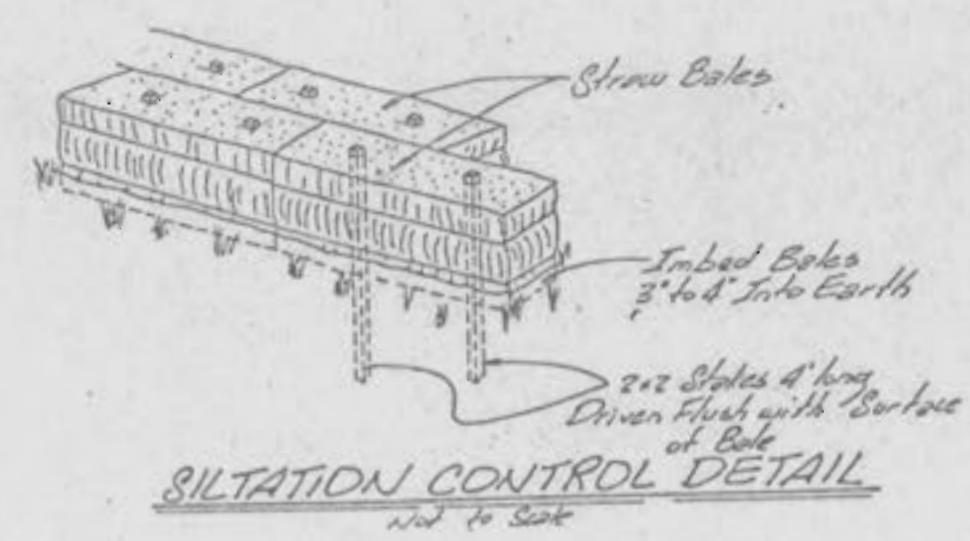


**DRAINAGE AREA MAP**  
**ASPEN POINTE**  
 SAN PROJECT #90-3196  
 JULY 19, 1990

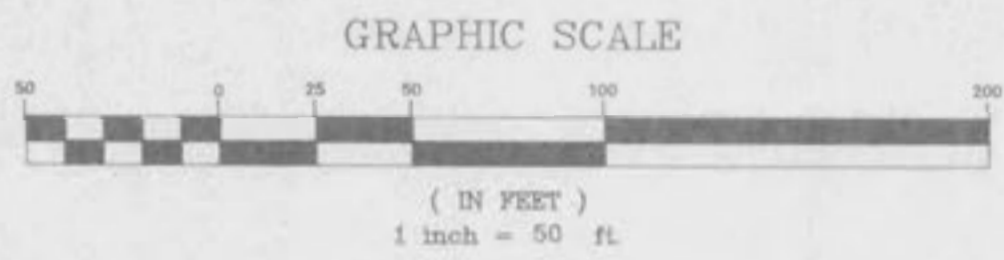
REV. B-3-90  
 REV. B-10-90

- I. GENERAL**
- No area shall be cleared without authorization from the project engineer.
  - All grading work performed shall be within a 0.2 feet tolerance of the grades shown on the grading plan.
  - A Geotechnical Engineer shall be employed by the owner and be on site during grading operations.
  - The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied there from, all in accordance with the plans and notes as interpreted by the geotechnical engineer.
  - Before the grading begins, the Owner shall employ a competent, licensed surveyor to establish all lines and grades.
  - The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
  - Trench backfills within the road right-of-way will be water jetted and granular backfill will be used under gravel areas.
  - All areas will be allowed to drain. All low points should be provided with temporary ditches.
  - A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from eroding adjacent property and hitting up existing downstream storm drainage system.
  - Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.
  - Any existing trash and debris currently on this property must be removed and disposed of off-site.
  - Soft soil in the bottom and banks of any existing or former pond site should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
  - No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.

- II. SPECIFICATIONS**
- Site preparation includes the clearance of all stumps, trees, bushes, shrubs and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any non-wood structures. The unsuitable material shall be properly disposed off-site. Topsoil and grass in the fill areas shall be thoroughly placed prior to the placement of any fill. The Soils Engineer shall approve the dicing operation.
  - Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers - acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
  - The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Inertia reports showing fill quality will be made to the Owner at regular intervals.
  - The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
  - All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 90 percent of the maximum density as determined by the Modified AASHTO T-99 Compaction Test (ASTM-D-1557). Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches, cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
  - The sequence of operation in the fill areas will be fill, compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 6 percent above the optimum moisture control.
  - The surface of the fill shall be finished so that it will not pond water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.



NOTE: Sediment Control Plan shall be implemented before grading begins



TOTAL TO BASIN  
 Q = 2.69 cfs (EP 103)  
 Q = 1.11 cfs (DIRECT TO BASIN)  
 Q = 34.64 cfs (SP 102)  
 T.Q. = 38.44 cfs (TOTAL TO BASIN)

DETENTION BASIN - HW  
 25 YR 513.40  
 100 YR 514.85

WHISPERING HILLS No. 2

COMMON GROUND  
 TREES TO BE SAVED  
 EXIST. SUBURBAN SERVICE

HUNTING CREEK PLAT TWO (PARK AREA)

**DRAINAGE AREA MAP**

NOTE: THIS PLAN IS FOR DRAINAGE AREA PURPOSES ONLY.  
 NOT TO BE USED FOR CONSTRUCTION.