

BLOCK 13
Monkbridge
Addition

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Lot 13

Lot 19

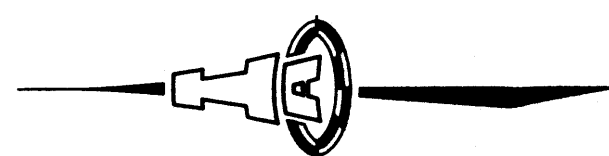
Lot 20

North Valley

Senior Center

5th Street NW

See detail
below



Scale:
1"=20'

LEGEND

- Existing spot elevation
- Contour interval (1/2 foot)
- Contour interval (1 foot)
- Existing curb & gutter
- Top of curb (median C&G)
- Flowline directional arrow
- Top of curb elevation
- Top of wall elevation
- Proposed concrete surfacing



VICINITY MAP

GENERAL NOTES

LEGAL DESCRIPTION: Lots 14 and 15, Block 13 of the Monkbridge Addition, Filed in Volume C2, Folio 88, on March 24, 1917.

ENGINEER: Isaacson & Arfman, P.A.
128 Monroe Street NE
Albuquerque, N.M. 87108

SURVEYOR: City Surveyor
City of Albuquerque
Date of Survey: January 16, 1992

BENCHMARK: Albuquerque Control Survey Station 7-G14A located 95 feet east of the intersection of 7th Street centerline with the north right-of-way line of Candelaria Road NW.
Elevation: 4,966.54

TEMPORARY BENCHMARK: Middle of the storm drain manhole (most southeasterly of the two manholes) in the intersection of 5th Street and Aztec Avenue.
ELEVATION: 4,966.12

ZONING: Parking

NUMBER OF LOTS: 2

AREA: 18,444.30 sq ft (0.4234 ac)

FLOOD HAZARD: No part of the site is subject to a flood hazard area as determined by Panel No. 350002-0022 of the October 14, 1983 edition of the F.E.M.A. maps.

LOCATION & DESCRIPTION:

Lots 14 and 15 are situated at the northeast corner of 5th Street and Aztec Avenue NW. These lots were previously zoned R-1 and contained one single family residence on each lot. The homes were recently demolished in anticipation of the parking lot construction.

EXISTING CONDITIONS:

The site is bordered by apartments to the east, a single family residence to the north and fully developed City streets on the south and west. A battery of storm drain catch basins exist at each quadrant of the intersection of 5th Street and Aztec Avenue. Site does not accept any offsite flows.

Storm waters generated onsite previously sheetflowed to the adjacent two street as calculated below:

EXISTING HYDROLOGY:

DATA: Precipitation Zone No. 1
 P_{30} (6-hr--100-year storm) = 2.2 inches
Area = 18,444.30 sq ft, 0.4234 ac
Peak Discharge (using a 12-minute time of concentration), cfs/ac
100 year, Zone 1 (Table 9) A (53%) = 1.29 cfs/ac
D (47%) = 4.37

Determine Total Q_p :

$$(1.29)(0.2244) + (4.37)(0.200) = 1.16 \text{ cfs}$$

Determine Volume:

$$\text{Weighted E} = \frac{(0.44)(0.2244) + (1.97)(0.20)}{0.4234} = 1.16$$

$$\text{Volume} = \frac{1.16}{12} \times (0.4234)(43,560) = 1,789 \text{ cu ft}$$

PROPOSED CONDITIONS:

The site shall be redeveloped as an offsite overflow parking area for the North Valley Senior Center located across Aztec Avenue. Improvements shall consist of asphalt paving, PCC curbing, and landscaping. Storm waters generated from the improved site will be routed to the southwest corner of the paved area where they will be accepted by a minor catch basin and 6-inch-diameter connector pipe. Pipe shall discharge flows through the back of the existing catch basin at the northeast corner of the said intersection.

PROPOSED HYDROLOGY

DATA: Land Treatments
A = 0.36 ac (15,682 sq ft)
D = 0.063 ac (2,762 sq ft)

Determine Q_p :

$$= (1.29)(0.063) + (4.37)(0.36) = 1.65 \text{ cfs}$$

Determine Volume

$$\text{Weighted E} = \frac{(0.44)(0.063) + (1.97)(0.36)}{0.4234} = 1.74$$

$$\text{Volume} = \frac{1.74}{12} \times (0.4234)(43,560) = 2,674 \text{ cu ft}$$

CATCH BASIN:

Use 3'-4' section of an 18" diameter RCP, Class III pipe having an inside of bell diameter of 22" and a Neenah R-4350-D (22" diameter) beehive grate.

Grate Opening = 0.9 sq ft

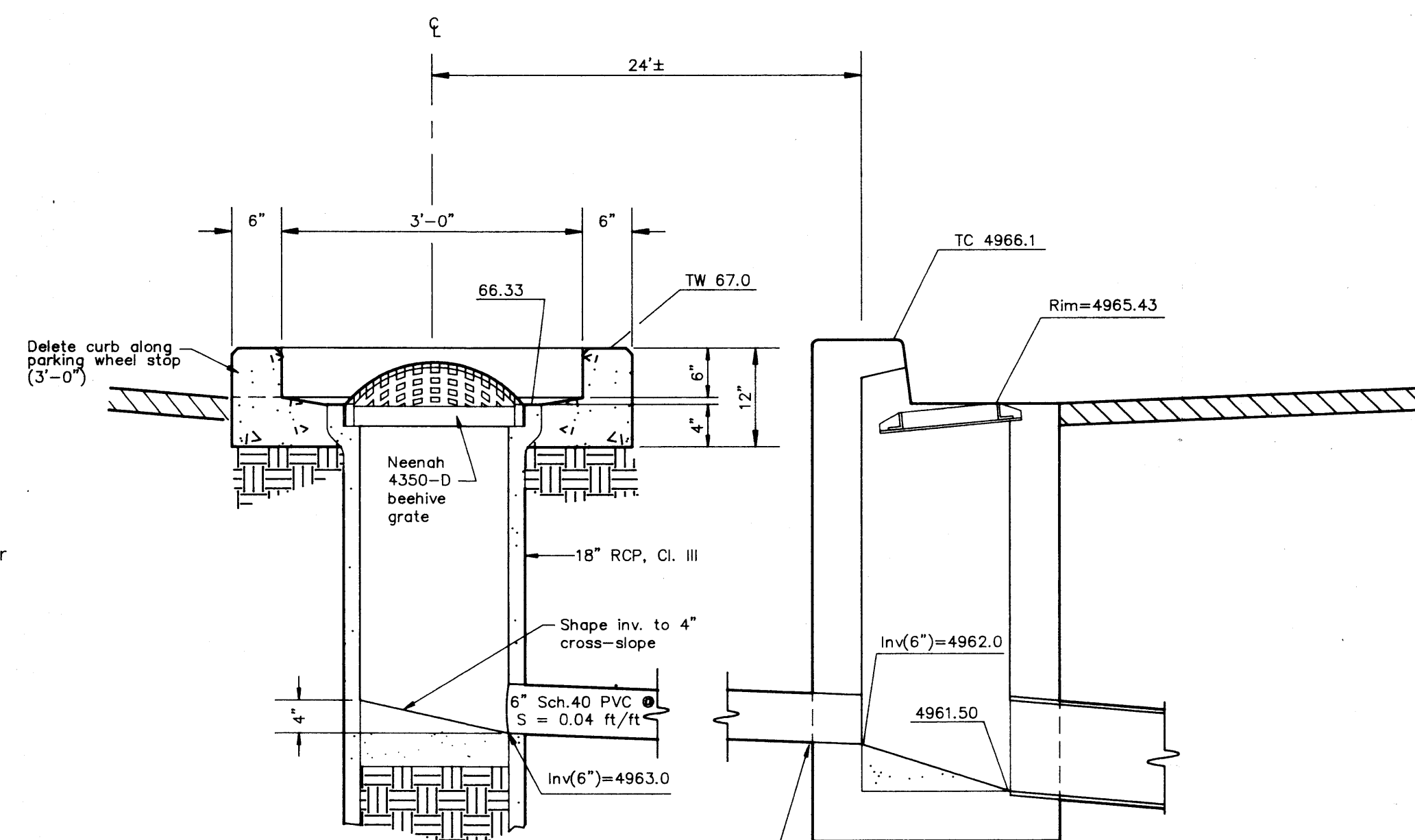
Using Curve (A), hydraulic capacity of grate inlet in sump from Bureau of Public Roads, Rev. August 1968, and a depth over the grate of $d = 6" = 0.5'$ yields a coefficient of discharge per foot of effective perimeter, p of 1.4.

Grate Inlet Capacity:
 $1.4 \times 0.9 \text{ sq ft} = 1.26 \text{ cfs}$

CONNECTOR PIPE:

6" diameter PVC, Sch. 40
 $S = 0.02'/'$ (2% min.)
 $n = 0.010$ for PVC
 $Q = 1.15 \text{ cfs}$ when pipe is flowing full
 $Q = 1.15 \text{ cfs} \times 1.08$ ($d = 0.92 \text{ y/d}$)
 $= 1.24 \text{ cfs}$ ---OK

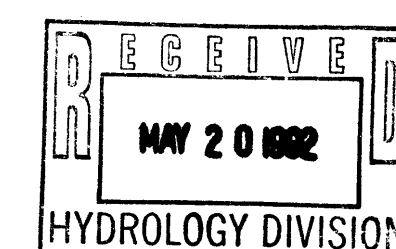
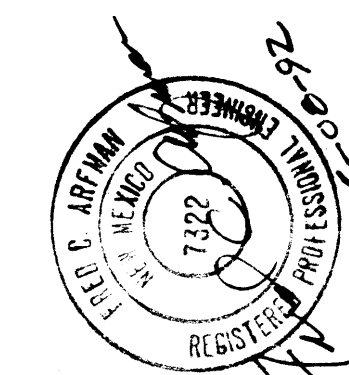
Pipe shall connect to the back of existing catch basin @ the northeast corner of 5th Street and Aztec Avenue.



ONSITE STORM WATER CATCH BASIN AND CONNECTOR PIPE

3/4"=1'-0"

AS-BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	WORK	STATED BY	DATE	BENCHMARK	DATE	BY	NO.	FIELD	NOTES	NO.	BY	REMARKS	DATE	DESIGNED BY	DATE
				Albuquerque Control Survey Station 7-G14A located 95 feet east of the intersection of 7th Street centerline with the north right-of-way line of Candelaria Road NW.	1/92	C.O.A.	1						3/92	SM	3/92
				Elevation: 4,966.54									4/92	NV	4/92
														STF	4/92



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: North Valley Senior Center Offsite Parking Lot Drainage & Grading Plan					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER	AKC	5-14-92
TRANSPORTATION	NAKHO	5-13-92	WASTE WATER	AKC	
HYDROLOGY					
PROJECT NO.	4351.91	MAP NO.	G-14	SHEET	2 OF 7