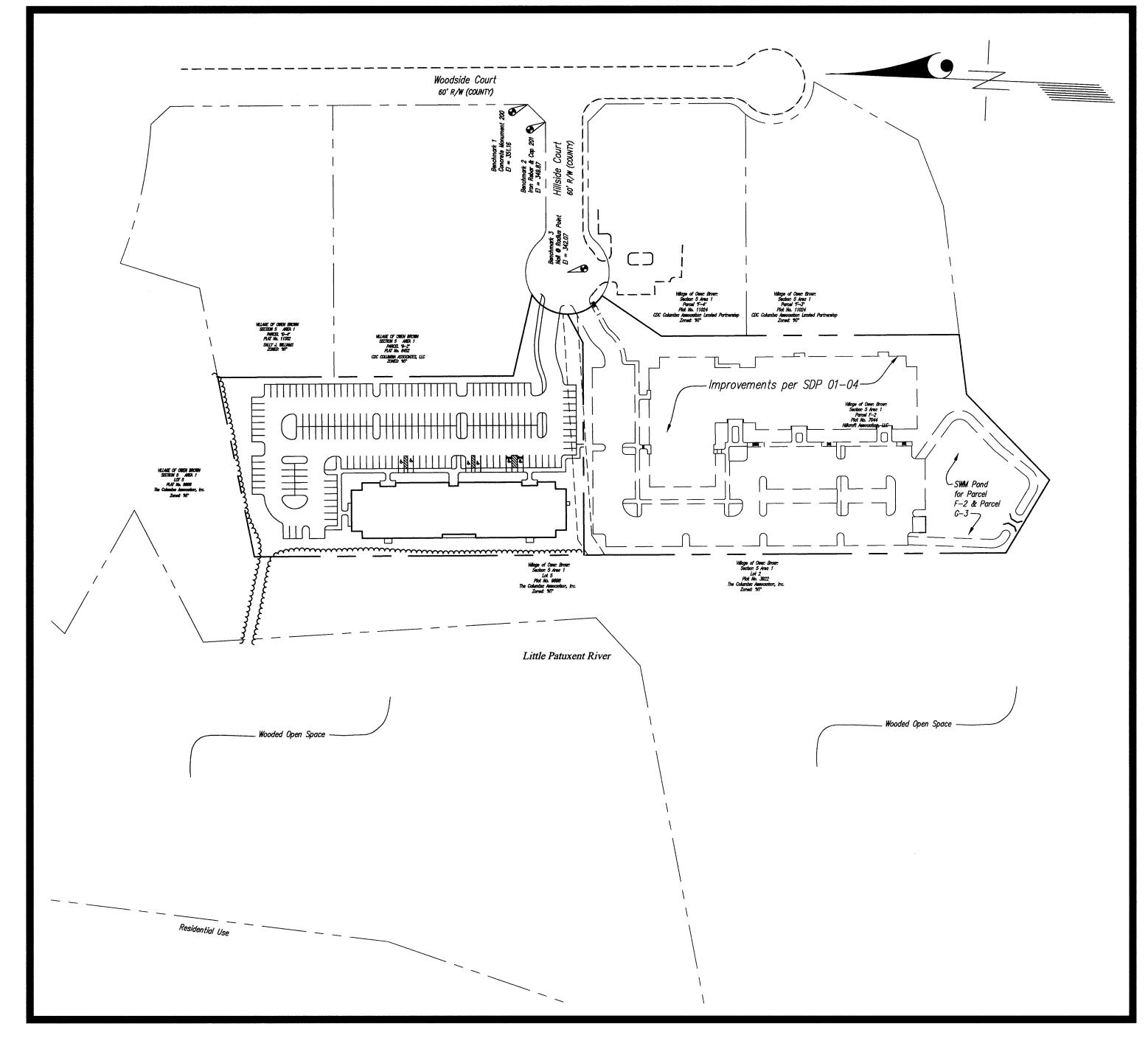
GENERAL NOTES

- 1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- 2. The contractor shall notify the Department of Public Works at (410) 313-1880 at least five (5) working days prior to the start of work.
- 3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- 4. The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation
- 5. Area of Parcel: 3.028 Ac. Disturbed Area: 3.0 Ac.
- 6. Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- 7. All plan dimensions are to face of curb unless otherwise noted.
- 8. Existing topography was determined by GLW field survey dated August 2000 using the benchmarks shown on the key map on this sheet.
- 9. Coordinates and bearings are based upon the MD State Plane System (NAD '27).
- 10. Water and sewer shown is public and private as shown on the plan. Proposed public per contract # 24-3944-D.
- 11. All existing water and sewer is shown per Contract No. 24-1482-D.
- 12. All existing public storm drain is per F-87-02.
- 13. Stormwater management is provided on Parcel F-2 under SDP-01-04. Management consists of a detention basin for quantity control with a stormceptor for quality control. All SWM is to be privately owned and maintained. All proposed storm drain is private.
- 14. All curb radii are 5' unless noted otherwise.
- 15. Utility information tuken from approved final construction plans for development.
- 16. Sidewalks adjacent to perpendicular parking shall be 6' wide. All other sidewalks shall be 5' wide, except where dimensioned otherwise. Provide 3' radius rounding at all angle breaks and intersections.
- 17. Contractor shall utilize PVC pipe for all sewer house connections. Contractor shall utilize D.I.P. (Cl. 51) for 4" and 6" water house connections and D.I.P. (Cl. 50) for 8" water house connections.
- 18. For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain the same grade and alignment.
- 19. Use trench bedding class "C" for storm drains. See Howard County Standard G 2.01
- 20. Paved areas indicated are private except as noted.
- 21. Project background: See Dept. of Planning & Zoning File Numbers: F-87-02, FDP-149-A-II, SDP-01-04.
- 22. Recording reference: Plat No. 8452.
- 23. All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a five-foot by five-foot level (2 percent max.) landing at the top and bottom of all ramps and building entrances and
- 24. All water meters shall be located inside buildings. The building is to be sprinklered.
- 25. The proposed water and sewer house connection alignments indicated on the plans, from the proposed utility stubs to the building, are to be constructed by the building plumber and are approximate. The proposed stubs are located 5' from the building face.
- 26. The proposed roof drain alignment connections indicated on the plans, from the The proposed stubs are located 5' from the building face.
- 27. Maintain 2% cross-slopes on sidewalks, per standard details. Where sidewalk is adjacent to building, slope away from building, and utilize expansion joint material and sealer in the joint between the sidewalk and the building wall.
- 28. Sufficient sight distance per the Howard County Design Manual must be provided at
- all access points. Any landscaping that obstructs the line of sight must be relocated.
- 29. An A.P.F.O. traffic study is included with this submission.
- 30. There is no floodplain on this site.
- 31. There are no wetlands on this site.
- 32. Horizontal and vertical control are based on Howard County Street right-of-way Points.
- 33. There are no known grave sites or cemeteries on this site.
- 34. All outside lighting shall comply with Zoning Regulation Section 134 which requires lights to be installed to direct/reflect downwards and inwards on site away from all adjoining public streets and residential areas, and in compliance with HRD's alternative compliance approval . Typical parking lighting to be 400 Watt (32,000 lumen) metal halide lights, arm mounted rectilinear cutoff fixture on 25' bronze finish fiberglass poles in the locations shown on sheet 2. See electrical drawings to be submitted with the building permit package for more complete
- 35. This site is exempt from the Forest Conservation Ordinance in accordance with Section 16.1202 (b) (1) (iv), a planned unit development.
- 36. As shown on sheet 5, a financial surety for the required landscaping must be posted as part of the DPW Developers Agreement in the amount of \$10,350.

SITE DEVELOPMENT PLAN

VILLAGE OF OWEN BROWN

SECTION 5 AREA 1 PARCEL 'G-3'



VICINITY MAP 1"=2000'

**BENCHMARK

- 1. Concrete Monument 200 at Northernmost R/W corner Woodside Court & Hillside Court. EL.= 351.16
- 2. Rebar and cap at Northwest R/W corner Woodside Court & Hillside Court. EL.= 349.87

SITE ANALYSIS

- 1. Area of site: 3.028 ac.
- 2. Disturbed Area: 3.0 ac.
- 3. Present Zoning: New Town (Employment Center Commercial)
- 4. Proposed Use: Office
- 5. Leasable Floor space: 43,221 s.f. Gross Floor Space: 45,311 s.f.
- 6. Total number of Parking Spaces required: 87 (Based on General Office use @ 2 spaces/1000 s.f. leasable)
- 7. Total number of Handicap Spaces required: 6 (Including 1 Van Accessible Space)
- 8. Total number of Parking Spaces provided: 185 (includes 6 handicap spaces; provides a parking ratio of 4.3 sp./1000 s.f.)
- 9. Total number of Handicap Spaces provided: 6 (including 2 Van Accessible spaces)
- 10. Building coverage: 22,513 s.f.
- 11. Floor/Area ratio (F.A.R.): 45,311/131,900 = 0.34

WP-04-45 NOTE

ON 11/5/03, THE DIRECTOR OF THE DEPARTMENT OF PLANNING & ZONING GRANTED A WAIVER TO SECTIONS 16.156 (m)(i)(i) and 16.156 (m)(2), TO EXTEND THE On October 23, 2002, The WP 03-27 was granted, to establishing a new deadline for the filing of a building permit application of September TIME LIMIT FOR APPLYING FOR A BUILDING FERMIT To 9/27/04.

			ADDRESS CHART							
				LOT/PARCEL	#	STREET	DDRESS			
	WATER CODE: E 13	SEWER CO 5410000	DE:	G-3		6310 HILL	SIDE COURT			
SUBDIVISION NAME: VILLAGE OF O				OWEN BROWN		SECTION/AREA 5/1		PARCEL G-3		
	PLAT 8452	ZONE NEW TOWN	TA	AX MAP 36		OCK ELEC. DIS			CENSUS TRACT 6067.01	Γ
				SCALE		Z	ONING	G	. L. W. FILE No.	
			AS SHOWN			NT		00151		
				DATE		TAX MAP — GRID		SHEET		
	HOWARD COUNT	TY, MARYLAND	Aug	g. 22, 20	001	<i>36</i>	- 14		1 OF 9	

KEY MAP SCALE: 1"=100'

SHEET INDEX

- 1. Cover Sheet
- 2. Site Development Plan 3. Site Details/Paving Plan
- 4. Landscape Plan
- 5. Landscape Notes & Details
- 6. Drainage Area Map
- 7. Utility Profiles & Schedules
- 8. Sediment and Erosion Control Plan
- 9. Sediment Control Notes and Details



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development A

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VIL ENGINEERS, LAND SURVEYORS, LAND PLANN			HIEC12												
3909 national drive — Suite 250 — Burto Burtonsville, Maryland 2		E PARK													
EL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-		AX: 301-421-	-4186												
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9/27/01

Date *9/25/0/* Date

PREPARED FOR: OWNER CONTRACT PURCHASER Hillcroft Associates 2, LLC c/o Manekin Brothers Abeshouse The Stone Mill 1340 Smith Avenue, Suite 200 Baltimore, Maryland 21209 Attn: Mr. Richard P. Manekin 410-779-1208

The Howard Research and Development Corporation 10275 Little Patuxent Parkway Columbia, Maryland 21044 Attn:Mr. Edward Ely 410-992-6000

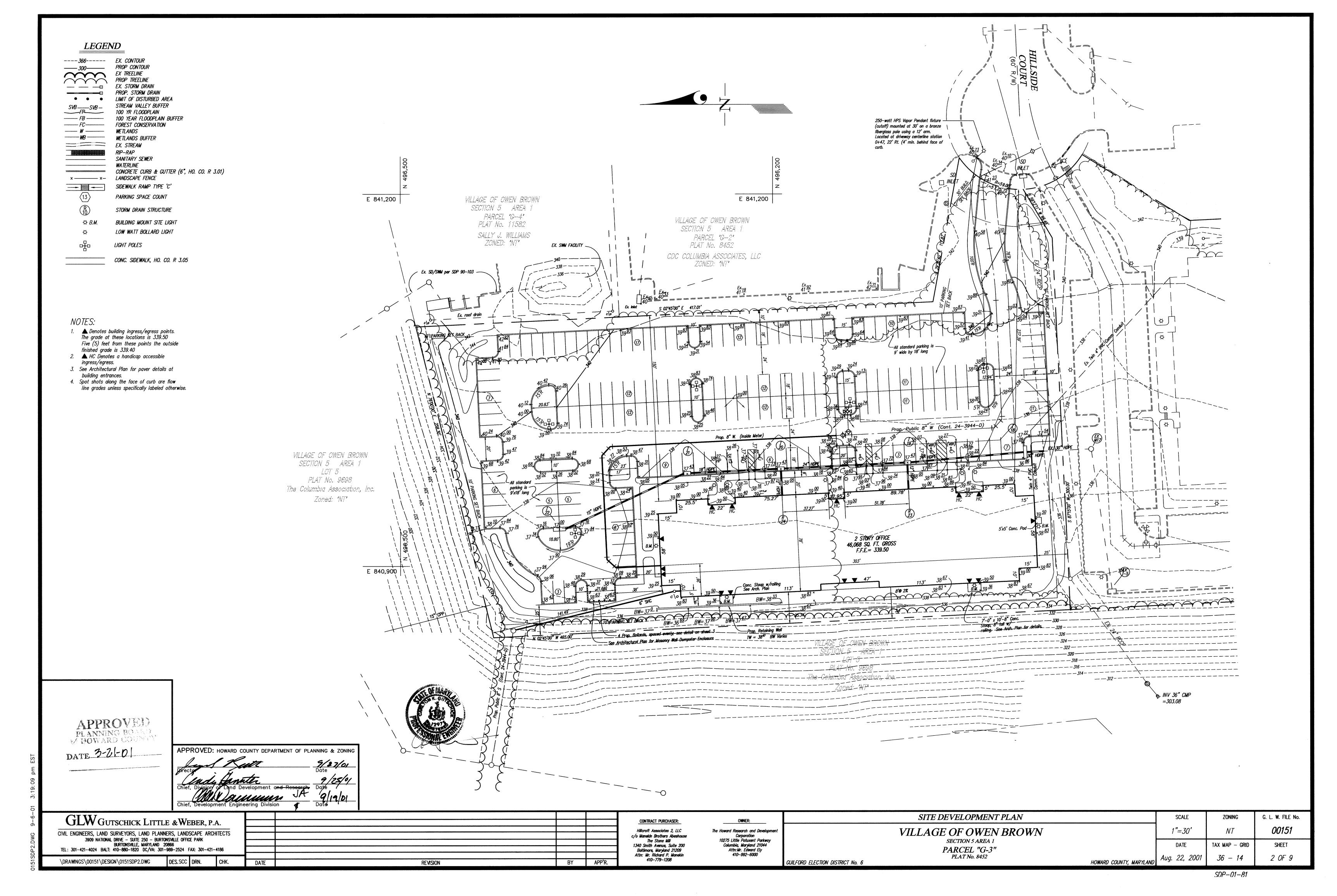
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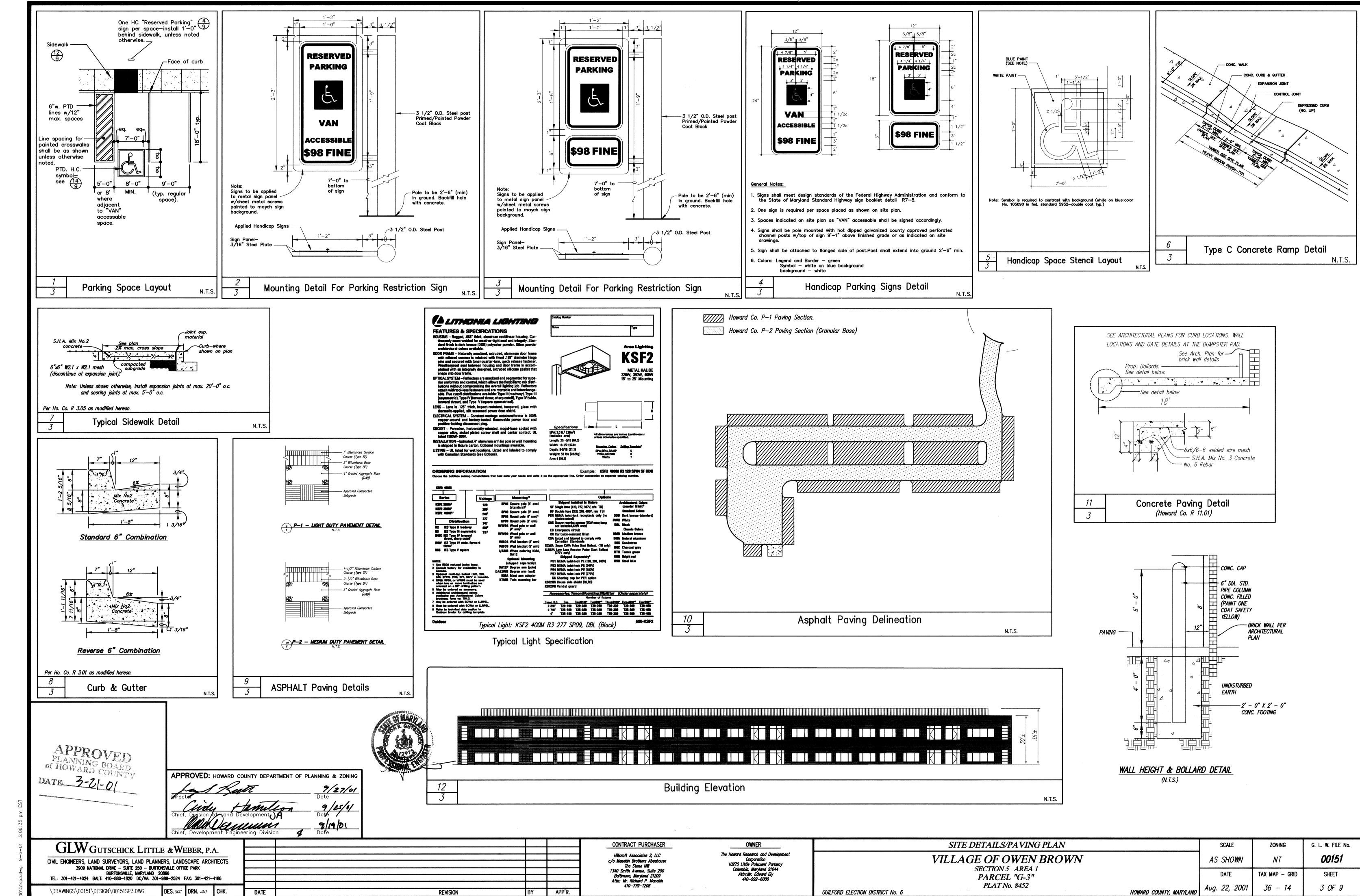
VILLAGE OF OWEN BROWN SECTION 5 AREA 1 ~ PARCEL 'G-3' PLAT No. 8452 (HILLCROFT EXECUTIVE PARK) GUILFORD ELECTION DISTRICT No. 6

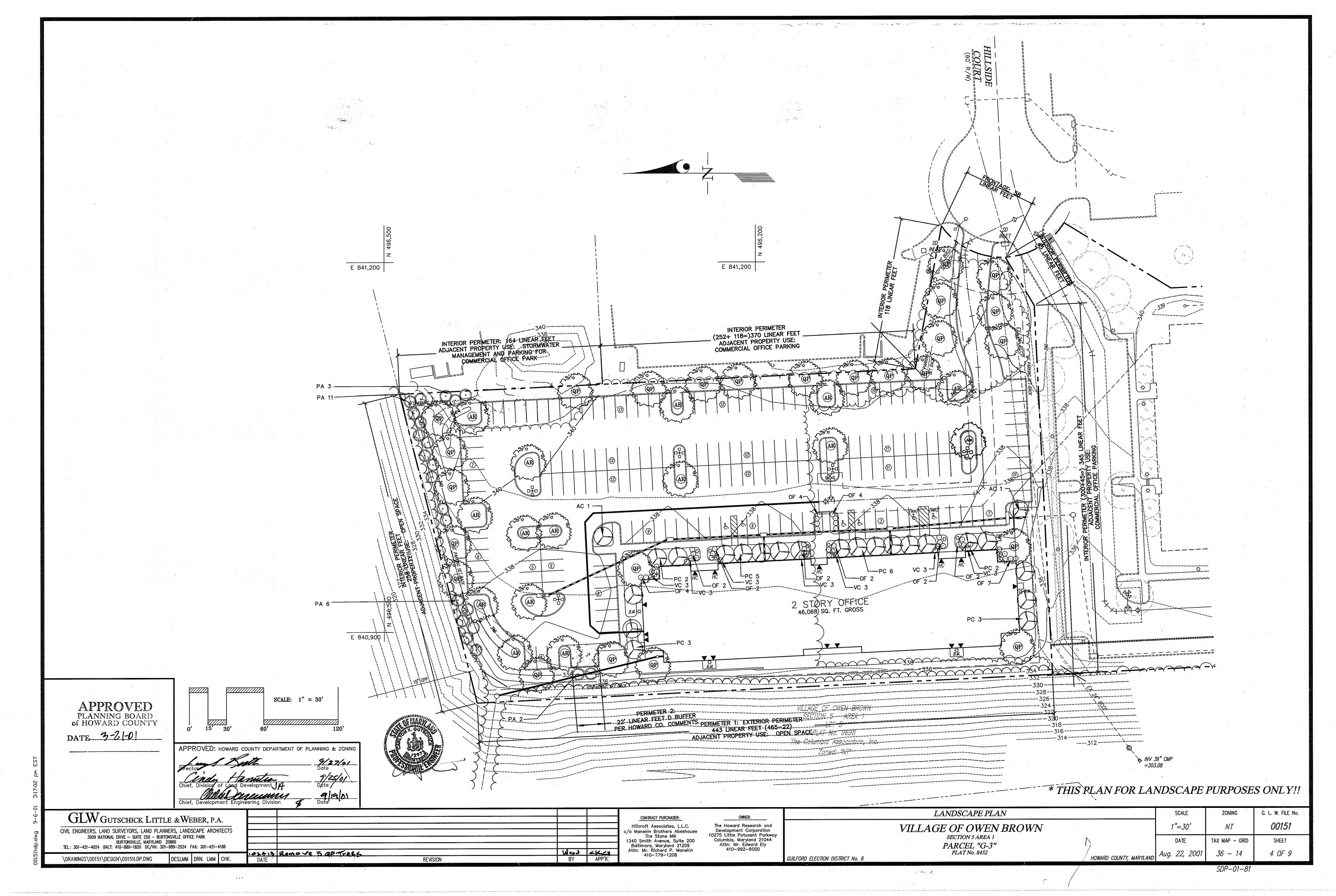
COVER SHEET

SDP-01-81

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A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

2. Plant Standards

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled—in plants nor plants from cold storage will be accepted.

3. Plant Measurements

All plants shall conform to the measurements specified in the Plant Schedule as approved by

- Caliper measurements shall be taken six inches (6") above grade for trees under four—inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.
- b. Minimum branching height for all shade trees shall be six feet (6'), maximum eight feet (8').
- c. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HE I GHT	SPREAD	SIZE OF BALL
3" - 3.5"	14' -16'	6 ' –8'	32" diameter
3. 5" - 4"	14' –16'	8' -10'	36" diameter
4" - 4.5"	16' -18'	8' -10'	40" diameter
4. 5" - 5"	16' -17'	10' -12'	44" diameter
5" - 5, 5"	16' -20'	10' -12'	48" diameter
5. 5" - 6"	18' –20'	12' -14'	52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

4. Plant Identification

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

5. Plant Inspection

The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

B. Planting Methods

All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:

1. Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

3. Excavation of Plant Pits

The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

- a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.
- b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.
- c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.
- d. Diameter and depth of tree pits shall generally be as follows:

3" - 3.5" cal. 32" 64" 28" 3.5" - 4" cal. 36" 72" 32" 4" - 4.5" cal. 40" 80" 36" 4.5" - 5" cal. 44" 88" 40" 5" - 5.5" cal. 48" 96" 44" 5.5" - 6" cal. 52" 104" 48"	PLANT SIZE	ROOT BALL	DIAMETER	DEPTH
J. J = 0 Cd1.	3.5" - 4" cal. 4" - 4.5"cal. 4.5" - 5" cal.	36" 40" 44"	72" 80" 88" 96"	32" 36" 40" 44"

% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

- All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:
 - a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.
 - b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.
 - Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2"
 I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.
 - I. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail".
 - . Plant Pruning, Edging and Mulching

9/19/01

0.24.13 Remove SQP Treen

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in

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REVISION

diameter shall be painted with an approved antiseptic tree wound dressing.

- All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.
- c. After cultivation, all plant
 materials shall be mulched with a 2"
 layer of fine, shredded pine bark,
 peat moss, or another approved
 material over the entire area of the
 bed or saucer.
- 6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

- a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.
- b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

Sodding

DIT

All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.

All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4" long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victa, or Escort.

LANDSCAPING NOTES

- 1. This plan has been prepared in accordance with Section 16.124 of the Howard County Code and Chapter VI (Alternative Compliance) of the Howard County Landscape Manual.
- Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocation's are required.
- 4. Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
- 6. No substitution shall be made without written consent of the owner or his representative.7. All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with
- the project specifications.

 8. The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the
- 9. All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- 10. Financial surety for the required landscaping per schedule A and B shall be posted with the developers' agreement in the amount of \$10,200.00.
- 11. Tabulation for landscape shown:
 Required planting by HRD for 3.03 acre of office combined at
 24 trees/acre = 73 trees

Planting provided:
Shade Trees (plants provided)
Ornamental Trees
Evergreen Trees (existing and proposed)
Shrubs provided:

45 23 = 12 E. S. T. 1 2: 1 22 = 11 E. S. T. 1 2: 1 52 = 5 E. S. T. 1 10: 1 Total E. S. T. = 73

*E.S.T., or Equivalent Shade Tree

BY

12. The owner, tenant, and /or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

SCHEDULE A					•			
PERIMETER LANDSCAPE EDGE Category			,	·				
	Adj. to Roadways		·	Adj.to Perimeter Property	On-site S. W. M. Per			
Perimeter		1	2					
Landscape Buffer Type	В	С	D	N/A - Internal Perimeter				
Linear Feet of Roadway/ Perimeter Frontage	55'	443	22'					
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	55'	NO	NO					
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	55'	NO	NO					
Number of Plants Required Shade Trees Evergreen Trees Shrubs	1 1	11 22	1 2					
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 subst.) Shrubs (10:1 subst.) (describe plant substitution credits below if needed) Provided through Alternative Complianceexceeds county req Alternative Complianceexceeds county req Alternative Complianceexceeds county req								
Bond Requirement - Surety for Schedule 'A' Number of Shade Tre- Schedule 'A' Number of Evergreen Schedule 'A' Number of Shrubs for Schedule 'A' Number of Street Tro TOTAL Estimate for Surety:	es for bondi Trees for bo r bonding:	onding:		x \$30 = \$				

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING
Number of Parking Spaces = 185 Spaces (Provided)
Number of Trees Required = 9 Trees @ 1 per 20 spaces
Number of Trees Provided more than 9 provided with alternative compliance Shade Trees
Other Trees (2: 1 substitution) NOTE:
Alternative Compliance per HRD's Standards Alternative Compliance exceeds County requirements
Schedule 'B' Number of required Shade Trees for bonding: 9x \$300 = \$2,700.00

DEVELOPER'S / BUILDER'S CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape manual. I/We further cerify that upon completion, a Certification of Landscape Installation, accompanies by an executed one-year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Name (Developer's /Builder's)

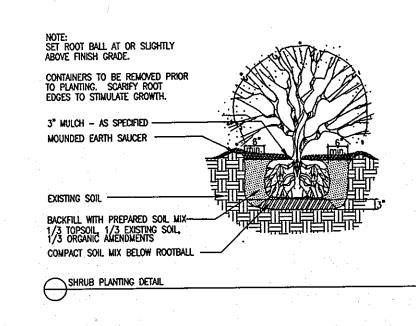
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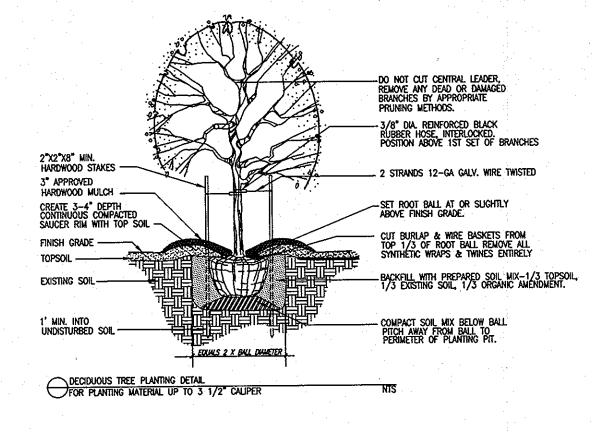
COMMENTS:

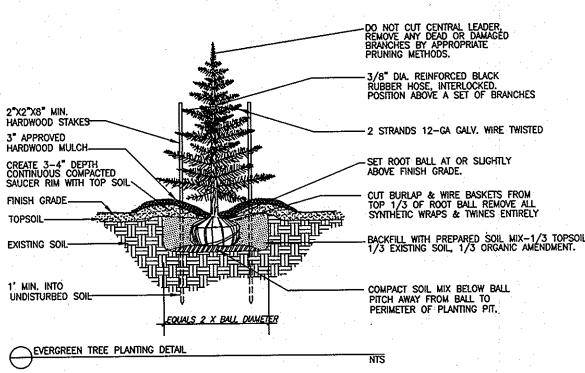
Financial surety for the required landscaping has been posted as part of the DPW Developer's Agreement in the amount of \$10,350.00.

Date

<u>PLAN</u>	<u>IT LIS'</u>			
QTY.		NAME (BOTANICAL/COMMON)	SIZE	R00T
COMMEN	TS			
Decidu	ous Tree		- 4 (0 07 0 1	0.00
15	AR	Acer rubrum 'Red Sunset'/ Red Sunset Maple	2 1/2 - 3" Cal.	B&B
25	QP .	Quercus palustris/ Pin Oak	2 1/2 - 3" Cal.	B&B
Everg	reen Tre		2 01 14	Don
22	ΡΑ .	Picea abies/ Norway Spruce	6-8'' Ht.	B&B
Orname	ntal Tre	ees		
2	AC	Amalanchier canadensis/ Serviceberry	6-8' ht.	B&B
21	PC	Prunus Cerifera 'Thundercloud' / Purple leaf Plum	2 - 2 1/2" Cal.	B&B
Shrubs	/ Groun	ndcover / Perennials		- · · /-
31	OF	Osmanthus fortuneii	18-24" Spr.	Cont. /B&l
		For tune's Osmanthus	24-30" Ht.	B&B
21	VC	Viburnum carlesii Korean Spicebush quantities to be verified by contractor.	24-30 nt.	υαυ







APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 2-2-0

\DRAWINGS\00151\DESIGN\00151LD.DWG

Chief, Division of Land Development

Chief, Development Engineering Division

Chief, Development Surversion

Chief, Division of Land Development

Chief, Development Engineering Division

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE - SUITE 250 - BURTONSWILLE OFFICE PARK

BURTONSWILLE, MARYLAND 20866

TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DRN. Imm CHK.

PREPARED FOR: CONTRACT PURCHASER: OWNER: The Howard Research and Hillcroft Associates, L.L.C. Development Corporation Manekin Brothers Abeshouse 10275 Little Patuxent Parkway The Stone Mill 340 Smith Avenue, Suite 200 Columbia, Maryland 21044 Baltimore, Maryland 21209 Attn: Mr. Edward Ely Attn: Mr. Richard P. Manekin 410-992-6000 MUNI CKCI

VILLA

GUILFORD ELECTION DISTRICT No. 6

LANDSCAPE NOTES & DETAILS

VILLAGE OF OWEN BROWN

SECTION 5 AREA 1
PARCEL "G-3"
PLAT No. 8452

HOWARD COUNTY, MARYLAND

SCALE

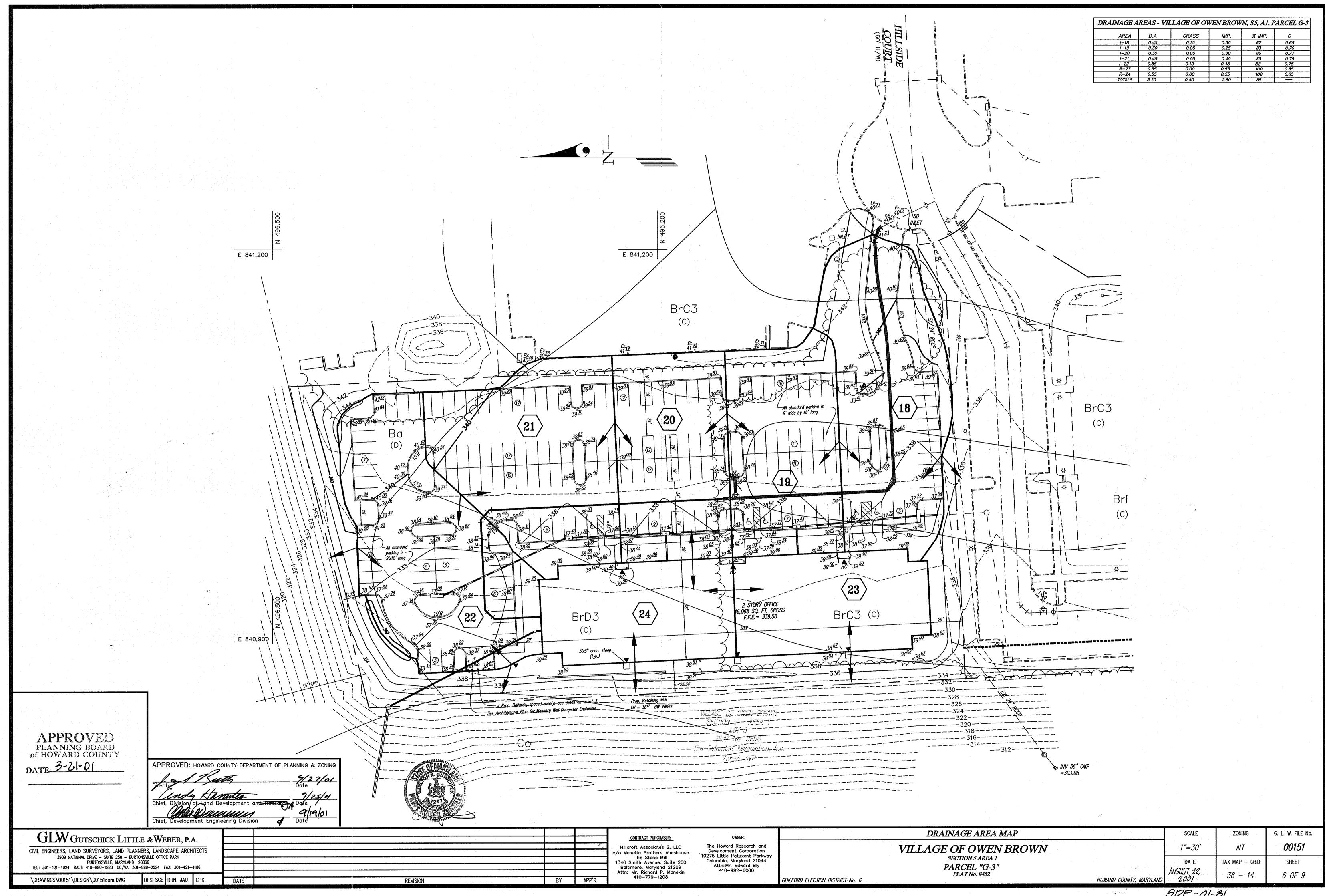
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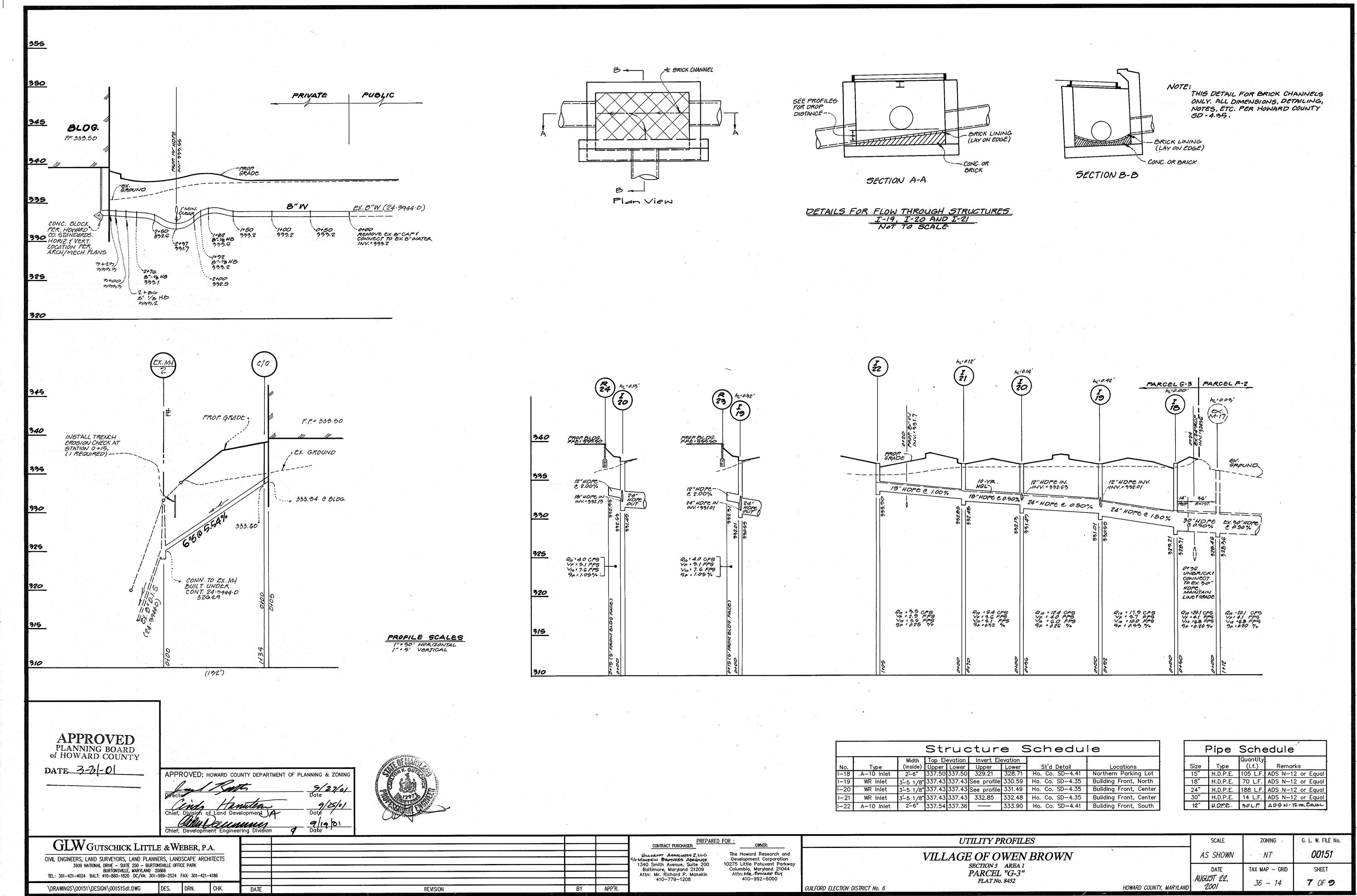
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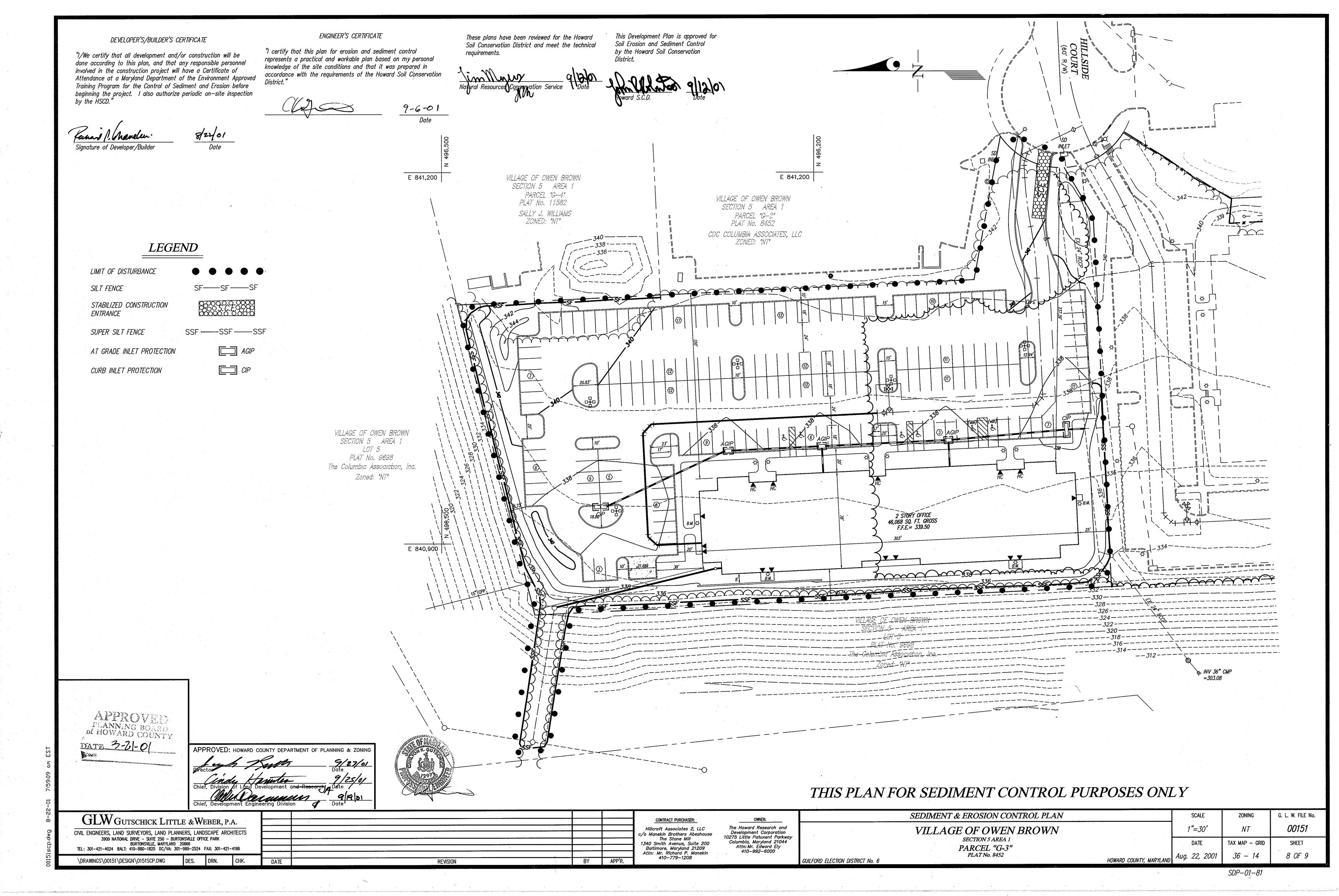
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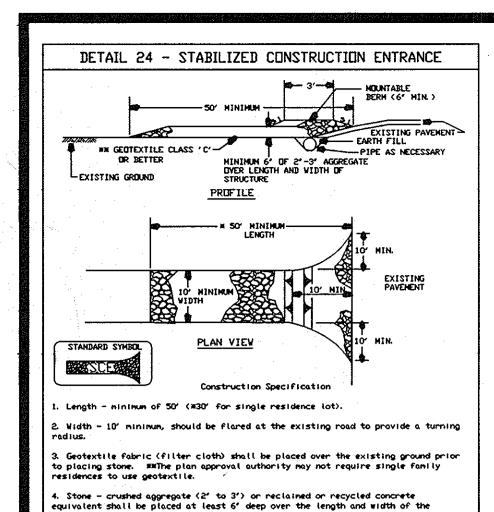
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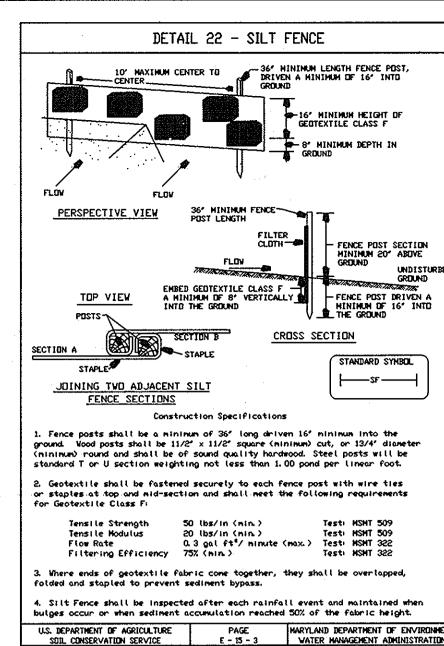


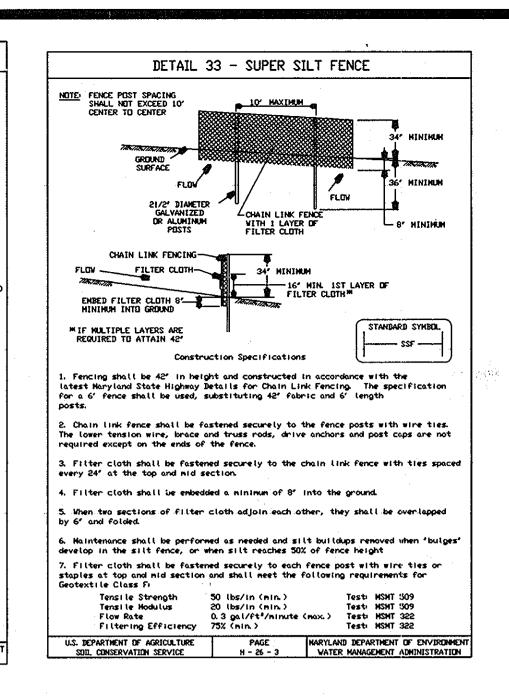


SDP-01-81









Dust Control

Controlling dust blowing and movement on construction sites and roads.

5. Surface Water - all surface water flowing to or diverted toward construction

entrances shall be piped through the entrance, maintaining positive drainage. Pipe

nountable bern with Sil slopes and a minimum of 6' of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6' minimum will be required.

5. Location - A stabilized construction entrance shall be located at every point

where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the enting length of the stabilized construction entrance

U.S. DEPARTMENT OF AGRICULTURE 3.7 PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SDIL, CONSERVATION SERVICE F - 17 - 3 WATER HANAGEMENT ADMINISTRATION

installed through the stabilized construction entrance shall be protected with a

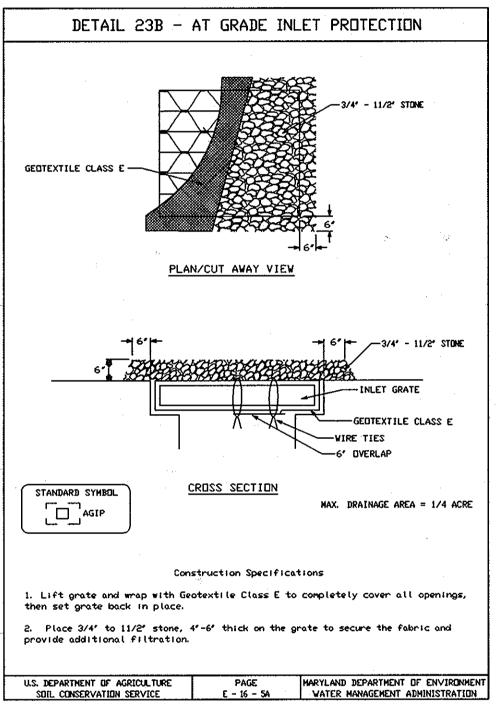
To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

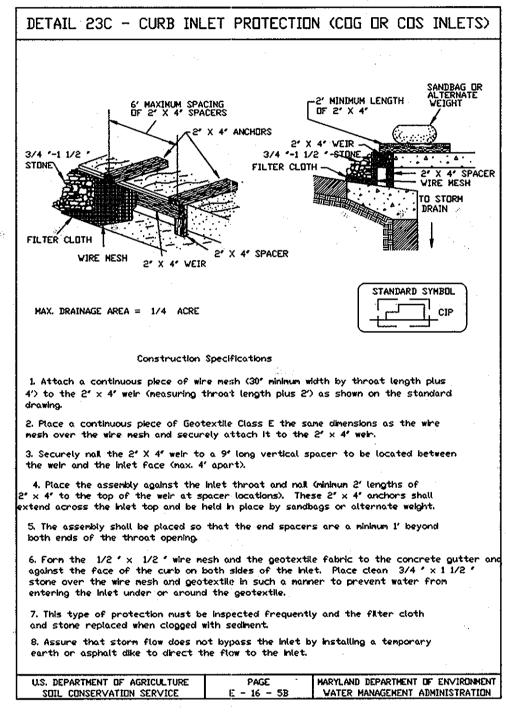
Conditions Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

- 1. Mulches See standards for vegetative stabilization with mulches only, much should be crimped or tacked to prevent blowing.
- 2. Vegetative Cover See standards for temporary vegetative cover.
- 3. Tillage To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12" apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
- 4. Irrigation This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed At no time should the site be irrigated to the point that runoff begins to flow.
- 5. Barriers Solid board fences, silt fences, snow fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angle to prevailing currents at intervals at about ten times their height are effective in controlling soil blowing.
- 6. Calcium Chloride -- Apply at rates that will keep surface moist. May need treatment.
- 1. Permanent Vegetation See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if
- 2. Topsoiling Covering with less erosive soil material. See standards for top soil.
- 3. Stone Cover surface with crushed stone or gravel.
- 1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.

2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA_ARS.





SEQUENCE OF CONSTRUCTION

- 1. Obtain grading permit. (1 day)
- 2. Arrange for an on-site pre-construction meeting with the sediment control inspector. (1 day)
- 3. Install stabilized construction entrance. (1 day)
- 4. Wrap site with silt fence & super silt fence as shown on sediment control plan. (2 days)
- 5. Rough grade site, construct storm drains, installing imlet protection as drainage structures are installed. Construct water & sewer from existing stubs within 5' of building. Spoil material must be disposed of at an approved site with an active sediment control plan. (3 weeks)
- 6. Construct building. (2 months)
- Install curb & gutter, sidewalks, & base paving. (2 weeks)
- 8. Fine grade landscape greas and stabilize remaining greas with grass seed & mulch; install landscaping with the inspectors approval. With the inspectors approval Inlet protection may be removed when all contributing drainage area has been stabilized. (2 weeks)
- 9. Install surface paving. (1 week)
- 10. With permission of the sediment control inspector, remove silt fence & super silt fence, and any remaining inlet protection & stabilize all areas disturbed by this process. (2 days)

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
- a. The texture of the exposed subsoil/parent material is not
- adequate to produce vegetative growth. b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing
- c. The original soil to be vegetated contains material toxic to plant growth.
- d. The soil is so acidic that treatment with limestone is not feasible.
- II. 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.

supplied of moisture and plant nutrients.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- I. 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 respective soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
 - Topsoil shall be a loam, sandy loam, clay loam, silt Joam, sandy clay Joam, Joamy sand. Other soils may be used if recommended by a agronomist or soil scientist and approved by the appropriate approval authority. Reaardless. topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - ii. Topsoil must be free of plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy. thistle, or others as specified.
 - iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate if 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.
- II. For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 -Vegetative Stabilization Methods and Materials.
- Ill. For sites having disturbed greas 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:
 - a. pH for topsoil shall be between 6.0 and 7.5. If

SEDIMENT CONTROL NOTES

- 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 131–1880
- 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1. Chapter 12. of the HOWARD COUNTY DESIGN MANUAL. Storm Drainage.
- 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51), sod (Sec. 54), temporary seedings (Sec. 50) and mulching (Sec. 52). Temporary stabilization, with mulch alone, 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. Site Analysis:				
Total Área of S	Site	:	3.028	Acres
Area Disturbed		:	3.0	Acres
Area to be roo	ofed or paved	:	2.6	Acres
Area to be veg	getatively stabilized	:	0.4	Acres
Total Cut		<i>:</i>	10,000	Cu. Yds.
Total Fill	•	:	7,500	Cu. Yds.
Off-site waste,	/borrow area location	on:	Unknkow	'n
Note: Any offsite was			active appro	oved S&E

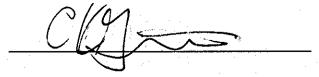
- 8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control
- 10. On all sites with disturbed areas in excess of 2 acres, completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection gaency is made.
- 11. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within one working day whichever is shorter.

This Development Plan is approved for Soil Fresion and Sediment Control by the Howard Soil Conservation

These plans have been reviewed for the Howard Soil Conservation District and meet the technical reauirements.



"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



9-6-01

G. L. W. FILE No.

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

9/27/01

DATE REVISION APP'R. BY

CONTRACT PURCHASER Hillcroft Associates 2, LLC c/o Manekin Brothers Abeshouse The Stone Mill 1340 Smith Avenue, Suite 200 Baltimore, Maryland 21209 Attn: Mr. Richard P. Manekin 410-779-1208

PREPARED FOR: Columbia, Maryland 21044 Attn:Mr. Edward Ely 410-992-6000

OWNER e Howard Research and Developme Corporation 10275 Little Patuxent Parkway

GUILFORD ELECTION DISTRICT No. 6

SEDIMENT CONTROL NOTES AND DETAILS

VILLAGE OF OWEN BROWN

SECTION 5 AREA 1 PARCEL "Gーラ" PLAT NO. 8452

NO SCALE NT DATE TAX MAP - GRID SHEET 9 OF 9 36 - 14 AUG. 22, 2001 HOWARD COUNTY, MARYLAND

SCALE

Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is

PERMANENT SEEDING NOTES

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless

previously loosened).

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

- 1) Preferred Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sa ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 unreaform fertilizer (9 lbs/1000 sq ft).
- 2) Acceptable Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15. seed with 60 lbs per acre (1.4 lbs/1000 sa ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 Ibs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs. - plan replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

DEVELOPER'S /BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

ZONING

APPROVED

PLANNING BOARD

of HOWARD COUNTY

DATE 3-2 -0