

APPROVAL	NAME	DATE	TITLE:	
	-		2417 AZTEC RD. N.E.	
INSPECTOR			MAP NUMBER: G16	

LEGAL DESCRIPTION

TRACT "A" THE E.155' OF THE W.310' OF THE E.620' OF THE N.630' OF THE S.640' OF BLOCK "D" INDIAN ACRES

ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

GRADING/PAVING PLAN

THE FOLLOWING ITEMS CONCERNING TRACT "A" AND THE E155' OF THE W310' OF THE E620' OF THE N630' OF THE S640' OF BLOCK 'D" INDIAN ACRES, BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO (2417 AZTEC ROAD N.E.) ARE CONTAINED HEREON:

EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 4.4836 ACRES MORE OR LESS AND IS LOCATED NORTHEAST OF THE INTERSECTION OF AZTEC ROAD N.E AND VASSAR ROAD N.E... THE SITE IN ITS PRESENT CONDITION HAS A 36,701 SQ FT. OFFICE/WAREHOUSE BUILDING ALONG WITH PAVED PARKING AND DOCK AREAS. THE REMAINING PORTION OF THE SITE IS DIRT WITH ELECTRICAL SUPPLIES AND PIPE. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, PANEL 0351E, REVISED NOVEMBER 19, 2003; THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/PAVING PLAN, THE PROJECT WILL CONSIST OF REMOVING AND REPAVING THE FROM AREA OF THE BUILDING AND PAVING THE EXISTING DIRT AREA. THE SITE HAS BEEN DIVIDED INTO THREE BASINS BASIN "A" WILL DRAIN SOUTHERLY TOWARDS AZTC RD. N.E. THROUGH THE EXISTING CURB CUT. BASIN "B" WILL DRAIN NORTHERLY INTO A PROPOSED PONDING AREA WHICH WILL THEN BE PUMPED THROUGH A 3" PVC PIE OUT TO AZTEC RD N.E. BASIN "C" IS COMPRISED OF A PORTION OF THE EXISTING BUILDING AND THE DOCK AREA WHICH WILL BE DRAINED BY A PUMP SUMP VIA A 2.5" PVC PIPE OUT INTO AZTEC RD. N.E. THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRES AND SMALLER BASINS, AS SET FORTH FOR THE REVISION OF SECTION 22.2 HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME II, DESIGN CRITERIA DATED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME GENERATED.

1. NO OFF-SITE FLOWS ENTER THE SITE FROM ANY DIRECTION.
PROPERTY TO THE EAST OF THE SITE (HOSANNA FAITH COMES BY HEARING 2421 AZTEC RD N.E.) DRAINS ALL THEIR RUN-OFF TO THE NORTH AND INTO A POND LOCATED AT THE NORTHWEST CORNER OF THEIR PROPERTY.

2. FREE DISCHARGE FROM THIS AREA IS ALLOWED BECAUSE OF THE NEW CITY OF ALBUQUERQUE MENAUL RETENTION POND WHICH WAS BUILT NORTH OF THE INTERSECTION OF EDITH BLVD. AND MENAUL ON THE WEST SIDE OF EDITH BLVD. N.E.

	ZONE 2 PRECIPITATION:	360 = 2.35 in. 1440 = 2.75 in. 10day = 3.95 in.	
		EXCESS PRECIPITATION:	PEAK DISCHARGE:
,	TREATMENT A	0.53 in.	1.56 cfs/ac.
	TREATMENT B	0.78 in.	2.28 cfs/ac.
	TREATMENT C	1.13 in.	3.14 cfs/ac.
	TREATMENT D	2.12 in.	4.70 cfs/ac.
	÷.	EXISTING CONDITIONS:	PROPOSED CONDITIONS: AREA
	TREATMENT A	0 ac.	0 ac.
	TREATMENT B	0 ac.	0 ac.
	TREATMENT C	0.70576 ac.	0 ac.
	TREATMENT D	0.74172 ac.	1.4478 ac.
	FYISTING FYCES	S PRECIPITATION.	

EXISTING EXCESS PRECIPITATION

PROJECT AREA = 1.44748 ac. AZTEC LLC BASIN A

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.71)+(2.12)x(0.74)/ 1.45 ac. = 1.64 in. V100-360 = (1.64)x(1.45)/12 = 0.197496 ac-ft = 8603 cf

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(0.71) + (4.70)x(0.74) = 5.70 CFS

PROPOSED EXCESS PRECIPITATION: Weighted E = $(0.53) \times (0.00) + (0.78) \times (0.00) + (1.13) \times (0.00) + (2.12) \times (1.45) / 1.45$ ac. = 2.12 in.

V100-360 = (2.12)x(1.45)/12.0 = 0.255778 ac-ft = 11142 CF V100-1440 = (0.26)+(1.45)x(2.75-2.35)/12 = 0.304038 ac-ft = 13244 CF

V100-10day = (0.26)+(1.45)x(3.95-2.35)/12 = 0.448818 ac-ft = 19551 CF

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(0.00) + (4.70)x(1.45) = 6.80 CFSINCREASE 6.80 CFS - 5.70 CFS = 1.10 CFS

KEYED NOTES:

1	GRATE PER COA STD DWG. 222	20 (SEE DRAINAGE	PLAN FOR	GRATE ELEVATION)
2	#4 RE-BAR(SCH 40) 6" EACH-	-WAY		

6" 4000# CONCRETE PAD & WALLS 1/4" DIAMOND STEEL PLATE

SUMP PUMP (FLYST MODEL DF3068, IMP 474, 1/-PHASE,115 VOLTS O.A.E.)

3.0" PVC(SCH 40) FORCE MAIN- SEE DRAMAGE PLAN FOR POINT OF DISCHARGE

SLOPE GRADE TO INLET GRAJE

FLOAT CONTROL & POWER SUPPLY CONDUIT SEAL WATER TIGHT

4"x3" x 1/4" ANGLE

TRANSMION COUPLING (FLEXIBLE)DRESSER O.A.E.

GATE VALVE

ENGINEER CERTIFICATION FOR (G16-D027)

1/2"x3" BOLT WITH SQ HEAD WELDED TO ANGLE(1 ON ALL SIDES)

COMPACTED EARTH

I EUFRACIO SEBAY NMPE # 6790, HEREBY CERTIFY THAT THE PROJECT HAS BEEN GRADED AND WILL DRAIN IN ACCORDANCE WITH THE DESIGN INTENT

ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY

DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST ON MY

SUPPORT OF A REQUEST FOR RELEASE OF GRADING/PAVING APPROVAL

KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN

(SO19 DWG. 2235). SEE PLAN DRAWING

AS-BUILT DESIGNATION

OF THE APPROVED PLAN DATED 03/14/2007. THE RECORD INFORMATION EDITED ONTO THE

PROPOSED INLET WITH PUMP SYSTEM HAS BEEN CHANGED TO A SINGLE "D"

DOCK SUMP IS ALSO ATTACHED TO THE 3" STEEL PIPE (SEE PLAN DRAWING).

FL 97.50

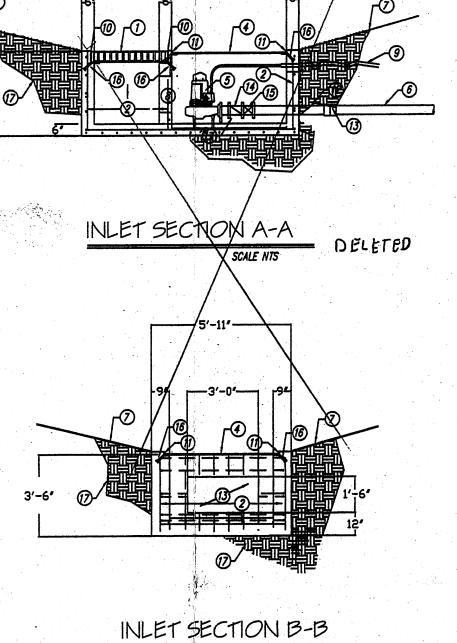
97.50

THE EASTERN PORTION OF BASIN A AND ALL OF BASIN B HAVE BEEN CHANGED TO ASPHALT MILLINGS

INLET (DWG. 2206) WHICH NOW CONNECTS TO A MANHOLE LIFT STATION (SEE PLAN DRAWING) 3. LIFT STATION IS DRAINED VIA A 3" STEEL PIPE ATTACHED ALONG THE WEST SIDE OF BUILDING.

4. THE 3" STEEL PIPE NOW DRAINS FROM THE SOUTHWEST CORNER OF THE BUILDING UNDERGROUND TO THE SOUTHWEST CORNER OF THE PROPERTY AND THROUGH A DRAIN LINE THRU THE CURB

-2'-7 1/24 INLET PLAN INLET WALL DETAIL



PUMP DATA:

STATIC LIFT: 0 FT. TO 2.2 FT. (POND LEVEL VARIATION)

TOTAL EQUIVALENT FEET OF DISCHARGE PIPE = 664'

DISCHARGE RATE= 60 gpm (EVACUATION IN 21.0± hrs)

SYSTEM HEAD LOSS = 17.0'

TOTAL DYNAMIC LOSS = 17.0' TO 19.2'

PUMP SELETION TO OPERATE BETWEEN 60 gpm AND 65 gpm (APPROX)

PROJECT AREA = 2.46755 qc.
AZTEC LLC BASIN B
ZONE 2
PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in. 10day = 3.95 in.

PEAK DISCHARGE TREATMENT A 0.53 in. TREATMENT B 0.78 in. 1.56 cfs/ac. 2.28 cfs/ac. 3.14 cfs/ac. 4.70 cfs/ac. TREATMENT C 1.13 in. TREATMENT D 2.12 in.

TREATMENT A 0 ac.
TREATMENT B 0 ac.
TREATMENT C 1.67577 ac.
TREATMENT D 0.79178 ac. EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(1.68)+(2.12)x(0.79)/2.47 ac. = 1.45 in. V100-360 = (1.45)x(2.47)/12 = 0.297683 ac-ft = 12967 CF

0.185 ac. 2.28255 ac.

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(1.68) + (4.70)x(0.79) = 8.98 CFSPROPOSED EXCESS PRECIPITATION

Weighted E = (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.19)+(2.12)x(2.28)/2.47 ac. = 2.05 in. V100-360 = (2.05)x(2.47)/12.0 = 0.420671 ac-ft = 18324 CF

V100-1440 = (0.42)+(2.28)x(2.75-2.35)/12 = 0.496756 ac-ft = 21639 CF V100-10day = (0.42)+(2.28)x(3.95-2.35)/12 = 0.725011 ac-ft = 31581 CF

Q100 = (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.19)+(4.70)x(2.28)=11.31 CFS INCREASE 11.31 CFS - 8.98 CFS = 2.33 CFS

PROJECT AREA = 0.61429 ac.
AZTEC LLC BASIN C
ZONE 2
PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in. 10day = 3.95 in.

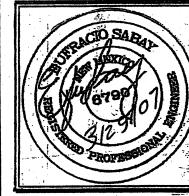
EXCESS PRECIPITATION: PEAK DISCHARGE 1.56 cfs/ac. 2.28 cfs/ac. 3.14 cfs/ac. 4.70 cfs/ac. TREATMENT A 0.53 in. TREATMENT B 0.78 in. TREATMENT C 1.13 in. TREATMENT D 2.12 in. TREATMENT A 0 dc.
TREATMENT B 0 dc.
TREATMENT C 0.05079 dc.
TREATMENT D 0.5635 dc.

Weighted E = (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.05)+(2.12)x(0.56)/0.61 ac. = 2.04 in. V100-360 = (2.04)x(0.61)/12 = 0.104334 ac-ft = 4545 CF

Q100 =(1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.05)+(4.70)x(0.56)= 2.81 CFS PROPOSED EXCESS PRECIPITATION

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.05)+(2.12)x(0.56)/ 0.61 ac. = 2.04 in. V100-360 = (2.04)x(0.61)/12.0 = 0.104334 ac-ft = 4545 CF $V100-1440 = (0.10) + (0.56) \times (2.75 - 2.35) / 12 = 0.123118$ ac-ft = 5363 CF V100-10day = (0.10)+(0.56)x(3.95-2.35)/12 = 0.179468 ac-ft = 7818 CF

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(0.05) + (4.70)x(0.56) = 2.81 CFS

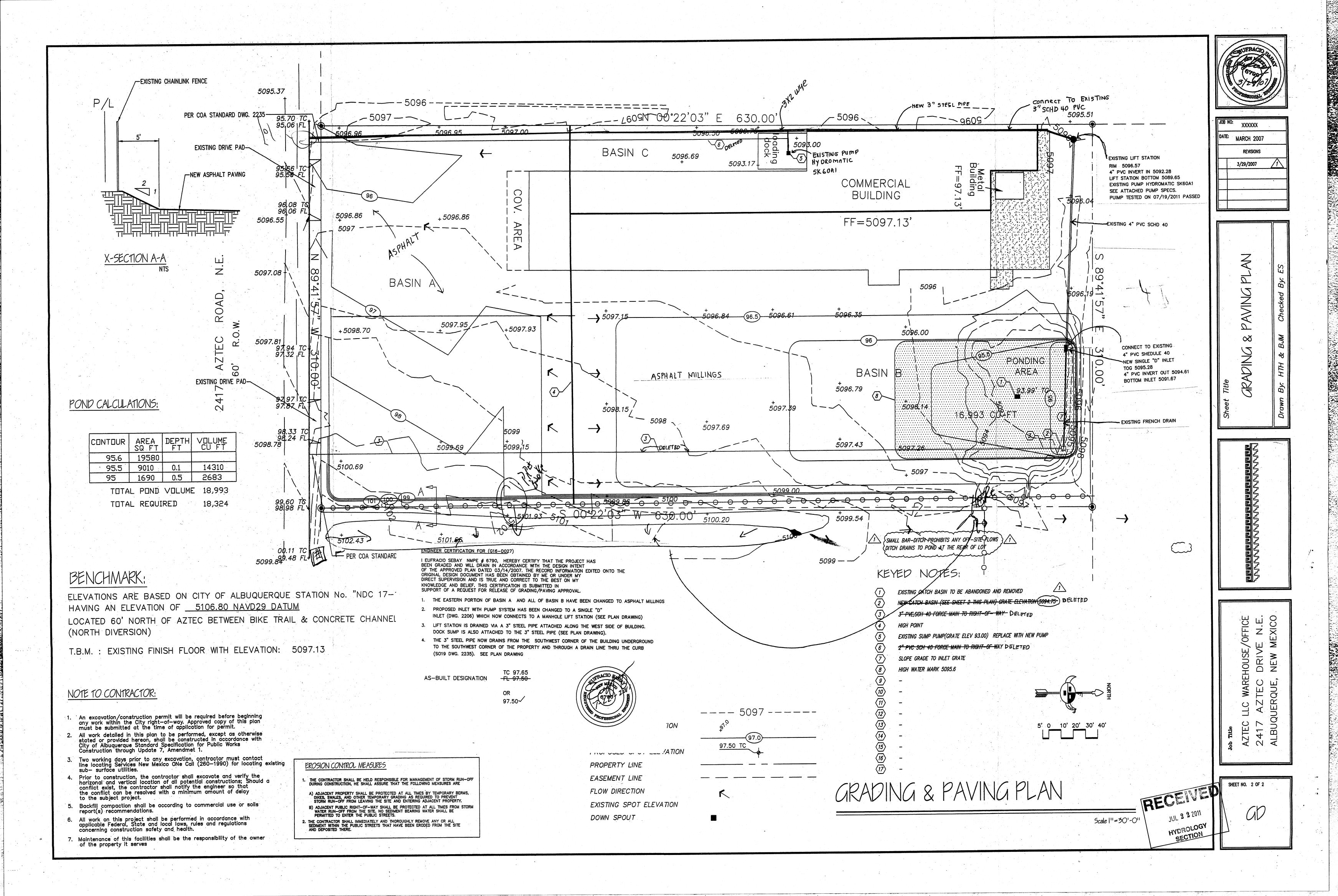


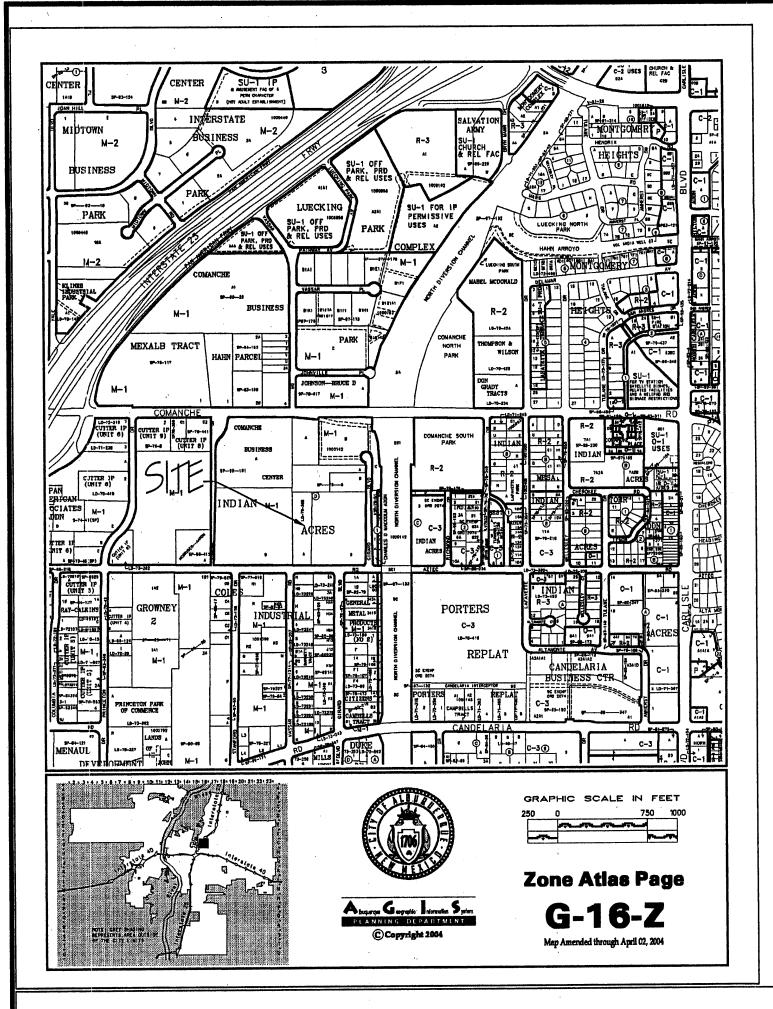
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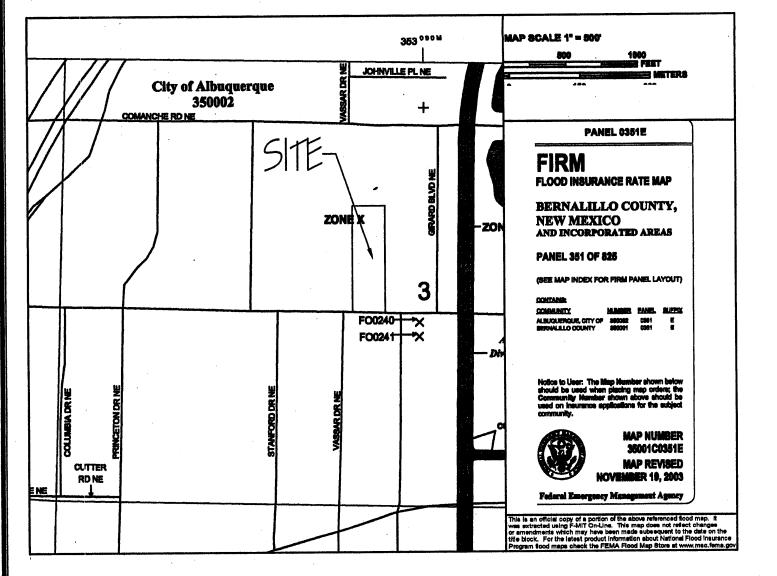
WAREHOUSE/OFFICE ZTEC DRIVE N.E. RQUE, NEW MEXICO ob Title AZTEC

SHEET NO. 1 OF 2

JUL 2 2 2011 HYDROLOGY SECTION







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		2417 AZTEC RD. N.E.
INSPECTOR		MAP NUMBER: G16

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TRACT "A" AND THE E.155' OF THE W.310' OF THE E.620' OF THE N.630' OF THE S.640' OF BLOCK "D" INDIAN ACRES

ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

GRADING/PAVING PLAN

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EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 4.4836 ACRES MORE OR LESS AND IS LOCATED NORTHEAST OF THE INTERSECTION OF AZTEC ROAD N.E AND VASSAR ROAD N.E... THE SITE IN ITS PRESENT CONDITION HAS A 36,701 SQ FT. OFFICE/WAREHOUSE BUILDING ALONG WITH PAVED PARKING AND DOCK AREAS. THE REMAINING PORTION OF THE SITE IS DIRT WITH ELECTRICAL SUPPLIES AND PIPE. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, PANEL 0351E, REVISED NOVEMBER 19, 2003; THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/PAVING PLAN, THE PROJECT WILL CONSIST OF REMOVING AND REPAVING THE FROM AREA OF THE BUILDING AND PAVING THE EXISTING DIRT AREA. THE SITE HAS BEEN DIVIDED INTO THREE BASINS. BASIN "A" WILL DRAIN SOUTHERLY TOWARDS AZTC RD. N.E. THROUGH THE EXISTING CURB CUT. BASIN "B" WILL DRAIN NORTHERLY INTO A PROPOSED PONDING AREA WHICH WILL THEN BE PUMPED THROUGH A 3" PVC PIE OUT TO AZTEC RD N.E. BASIN "C" IS COMPRISED OF A PORTION OF THE EXISTING BUILDING AND THE DOCK AREA WHICH WILL BE DRAINED BY A PUMP SUMP VIA A 2.5" PVC PIPE OUT INTO AZTEC RD. N.E. THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRES AND SMALLER BASINS, AS SET FORTH FOR THE REVISION OF SECTION 22.2 HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME II, DESIGN CRITERIA DATED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME GENERATED.

1. NO OFF-SITE FLOWS ENTER THE SITE FROM ANY DIRECTION.
PROPERTY TO THE EAST OF THE SITE (HOSANNA FAITH COMES BY HEARING 2421 AZTEC RD N.E.)

2. FREE DISCHARGE FROM THIS AREA IS ALLOWED BECAUSE OF THE NEW CITY OF ALBUQUERQUE MENAUL RETENTION POND WHICH WAS BUILT NORTH OF THE INTERSECTION OF EDITH BLVD. AND MENAUL ON THE WEST SIDE OF EDITH BLVD. N.E.

PROJECT AREA = 1.44748 dc. AZTEC LLC BASIN A ZONE 2 PRECIPITATION: 360 = 2.35 in. 1440 = 2.75 in.10 day = 3.95 in.PEAK DISCHARGE: EXCESS PRECIPITATION: 1.56 cfs/ac. 2.28 cfs/ac. 3.14 cfs/ac. TREATMENT A 0.53 In. TREATMENT B 0.78 in. TREATMENT C 1.13 in. 4.70 cfs/ac. TREATMENT D 2.12 in. PROPOSED CONDITIONS: EXISTING CONDITIONS: TREATMENT A 0 ac. TREATMENT B 0 ac. TREATMENT C 0.70576 ac. 0 ac. 0 ac. 1.4478 ac. TREATMENT D 0.74172 ac. **EXISTING EXCESS PRECIPITATION:** Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.71)+(2.12)x(0.74)/ 1.45 ac. = 1.64 in.

V100-360 = (1.64)x(1.45)/12 = 0.197496 ac-ft = 8603 cf **EXISTING PEAK DISCHARGE:** Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(0.71) + (4.70)x(0.74) = 5.70 CFS

PROPOSED EXCESS PRECIPITATION: Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.00)+(2.12)x(1.45)/ 1.45 ac. = 2.12 in. V100-360 = (2.12)x(1.45)/12.0 = 0.255778 ac-ft = 11142 CF

V100-1440 = (0.26) + (1.45)x(2.75 - 2.35)/12 = 0.304038 ac-ft = 13244 CF V100-10day = (0.26)+(1.45)x(3.95-2.35)/12 = 0.448818 ac-ft = 19551 CF

PROPOSED PEAK DISCHARGE:

 $Q100 = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.00) + (4.70) \times (1.45) = 6.80 CFS$ INCREASE 6.80 CFS - 5.70 CFS = 1.10 CFS

KEYED NOTES:

- GRATE PER COA STD DWG. 2220 (SEE DRAINAGE PLAN FOR GRATE ELEVATION)
- #4 RE-BAR(SCH 40) 6" EACH-WAY
- 6" 4000# CONCRETE PAD & WALLS
- 1/4" DIAMOND STEEL PLATE
- SUMP PUMP (FLYGT MODEL DF3068, IMP 474, 1-PHASE,115 VOLTS O.A.E.)
- 3.0" PVC(SCH 40) FORCE MAIN- SEE DRAINAGE PLAN FOR POINT OF DISCHARGE
- SLOPE GRADE TO INLET GRATE
- OPENING TO ALLOW FLOW CENTER ON PARTITION
- FLOAT CONTROL & POWER SUPPLY CONDUIT SEAL WATER TIGHT

4"x3" x 1/4" ANGLE

- 1"x2"x1/4" ANGEL
- 2.5"GALV PIPE
- TRANSITION COUPLING (FLEXIBLE)DRESSER O.A.E.
- CHECK VALVE
- GATE VALVE
- 1/2"x3" BOLT WITH SQ HEAD WELDED TO ANGLE(1 ON ALL SIDES)
- COMPACTED EARTH

PROJECT AREA = 2.46755 qc.
AZTEC LLC BASIN B
ZONE 2

PRECIPITATION: 360 = 2.35 in. 1440 = 2.75 in. 10day = 3.95 in.

TREATMENT A 0.53 in.

TREATMENT B 0.78 in.

TREATMENT C 1.13 in.

TREATMENT D 2.12 in.

TREATMENT A 0 ac.

TREATMENT B 0 ac.

TREATMENT C 1.67577 ac.

TREATMENT D 0.79178 ac.

EXISTING PEAK DISCHARGE:

PROPOSED EXCESS PRÉCIPITATION:

EXISTING EXCESS PRECIPITATION:

EXCESS PRECIPITATION:

V100-360 = (1.45)x(2.47)/12 = 0.297683 ac-ft = 12967 CF

V100-360 = (2.05)x(2.47)/12.0 = 0.420671 ac-ft = 18324 CF

INCREASE 11.31 CFS - 8.98 CFS = 2.33 CFS

PEAK DISCHARGE:

1.56 cfs/ac. 2.28 cfs/ac. 3.14 cfs/ac.

4.70 cfs/ac.

0.185 ac.

Weighted E = (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(1.68)+(2.12)x(0.79)/2.47 ac. = 1.45 in.

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(1.68) + (4.70)x(0.79) = 8.98 CFS

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.19)+(2.12)x(2.28)/ 2.47 ac. = 2.05 in.

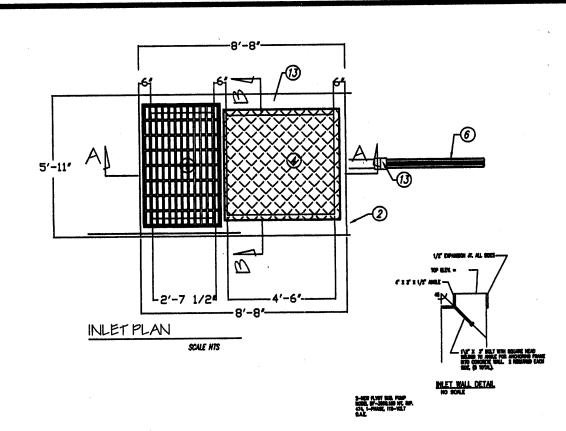
V100-1440 = (0.42)+(2.28)x(2.75-2.35)/12 = 0.496756 ac-ft = 21639 CF

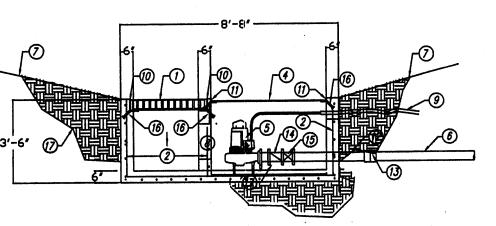
V100-10doy = (0.42)+(2.28)x(3.95-2.35)/12 = 0.725011 ac-ft = 31581 CF

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(0.19) + (4.70)x(2.28) = 11.31 CFS

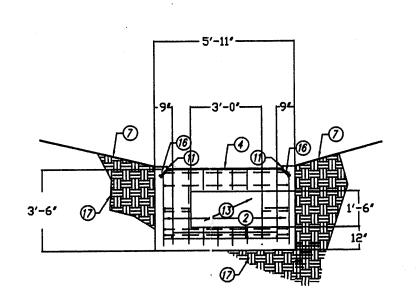
2.28255 ac.

PROPOSED CONDITIONS:





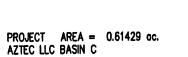
INLET SECTION A-A



INLET SECTION B-B

CONCRETE FOR NEW INLET STRUCTURE SHALL BE 4000#-28-DAY STRENGTH. REBAR SHALL BE GRADE 40 BARS.
 ALL SMALL DIAMETER PVC PIPE SHALL BE SDR 26 PIPE.

STATIC LIFT: 0 FT. TO 2.2 FT. (POND LEVEL VARIATION)
TOTAL EQUIVALENT FEET OF DISCHARGE PIPE = 664'
DISCHARGE RATE= 60 gpm (EVACUATION IN 21.0± hrs)
SYSTEM HEAD LOSS = 17.0'
TOTAL DYNAMIC LOSS = 17.0' TO 19.2'
PUMP SELETION TO OPERATE BETWEEN 60 gpm AND 65 gpm (APPROX)



ZONE 2
PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in.

	EXCESS PRECIPITATION:	PEAK	DISCHARGE:
TREATMENT A	0.53 in.		cfs/ac.
TREATMENT B	0.78 in.	2.28	cfs/ac.
TREATMENT C	1.13 in.		cfs/ac.
TREATMENT D	2.12 in.	4.70	cfs/ac.
	EXISTING CONDITIONS: AREA	PROPOS AREA	ED CONDITION
TREATMENT A	0 ac.	0 ac.	

TREATMENT B 0 ac.
TREATMENT C 0.05079 ac. TREATMENT D 0.5635 ac. EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.05)+(2.12)x(0.56)/0.61 ac. = 2.04 in. V100-360 = (2.04)x(0.61)/12 = 0.104334 ac-ft = 4545 CF

0 ac. 0.05079 ac. 0.5635 ac.

EXISTING PEAK DISCHARGE:

Q100 = (1.56)x(0.00) + (2.28)x(0.00) + (3.14)x(0.05) + (4.70)x(0.56) = 2.81 CFS

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.05)+(2.12)x(0.56)/ 0.61 ac. = 2.04 in. V100-360 = (2.04)x(0.61)/12.0 = 0.104334 ac-ft = 4545 CF

V100-1440 = (0.10)+(0.56)x(2.75-2.35)/12 = 0.123118 ac-ft = 5363 CF

V100-10day = (0.10)+(0.56)x(3.95-2.35)/12 = 0.179468 ac-ft = 7818 CF

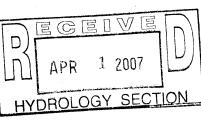
 $Q100 = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.05) + (4.70) \times (0.56) = 2.81 \text{ CFS}$ NO CHANGE

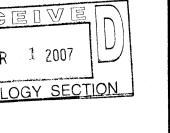


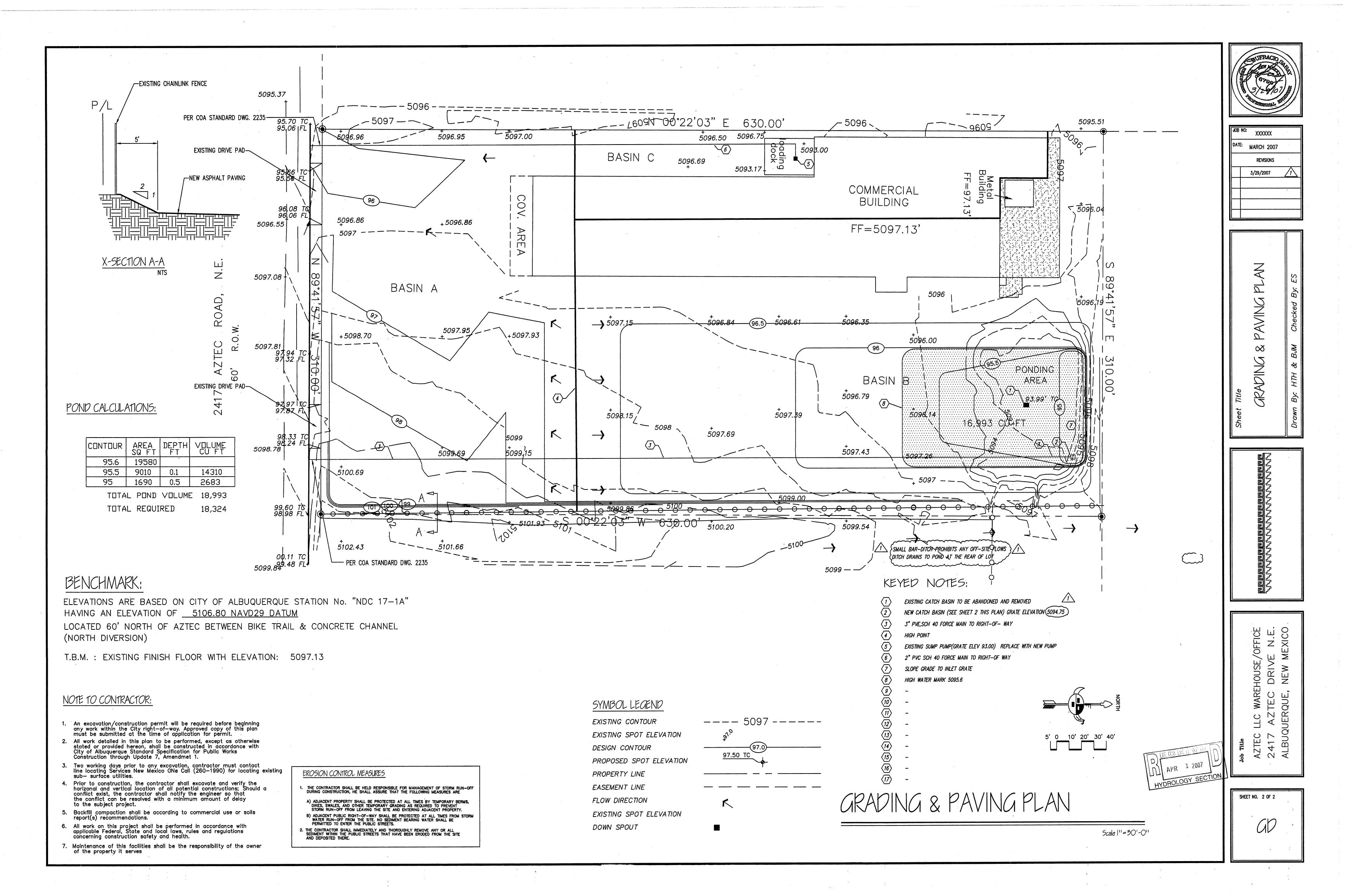
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DATE:	MARCH 2007			
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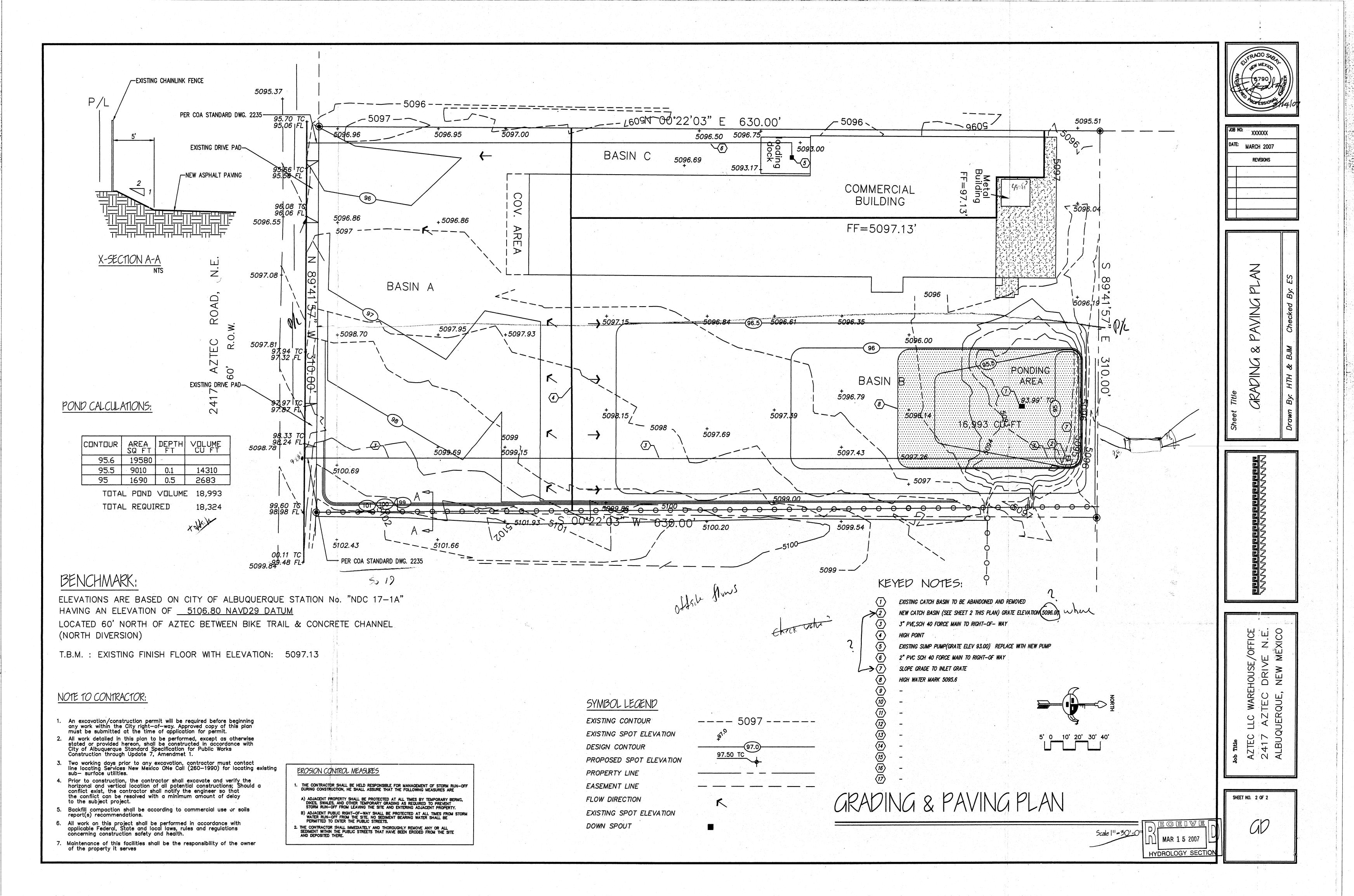
/OFFICE TEN.E. WAREHOUSE/OFI TTEC DRIVE N RQUE, NEW MEX LLC \mathcal{O} AZTE 241⁻ ALBU

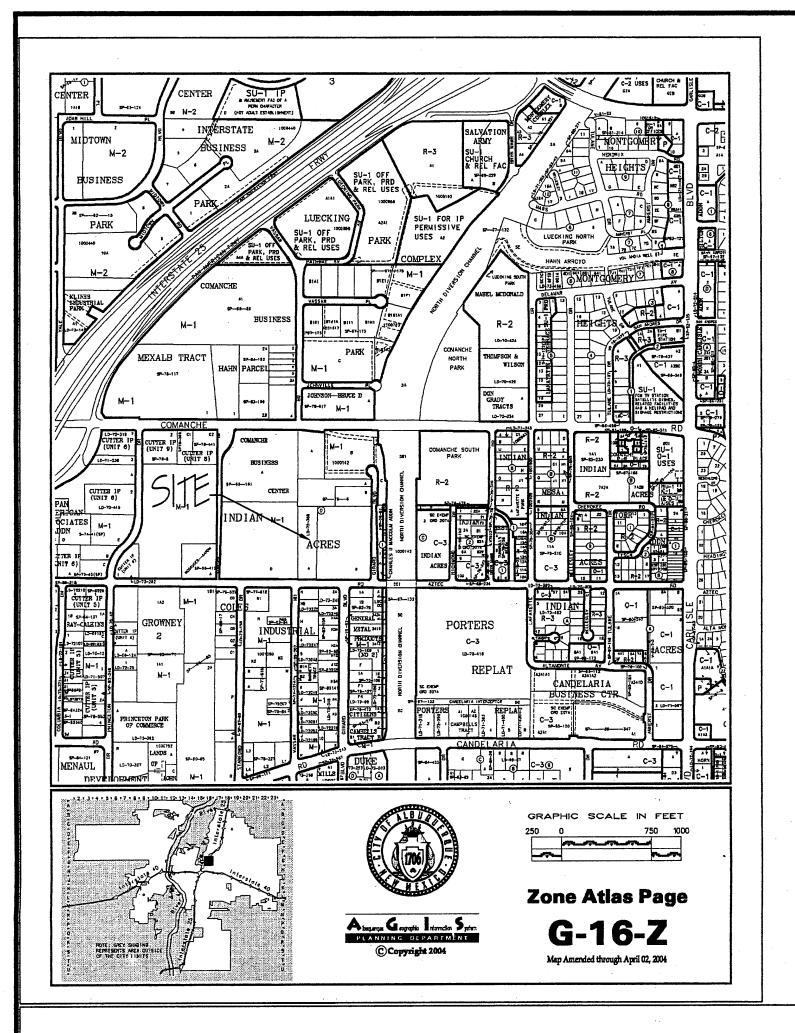
SHEET NO. 1 OF 2

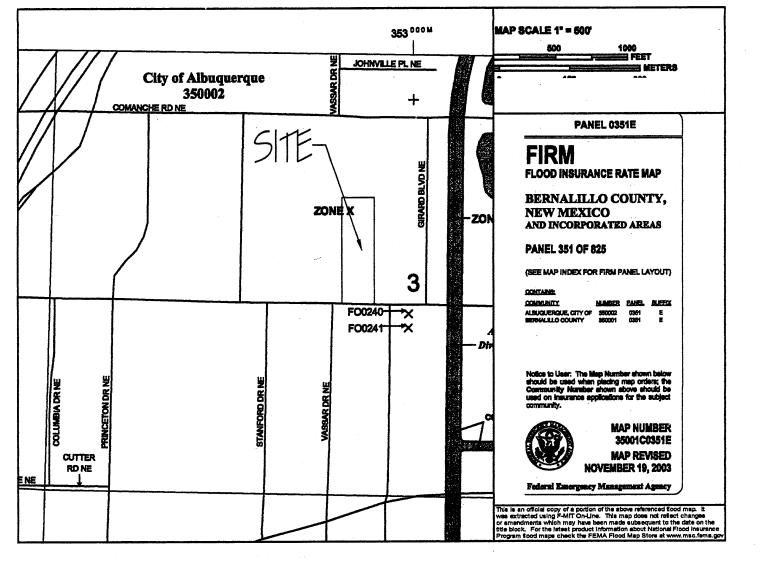












APPROVAL	NAME	DATE	TITLE:
			2417 AZTEC RD. N.E.
INSPECTOR			MAP NUMBER: G16

LEGAL DESCRIPTION

THE E.155' OF THE W.310' OF THE E.620' OF THE N.630' OF THE S.640' OF BLOCK "D" INDIAN ACRES

ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

GRADING/PAVING PLAN

THE FOLLOWING ITEMS CONCERNING TRACT "A" AND THE E155' OF THE W310' OF THE E620' OF THE N63C' OF THE S640' OF BLOCK 'D" INDIAN ACRES, BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO (2417 AZTEC ROAD N.E.) ARE CONTAINED HEREON:

EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 4.4836 ACRES MORE OR LESS AND IS LOCATED NORTHEAST OF THE INTERSECTION OF AZTEC ROAD N.E AND VASSAR ROAD N.E... THE SITE IN ITS PRESENT CONDITION HAS A 36,701 SQ FT. OFFICE/WAREHOUSE BUILDING ALONG WITH PAVED PARKING AND DOCK AREAS. THE REMAINING PORTION OF THE SITE IS DIRT WITH ELECTRICAL SUPPLIES AND PIPE. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, PANEL 0351E, REVISED NOVEMBER 19, 2003; THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

PROPOSED CONDITIONS

PROJECT AREA = 1.44748 ac. AZTEC LLC BASIN A ZONE 2

PRECIPITATION: 360 = 2.35 in. 1440 = 2.75 in.

10 day = 3.95 in.

V100-1440 = (0.26) + (1.45)x(2.75 - 2.35) / 12 = 0.304038 ac-ft = 13244 CF

V100-10day =(0.26)+(1.45)x(3.95 - 2.35)/ 12 = 0.448818 ac-ft = 19551 CF

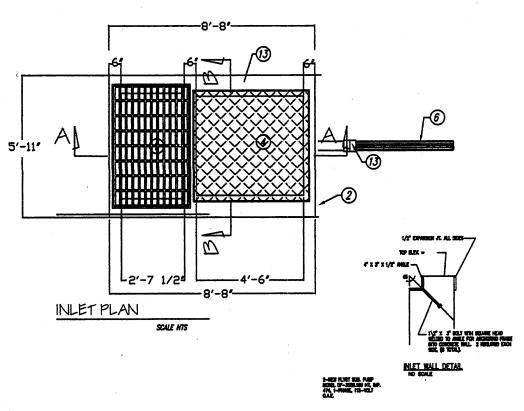
INCREASE 6.80 CFS - 5.70 CFS = 1.10 CFS

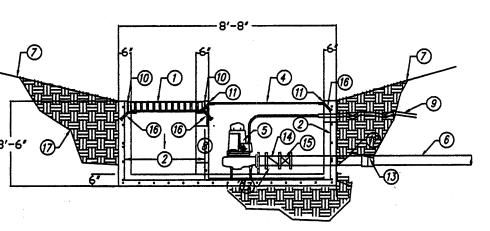
Q100 = $(1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.00) + (4.70) \times (1.45) = 6.80$ CFS

AS SHOWN BY THE GRADING/PAVING PLAN. THE PROJECT WILL CONSIST OF REMOVING AND REPAYING THE FROM AREA OF THE BUILDING AND PAYING THE EXISTING DIRT AREA. THE SITE HAS BEEN DIVIDED INTO THREE BASINS. BASIN "A" WILL DRAIN SOUTHERLY TOWARDS AZTC RD. N.E. THROUGH THE EXISTING CURB CUT. BASIN "B" WILL DRAIN NORTHERLY INTO A PROPOSED PONDING AREA WHICH WILL THEN BE PUMPED THROUGH A 3" PVC PIE OUT TO AZTEC RD N.E. BASIN "C" IS COMPRISED OF A PORTION OF THE EXISTING BUILDING AND THE DOCK AREA WHICH WILL BE DRAINED BY A PUMP SUMP VIA A 2.5" PVC PIPE OUT INTO AZTEC RD. N.E. THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRES AND SMALLER BASINS, AS SET FORTH FOR THE REVISION OF SECTION 22.2 HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME II, DESIGN CRITERIA DATED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME GENERATED.

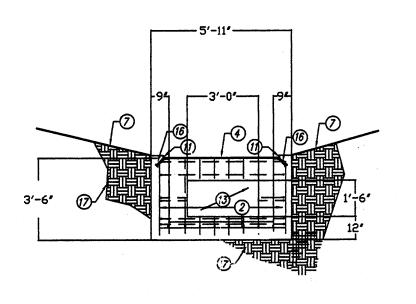
KEYED NOTES:

- GRATE PER COA STD DWG. 2220 (SEE DRAINAGE PLAN FOR GRATE ELEVATION)
- #4 RE-BAR(SCH 40) 6" EACH-WAY
- 6" 4000# CONCRETE PAD & WALLS
- 1/4" DIAMOND STEEL PLATE
- SUMP PUMP (FLYGT MODEL DF3068, IMP 474, 1-PHASE,115 VOLTS O.A.E.)
- 3.0" PVC(SCH 40) FORCE MAIN- SEE DRAINAGE PLAN FOR POINT OF DISCHARGE
- SLOPE GRADE TO INLET GRATE
- OPENING TO ALLOW FLOW CENTER ON PARTITION
- FLOAT CONTROL & POWER SUPPLY CONDUIT SEAL WATER TIGHT
- 4"x3" x 1/4" ANGLE
- 1"x2"x1/4" ANGEL
- 2.5"GALV PIPE
- TRANSITION COUPLING (FLEXIBLE)DRESSER O.A.E.
- CHECK VALVE
- GATE VALVE
- 1/2"x3" BOLT WITH SQ HEAD WELDED TO ANGLE(1 ON ALL SIDES)
- COMPACTED EARTH





INLET SECTION A-A



INLET SECTION B-B

 CONCRETE FOR NEW INLET STRUCTURE SHALL BE 4000#-28-DAY STRENGTH. REBAR SHALL BE GRADE 40 BARS. 2. ALL SMALL DIAMETER PVC PIPE SHALL BE SDR 26 PIPE.

STATIC LIFT: 0 FT. TO 2.2 FT. (POND LEVEL VARIATION)
TOTAL EQUIVALENT FEET OF DISCHARGE PIPE = 664'
DISCHARGE RATE= 60 gpm (EVACUATION IN 21.0± hrs)
SYSTEM HEAD LOSS = 17.0'
TOTAL DYNAMIC LOSS = 17.0' TO 19.2'
PUMP SELETION TO OPERATE BETWEEN 60 gpm AND 65 gpm (APPROX)

PROJECT AREA = 2.46755 ac.
AZTEC LLC BASIN B
ZONE 2
PRECIPITATION: 360 = 2.35 in. 1440 = 2.75 in.10day = 3.95 in.EXCESS PRECIPITATION: PEAK DISCHARGE: 1.56 cfs/ac. 2.28 cfs/ac. 3.14 cfs/ac. TREATMENT A 0.53 in. TREATMENT B 0.78 in. TREATMENT C 1.13 in. TREATMENT D 2.12 in. 4.70 cfs/ac. PROPOSED CONDITIONS: area 0 ac. 0 ac. 0.185 ac. TREATMENT B 0 ac.
TREATMENT C 1.67577 ac. TREATMENT D 0.79178 ac. 2.28255 ac.

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(1.68)+(2.12)x(0.79)/ 2.47 ac. = 1.45 in. V100-360 = (1.45)x(2.47)/12 = 0.297683 ac-ft = 12967 CF

Weighted E = $(0.53) \times (0.00) + (0.78) \times (0.00) + (1.13) \times (0.19) + (2.12) \times (2.28) / 2.47$ ac. = 2.05 in. V100-360 = (2.05)x(2.47)/12.0 = 0.420671 ac-ft = 18324 CF.

Q100 = (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.19)+(4.70)x(2.28)= $\underline{11.31}$ CFS INCREASE 11.31 CFS - 8.98 CFS = 2.33 CFS

PROJECT AREA = 0.61429 dc.
AZTEC LLC BASIN C
ZONE 2
PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in.

10day = 3.95 in.PEAK DISCHARGE: 1.56 cfs/ac. TREATMENT A 0.53 in. 2.28 cfs/ac. 3.14 cfs/ac. TREATMENT B 0.78 in. TREATMENT C 1.13 in. TREATMENT D 2.12 in. 4.70 cfs/ac. PROPOSED CONDITIONS: TREATMENT A 0 ac. TREATMENT B 0 ac. TREATMENT C 0.05079 ac.

EXISTING EXCESS PRECIPITATION

TREATMENT D 0.5635 ac.

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.05)+(2.12)x(0.56)/ 0.61 ac. = 2.04 in. V100-360 = (2.04)x(0.61)/12 = 0.104334 ac-ft = 4545 CF **EXISTING PEAK DISCHARGE:**

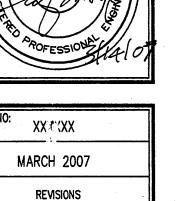
0.5635 ac.

Q100 =(1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.05)+(4.70)x(0.56)= 2.81 CFSPROPOSED EXCESS PRECIPITATION:

Weighted E =(0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.05)+(2.12)x(0.56)/ 0.61 ac. = 2.04 in. V100-360 = (2.04)x(0.61)/12.0 = 0.104334 ac-ft = 4545 CF

 $V100-1440 = (0.10) + (0.56) \times (2.75 - 2.35) / 12 = 0.123118$ ac-ft = 5363 CF V100-10day = (0.10)+(0.56)x(3.95-2.35)/12 = 0.179468 ac-ft = 7818 CF

Q100 = $(1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.05) + (4.70) \times (0.56) = 2.81 \text{ CFS}$ NO CHANGE

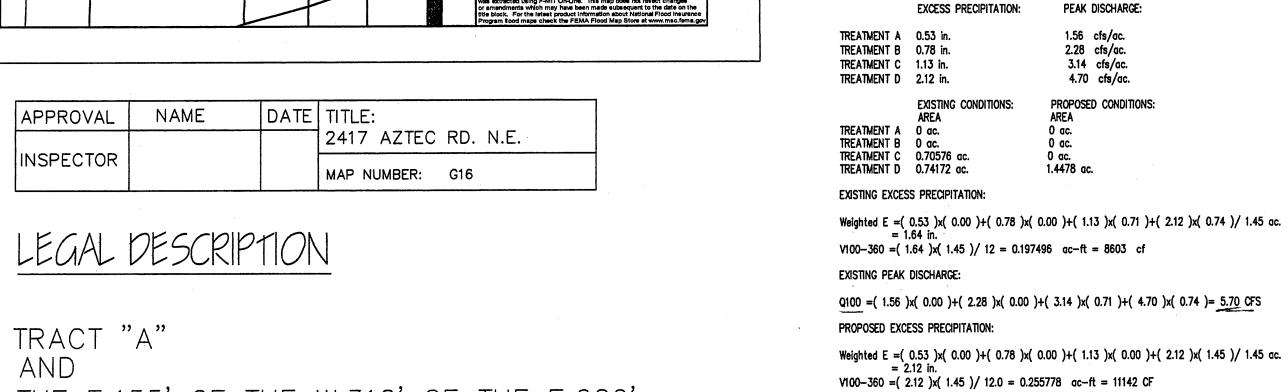


DATE: MARCH 2007

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WAREHOUSE/OFFICE ZTEC DRIVE N.E. RQUE, NEW MEXICO AZ LLC AZTEC L 2417 ALBUQU

SHEET NO. 1 OF 2



EXISTING EXCESS PRECIPITATION: $\underline{\text{Q100}} = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (1.68) + (4.70) \times (0.79) = 8.98 \text{ CFS}$ PROPOSED EXCESS PRECIPITATION: V100-1440 = (0.42)+(2.28)x(2.75-2.35)/12 = 0.496756 ac-ft = 21639 CF V100-10day = (0.42)+(2.28)x(3.95-2.35)/12 = 0.725011 ac-ft = 31581 CF PROPOSED PEAK DISCHARGE:

MAR 1 5 2007 PROPOSED PEAK DISCHARGE: HYDROLOGY SECTION