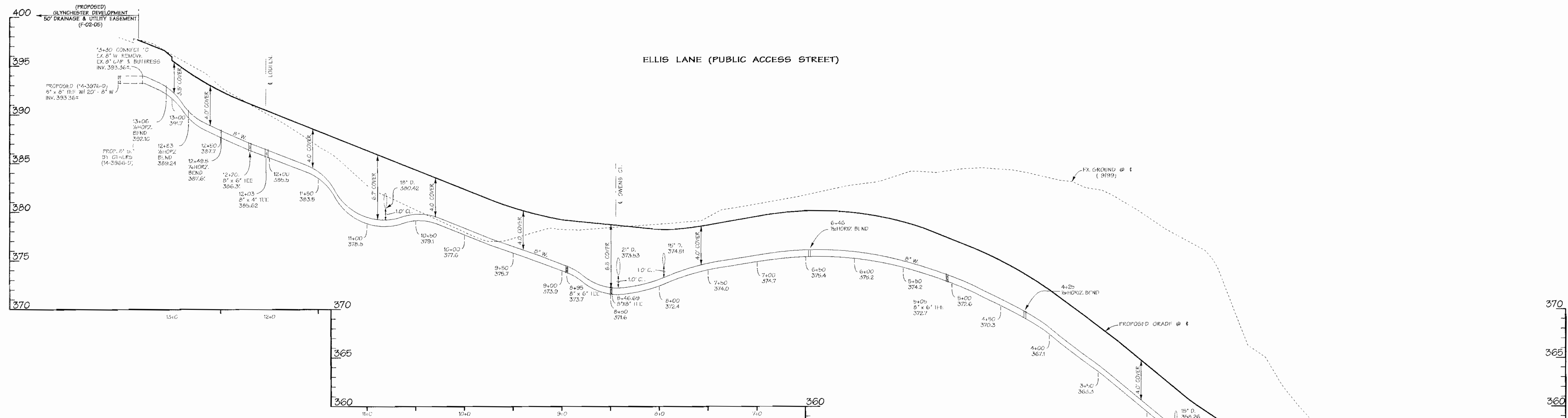
Parcel 572: Zhen Owens 5016 Landing Road Elkridge, MD 21075

DEVELOPER: James Keely and Co. Inc. P.O. Box 528 61 F. Padonia Road Pimonia, MD 21093

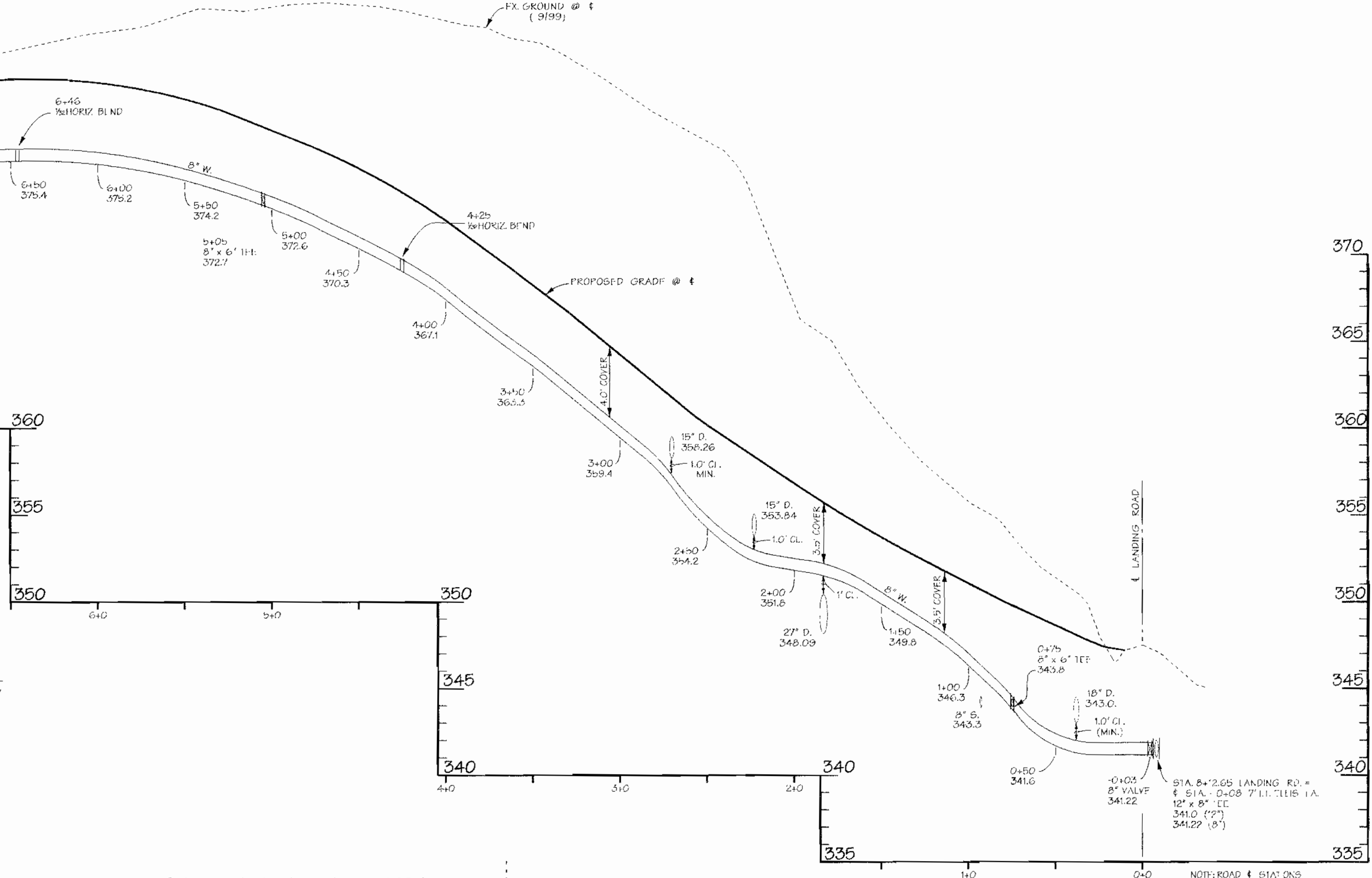
CONTRACT NO. 14-4099-D

SCALE: 1"= 50'

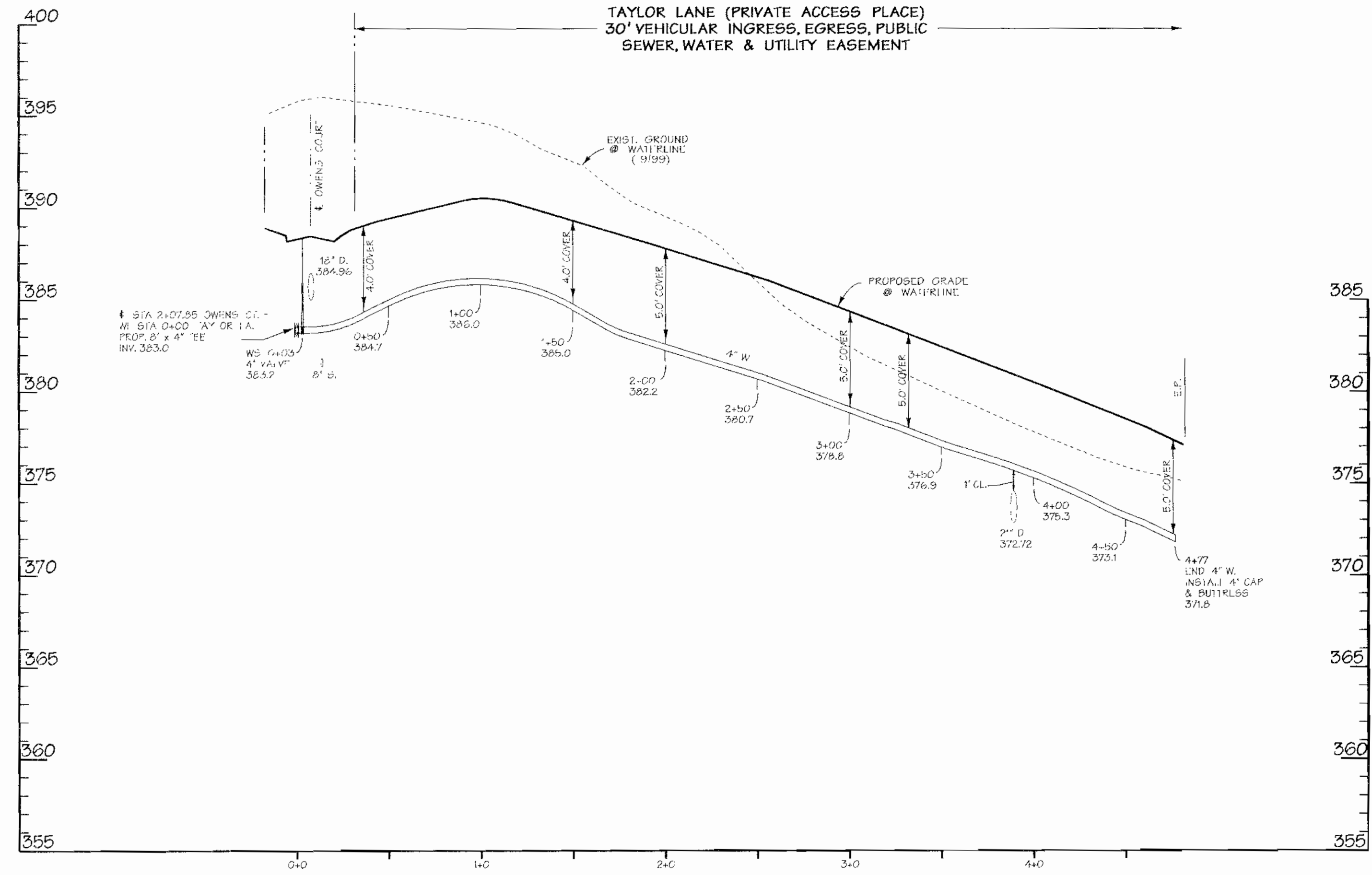
SHEET 3 of 7



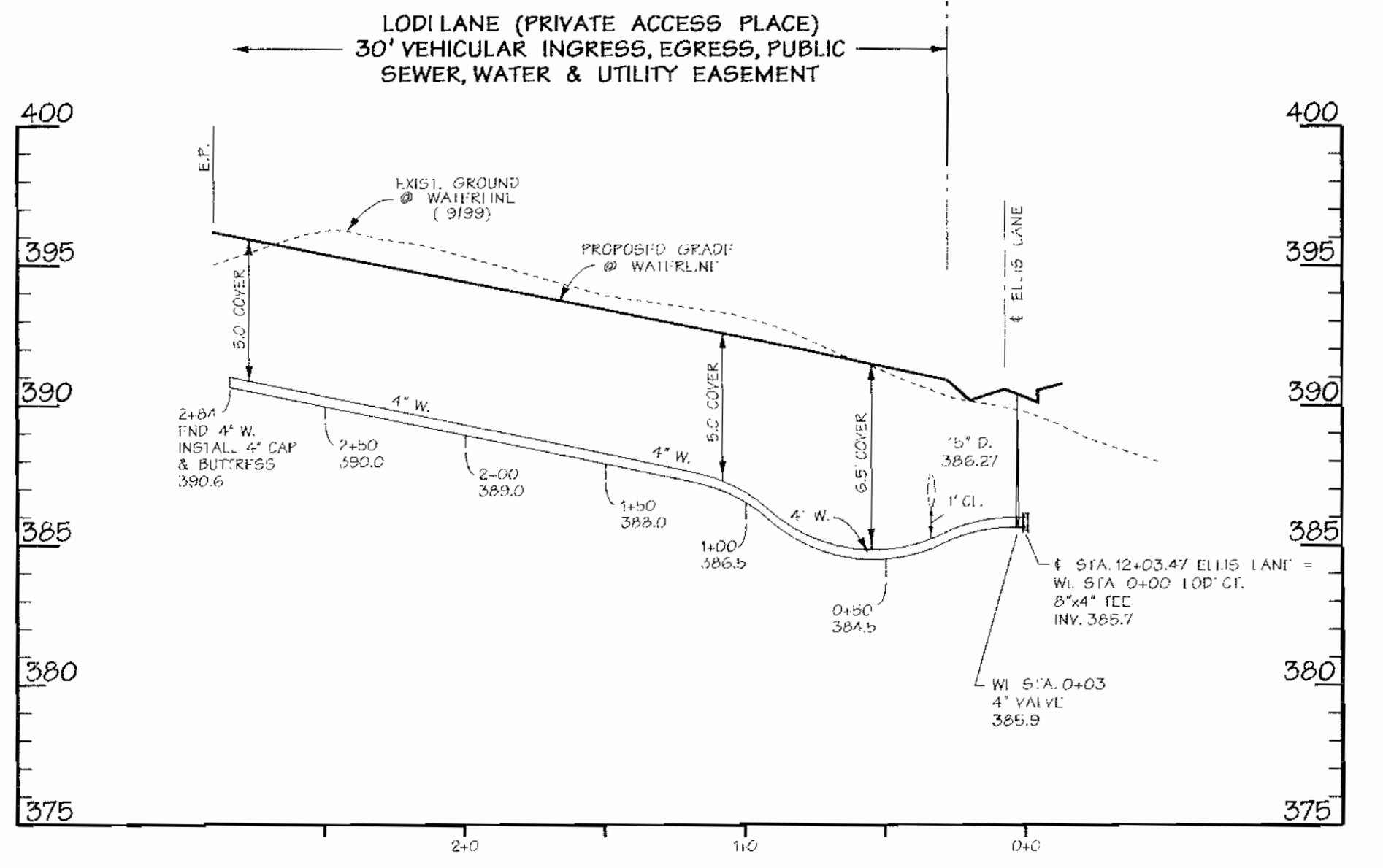
NOTE: STATIONING BASED ON ϵ PROJECTION



PROFILES
SCALE: HORIZ. 1"=50'
VERT. 1"=5'



NOTE: ACTUAL WATERLINE STATIONING



NOTE: ACTUAL WATERLINE STATIONING

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
CHIEF - DEVELOPMENT ENGINEERING DIVISION DATE

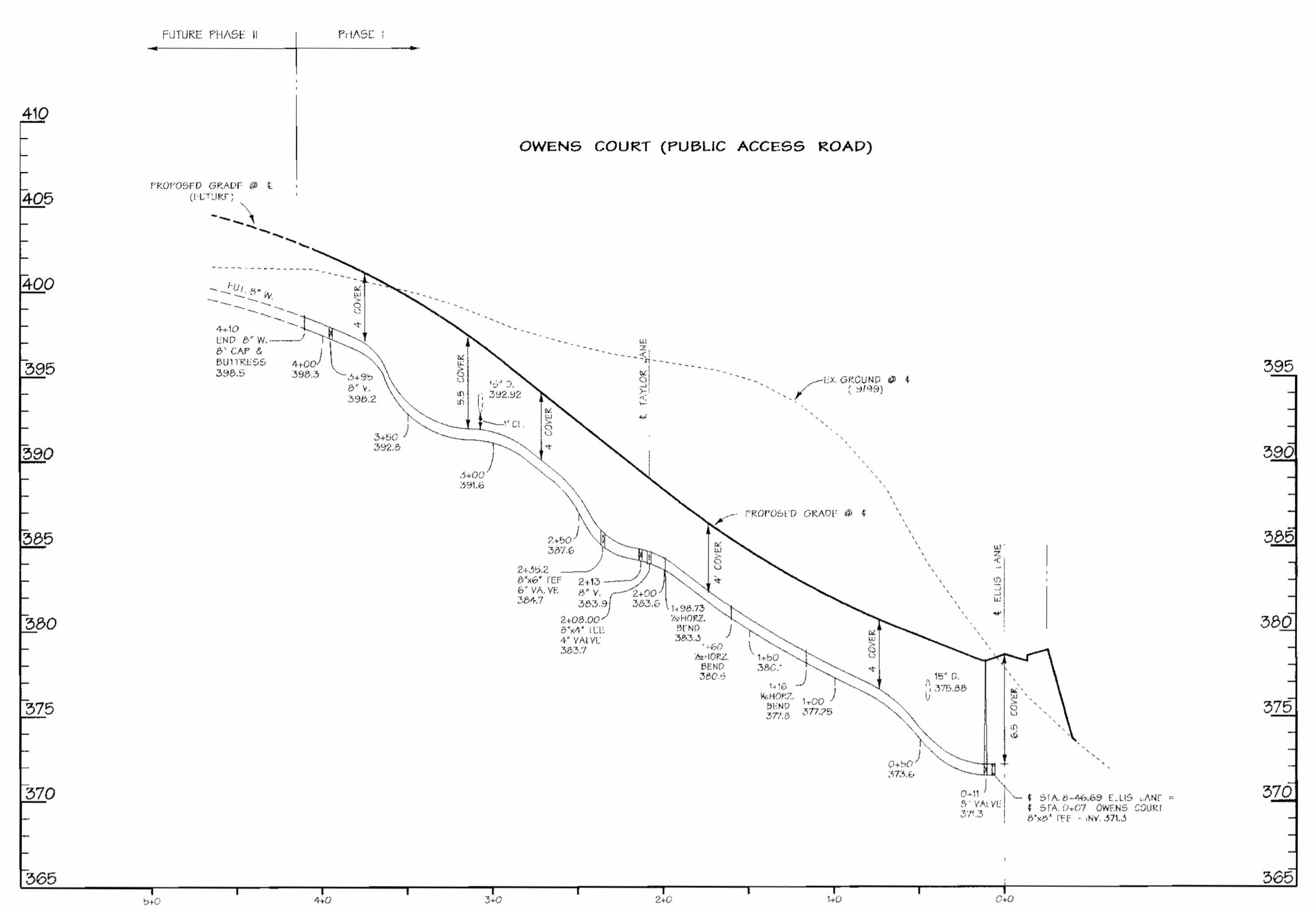
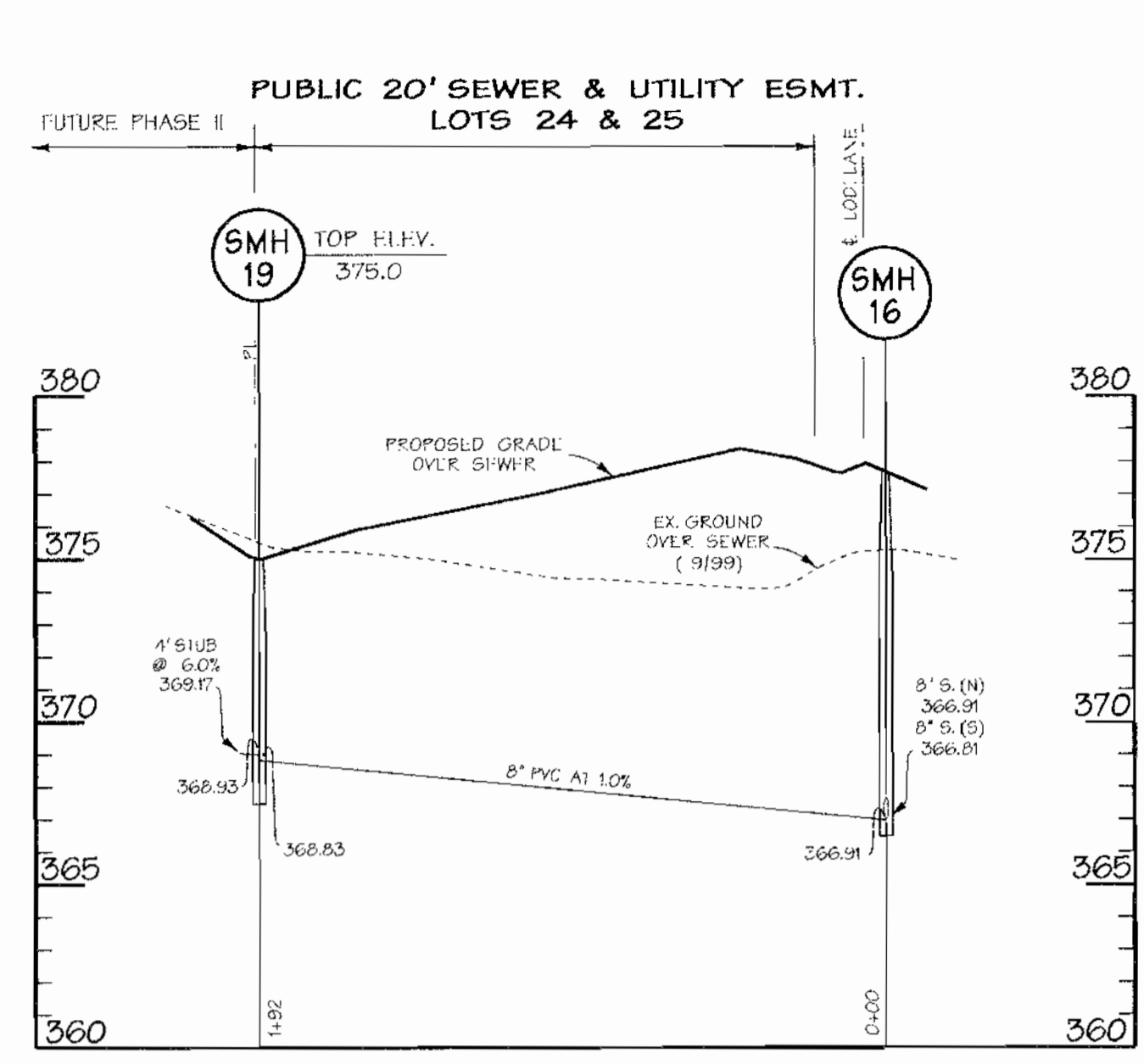
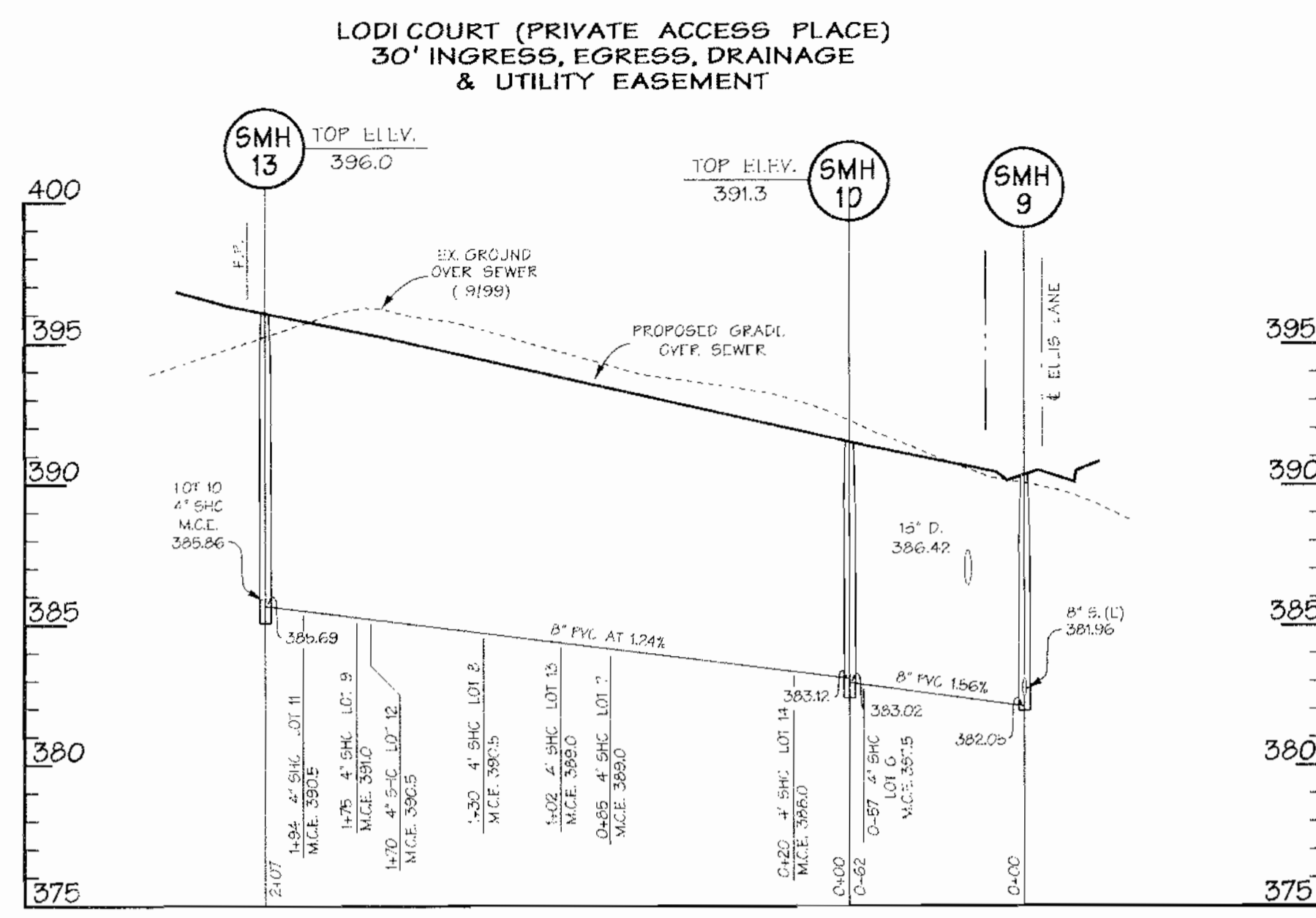
DMW
Daft-McCune-Walker, Inc.
A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

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DRAWN BY:	
CHECKED BY:	
DATE:	12/6/04
BY NO.	
REVISION	
DATE	

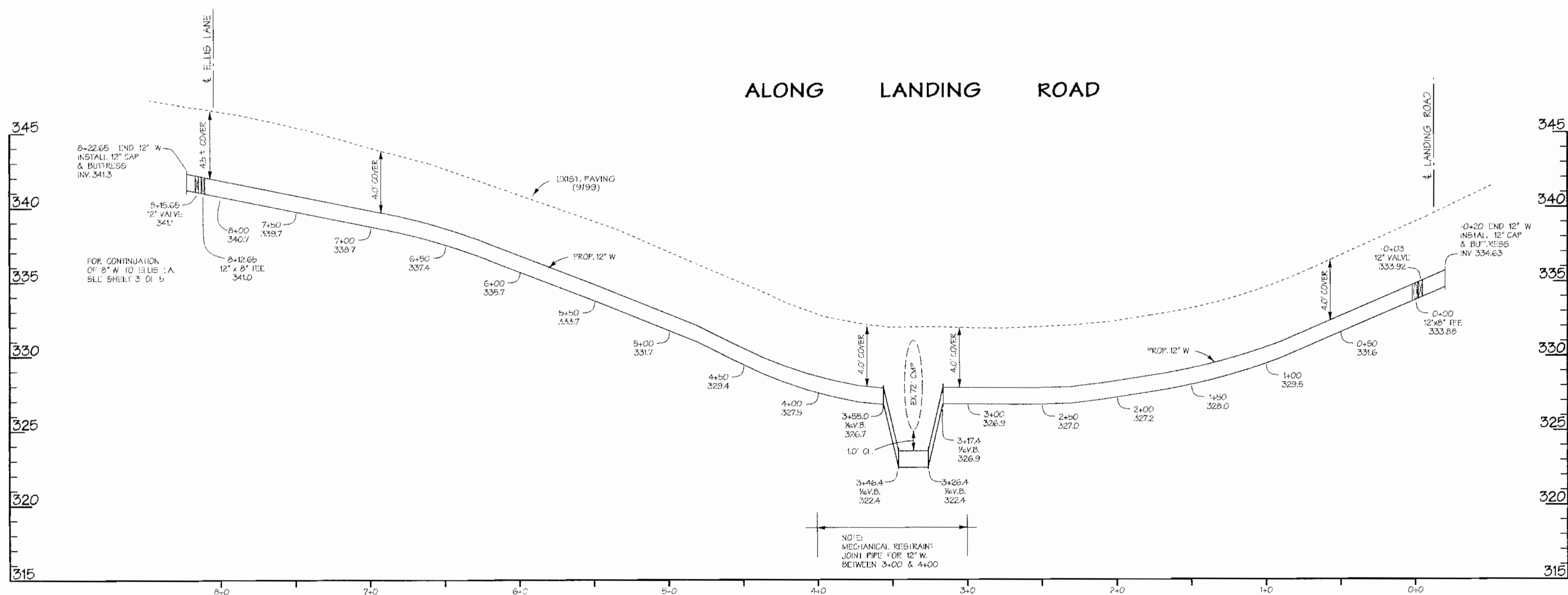
FINAL WATER MAIN PROFILES
600 SCALE MAP NO. 31
BLOCK NO. 10, 11, 16, 17

**OWENS PROPERTY PHASE I, LOTS 1-38
ELLIS LANE AT LANDING ROAD**
OWNER: Parcel 243, Edmund Broderick et alia
FAX MAP 31, PARCEL: 243, 572
DEVELOPER: Parcel 572, Zhen Owens
7720 Millstone Ct., Elkridge, MD 21043
James Kestly and Co., Inc.
P.O. Box 5929, 6111 Padonia Road, Timonium, MD 21093
CONTRACT NO. 14-4099-D

SCALE: AS SHOWN
SHEET 4 of 7

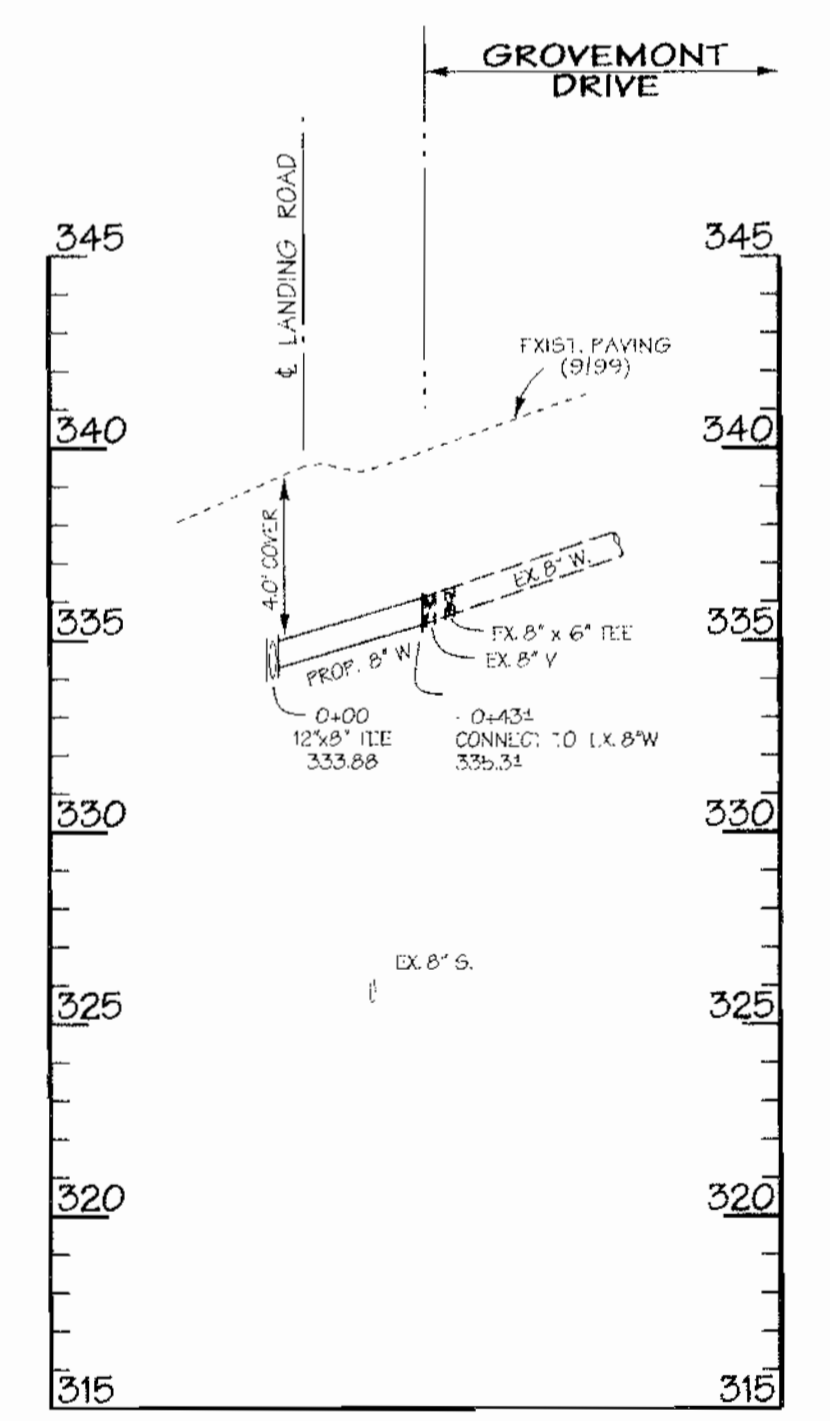


NOTE: STATIONING BASED ON ϕ PROJECTION



NOTE: ACTUAL WATERLINE STATIONING

PROFILES
SCALE: HORIZ. 1"=50'
VERT. 1"=5'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Richard Benjamin 1-11-05
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature] 2/17/05
CHIEF DEVELOPMENT ENGINEERING DIVISION - DATE

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200 East Pennsylvania Avenue
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(410) 296-3333
Fax 296-4705

[Handwritten Signature]

DESIGN BY:	
DRAWN BY:	
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DATE:	12/6/04
BY NO.	
REVISION	
DATE	

FINAL SANITARY SEWER & WATER PROFILES

600 SCALE MAP NO. 31 BLOCK NO. 10, 11, 16, 17

**OWENS PROPERTY PHASE I, LOTS 1-38
ELLIS LANE AT LANDING ROAD**

OWNER: Parcel 243
Edmund Broderick
et alia
7720 Millstone Ct.
Ellicott City, MD 21043

DEVELOPER: Parcel 572
Zhen Owens
5016 Landing Road
Ellicott City, MD 21075

James Kesby and Co. Inc.
P.O. Box 528
61 E. Padonia Road
Timonium, MD 21083

CONTRACT NO. 14-4099-D

SCALE:
AS SHOWN

SHEET
6 of 7

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (203-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MAPS AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERE OF.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER BARRIERS AND ALL SLOPE STABILIZATION.
 - B. FOURTEEN DAYS AFTER ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAP BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 22 OF THE HOWARD COUNTY DESIGN MANUAL, SOIL DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 01), SOILS (SEC. 04), TEMPORARY SEEDINGS (SEC. 05), AND MULCHING (SEC. 02), TEMPORARY STABILIZATION WITH MULCH. A ONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SOIL ANALYSIS:

10% AREA OR SITE AREA DESIGNATED	ADRES
AREA TO BE ROOFED OR PAVED	ADRES
AREA TO BE VEGETATIVELY STABILIZED	ADRES
TOTAL CU. YARDS	CUBIC YARDS
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DETERMINED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. DITCH BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. FENCES FOR THE PROTECTION OF UTILITIES IS LIMITED TO THREE FT. LENGTHS OR THEREAFTER WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

Sediment Control General Notes

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-TERM VEGETATIVE COVER IS REQUIRED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1. DISKING - APPLY 2 TONS PER ACRE OF DOMINIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK AND UPPER THREE INCHES OF SOIL AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (19 LBS./1000 SQ.FT.).
2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOMINIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK AND UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 20 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 2 LBS. PER ACRE OF WEEPING LOVEGRASS (0.7 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WEL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SUB.

MULCHING - APPLY 14 TO 2 TONS PER ACRE (70 - 90 LBS./1000 SQ.FT.) OF UNROTTED WOOD PELLETS, OR GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORS - 100# OR 200# GAL. PER ACRE (5 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS ON SLOPES 5:1 OR HIGHER, USE 34# GAL. PER ACRE (8 GAL./1000 SQ.FT.) FOR ANCHORS.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RULES AND METHODS NOT COVERED.

Permanent / Temporary Seeding Notes

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Ruth Benjamin 1-11-05</i> CHIEF - BUREAU OF UTILITIES - DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE
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SEQUENCE	NUMBER OF DAYS
1. OBTAIN A GRADING PERMIT	7
2. WHILE CONSTRUCTING 12" WATER MAIN THE LIMIT-OF-DISTURBANCE SHALL INCLUDE ONLY THAT TRENCH LENGTH WHICH WILL BE BACKFILLED AND STABILIZED IN ONE WORK DAY. ALL EXISTING TRAFFIC MUST BE MAINTAINED THROUGHOUT CONSTRUCTION.	15
3. STABILIZE ALL EXISTING VEGETATIVE DISTURBED AREAS IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS AT THE END OF EACH WORK DAY.	15

Sequence of Construction

250 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition: Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose: To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies:

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil is not adequate to provide vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plants growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

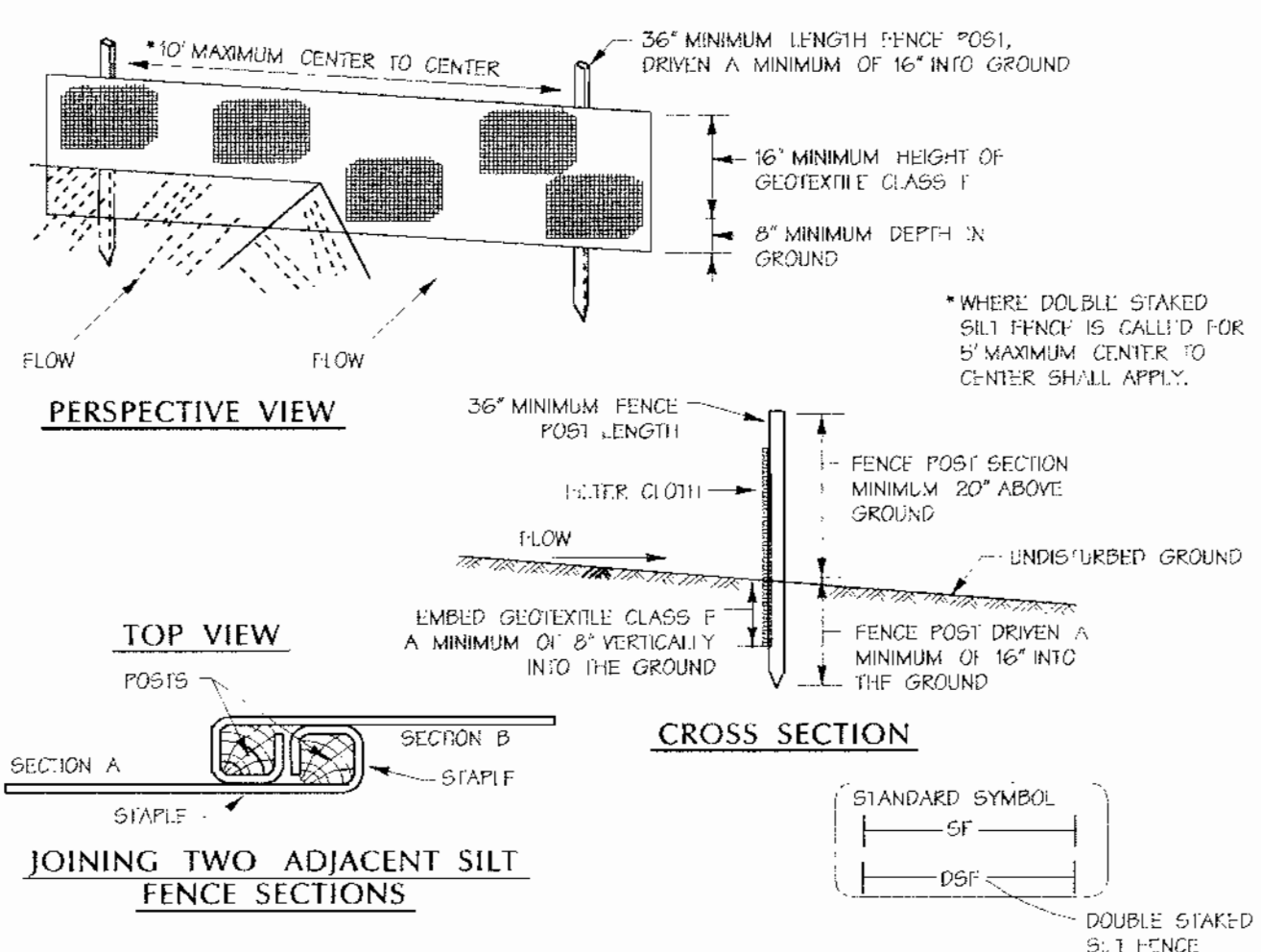
Construction and Material Specifications:

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS in cooperation with Maryland Agricultural Experimental Station.
 - Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silty loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textural materials and shall contain less than 1% by volume of cinders, stones, debris, coarse fragments, gravel, rocks, trash, and other materials larger than 1 1/2 inch in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. LIME shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures:
 - For sites having disturbed areas under 5 acres:
 - Place Topsoil (if required) and apply soil amendments as specified in 200 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic contents of topsoil shall be not less than 1% percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

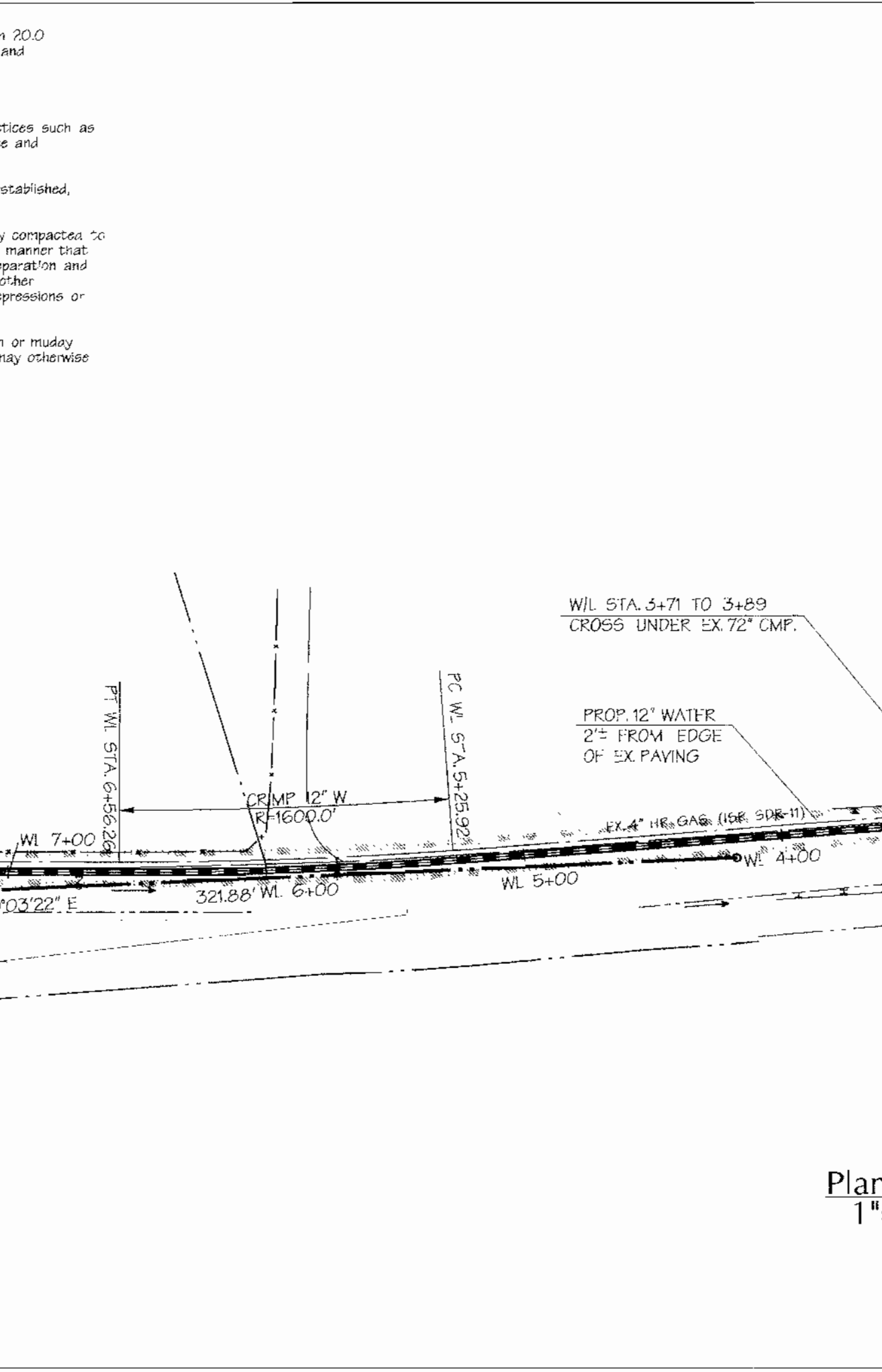
Note: Topsoil substitutes or amendments as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

Topsoil Specifications (FOR SEDIMENT CONTROL / STABILIZATION PURPOSES)

 Daft-McCune-Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 298-3333 Fax 298-4705	A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals	DESIGN BY: MAT DRAWN BY: KDE CHECKED BY: DATE: 12/6/04 BY NO.	DATE: 600 SCALE MAP NO. 31 BLOCK NO. 11.16.17
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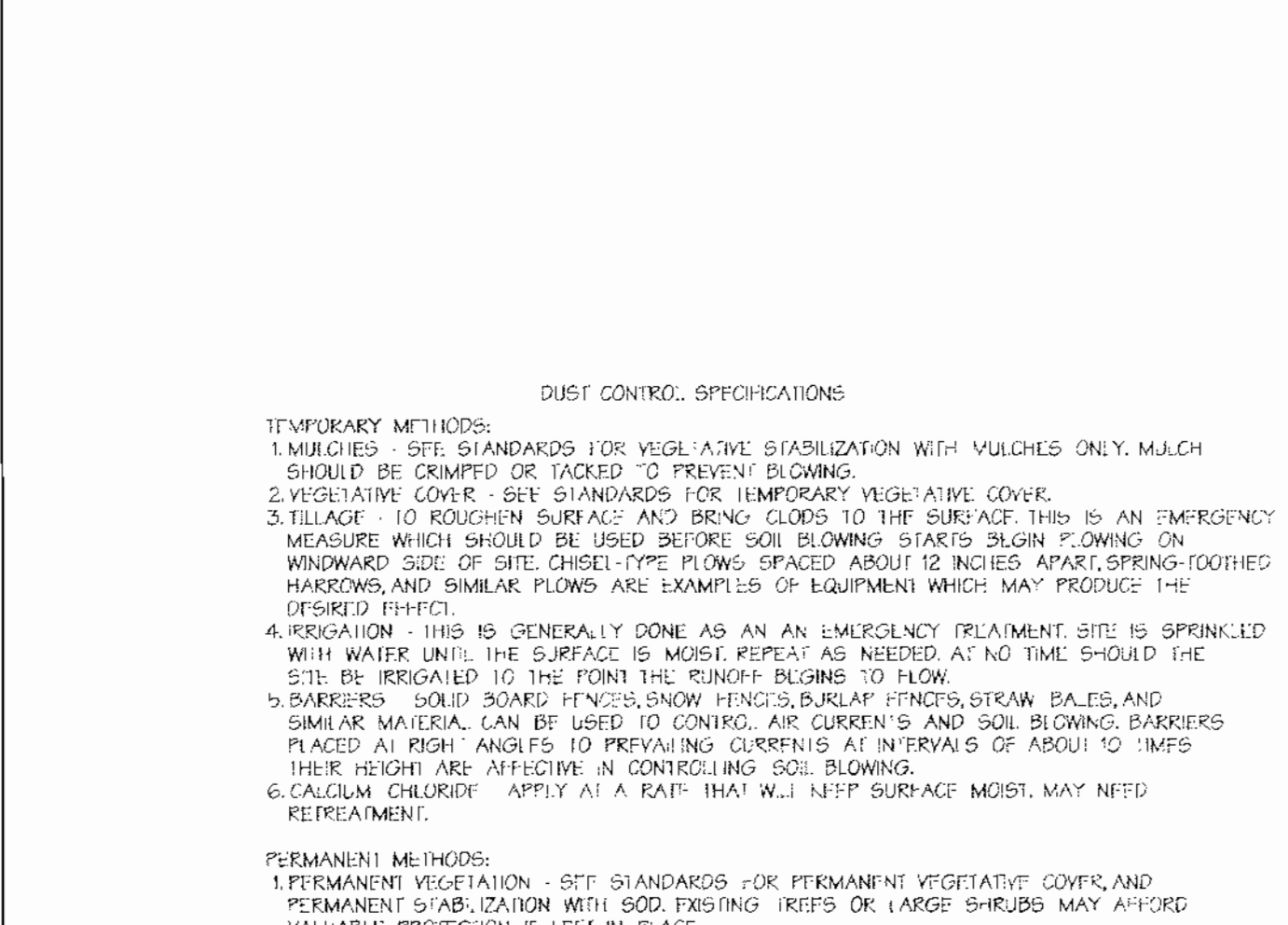


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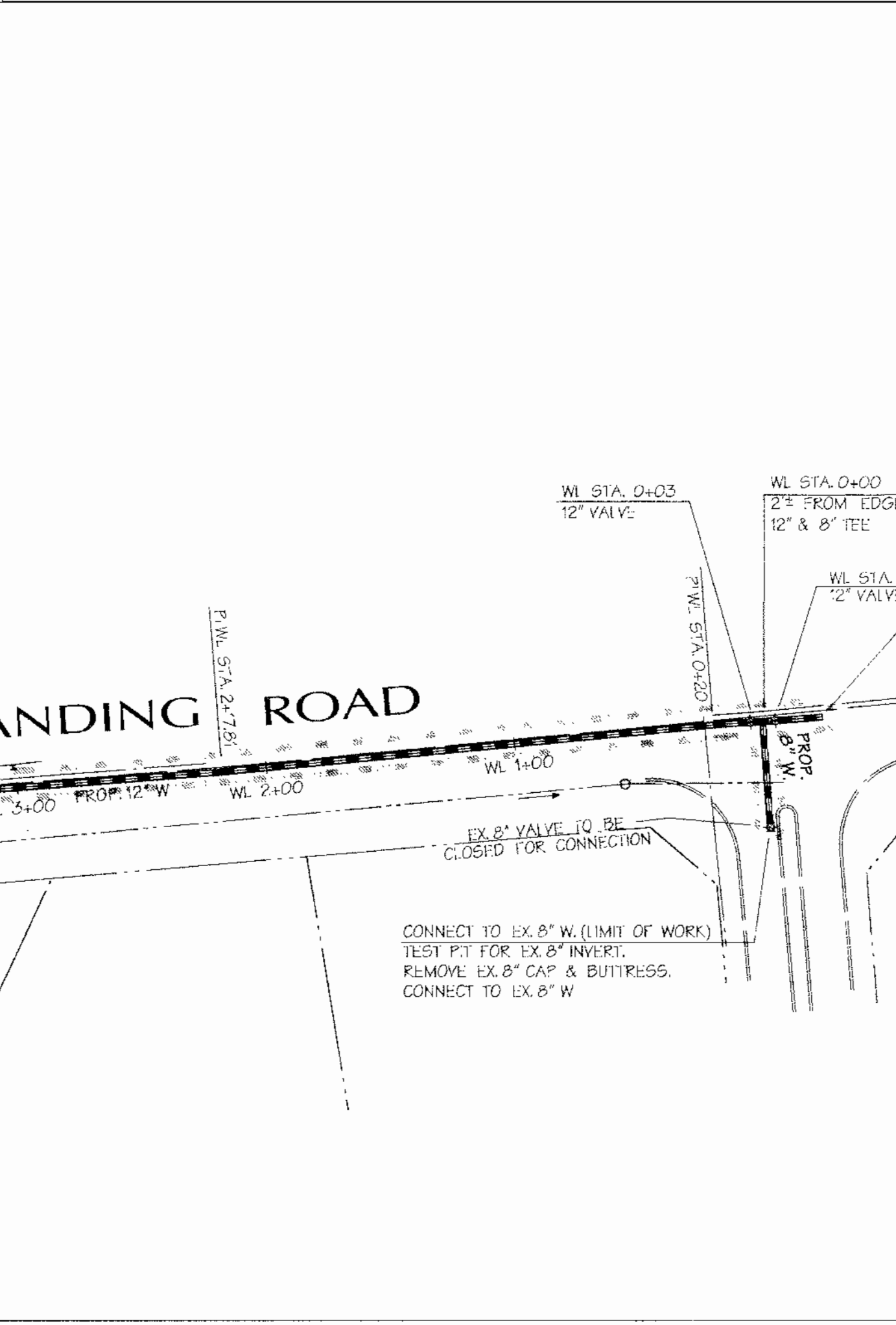


FINAL SEDIMENT AND EROSION CONTROL DETAILS

DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 15 - 5	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION Not To Scale
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Dust Control Specifications



OWENS PROPERTY PHASE I, LOTS 1-38 ELLIS LANE AT LANDING ROAD

OWNER: Parcel 243 Edmund Broderick 7700 Millstone Co. Elliott City, MD 21043	Parcel 572 7700 Box 529 5016 Landora Road Elkridge, MD 21076	DEVELOPER: James Neely and Co. Inc. P.O. Box 529 61 E. Adoma Road Timonium, MD 21093
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CONTRACT NO. 14-4099-D

Scale

Scale: AS SHOWN

Sheet: 7 of 7

DATE PLOTTED: 12/6/04 10:48 AM PLOT: 14-4099-D.DWG