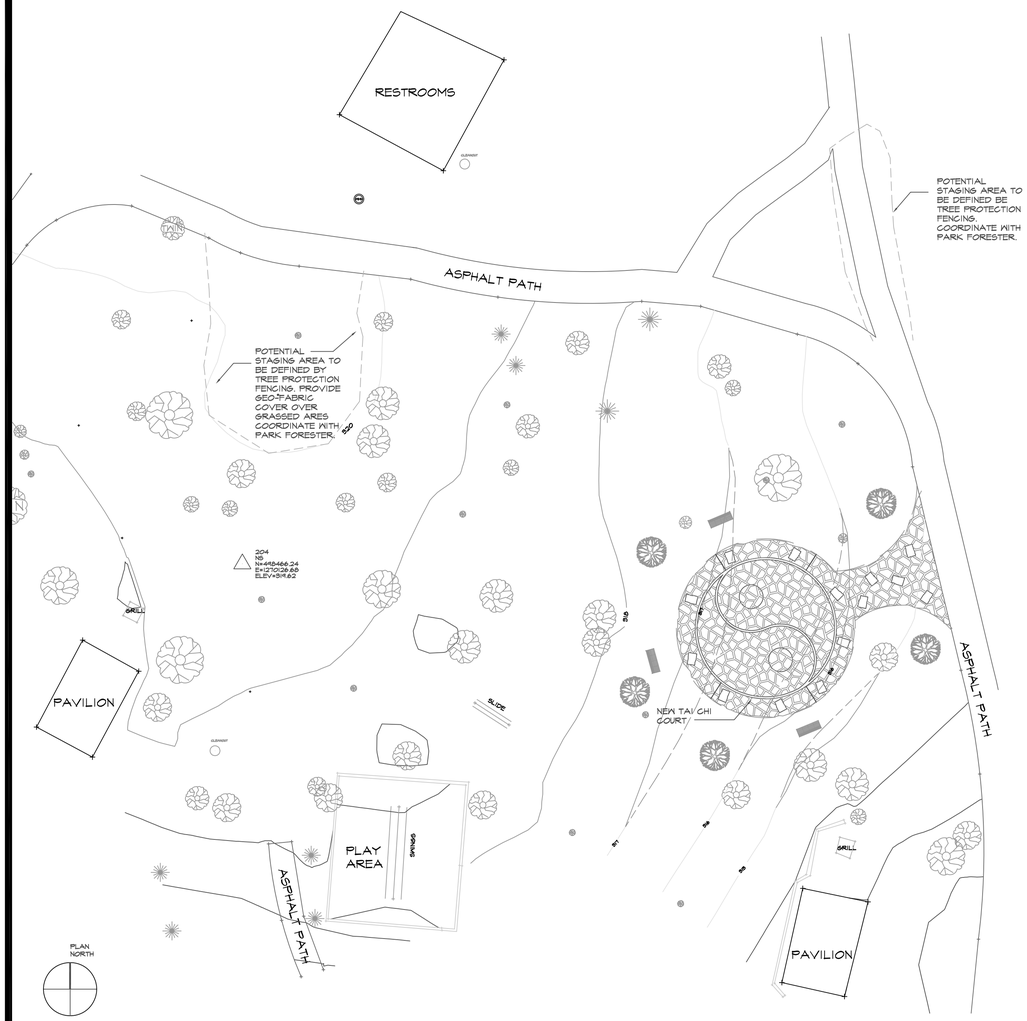

1 A-1 SITE LOCATION PLAN

SCALE: 1/16"= 1'-0"

1. Protect and maintain benchmarks and survey control points from disturbance during construction.

2. Locate and clearly flag trees and vegetation to remain

3. Protect existing site improvements to remain from damage during construction.

4. Restore damaged improvements to their original condition, as acceptable to Park Service.

5. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust walkways.

6. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.

7. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

8. Coordinate with Park Service and obtain all necessary permits

9. Erect and maintain temporary fencing around tree protection zones before starting site clearing. Remove fence when construction is complete.

10. Do not store construction materials, debris, or excavated material within fenced area.

11. Do not permit vehicles, equipment, or foot traffic within fenced area.

12. Maintain fenced area free of needs and trash.

13. Do not excavate within tree protection zones, unless otherwise indicated.

14. Where excavation for new construction is required within tree protection zones, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks, comb soil to expose roots, and cleanly cut roots as close to excavation as possible.

15. Cover exposed roots with burlap and water regularly.

16. Temporarily support and protect roots from damage until they are permanently redirected and covered with soil.

17. Tree protection placement and installation must be coordinated and approved by M-NCPPC Forester before work can begin.

18. Backfill with soil as soon as possible.

19. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, in a manner approved by the park service arborist.

20. Replace trees that cannot be repaired and restored to full-growth status, as determined by Architect.

21. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction.

22. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.

23. Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.

24. Grind stumps and remove roots, obstructions, and debris extending to a depth of 18 inches below exposed subgrade.

25. Use only hand methods for grubbing within tree protection zone.

26. Chip removed tree branches and dispose of off-site.

27. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

28. For fill in areas to remain grass or landscaped, place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground

29. Verify locations of existing underground utility and contact "Miss Utility" 48 hr. prior to start of work and mark all utility locations.

30. Install silt fence around soil stockpile. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

31. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

32. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:

a. Under patio slab, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 92 percent.

b. Under lawn or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.

Concrete Mixtures:

1. Prepare design mixtures, proportioned according to ACI 301, with the following properties:
   a. Compressive Strength (28 Days): 3500 psi.
   b. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.50.
   c. Slump Limit: 5 inches, plus or minus 1 inch.
   d. Air Content: 4-1/2 percent plus or minus 1.5 percent.

Concrete Material

1. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:
   a. Portland Cement: ASTM C 150, Type I.
2. Normal-Weight Aggregates: ASTM C 33, Class 4S coarse aggregate, uniformly graded.
   a. Provide aggregates from a single source.

3. Water: ASTM C 94/C 94M.

4. Air-Entraining Admixture: ASTM C 260.

5. Chemical Admixtures: ASTM C 494/C 494M, of type suitable for application, certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

2 A-1 SITE GENERAL NOTES

SCALE: 1/8"= 1'-0"

VEGETATIVE STABILIZATION

PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

I. SITE PREPARATION

PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, GRASSED WATERWAYS, SEDIMENT BASINS, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND (B) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

II. SEEDBED PREPARATION AND SEEDING APPLICATION

THE TOP LAYER OF SOIL SHALL BE LOOSENED, LIMED AND FERTILIZED BY RAKING, DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING.

APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL CULTIPACKER,SEEDER OR HYDROSEEDER ON A FIRM MOIST SEEDBED.

III. SOIL AMENDMENTS

LIME AND FERTILIZE ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TEST APPLY THE FOLLOWING:

DOLOMITIC LIMESTONE — 2 TONS PER ACRE OR 92 LBS/1,000 (PERMANENT AND SODDING SQ.FT.)

FERTILIZER — 1 TON PER ACRE OR 46 LB/1,000 (TEMPORARY) 10-10-10 OR EQUIVALENT AT 1,000 LBS PER ACRE OR 23 LBS PER 1,000 SQ. FT. (PERMANENT AND SODDING)

IV. SEDIMENT CONTROL PRACTICES, SEEDING

SEED: "KENTUCKY 31" TALL FESCUE 60 LBS/ACRE OR 1.38 LBS/1,000 SQ. FT AND ITALIAN (ANNUAL) RYEGRASS 40 LBS/ACRE OR .91 LBS/1,000 SQ. FT.

DATES: 1/2 – 10/31 5/1 – 8/14 WITH IRRIGATION.

V. TEMPORARY SEEDING: PER GROWING SEASON

SEED: ITALIAN OR PERENNIAL RYEGRASS 40 LBS/ACRE OR .92 LBS/1,000 SQ. FT.

DATES: 2/1 – 4/30 AND 8/15 – 11/30

SEED: MILLET 40 LBS/ACRE OR 0.92 LBS/1,000 SQ. FT.

DATES: 5/1 – 8/14 VI. PERMANENT SEEDING

A. RESIDENTIAL AND HIGH MAINTENANCE AREAS

1. KENTUCKY BLUEGRASS, "PLUSH", "BIRKA", "PARADE", "VANTAGE", "COLUMBIA", "MERION", "ADELPHI", "SOUTH DAKOTA", "KENBLUE". ANY THREE VARIETIES AT 30 LBS. TO MAKE 90 LBS/ACRE OR 2 LBS/1,000 SQ.FT. AND RED FESCUE – "PENNLAWN" OR JAMESTOWN 10 LBS/1000 SQ.FT.

   DATES: 2/1 – 4/30 AND 8/15 – 10/31.

2. "KENTUCKY 31" TALL FESCUE
   220-260 LBS/ACRE OR 5-6 LBS/1,000 SQ. FT.

   DATES: 2/1 – 10/31 5/1 – 8/14 IRRIGATION REQUIRED.

B. LOW MAINTENANCE AND MINING AREAS

"KENTUCKY 31" TALL FESCUE 40 LBS/ACRE OR 0.92 LBS/1,000 SQ. FT. AND "INTERSTATE" SERICEA LESPEDEZA (INOCULATED)20 LBS/ACRE OR 0.46 LBS/1,000 SQ. FT.

DATES: 2/1 – 4/30 AND 8/15 – 10/31

C. GENERAL AND LARGE ACREAGE

"KENTUCKY 31" TALL FESCUE 60 LBS./ACRE OR 1.38 LBS/1,000 SQ.FT.(0.5 kg/100 sq.m)

VII. MULCHING

ALL SEEDINGS REQUIRE MULCHING. USE MULCH ONLY DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE.

MULCH SHALL BE UNROTTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A RATE OF 1 TO 2 TONS/ACRE OR 70-90 LBS/1,000 SQ.FT. (2 BALES) MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEED BEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY MECHANICALLY OR BY HAND. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, PEG AND TWN OR LIQUID MULCH BINDERS.

LIQUID MULCH BINDER SHALL BE RAPID CURING CUTBACK ASPHALT APPLIED AT A RATE OF 200 GAL/ACRE OR 5 GAL. PER 1,000 SQ. FT. SLOPES 8 FEET OR MORE HIGH USE 348 GAL./ACRE OR 8 GAL./1,000 SQ. FT.

VII. SODDING

CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR WITH STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTING AND NOT OVERLAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED WITHIN EIGHT HOURS OF INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

IX. MAINTENANCE

A. IRRIGATION – WHEN SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.

B. REPAIRS – IF STAND IS INADEQUATE FOR EROSION CONTROL, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND IS OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL RATES AND PROCEDURES.

General Notes

No.	Revision/Issue	Date
1	PARK COMMENT	9/2/08

Firm Name and Address

Project Name and Address

SITE LOCATION PLAN & NOTES

Project

Date 7/08/2008

Scale

Sheet A-1