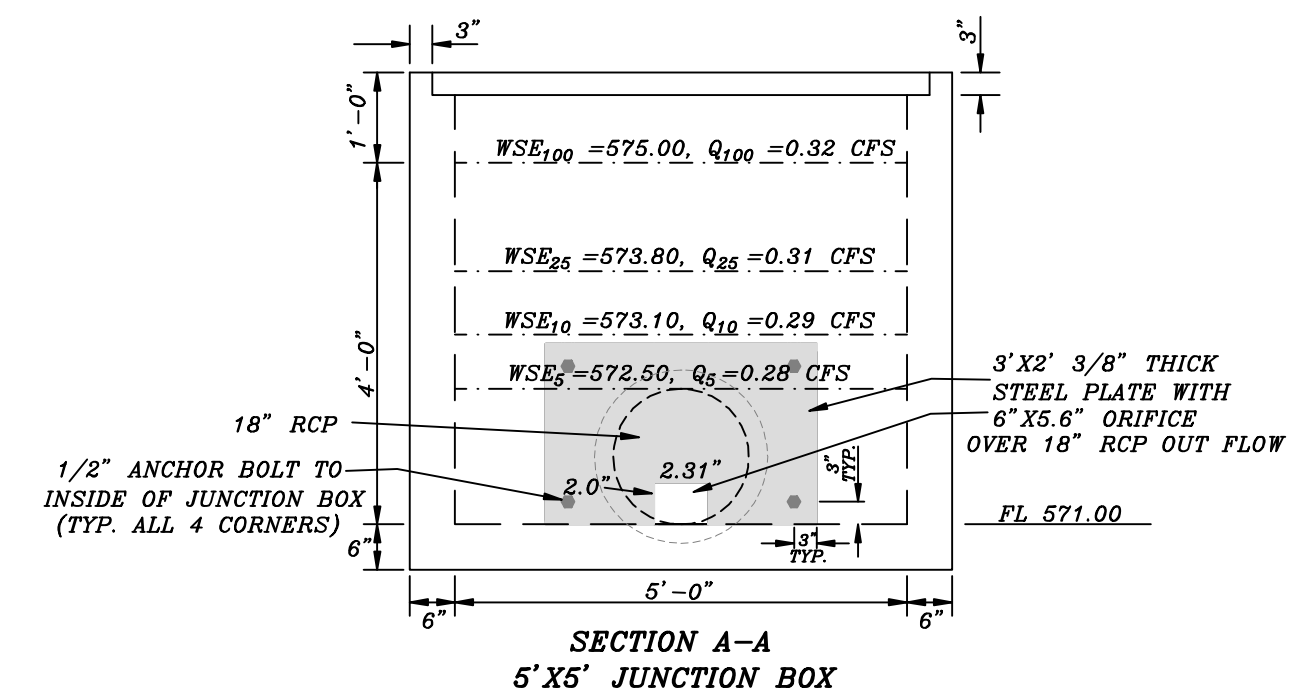
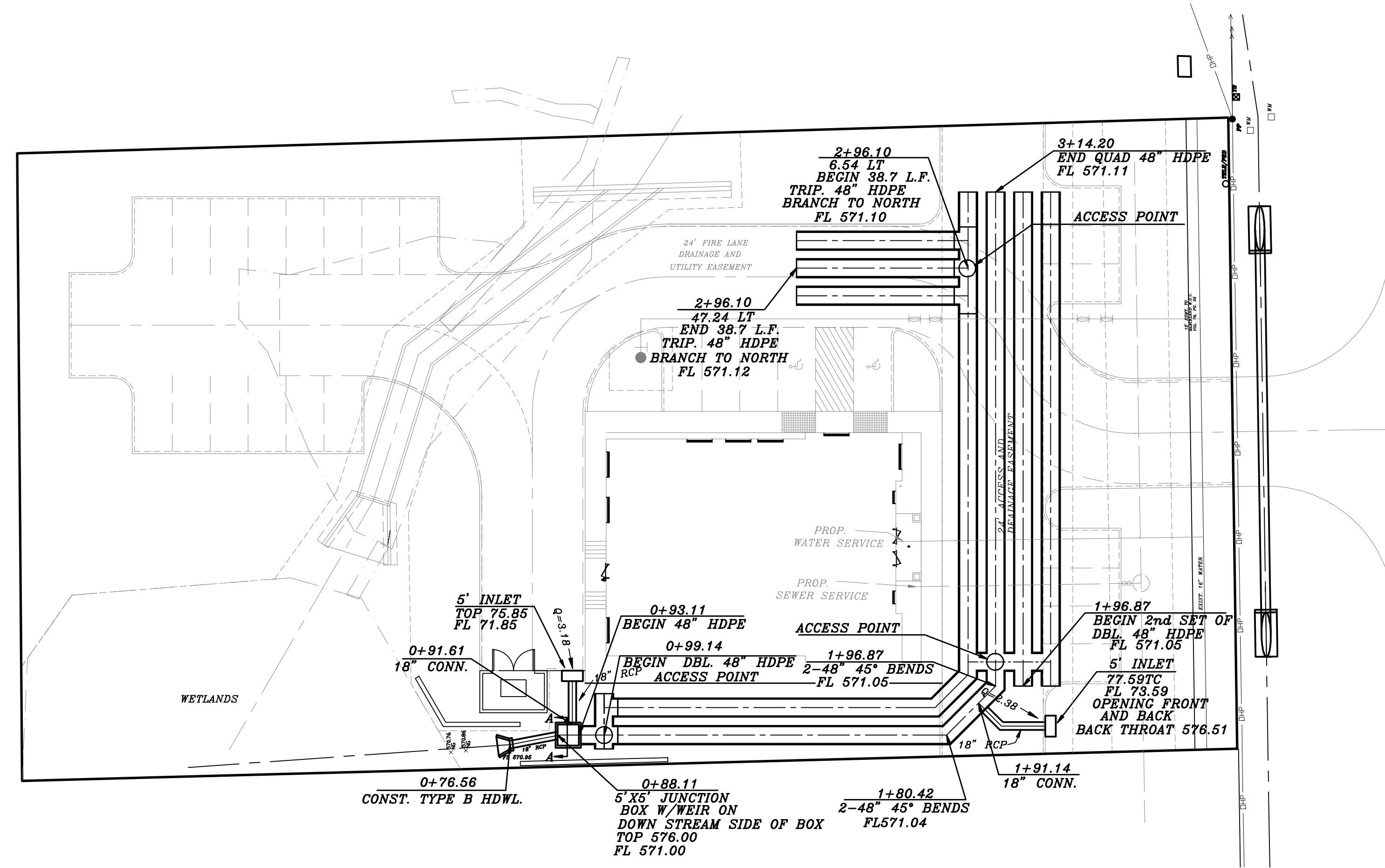
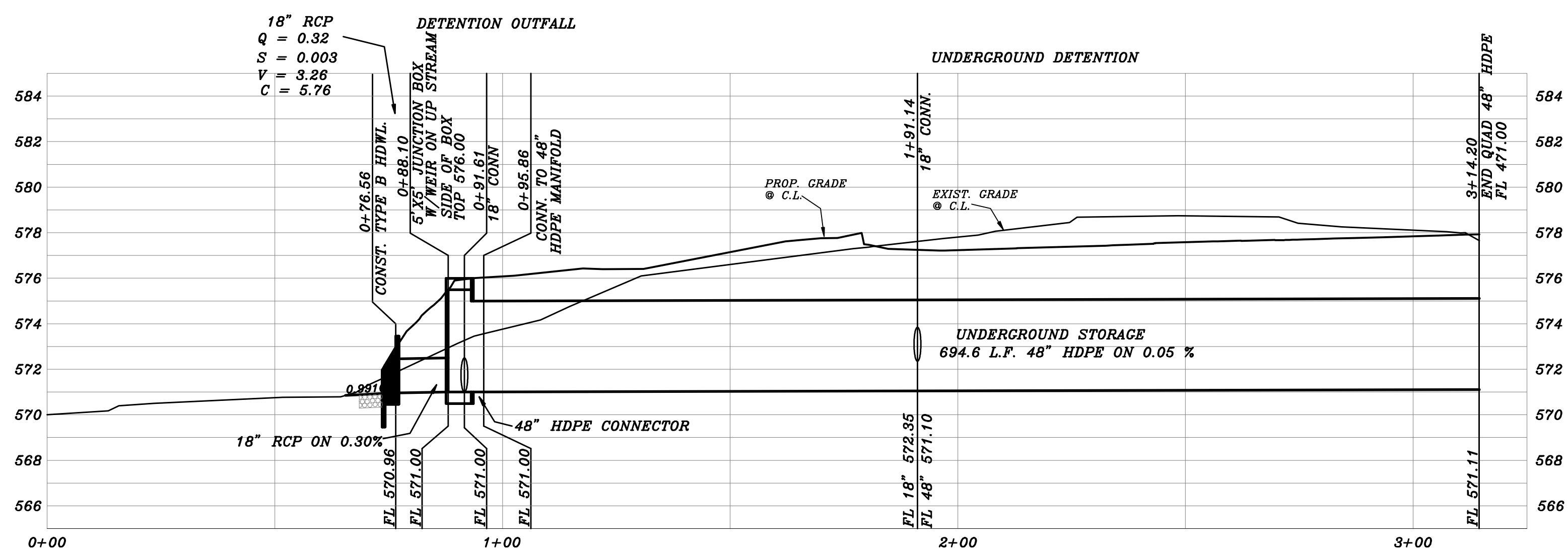
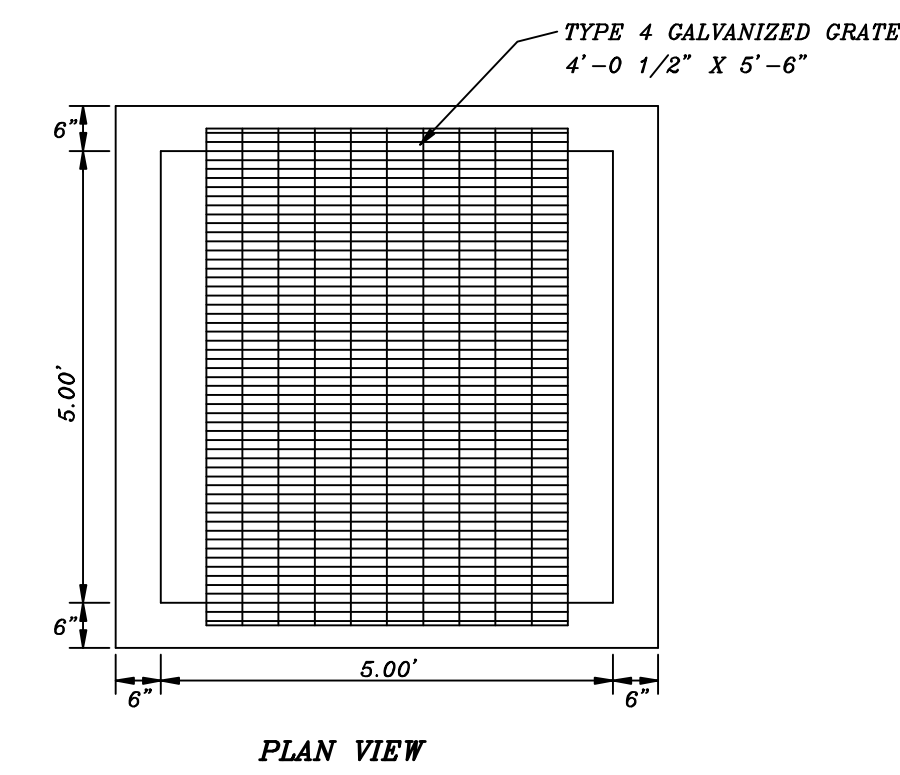


REVISED TO CONFORM TO CONSTRUCTION RECORDS.
W. Douglas DATE: JUNE 12, 2014

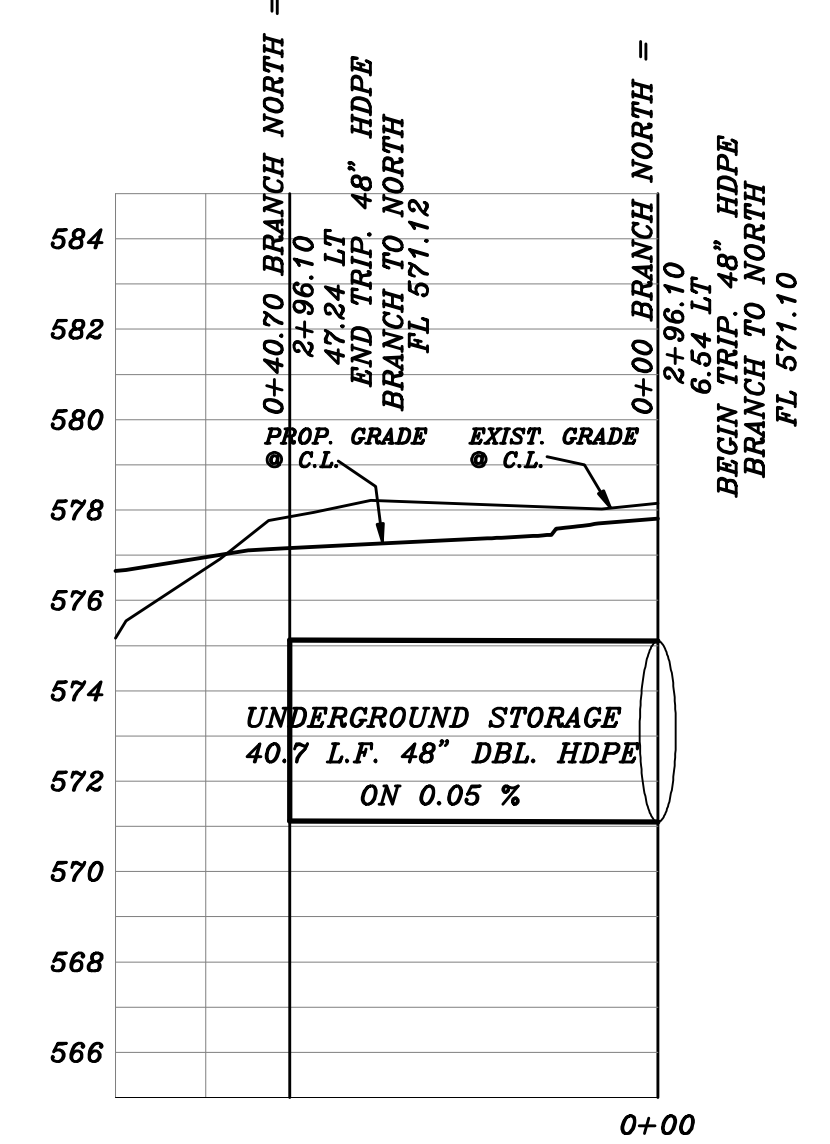
Q ACTUAL	Q ALLOWABLE
Q ₁₀₀ = .32 CFS	Q ₁₀₀ = .32 CFS
Q ₂₅ = .31 CFS	Q ₂₅ = .31 CFS
Q ₁₀ = .29 CFS	Q ₁₀ = .29 CFS
Q ₅ = .28 CFS	Q ₅ = .28 CFS



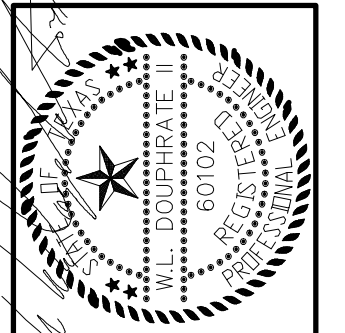
SUBMERGED ORIFICE CALCULATIONS
 $Q = 0.32 \text{ CFS}$
 $Q = (Cd)(A)(2gH)^{.5}$
 $Cd = 0.62$
 $AREA = 4.63 \text{ SQ. IN.}$
 $= 2.31" \text{ W} \times 2.0" \text{ H}$
 $100yr \text{ Hd} = 4'$
 $25yr \text{ Hd} = 3.8'$
 $10yr \text{ Hd} = 3.3'$
 $5yr \text{ Hd} = 3.1'$



UNDERGROUND DETENTION BRANCH NORTH



BENCHMARK:
 BRASS CAP MONUMENT NO. 19 SET IN CONCRETE AT THE NORTHWEST CORNER OF SILVER VIEW AND DIAMOND WAY N 7018063.211, E 2609533.550 ELEV. = 600.69



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY THE BOARD OF ENGINEERING EXAMINERS, STATE OF TEXAS, NO. 60102, F-886, ON DATE, JUNE 12, 2014.

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 2235 RIDGE RD. # 200 ROCKWALL, TEXAS 75087
 PHONE: (972)771-9004 FAX: (972)771-9005

DRAINAGE AND DETENTION
 LOT 1, BLOCK A
 PEAR PEDI MEDICAL OFFICE
 J.M. ALLEN SURVEY, ABST. 2
 CITY OF ROCKWALL
 ROCKWALL COUNTY, TEXAS

CITY REVIEW 6-12-14
 REVISION

WLD.

CHECKED

G.C.W.

DRAWN

SCALE
 1" = 20' H
 1" = 5' V

JUNE 12, 2014
 DATE

13029
 PROJECT

7A OF 10