12 SITE PLAN 13 SITE DETAILS I

SITE ANALYSIS DATA

1. General Site Data: A. Present Zoning: NT (NewTown) B. Proposed use of site or structure Institutional (Public School) C. Public water and sewer to be utilized.

2. Area Tabulation: A. Total project area: 48,904 Ac= B. Area of this plan submission 3.07 Ac. is the limit of submission and grading disturbance for the construction of the high school addition and

associated parking.

C. Impervious Coverage
Existing high school 162,590 sq.ft.
Proposed additions 33,390 sq.ft.
Proposed addition alternates 7,926 sq.ft.
Paved areas (parking, and walkways): 0.53 Ac.

A. Non-credited open space recorded in Final Development Plan Phase 102-A

Criteria for public schools parking, travelways and driveways = 5.97 Ac.

B. Non-credited open space provided for public schools parking, travelways and driveways = 5.65 Ac. 4. Parking Space Data:

A. Number of parking space required by zoning regulations: N/A

B. Total number of parking spaces provided on site: 340 (including handicap parking) per the Public School Systems Parking Requirements

C. Number of Handicapped parking spaces provided: 0

## BUILDING COVERAGE

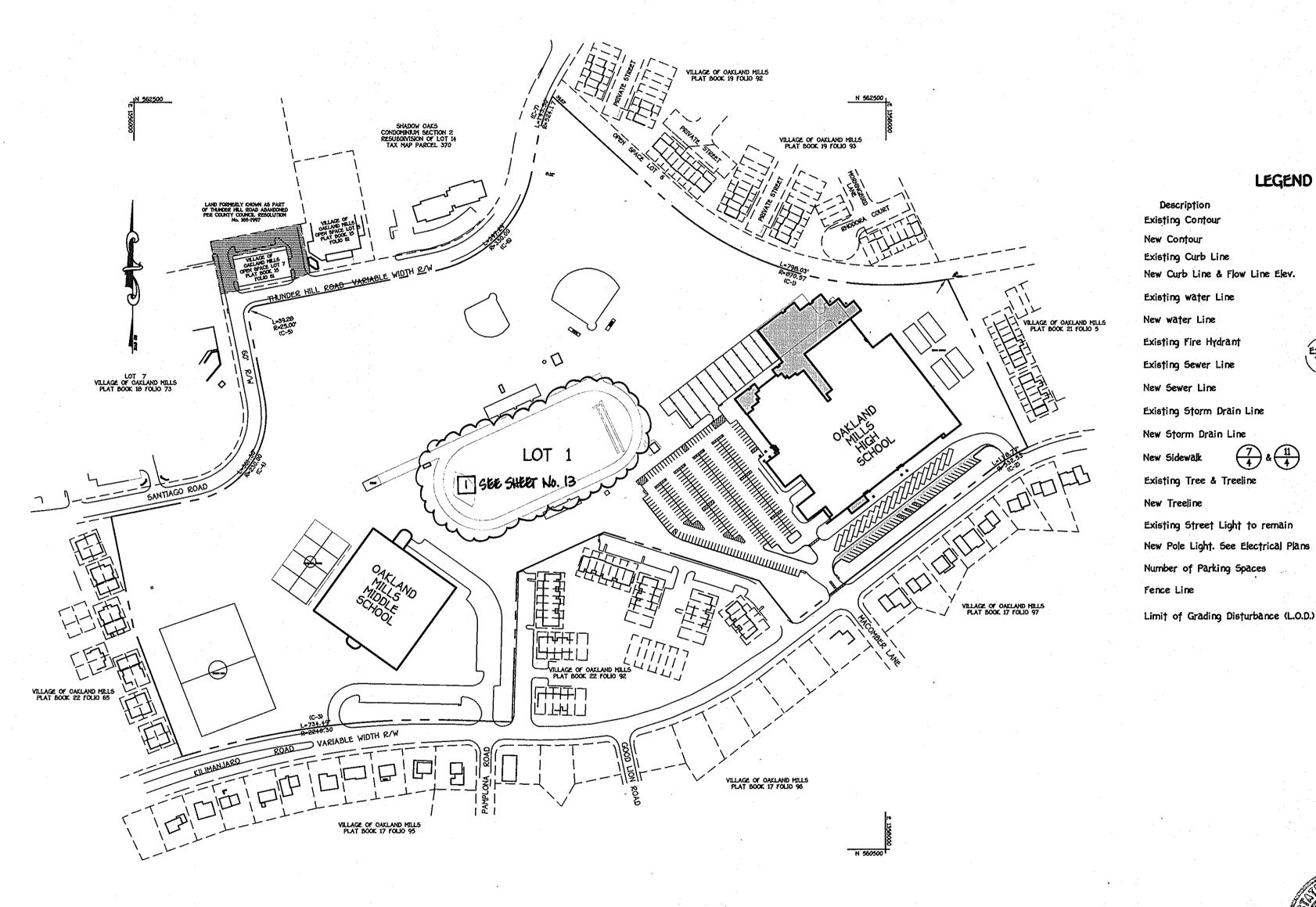
Percentage Of Coverage Percentage Of Coverage 72,900 sq.ft. = 1.67 Ac.

Existing Middle School Existing High School (With Additions) Gym Addition (and 195,996 sq.ft. = 4.50 Ac.

Percentage Of Coverage

# SITE DEVELOPMENT PLAN COLUMBIA OAKLAND MILLS HIGH SCHOOL

VILLAGE OF OAKLAND MILLS SECTION 2 AREA 5



--322----Existing Contour <del>-322 ----</del> New Contour Existing Curb Line New Curb Line & Flow Line Elev. Existing water Line New water Line Existing Fire Hydrant New Sewer Line \_\_Ex, 12" 5.D. Existing Storm Drain Line New Storm Drain Line  $\sim\sim\sim\sim$ Existing Street Light to remain

LEGEND

## General Notes

1. All construction shall be accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable. 2. The contractor shall notify the Bureau of Engineering/Construction Inspection Division a 110-313-1880 at least five working days prior to start of work. 3. The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any digging and excavation work. 4. Project Background: Location Tax Map 36, Grid 9, Parcel 336

VICINITY MAP

SCALE: 1" = 2000"

Zoning: This project is zoned NT "open space credited and noncredited" per the 10/18/93 comprehensive zoning plan. Election District: SIXTH Section/Area: 2/5 Site Area: 48.904 Ac.

5. Traffic control devices, markings and signing shall be in accordance with the latest edition of the manual on Uniform Traffic Control Devices (MUTC). All street and regulatory signs shall be in place prior to placement of any asphalt 6. All plan dimensions are to the face of curb or face of building unless otherwise noted. Dimensions are measured perpendicular or radial between items unless otherwise noted. 7. Existing topography and features were derived from survey by Fisher, Collins and Carter Inc. and Harford Aerial Surveys inc. Dated July 6, 2001.

8. Coordinates are based on NAD 83 Maryland Coordinates System as projected by Howard County Geodetic Control Stations. 368A N 562135.527 368B N 561504.226 E 1357571.642 E 1356203.675 ELEV. 417.46

9. Public water and sewer is to be utilized for this project. Contract 337 W & 5 10. Stormwater management is provided by a dry swale that will be privately owned and maintained by the Howard County Public School System. 11. All on-site storm drains under this site development plan are private. 12. The existing utilities shown hereon were derived from available public records. The contractor must dig test pits by hand at all utility crossings and connection points to verify 13. All proposed ramps shall be in accordance with current A.D.A. Standards. Maximum sidewalk cross slope shall be two percent. Provide a (5'x5') five foot by five foot level landing (max. slope 2x) at the top and bottom of all ramps and building entrances and exits.

16. Trench bedding for storm drains structures shall be in accordance with Howard County Standard G2.01 Class C Bedding unless otherwise noted. 17. Gutter pan of curbs shall be pitched to conform to the adjacent drainage patterns of the adjoining paving for vehicular use. See detail 18. All curb fillets are 5' radius unless noted otherwise. Curb spot elevations along curb line are it the flow line unless noted otherwise. 19. For details of building profile, parking, road section, handicap, curb and gutter see sheet 4 20. There are no known grave sites or cemeteries on this site.

15. Any damage to County and or State owned right-of-way to be corrected at the

21. Other topics related to this site: Soils Analysis prepared by: EBA Engineering Inc. Dated January, 2002. 22. All outside lighting shall comply with Zoning Regulations Section 134 which requires lights to be installed to direct/reflect light downwards and inwards on the site and away from all public streets and residential areas. 23. Existing water meter to remain. The building shall be equipped with an

automatic fire prevention sprinkler system.

24. There are no wetlands within the limits of disturbance "per a signed and sealed wetlands certification prepared by Fisher, Collins, and Carter Inc. dated March 7, 2002". 25. This project shall be in accordance with the Amended Final Development Plan Criteria Phase 102-A recorded in Plat Book 14644-14647. 26. This Project is recorded among the land records in Howard County, Maryland in Plat Book 21

27. Previous DPZ file numbers VP01-60, 5DP91-34, F71-20, 5DP71-62, WP93-33, WP99-29, and SDP01-51 (icerink). 20. "This project is exempt from the requirements of Section 16.1200 of the Howard County Code for Forest Conservation because this site is part of a Preliminary Development Plan which received approved prior to 12/31/92". 29. Apply asphalt emulsion sealer to existing parking lot and bus loop paving prior to restripping. 30. The Planning Board granted approval to building additions and parking lot expansion on

31. The activities proposed in the building addition areas are a weight room, dance room, ROTC, art studio, classrooms, graphic communications and a fabrication/ production lab.



PLANNING BOARD of HOWARD COUNTY

LOCATION PLAN



Address Chart Parcel Number Street Address 9410 KILIMANJARO ROAD PLAT RECORDATION REFERENCE PLATBOOK 21 FOLIO 15 AND 16

PROJECT SECTION/AREA PARCEL OAKLAND MILLS HIGH SCHOOL DEED REF. BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. | CENSUS SIXTH WATER CODE SEWER CODE E 05

SEAL APPLIES TO REDLINE REVISION NO. 1 ONLY ADDED SHEETS 12213 REVISED SHEET INDEX TREVISED 5-2013 SDP REDLINE REVISION NO. 1 DATE REVISION TITLE SHEET DEVELOPER'S CERTIFICATE ENGINEER'S CERTIFICATE PROVED: DEPARTMENT OF PLANNING AND ZONING I Hereby Certify That This Plan For Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge "I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion PREPARED FOR HOWARD COUNTY PUBLIC SCHOOL SYSTEM And Sediment Control And That All Responsible Personnel Involved Of The Site Condition And That It Was Prepared In Accordance 10910 Maryland Route 108 In The Construction Project Will Have A Certificate Of Attendance With The Requirements Of The Howard Soil Conservation District. At A Department Of Natural Resources Approved Training Program Ellicott City, Maryland 21042 For The Control Of Sediment And Erosion Before Beginning The Project.

I Also Authorize Periodic On-Site Inspection By The Howard Soil

Conservation District Or Their Authorized Agents, As Are Deemed Necessary." Attention Cathleen Young

FISHER, COLLINS & CARTER, INC IVIL ENGINEERING CONSULTANTS & LAND SURVEYOR

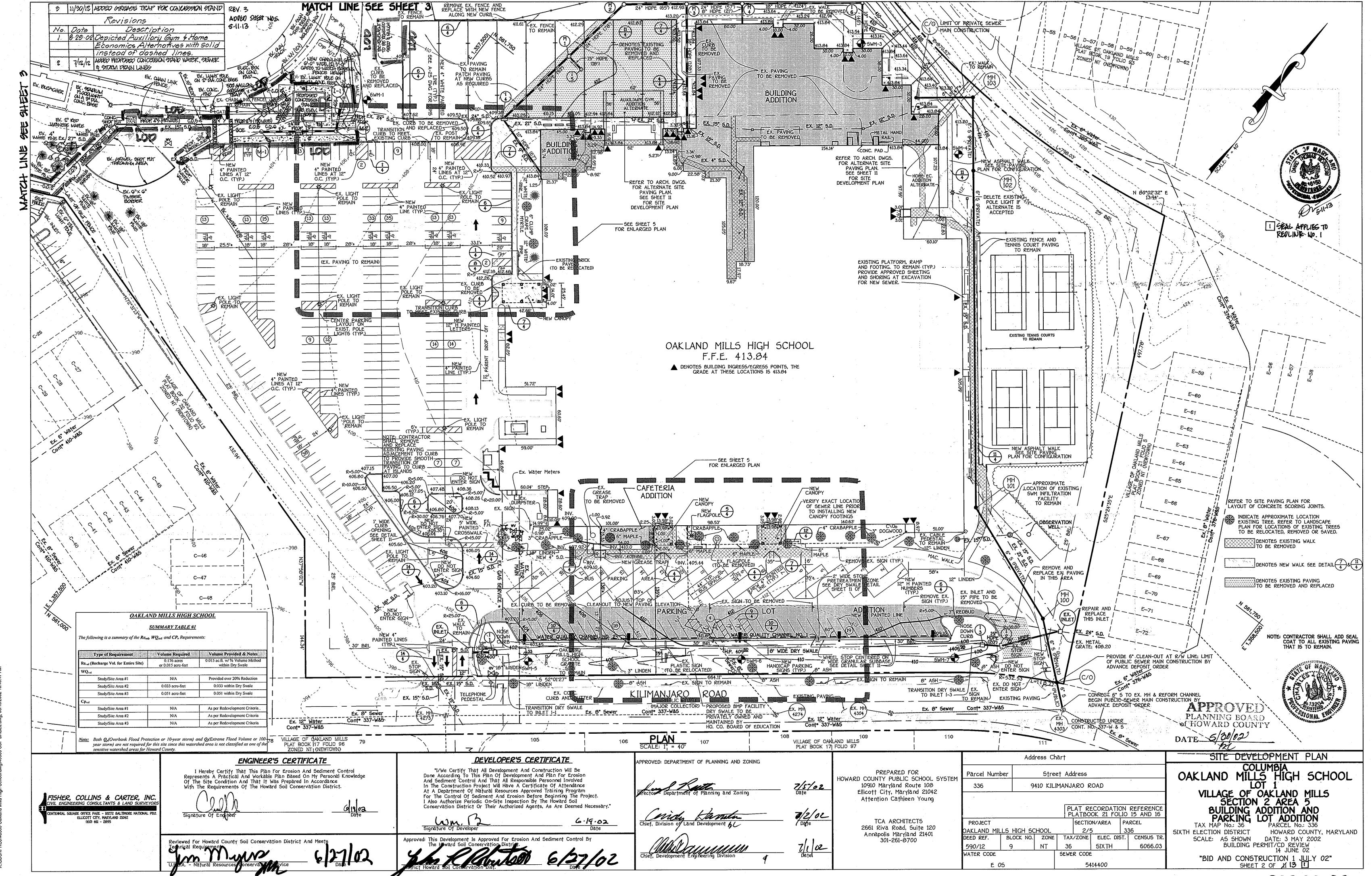
TCA Architects 2661 Riva Road, Suite 120 Annapolis Maryland 21401 301-261-8700

VILLAGE OF OAKLAND MILLS SECTION 2 AREA BUILDING ADDITION AND

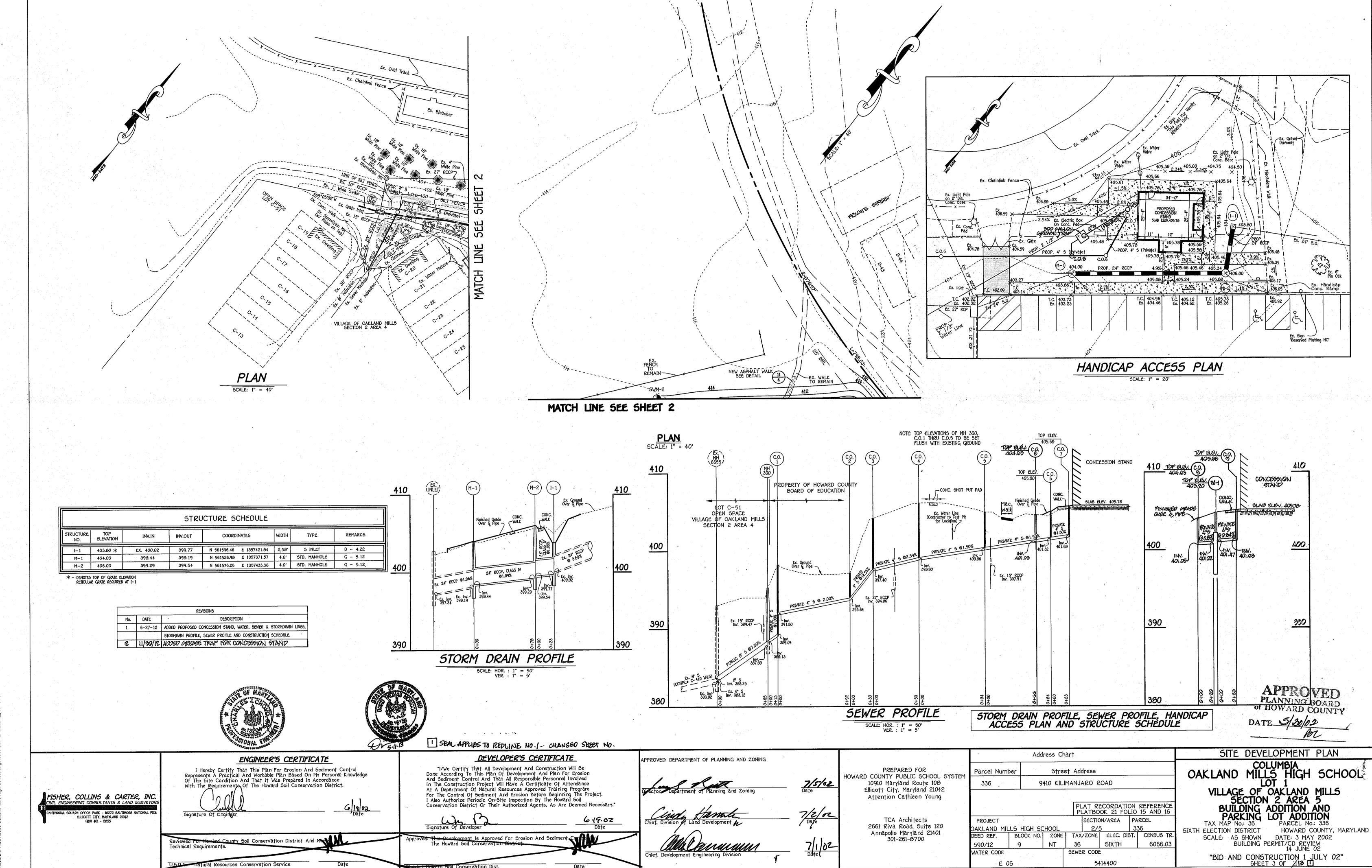
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: 3 MAY 2002 BUILDING PERMIT/CD REVIEW 14 JUNE 02

"BID AND CONSTRUCTION 1 JULY 02"

SHEET 1 OF 11 13 1 SP-50 905



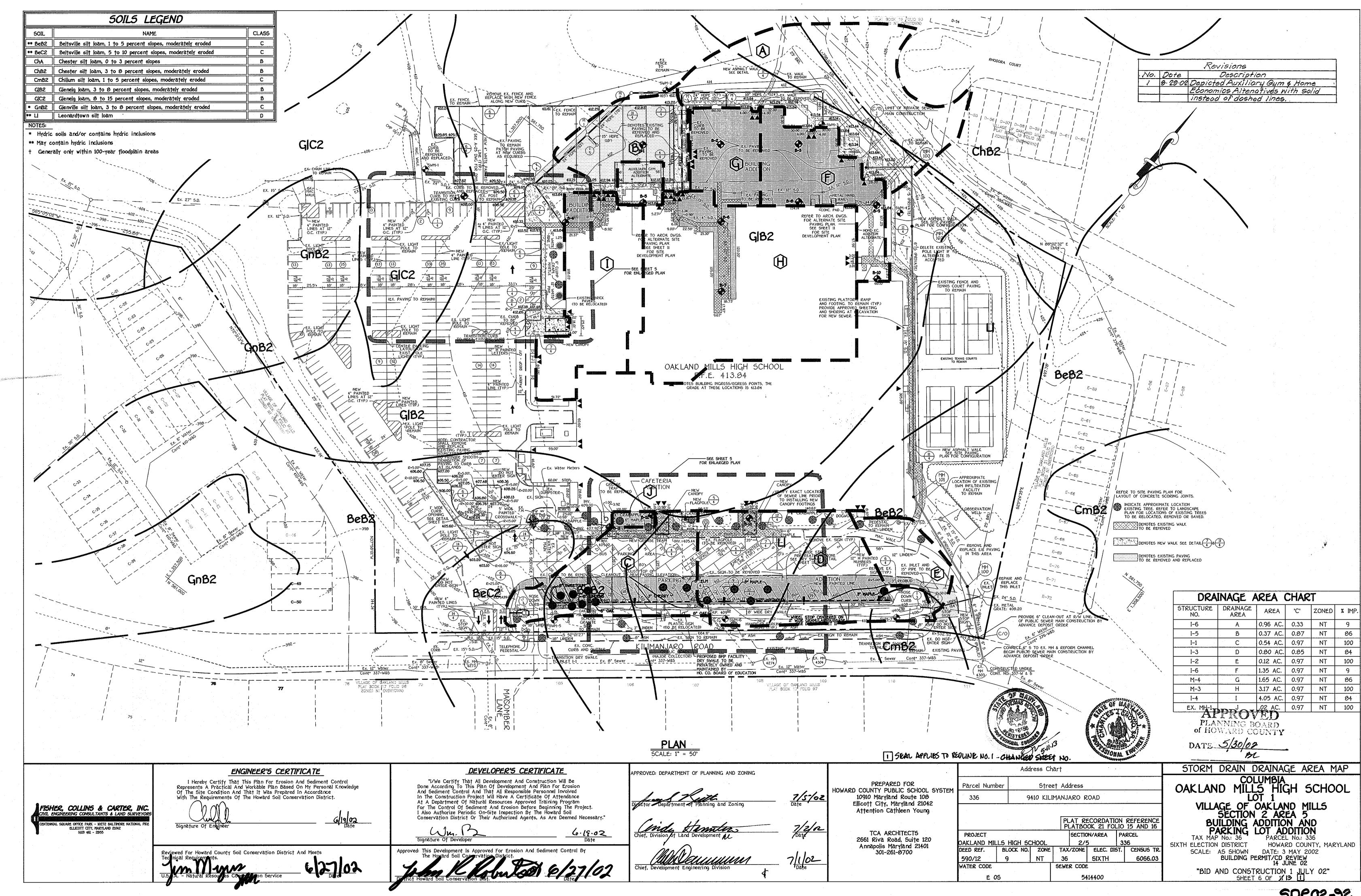
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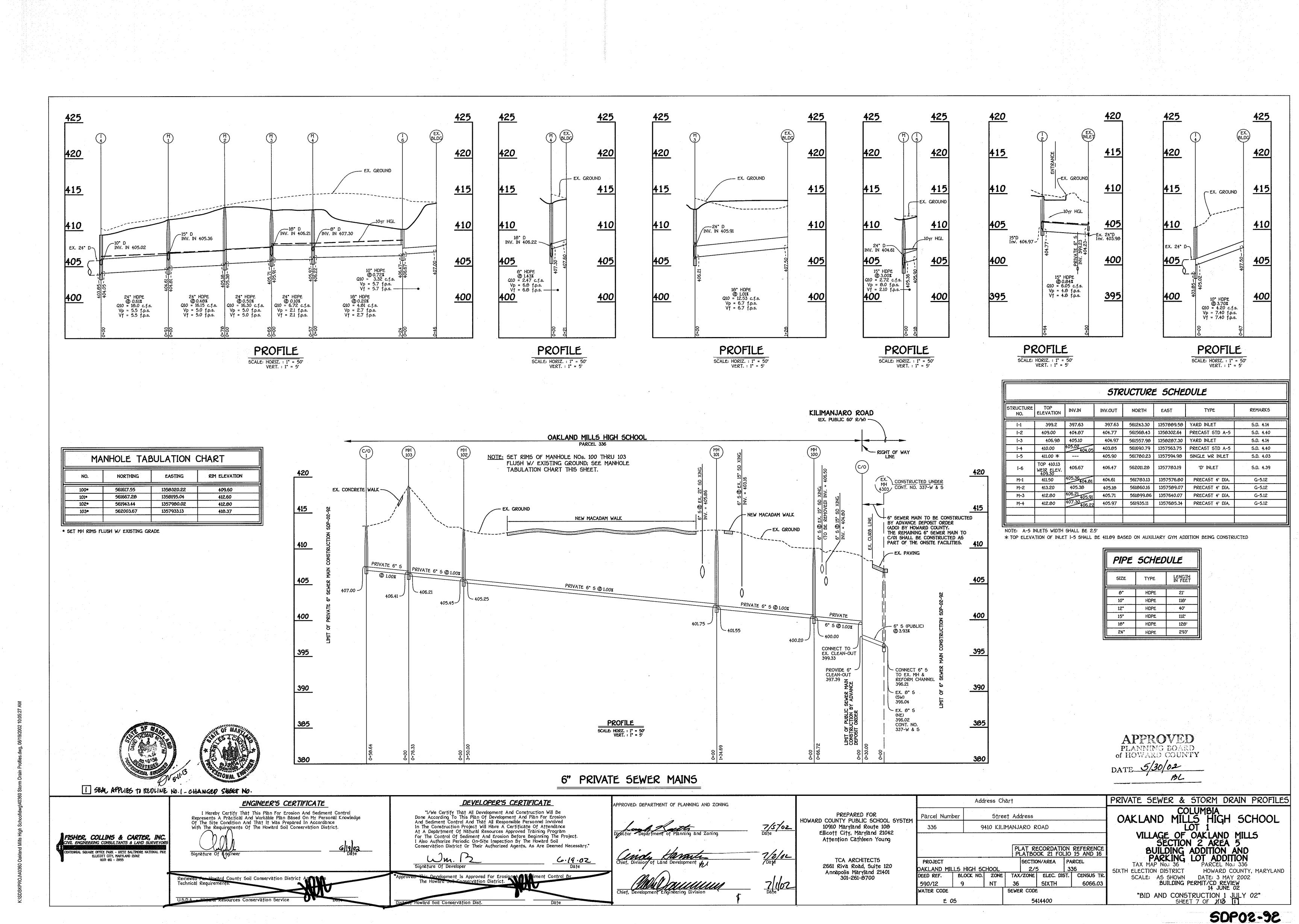
tural Resources Conservation Service

5414400

SP-SO9OZ



Sproz-92



K.\SDSKPROJ\40360 Oakland Mills High School\dwg\40360 Sediment Control Plan.dwg, 06/19/201

SC-30902

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources. CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Olup to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc. EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff. infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

- SECTION 1 VEGETATIVE STABILIZATION METHODS AND MATERIALS Install erosion and sediment control structures (either temporary of permanent) such as diversions,
- ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.

  iii. Schedule required soil tests to defermine soil amendment composition and application rates for sites having disturbed area over 5 acres.

  B. Soil Amendments (Fertilizer and Lime Specifications)
- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses. iii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee
- iii. Lime materials shall be ground limestone thydrated or burnt lime may be substituted which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a \*100 mesh sieve and 90-100% will pass through a \*20 mesh sieve. Incorporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.
- iv. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

  Seedbed Preparation

  i. Temporary Seeding

  a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:D) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.

  b. Apply fertilizer and lime as prescribed on the plans.

  c. In corporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

  ii. Permanent Seeding

  a. Minimum soil conditions required for permanent vecetative establishment:
- - finimum soil conditions required for permanent vegetative establishment:

    Soil ph shall be between 6.0 and 7.0. Soil pH shall be between 6.0 and 7.0.

    Soluble salts shall be less than 500 parts per million (ppm).

    The soil shall contain less than 40% clay, but enough fine grained material 0.30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedezas is to be planted, then a sandy soil (30% silt
  - plus clay's would be acceptable.

    Soil shall contain 1.5% minimum organic matter by weight.
- 5. Soil shall contain sufficient pore space to permit adequate root penetration.

  6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.

  Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise lossened to a depth of 3-5° to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from
- of the surface area and to create nonzonal erosion check stops to prevent topsoil from sliding down a slope.

  c. Apply soil amendments as per soil test or as included on the plans.

  d. Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:D) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.
- i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.

  Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.

  ii. Inoculant The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-tixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° f. can weaken bacteria and make the inoculant less effective.
- until used. Temperatures above 75°-80° F. can weaken bacteria and make the inocular less effect.

  Methods of Seeding

  i. Hydroseeding: Apply seed uniformly with hydroseeder (skurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.

  a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogen P205 (phosphorous); 200 lbs/ac; K20 (potassium); 200 lbs/ac.

  b. Lime use only ground agricultural limestone, (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.

  c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.

- c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.

  ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

  a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.

  b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

  iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

  a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.

  b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

  Much Specifications (In order of preference)
- Mulch Specifications (In order of preference)

  i. Straw shall consist of thoroughly threshed wheat, rie or oat straw, reasonable bright in color, and shall not be musty, moldy, caked decayed or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.

- of specified in the Maryland Seed Law.

  In Cellulose Fiber Mulch (WCFM)

  WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.

  WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread sturry.

  WCFM, including dye, shall contain no germination or growth imbitting factors.

  WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous sturry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.

  WCFM material shall comtain no elements or compounds at concentration levels that will be phytio-toxic.
- will be phytol-toxic.

  f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.

  Note: Only sterile straw much should be used in areas where one species of grass is desired. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately after seeding.

  If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained umil the seeding season returns and seeding can be performed in accordance with these specifications.
- accordance with these specifications.

  ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1° and 2°. Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.

  iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 bs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 bs. of wood cellulose fiber per 100 gallons of water.

  Securing Straw Mulch Otulch Anchoring: Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:

  i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch
- i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. It used on sloping land, this practice should be used on the contour if possible.

  ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- of water.

  iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch. V. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.
- i. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
   ii. Construction sequence (Refer to Figure 3 below):
- a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.

  b. Perform Phase 1 excavation, dress, and stabilize.

  c. Perform Phase 2 excavation, dress and stabilize.

  Overseed Phase 1 areas as
- necessary.

  d. Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.
- Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required and permanent seed and mulch. Any interruptions int he operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization. Incremental Stabilization of Embankments - Fill Slopes

J. Incremental Stabilization of Embarkments - Fill Slopes

i. Embarkments shall be constructed in lifts as prescribed on the plans.

ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches

15 or when the grading operation ceases as prescribed in the plans.

iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge

of the embarkment to intercept surface runoff and convey it down the slope in a non-erosive manner to

a sediment trapping device.

iv. Construction sequence: Refer to Figure 4 (below).

a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used

to divert runoff around the fill. Construct slope silt fence on low side of fill as shown

in Figure 5, unless other methods shown on the plans address this area.

b. Place Phase 1 embarkment, dress and stabilize.

c. Place Phase 2 embarkment, dress and stabilize.

d. Place final phase embarkment, dress and stabilize.

Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Am interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

### SILT FENCE 36" MINIMUM LENGTH FENCE POST 10' MAXIMUM CENTER TO DRIVEN A MINIMUM OF 16" INTO -16" MINIMUM HEIGHT OF GEOTEXTILE CLASS I --- ø" minimum depth ii

GROUND

------SF -----

MINIMUM FENCE PERSPECTIVE VIEW CLOTH-- FENCE POST SECTION MINIMUM 20" ABOVE GROUND UNDISTURBED GROUND EMBED GEOTEXTILE CLASS F - FENCE POST DRIVEN TOP VIEW A MINIMUM OF 8" VERTICALLY INTO THE GROUND P05T5 ~ THE GROUND SECTION A

JOINING TWO ADJACENT SILT FENCE SECTIONS

Construction Specifications 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut. or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be

standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

.50 (bs/in (min.) Tensile Strenath Tensile Modulus 20 lbs/in (min.) Test: MSMT 509 0.3 gal ft / minute (max.)\* Test: MSMT 322 Flow Rate Filtering Efficiency Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

STORM INLET SEDIMENT TRAP ST-III

CROSS SECTION

manner that it will not erode

CONSTRUCTION SPECIFICATION FOR ST-III

. The volume of sediment storage shall be 1800 cubic feet per acre of

. The structure shall be inspected after each rain and repairs made as

Construction operations shall be carried out in such a manner that

5. The sediment trap shall be removed and the area stabilized when the

STORM INLET SEDIMENT TRAP

constructed drainage area has been properly stabilized.

erosion and water pollution shall be minimized

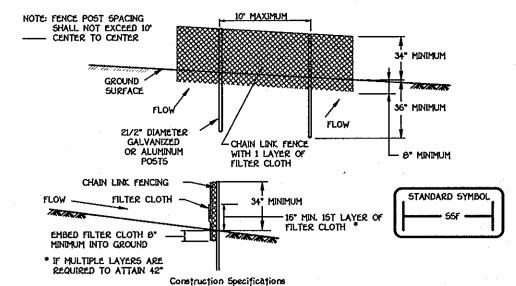
6. All cut slopes shall be 1:1 or flatter.

Maximum Drainage Area: 3 Acres

U.S. DEPARTMENT OF AGRICULTURE

. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 12 the design depth of the trap.

## SUPER SILT FENCE



Construction Specifications L Fencing shall be 42° in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 6° into the ground.

Flow Rate

1 SEAL APPLIES TO

sheet No.

**REVISIONS** 

REPLINE NO. 1 - CHANGED

DESCRIPTION

APPROVED

PLANNING BOARD

of HOWARD COUNTY

REVISED SITE ANALYSIS. ADDED CONCESSION STAND SEQUENCE OF

Filtering Efficiency 75% (min.)

5. When two sections of filter cloth adjoin each other, they shall be overlapped 6. Maintenance shall be performed as needed and silt buildups removed when "oulges develop in the silt fence, or when silt reaches 50% of fence height

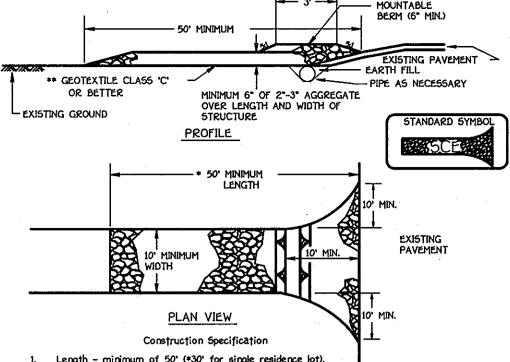
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Tensile Strength

20 Jbs/in (min.)

	Desi		
e	5lope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
10X	0 - 10:1	Unlimited	Unlimited
20%	10:1 - 5:1	200 feet	1,500 feet
- 33%	5:1 - 3:1	100 feet	1,000 feet
- 50X	3:1 - 2:1	100 feet	500 feet

0.3 gal/ft /minuté (max.) Test: MSMT 322

## STABILIZED CONSTRUCTION ENTRANCE



- Length minimum of 50' (\*30' for single residence lot). Width - 10' minimum, should be flared at the existing road to provide a turning
- 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\*The plan approval authority may not require single family
- residences to use geotextile. 4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the
- 5. Surface Water all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 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.
- 6. 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 entire length of the stabilized construction entrance.

CONCESSION STAND

SEQUENCE OF CONSTRUCTION

EROSION CONTROL STRUCTURES SHOWN HEREON.

between staples.

. OBTAIN A GRADING PERMIT.
2. NOTIFY 'MISS UTILITY' AT LEAST 40 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777.
NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 24 HOURS

3. INSTALL ALL TREE PROTECTION FENCE FOR TREES TO BE UNDISTURBED AS INDICATED ON THE

7. STABILIZED ALL DISTURBED AREAS AND OBTAIN PERMISSION FROM THE SEDIMENT CONTROL

REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 WEEKS)

9. NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR FINAL INSPECTION OF THE COMPLETED PROJECT.

5. CONSTRUCT SITE UTILITIES, (3 WEEKS)
5. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND

8. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE DEVICES MAY BE REMOVED AND/OR BACKFILLED AND THE REMAINING AREAS BROUGHT TO FINAL DESIGN GRADE. STABILIZED ALL

Construction Specifications

Key-in the matting by placing the top ends of the matting in a

Staple the 4" overlap in the channel center using an 10" spacing

Before stapling the outer edges of the matting, make sure the

Staples shall be placed 2' apart with 4 rows for each strip, 2

the top strip shall overlap the upper end of the lower strip by 4",

shiplap fashion. Reinforce the overlap with a double row of staples

Note: If flow will enter from the edge of the matting then the area

5. Where one roll of matting ends and another begins, the end of

matting is smooth and in firm contact with the soil.

outer rows, and 2 alternating rows down the center.

spaced 6" apart in a staggered pattern on either side.

6. The discharge end of the matting liner should be similarly

secured with 2 double rows of staples.

effected by the flow must be keyed-in.

narrow trench, 6" in depth. Backfill the trench and tamp firmly to

conform to the channel cross-section. Secure with a row of staples

about 4" down slope from the trench. Spacing between staples is 6".

PLANS. INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE. (1 DAY)
4. CONSTRUCT CONCESSION STAND. (2 MONTHS)

BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.

TREE PROTECTION DETAIL

BLAZE ORANGE PLASTIC MESH

MAXIMUM & FEET

HIGHLY VISIBLE FLAGGING ---

ANCHOR POST SHOULD BE

MINIMUM 2" STEEL "U" CHANNEL OR 2" x 2" TIMBER 6' IN LENGTH

ANCHOR POST MUST BE INSTALLED

TO A DEPTH OF NO LESS THAN 1/3

OF THE TOTAL HEIGHT OF POST

RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.

DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

FOREST PROTECTION DEVICE ONLY.

ROOT DAMAGE SHOULD BE AVOIDED.

PROTECTIVE SIGNAGE MAY ALSO BE USED.

NOTES:

SEQUENCE OF CONSTRUCTION 1. OBTAIN A GRADING PERMIT. 2. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT

410-313-1330 24 HOURS BEFORE STARTING WORK. 3. INSTALL ALL TREE PROTECTION FENCE FOR TREES TO BE UNDISTURBED AS INDICATED ON THE PLANS (1 DAY). INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 DAY) 4. INSTALL SILT FENCE AND SUPER SILT FENCE (3 DAYS). THE 5 MEMORIAL TREES SHALL BE

1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT

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USE 2" x 4"

LUMBER FOR CROSS BACKING

AROUND THE MEMORIAL TREES AND ALL OTHERS THAT ARE SHOWN WITH THE SYMBOL. E 5. GRADE SITE TO SUBGRADE (2 WEEKS). STABILIZE ALL SLOPES IMMEDIATELY UPON COMPLETION 6. INSTALL STORM DRAIN SYSTEM FROM I-4 TO I-6 INSTALL INLET PROTECTION AT I-6 (2 DAYS).

RELOCATED AS SHOWN ON THE LANDSCAPE PLAN. TREE PROTECTION FENCE SHALL BE INSTALLED

CONSTRUCT INLET SEDIMENT TRAP AND STABILIZE WITH TEMPORARY SEEDING. AFTER EACH RAINFALL REMOVE SEDIMENT FROM THE TRAP. 7. CONSTRUCT THE SCHOOL BUILDING, SITE UTILITIES, CONCRETE CURB, BASE PAVING AND

SIDEWALKS. (12 MONTHS) 3. THE PROPOSED BMP FACILITY OR DRY SWALE SHALL BE CONSTRUCTED IN CONJUNCTION WITH THE PARKING LOT EXPANSION. HOWEVER, SILT FENCE SHALL BE PROVIDED ALONG TOP OF BANK

9. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT

FOR THE SWALE UNTIL SUCH TIME AS THE SITE IS FULLY STABILIZED AND GRASS HAS TAKEN

AND EROSION CONTROL STRUCTURES SHOWN HEREON. 10. STABILIZE ALL DISTURBED AREAS AND OBTAIN PERMISSION FROM THE SEDIMENT CONTROL

INSPECTOR TO PROCEED. 11. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED

AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE DEVICES MAY BE REMOVED AND/OR BACKFILLED AND THE REMAINING AREAS BROUGHT TO FINAL DESIGN GRADE. STABILIZE ALL REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 WEEKS) 12. NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR FINAL INSPECTION OF THE

## SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL
- DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). 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 MARYLAND STANDARDS AND SPECIFICATIONS
- FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO. ) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES. DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING

COMPLETED PROJECT.

- SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE. 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 SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (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

48,904 ACRES

3.303.6 ACRES

1:09/16 ACRES

2-21244 ACRES

- 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 AREA OF SITE AREA DISTURBED AREA TO BE ROOFED OR PAVED

AREA TO BE VEGETATIVELY STABILIZED

TOTAL FILL 294 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION 2797 CU.YDS.

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 CONTROLS MUST BE PROVIDED, IF DEEMED 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, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH

APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

LEGEND

SUPER-SILT FENCE ----55F--55F--55F---SILT FENCE -----SF---SF--------TP-TP-TP-TREE PROTECTION FENCE

5.C.E.

Parcel Number

LIMIT OF DISTURBANCE

Street Address

9410 KILIMANJARO ROAD

5414400

ENTRANCE

Address Chart

EROSION CONTROL MATTING

STABILIZED CONSTRUCTION

## DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION

## 11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

## ENGINEER'S CERTIFICATE

I Hereby Certify That This Plan For Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Condition And That It Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District.

DEVELOPER'S CERTIFICATE

"I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion And Sediment Control And That All Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of Natural Resources Approved Training Program For The Control Of Sediment And Erosion Before Beginning The Project. Also Authorize Periodic On-Site Inspection By The Howard Soil

Conservation District Or Their Authorized Agents, As Are Deemed Necessary." Wm. 12 Signature Of Developer

NOTE: THESE SEEDING SPECIFICATIONS ARE THE MINIMUM REQUIRED FOR SEDIMENT CONTROL.

REFER TO PROJECT SPECIFICATIONS FOR SEEDING REQUIREMENTS FOR OTHER AREAS OF

No. DATE

6-27-12

CONSTRUCTION

6.19.02

ALL SWALES SHALL BE STABILIZED WITH

EROSION CONTROL MATTING

HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 Maryland Route 108 Ellicott City, Maryland 21042 Attention Cathleen Young

> TCA ARCHITECTS 301-261-8700

PROJECT OAKLAND MILLS HIGH SCHOOL DEED REF. BLOCK NO. ZONE 590/12 NT WATER CODE SEWER CODE 6066.03

VILLAGE OF OAKLAND MILLS SECTION 2 AREA BUILDING ADDITION AND PARKING LOT ADDITION

SEDIMENT CONTROL NOTES AND DETAILS



FISHER, COLLINS & CARTER, INC CIVIL ENGINEERING CONSULTANTS & LAND SURVEYOR

nnial square office park - 10272 Baltimore National Pi

ELLICOTT CITY, MARYLAND 2104

Reviewed For Howard County Soil Conservation District And Meets

7/5/02

APPROVED: DEPARTMENT OF PLANNING AND ZONING

OPERATION AND MAINTENANCE SCHEDULE FOR

PRIVATELY OWNED AND MAINTAINED

OPEN CHANNEL SYSTEMS

(O-1 AND O-2)

performed during wet weather to determine if the facility is functioning properly.

C. Debris and litter shall be removed during regular mowing operations and as needed.

E. Remove silt in the open channel system when it exceeds 25% of the original WQV.

a maximum grass height of less than 6 inches.

CROSS-SECTION

STAPLE OUTSIDE EDGE OF MATTING ON 2' CENTERS

A. The open channel system shall be inspected annually and after major storms. Inspections shall be

3. The open channel shall be moved a minimum of as needed during the growing season to maintain

EROSION CONTROL MATTING

D. Visible signs of erosion in the open channel system shall be repaired as soon as it is noticed

PREPARED FOR

OVERLAP OF MATTING

STRIPS WHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED. ATTACH

EDGE OF MATTING ON 2' CENTERS

TYPICAL STAPLES NO. 11

GAUGE WIRE

STAPLES ON 10" CENTERS

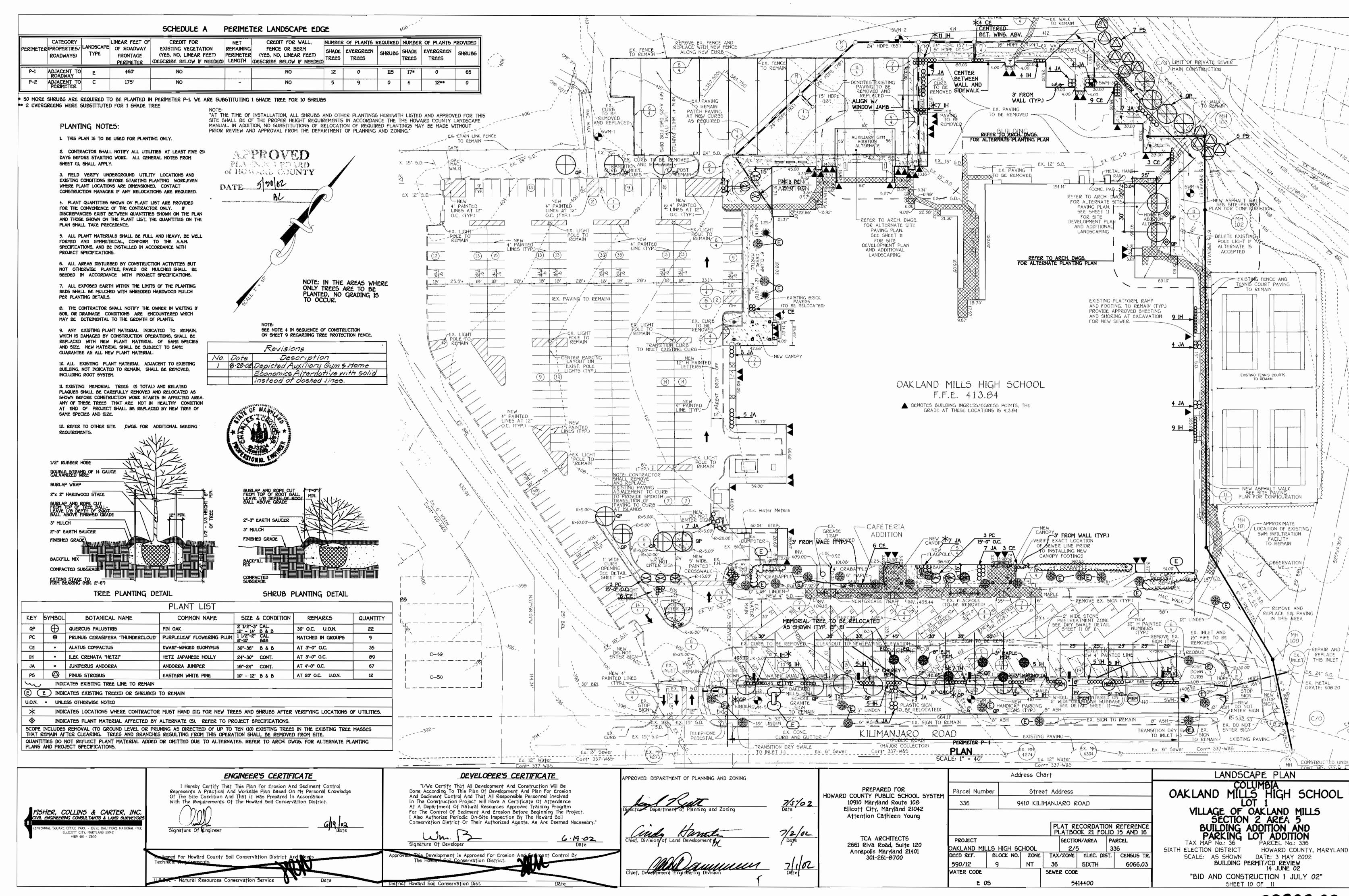
2661 Riva Road, Suite 120

Annapolis Maryland 21401

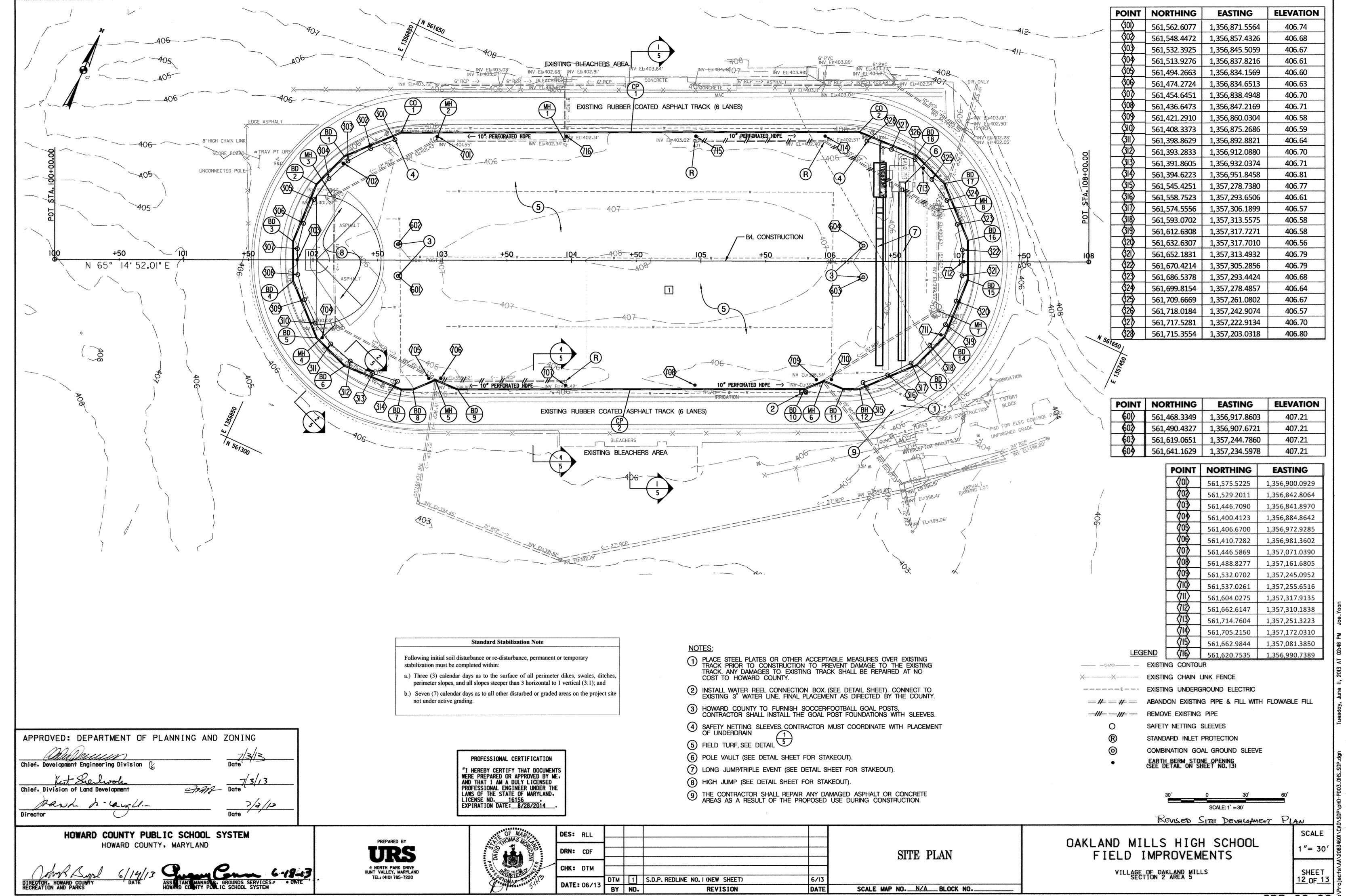
PLAT RECORDATION REFERENCE PLATBOOK 21 FOLIO 15 AND 16 SECTION/AREA PARCEL TAX/ZONE ELEC. DIST. CENSUS SIXTH

HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: 3 MAY 2002 BUILDING PERMIT/CD REVIEW 14 JUNE 02

"BID AND CONSTRUCTION 1 JULY 02" SHEET 9 OF 1/13 [



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SDP 02-9

