

DRAINAGE CONCEPT

SAPULPA AUTO POOL

SEDGWICK COUNTY, KANSAS

1

NORTH SITE
Area = 4.58 ac. + 0.7 ac. (offsite)
SOIL = TYPE C
(WALDECK SANDY LOAM, 0-1 %)

EXISTING	DEVELOPED
Tc = 18 min	Tc = 16 min
Cs = 0.30	Cs = 0.58
C100 = 0.54	C100 = 0.72
Is = 4.19	Is = 4.42
I100 = 6.83	I100 = 7.18
Qs = 6.64 cfs	Qs = 13.55 cfs
Q100 = 19.50 cfs	Q100 = 27.28 cfs

DETENTION
PEAK VOL₅ = 7,850 CU.FT.
PEAK VOL₁₀₀ = 16,820 CU.FT.

OFFSITE DRAINAGE AREA
0.7 acres

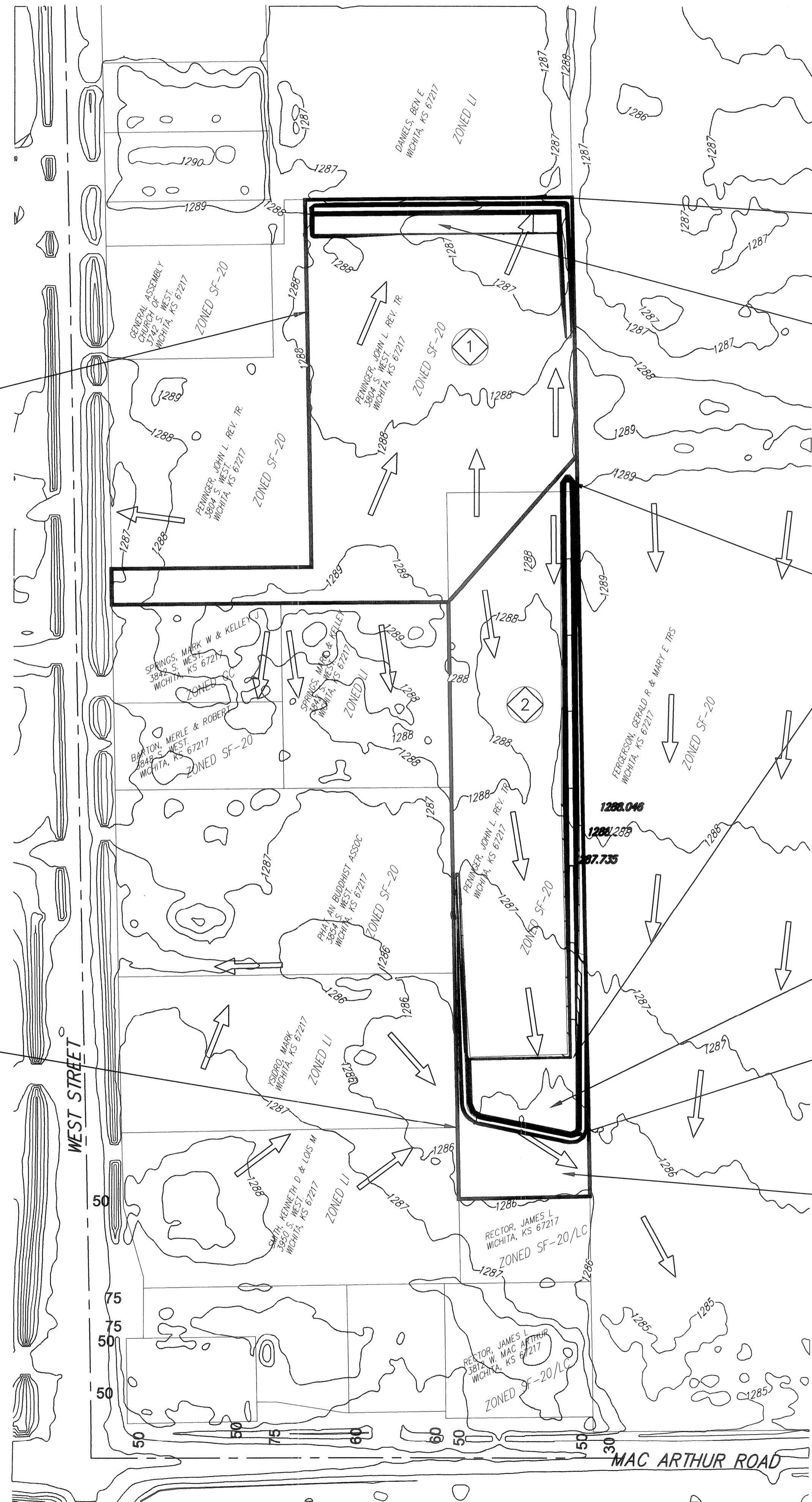
2

SOUTH SITE
Area = 3.80 ac. + 1.6 ac. (offsite)
SOIL = TYPE B
(NARON FINE SANDY LOAM, 0-1 %)

EXISTING	DEVELOPED
Tc = 26 min	Tc = 28 min
Cs = 0.20	Cs = 0.55
C100 = 0.39	C100 = 0.68
Is = 3.50	Is = 3.37
I100 = 5.79	I100 = 5.59
Qs = 3.78 cfs	Qs = 10.01 cfs
Q100 = 12.19 cfs	Q100 = 20.53 cfs

DETENTION
PEAK VOL₅ = 9,300 CU.FT.
PEAK VOL₁₀₀ = 16,800 CU.FT.

OFFSITE DRAINAGE AREA
1.6 acres



WEIR STRUCTURE
Construct Rein. Concrete Weir Structure.
See Weir Structure Detail.

DRY DETENTION AREA
Construct flat bottom detention basin with bottom area of 10,000 sq.ft. Construct berm with minimum height of 2' above basin bottom along the north and east sides of the basin and extend berm until it matches existing ground. Backfill adjacent area 9" above bottom of basin.

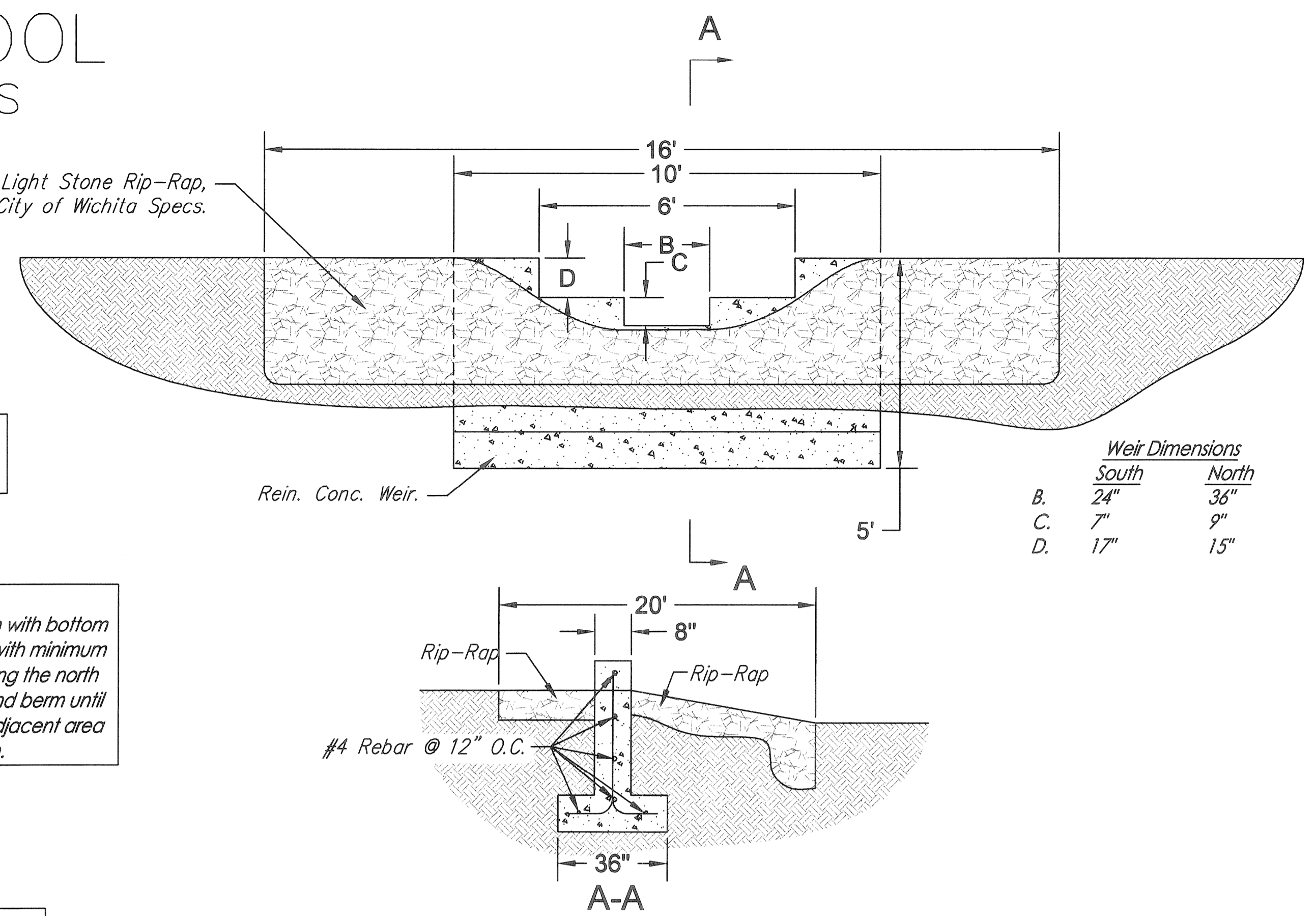
DRAINAGE SWALE
The construction of a 6' swale along the east line of the site at 0.15% slope to the south. Route runoff to the existing site discharge area.

DRY DETENTION AREA
Construct flat bottom detention basin with bottom area of 12,500 sq.ft. Construct berm with minimum height of 2' above basin bottom along the west, south and east sides of the basin and extend berm until it matches existing ground.

WEIR STRUCTURE
Construct Rein. Concrete Weir Structure.
See Weir Structure Detail.

CROSS LOT DRAINAGE
Existing drainage swale to remain unobstructed. Detention area to be constructed north of existing swale.

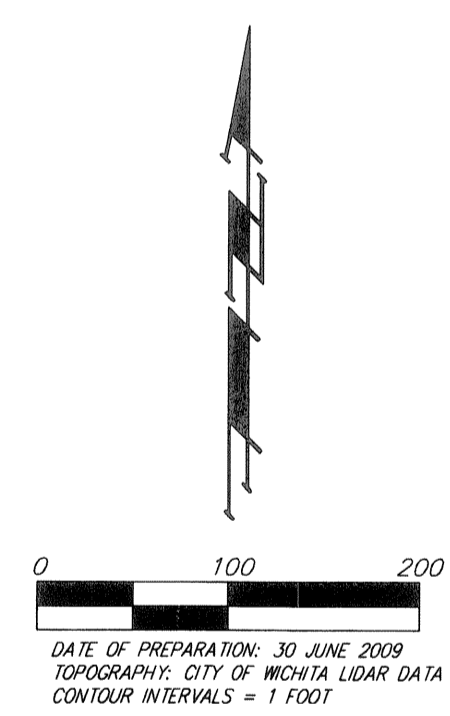
Install Light Stone Rip-Rap,
install per City of Wichita Specs.



Weir Dimensions

	South	North
B.	24"	36"
C.	7"	9"
D.	17"	15"

Weir Structure
Not to Scale

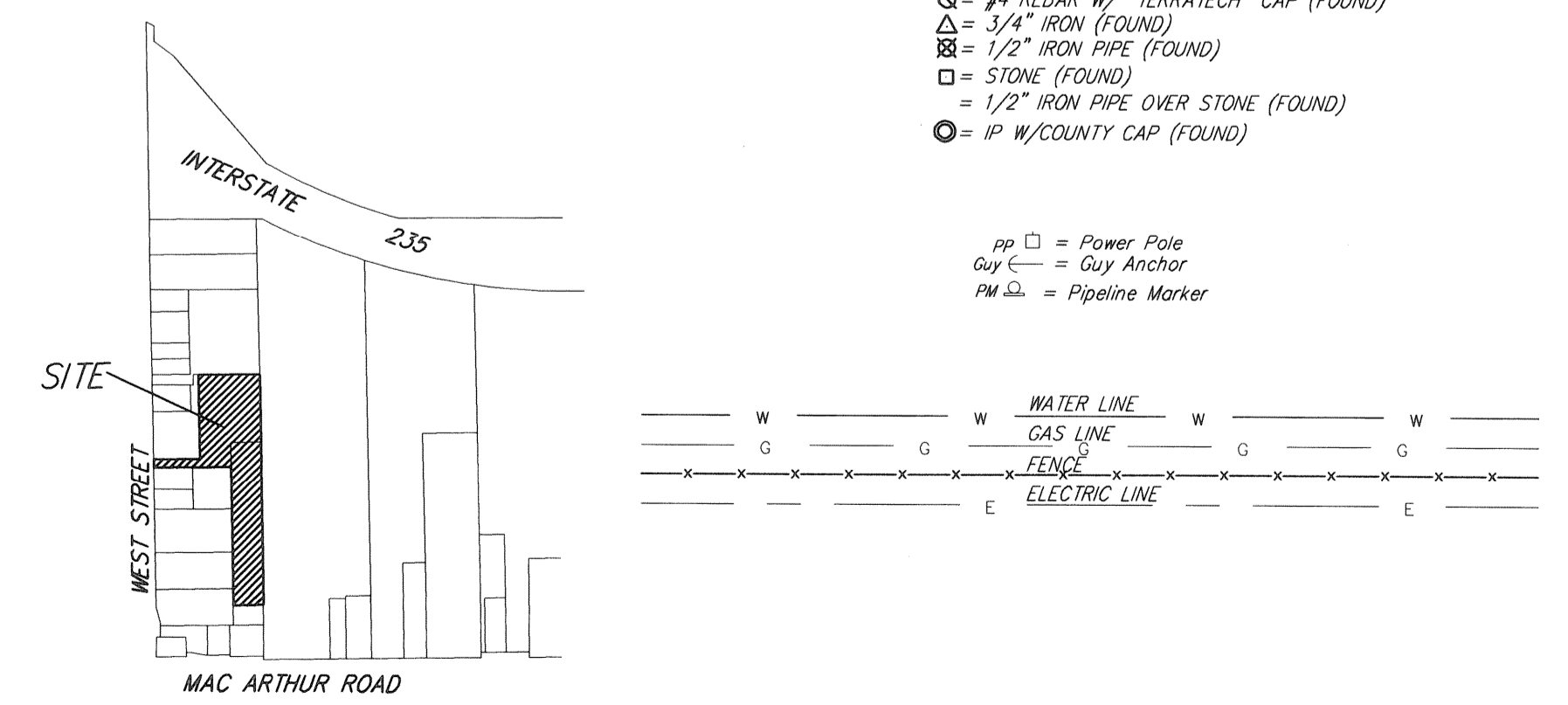


OWNER/DEVELOPER:
JOHN L. PENINGER,
3804 S. WEST
WICHITA, KS 67202

LEGAL DESCRIPTION:
A TRACT IN THE SW 1/4 OF SEC. 12, TWP. 28-S, R-1-W OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS, DESCRIBED AS: BEGINNING AT A POINT ON THE WEST LINE AND 1435.93 FEET SOUTH OF THE NORTHWEST CORNER OF SAID SW 1/4; THENCE EAST, PARALLEL WITH NORTH LINE OF SAID SW 1/4, 325 FEET; THENCE NORTH, PARALLEL WITH WEST LINE OF SAID SW 1/4, 504.08 FEET; THENCE EAST, PARALLEL WITH THE NORTH LINE OF SAID SW 1/4, 367.15 FEET; THEN SOUTH, PARALLEL WITH THE WEST LINE OF SAID SW 1/4, 1376 FEET MORE OR LESS TO A POINT 350 FEET NORTH OF THE SOUTH LINE OF SAID SW 1/4; THENCE WEST, PARALLEL WITH THE SOUTH LINE OF SAID SW 1/4, 180 FEET; THENCE NORTH, PARALLEL WITH THE WEST LINE OF SAID SW 1/4, 822.8 FEET MORE OR LESS TO A POINT 1485.93 FEET SOUTH OF THE NORTH LINE OF SAID SW 1/4, THEN WEST, PARALLEL WITH THE NORTH LINE OF SAID SW 1/4, 512.15 FEET TO A POINT ON THE WEST LINE OF SAID SW 1/4; THENCE NORTH, ALONG THE WEST LINE OF SAID SW 1/4, 50 FEET TO THE POINT OF BEGINNING.

- = #4 REBAR W/ "BAUGHMAN" CAP (SET)
- ⊗ = #4 REBAR W/ "TERRATECH" CAP (FOUND)
- △ = 3/4" IRON (FOUND)
- ⊠ = 1/2" IRON PIPE (FOUND)
- = STONE (FOUND)
- ⊞ = 1/2" IRON PIPE OVER STONE (FOUND)
- ⊙ = IP W/COUNTY CAP (FOUND)

- PP □ = Power Pole
- Guy = Guy Anchor
- PM Ⓞ = Pipeline Marker



VICINITY MAP
SEC. 12, T28S, R1W

NOTE: This site does not lie within a FEMA SFHA based on FEMA FIRM Panels 485 of 700 for Sedgwick County, Kansas, effective February 2, 2007.

