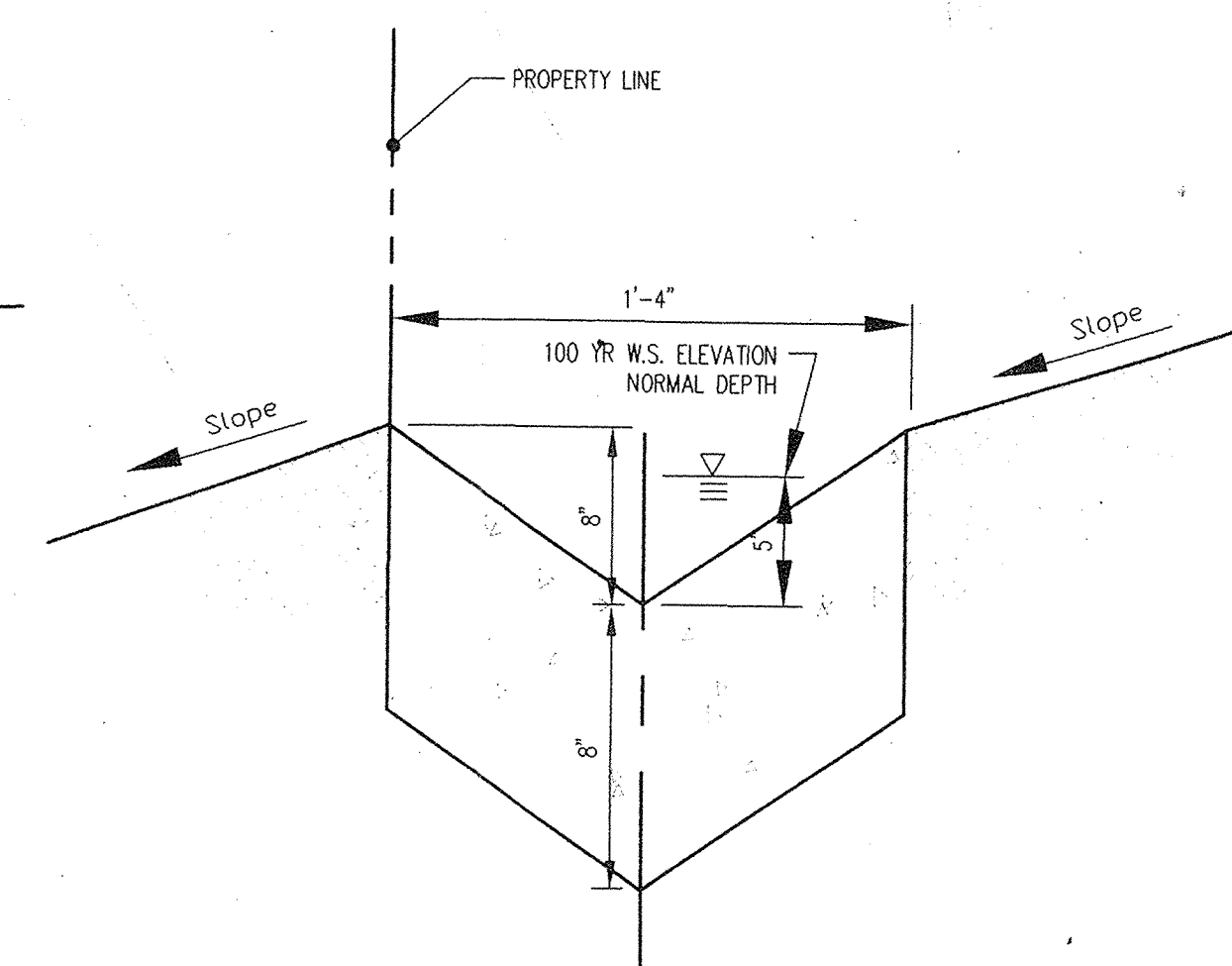




DRAINAGE CALCULATIONS FOR SIZING CONCRETE SWALE IN LOT 3
 1. PRECIPITATION ZONE = 2
 2. DESIGN STORM = DEPTH (INCHES) AT 100-YEAR STORM
 6-HOUR = 2.35 INCHES
 24-HOUR = 2.75 INCHES
 10 DAY = 3.95 INCHES
 3. PEAK DISCHARGE (CFS/ACRE) FOR 100-YEAR, ZONE 2, TABLE A-9:
 Q = 1.56 CFS/ACRE SOIL UNCOMPACTED "A"
 Q = 2.28 CFS/ACRE LANDSCAPED "B"
 Q = 3.14 CFS/AC COMPACTED SOIL "C"
 Q = 4.70 CFS/AC IMPERVIOUS AREA "D"
 FOR WATERSHEDS LESS THAN OR EQUAL TO 40 ACRES
 4. EXCESS PRECIPITATION (INCHES), 6 HOUR STORM, ZONE 2, TABLE A-8:
 E = 0.53 INCHES SOIL UNCOMPACTED "A"
 E = 0.78 INCHES LANDSCAPED "B"
 E = 1.13 INCHES COMPACTED SOIL "C"
 E = 2.12 INCHES IMPERVIOUS AREA "D"
 5. PROPOSED CONDITIONS ONSITE LOT #2 AND LOT #3
 LOT #2 AREA = 3,602SF = 0.08AC
 LOT #3 AREA = 4,178SF = 0.10AC
 TOTAL AREA = 7,780SF = 0.18AC
 TREATMENT "D" AREA:
 LOT#2: (HOUSE, GARAGE AND SDWK) = (40'x27') + (15'x12') + (21'x12')
 + (8'x4') = 1544SF = 0.04AC
 LOT#3: (HOUSE, GARAGE AND SDWK) = (43'x31') + (6'x16') + (21'x12')
 + (5'x5') + (8'x4') = 1738SF = 0.04AC
 TREATMENT "C" AREA:
 LOT#2: (GRAVEL DRIVEWAY) = (61'x11') = 671SF = 0.02AC
 LOT#3: (GRAVEL DRIVEWAY) = (73'x11') = 803SF = 0.02AC
 TREATMENT "B" AREA BALANCE:
 LOT#2: AREA = 0.08 - 0.04 - 0.02 = 0.02AC
 LOT#3: AREA = 0.10 - 0.04 - 0.02 = 0.04AC
 TREATMENT AREA (ACRES)
 A
 B
 C
 D
 O
 0.02 + 0.04 = 0.06
 0.02 + 0.02 = 0.04
 0.04 + 0.04 = 0.08
 Q(PROPOSED) = (2.28 x 0.06) + (3.14 x 0.04) + (4.70 x 0.08)
 = 0.64CFS PROPOSED ONSITE FLOW IN CONCRETE SWALE

- ① CONSTRUCT DRAINAGE SWALE TO ACCEPT DRAINAGE FROM LOTS 2 AND 3.
- ② CONSTRUCT 16" WIDE "V" SWALE CONCRETE RUNDOWN PER DETAIL SHOWN.
- ③ CONSTRUCT 6" HIGH WALL TO PREVENT CROSS LOT DRAINAGE, SEE DETAIL.
- ④ CONSTRUCT CONCRETE STAIRS.
- ⑤ CONSTRUCT APPROXIMATELY 11 FEET OF 18" DEEP CONCRETE CUTOFF WALL AT EDGE OF DRIVEWAY TO PREVENT UNDERMINING FROM EROSION. USE REBAR SIZE AND SPACING AS PER FLOODWALL

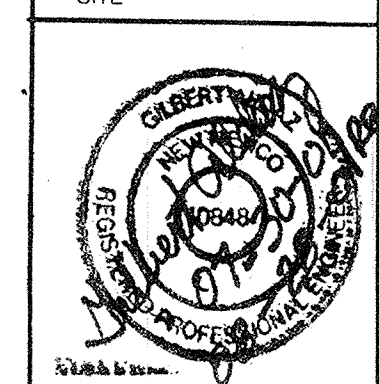


"V" SWALE DETAIL
SCALE: N.T.S.

-
- EXISTING ELEVATIONS
- PROPOSED TOP OF CURB
62.42TC
- PROPOSED FLOWLINE
61.92PL
- PROPOSED TOP OF FLOOD WALL
62.42TW
- PROPOSED BOTTOM OF FLOOD WALL
61.92BW
- PROPOSED GRADE
88.3GR
- EXISTING CONTOUR
4990
- FLOW DIRECTION

NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

FILE:
010401 - GAHP-CRESPIN
-SITE



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