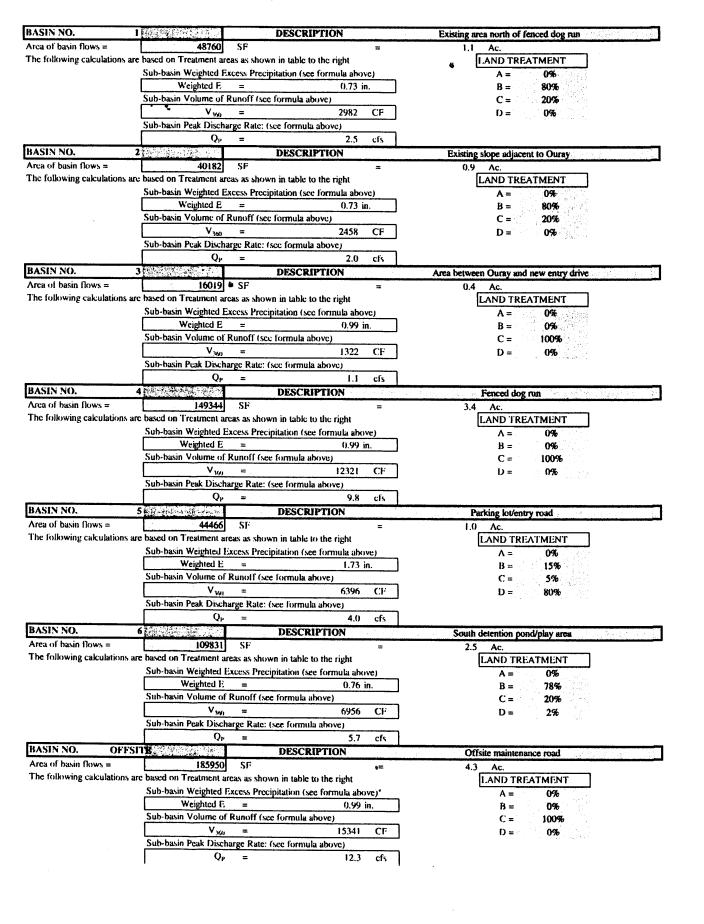
M:\CAD FILES\1700-1799\1731\dwa\1731 G5-101 dwa 12/15/2009 2:40:29 F



Q100=1.0 CFS

100 LF 12" N-12WT PIPE @ 0.53%

1-18" ADS NYLOPLAST BASIN WATER A COUTLET & 6" SUMP

1"=20'

CONCRETE COLLAR PER COA STD

1-18" SOLID GRATE

**DETAIL #2461** 

RIM=30.8

INV=27.4Q

CHANNEL AND STORM DRAIN DETAIL

**©** 0.5%

**CLEANOUTS** 

TOP = 30.5

40 LF 8" PERF. SAS PVC\_PIPE @ 0.5%

ADAPTER TO ADS N-12WT PIPE

1-12"X8" ADS N-12 REDUCER

1-12"X8" ADS N-12 WYE W/ SDR 35 BRANCH

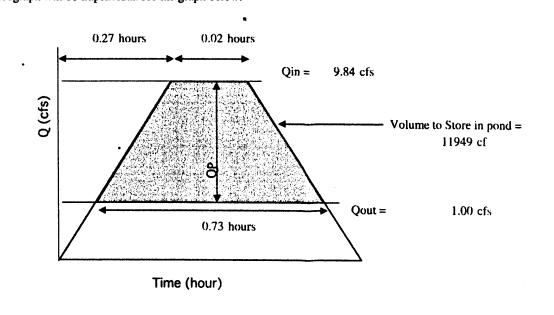
INV=27.63

Base time, t	B, for a small	watershed l	hydrograph is,	••
tB = (2.107)	* E * A / Q <sub>P</sub> )	- (0.25 * A	<sub>D</sub> /A)	
Where	E	= %,	0.95 inches	
	Α	= :	9.38 acres	
	$A_D$	- 2	0.87 acres	
•	$Q_{\rm P}$	= 1	25.1 cfs	

E is the excess precipitation in inches (from DPM TABLE A-8), Q<sub>p</sub> is the peak flow, A<sub>D</sub> is the area (acres) of treatment D, and A<sub>T</sub> is the total area in acres. Using the time of concentration, t<sub>C</sub> (hours), the time to peak in hours is:

 $t_P = (0.7 * tC) + ((1.6 - (A_D / A)) / 12)$ 0.20 hours

Continue the peak for  $0.25 * A_D / A_T$  hours. When  $A_D$  is zero, the hydrograph will be triangular. When  $A_D$  is not zero, the hyrograph will be trapezoidal. see the graph below:



DOG RUN POND INFLOW / OUTFLOW HYDROGRAPH

FL=24.2±

3-2' SIDEWALK CULVERTS
PER COA STD DWG #2236
BY OTHERS.

#2422.

NON-WOVEN GEOTEXTILE

INV=29.3

Q100=3.7 CFS

INV=30.2

/50 LF 12" ADS --N-12WT PIPE @ 1.8%

2-2' SIDEWALK
CULVERTS PER COA

10'X10' RIPRAP PAD--4"-8" DIA., (6" AVG DIA.), 1' THICK OVER

STD DWG #2236.

5'X5' RIPRAP PAD--4"-8" DIA., (6" AVG DIA.), 1' THICK OVER NON-WOVEN GEOTEXTILE

Q100=8.7 CFS

TSW=24.9± FL=24.4±

FL=28.7

HYDROGRAPH FOR SMALL WATERSHED DPM SECTION 22-2 \* PAGE A-13/14

Base time, t<sub>B</sub>, for a small watershed hydrograph is,

ere	E	=	0.95 inches
	A	=	9.38 acres
	A <sub>D</sub>	=	0.87 acres
	$Q_P$	=	25.1 cfs
	<del>*</del>		
	t <sub>B</sub>	=	0.73 hours

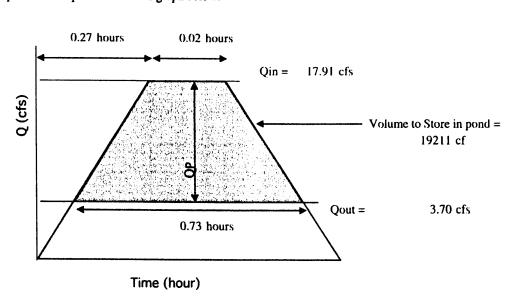
E is the excess precipitation in inches (from DPM TABLE A-8), Qp is the peak flow, AD is the area (acres) of treatment D, and  $A_T$  is the total area in acres. Using the time of concentration,  $t_C$  (hours), the

 $t_P = (0.7 * tC) + ((1.6 - (A_D / A)) / 12)$ 

t<sub>C'</sub> =

0.27 hours

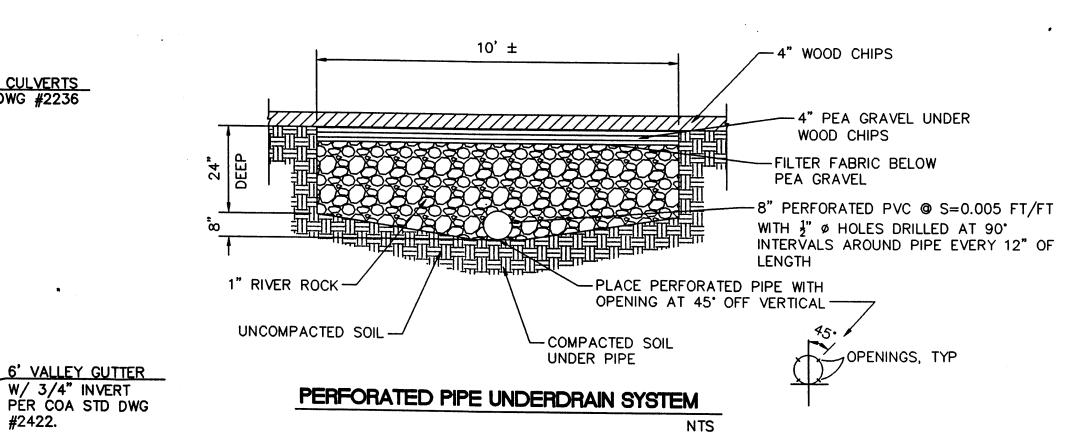
Continue the peak for  $0.25 * A_D / A_T$  hours. When  $A_D$  is zero, the hydrograph will be triangular. When  $A_D$  is not zero, the hyrograph will be trapezoidal. see the graph below:

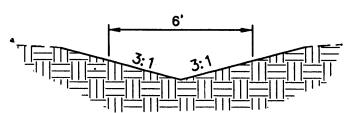


OFFSITES POND INFLOW / OUTFLOW HYDROGRAPH

## GENERAL STORM DRAIN NOTES

- A. ALL STORM DRAIN PRODUCT TO BE FURNISHED BY CONTRACTOR.
- B. INSTALL ALL STORM DRAIN PIPE, FITTINGS AND DRAIN BASIN PER MANUFACTURER'S REQUIREMENTS.
- C. ALL NEW STORM DRAIN LINE IS TO BE INSTALLED AT RIM AND INVERT ELEVATIONS SHOWN.
- D. ALL STORM DRAIN TO BE A.D.S. N-12WT (WATERTIGHT) PIPE OR APPROVED EQUAL, EXCEPT PERFORATED PIPE THAT SHALL BE 8" PVC





DOG RUN POND

5132.60

TOTAL VOL.

**ACTUAL WSEL:** 

Required Volume =

Contour Area Volume

925

12298

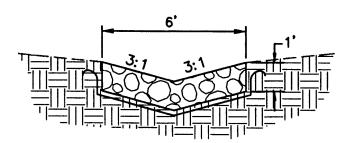
13884 CF

13884 CF

11949 CF

WSEL = 5132.45

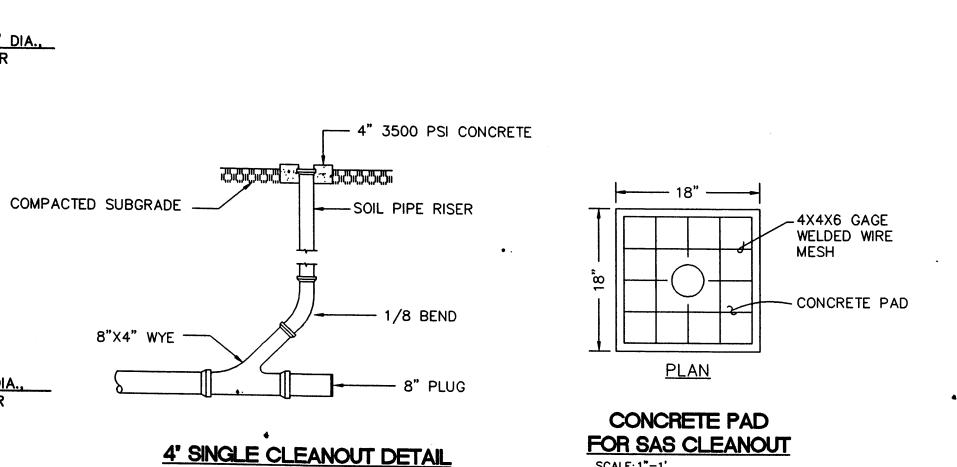
## SECTION A-A 1' DEEP EARTHEN SWALE



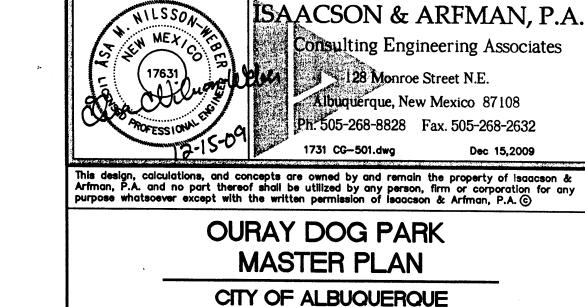
• VARY COBBLE SIZE BETWEEN 4" AND 8" DIA. (AVG.=6") • PLACE GEOTEX 501 NON-WOVEN GEOTEXTILE

(O.E.)BENEATH COBBLE SWALE PER MANUFACTURER'S

RECOMMENDATIONS. **SECTION B-B** 1' DEEP COBBLE LINED SWALE

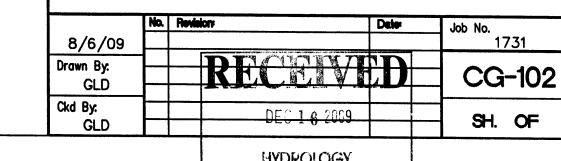


SCALE: 1"=1'

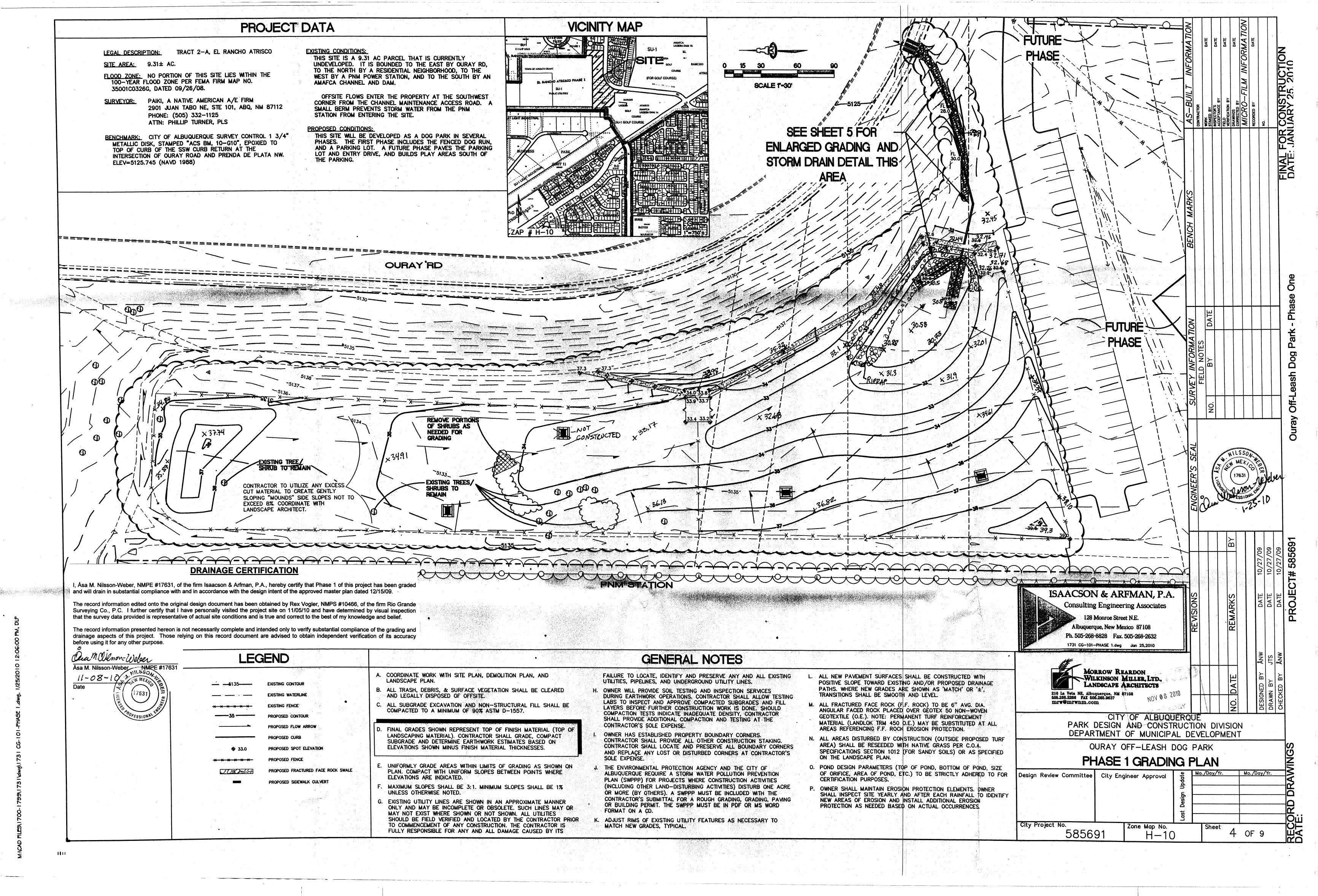


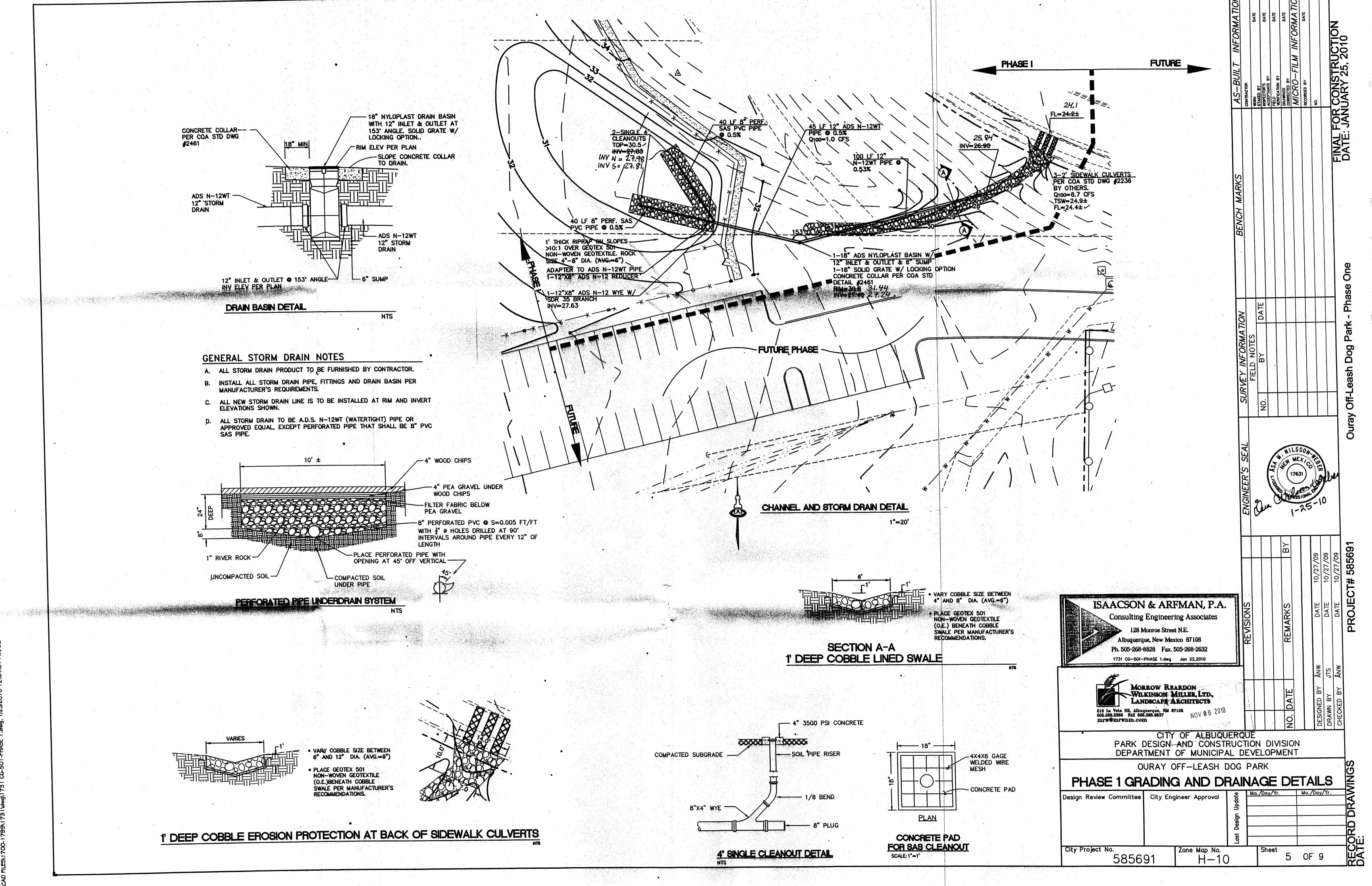
MASTER PLAN CITY OF ALBUQUERQUE

**GRADING DETAILS** 



HYDROLOGY SECTION





III M9 18.40.91 0100/30/1