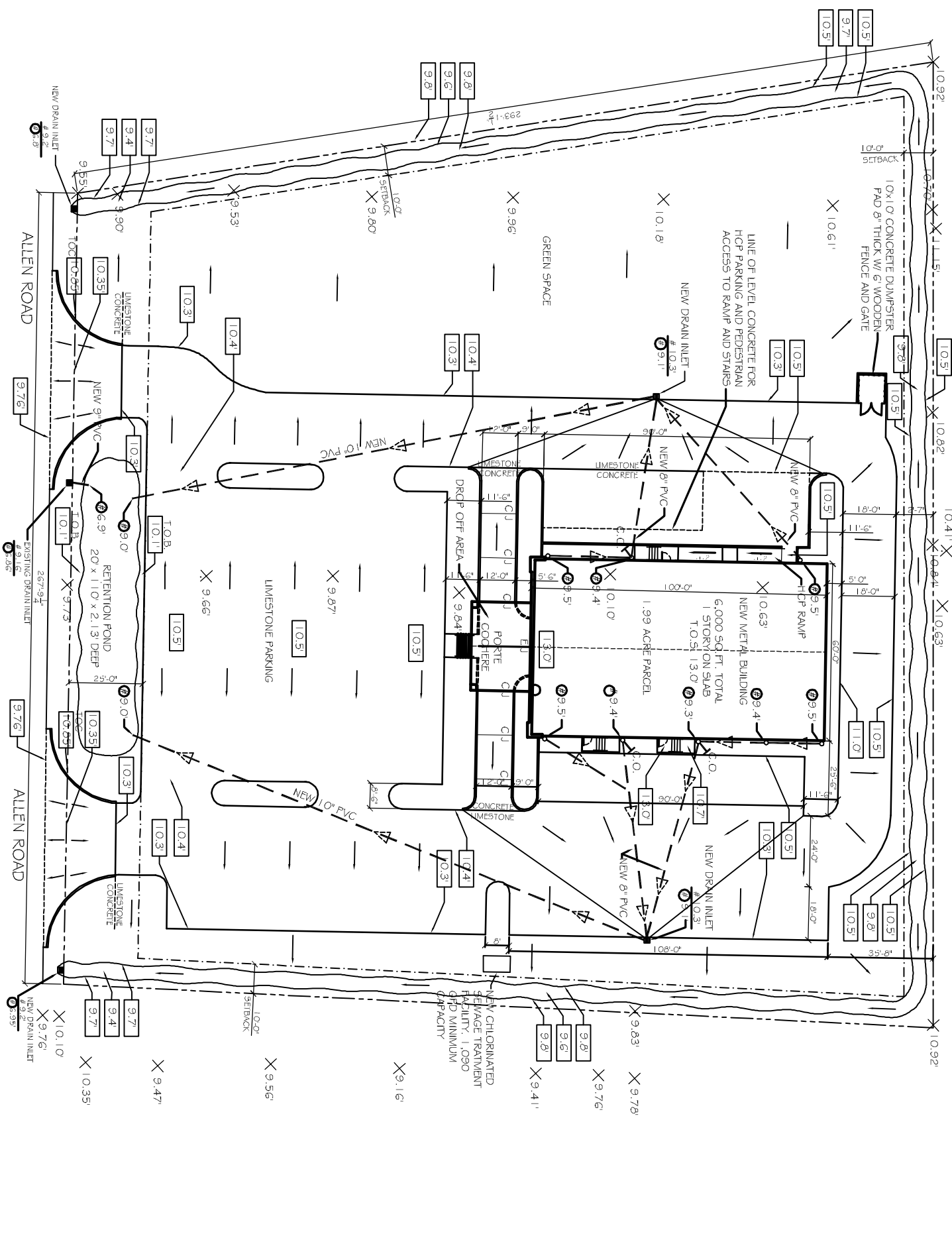
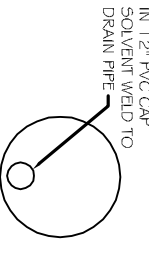
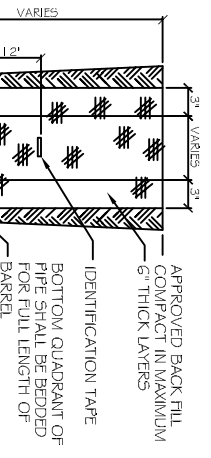
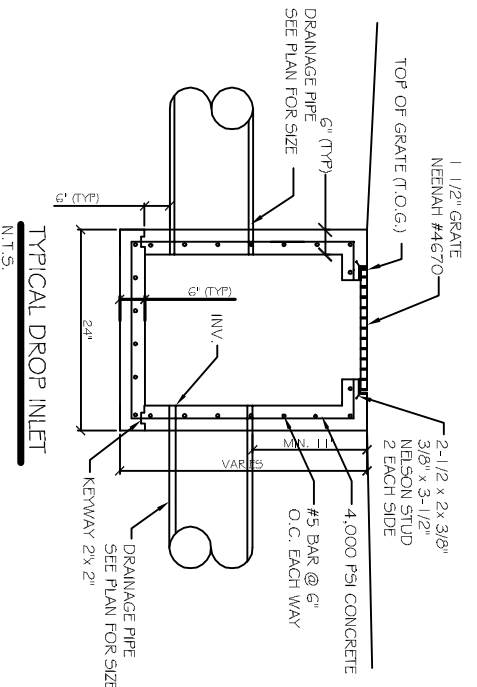


<b>PROJECT:</b> EL-BETHHEL	
DRAINAGE RUN OFF CALCULATIONS -- RATIONAL METHOD	
<b>PRIOR DEVELOPMENT</b> 25 Year Frequency	
<b>Q<sub>1</sub> = CIA</b>	
Watertight Surfaces c(1) = 0.9	sqft = 0.000 Acres
Gravel Surface c(2) = 0.21	sqft = 0.000 Acres
Green Space c(3) = 0.35	sqft = 1,993 Acres
Summary c = 0.35	sqft = 1,993 Acres
Duration (D) = Time of concentration (TC) TC = 7.039(L <sup>0.3917</sup> C <sup>-1.1309</sup> )S <sup>-1.1985</sup> where L = 290 c = 0.35 S = 0.5000 TC = D = 24.41	Runoff length ft Runoff coef Percent Slope minutes or in/hr Elev diff = 1.45
and from Rainfall Intensity Table I = 5.78	in/hr
<b>Q<sub>1</sub> = 4.033 cfs</b>	10% Reduction <b>3.630 cfs</b>
<b>POST DEVELOPMENT</b> 25 Year Frequency	
<b>Q<sub>2</sub> = CIA</b>	
Watertight Surfaces c(1) = 0.9	sqft = 0.239 Acres
Gravel Surface c(2) = 0.21	sqft = 0.748 Acres
Green Space c(3) = 0.35	sqft = 1,006
Summary c = 0.38	sqft = 1,993 Acres
D = Time of concentration (TC) TC = 7.039(L <sup>0.3917</sup> C <sup>-1.1309</sup> )S <sup>-1.1985</sup> where L = 120 c = 0.38 S = 0.5833 TC = D = 16.06	Runoff length ft Runoff coef Percent Slope minutes or in/hr Elev diff = 0.7
and from Rainfall Intensity Table I = 6.81	in/hr
<b>Q<sub>2</sub> = 4.929 cfs</b>	
<b>RESULTS</b>	
DETENTION REQUIRED ONE HOUR DETENTION RETENTION DIMENSIONS	1,299 cfs 4876.1 cuft 20 feet 110 feet 2.13 feet
<b>DISCHARGE END AREA CALCULATIONS</b>	
where Q is allowable run off	
Q = 3.630 cfs	
c = 0.98 coefficient	
g = 32.2 ft/ftsec	
H = 1.00 feet	
A = 0.46 sqft	
<b>REQUIRED CONDUIT =</b>	<b>9.20 inch diameter</b>



**DRAINAGE PLAN**  
SCALE: 1" = 20'-0"



- LEGEND**
- PROPERTY LINE
  - NEW BLDG. FOOTPRINT
  - SETBACK LINE
  - NEW FENCE
  - 6" CONCRETE CURB
  - PAVEMENT SLOPE INDICATOR
  - NEW DRAINAGE CATCH BASIN
  - NEW TOP OF CURB ELEVATION
  - TEMPORARY SILT FENCE
  - EXISTING GRADE ELEVATION

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	<p>REV. EUGENE WELLINGTON ALLEN ROAD SUDDLL, LA 70461</p>
	<p><b>DRAINAGE PLAN</b></p>
	<p>REV: SCALE: AS NOTED JOB#: 1819A DATE: 11-19-08 SHEET 4</p>