

VICINITY MAP

LEGAL DESCRIPTION

LOTS 11 AND 12, BLOCK 2, BRIGHTWOOD ADDITION, ALBUQUERQUE, NEW MEXICO.

STREET ADDRESS

1614 2ND STREET N.W.

PROJECT BENCHMARK

AN ACS 1 3/4" ALUMINUM DISK STAMPED "ACS BM, 24-J14", SET IN TOP OF THE CONCRETE CURB, CENTERED ABOVE A DROP INLET AT THE N.N.E. QUADRANT OF THE INTERSECTION OF FOURTH STREET AND CONSTITUTION AVENUE N.W. ELEVATION = 4958.37 FEET (M.S.L.D.)

T.B.M.

SET SPIKE IN POWER POLE AT SOUTHWEST PROPERTY CORNER OF THE SITE. ELEVATION = 4959.74, FEET (M.S.L.D.)

EXISTING

BUILDING

LEGEND

EXISTING SPOT ELEVATION

PROPOSED SPOT ELEVATION

DIRECTION OF FLOW

PROPOSED ASPHALT

PROPOSED CONCRETE

+57.5

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR INFORMATION ONLY FROM PREVIOUS SURVEY PROVIDED BY THE OWNER.

SCALE: 1" = 10'

EXISTING SIDEWALK/CURB CUT - LANDSCAPE AREA 150.00' EXISTING FENCE ---EXISTING TREE -TSW57.63 **EXISTING** NEW GRAVEL BUILDING FF = 4957.70→ EXISTING HOUSE FF = 4959.2657.2+ - INSTALL 4" PVC (C-900) CONSTRUCT CURB 4" PENETRATION PER STORM DRAIN C.O.A. STD. DWG. 2235 **EXISTING** FL=56.80 BUILDING ADDITION_{25.57} + + + 57.57 + 57.81+ BUILDING FF =4957.85 FF = 4957,56ROOF DRAINAGE WITH SUBMERSIBLE (TYP.) PUMP PER PAGE 2 56.8 OF 2; TG = 56.30 $\frac{2}{2}$ **√** FL56.81 - NEW GUTTER 日田田の + 57.4 -ROOF DRAINAGE, ASPHALT -(TYP.) **EXISTING EXISTING** BUILDING BUILDING 8 MAX W.S.L. = 57.2FF = 4957.56FF = 4957.85150.00' HANDICAP SIGN (VAN) LANDSCAPE AREA-T.B.M. (10 NEW JUNIPERS) SET SPIKE IN P.P. ELEV.=4959.47 CONCRETE BUMPER -FF=58.44

DRAINAGE PLAN

The following items concerning the Jaguar Precision Mcchine Corp. Drainage Plan are contained hereon:

Vicinity Map Grading Plan Calculations

As shown by the Vicinity Map, the site lies on the east side of Second Street N.W., approximately halfway between Constitution Avenue N.W. and Aspen Avenue N.W. This site is currently developed as a residence and commercial machine shop.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. The A.M.D.S. shows that this area generally drains northwest into Second Street N.W. With this information, it is not apparent that any offsite flows impact this site from the north. The adjacent property drains west into Second Street N.W. via a dirt driveway and drivepad at the northwest corner, so no offsite flows impact our site from the south. No eastern offsite flows impact our site due to the existing buildings along the property line. The site does have a sidewalk culvert available at the northwest corner of the site which is not utilized.

As shown by Panel 28 of 50 of the National Flood Insurance Program Flood Insurance Rate Map for the City of Albuquerque, New Mexico, dated October 14, 1983, this site lies within a designated flood hazard zone "C", and borders a flood hazard zone "AO" (depth 1) contained within Second Street N.W.

Development of this site consists of a 600 s.f. building addition, gravel parking area, and asphalt concrete paving. The proposed building addition is part of a manufacturing facility and will not be inhabited. An increase of runoff is expected by this development. The increase of the volume of runoff is 280 cf with a peak discharge increase of 0.1 cfs. These increases are very minor. This site is topographically lower than surrounding properties and public improvements, so the runoff tends to pond on the site. To aid in drainage of the site, a central drainage basin with a sump pit and submersible pump will be constructed. The pump will force the runoff generated from the site to a new 4" curb penetration in Second Street N.W. A sidewalk culvert at the northwest corner of the site suggests that the site drains to this point with free discharge, therefore, the curb penetration would be following historic drainage patterns into Second Street N.W. The minor increase of runoff into Second Street N.W. is negligible when compared to the existing runoff flowing in the right-of-way.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, a minor increase in runoff volume (280 cf) and peak discharge rate (0.1 cfs) is

CALCULATIONS

09.2 27.0 63.8

Site Characteristics 1. Precipitation Zone = 2

2. $P_{6.100} = P_{360} = 2.35$ in.

3. Total Area $(A_T) = 0.28$ ac.

4. Existing Land Treatment

635/0.02 6,965/0.16

4,475/0.10

1,115/0.03 3,260/0.07 7,700/0.18

Existing Condition

 Volume $E_{W} = (E_{A}A_{A} + E_{B} + E_{C}A_{C} + E_{D}A_{D})/A_{T}$

 $E_W = (0.78(0.02) + 1.13(0.16) + 2.12(0.10))/0.28 = 1.46 \text{ in.}$

 $V_{100} = (E_W/12)A_T = (1.46/12)0.28$

 $V_{100} = 0.0341$ ac.ft. = 1,480 cf

Peak Discharge

 $d^{b} = d^{b} + d^{b$

 $Q_p = Q_{100} = 2.28(0.02) + 3.14(0.16) + 4.70(0.10) = 1.0 \text{ cfs}$

Developed Condition Volume

 $E_W = (E_A A_A + E_B + E_C A_C + E_D A_D)/A_T$

 $E_W = (0.78(0.03) + 1.13(0.07) + 2.12(0.18))/0.28 = 1.73 in.$

 $V_{100} = (E_W/12)A_T = (1.73/12)0.28$ $V_{100} = 0.0404$ ac.ft. = 1,760 cf

Peak Discharge

 $d^{b} = d^{bA} q^{A} + d^{bB}q^{B} + d^{bC}q^{C} + d^{bD}q^{D}$

 $Q_p = Q_{100} = 2.28(0.03) + 3.14(0.07) + 4.70(0.18) = 1.1 \text{ cfs}$

Comparison

1. $\Delta V_{100} = 1,760 - 1,480 = 280 \text{ cf (increase)}$

2. $\Delta Q_{100} = 1.1 - 1.0 = 0.1$ cfs (increase) Pond Volume (By Average End Area Method)

Area (sf)

 $1,885 > 1,760 = V_{100}$ 57.20

The V_{100} Pond Volume Elevation is at 57.2 +/- (ft.)

Construction Notes:

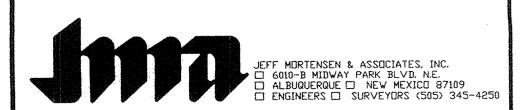
- 1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing
- 2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of
- 3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- 4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- 5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
- 6. An Excavation/Construction Permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
- 7. Backfill compaction shall be according to street use.
- 8. Maintenance of these facilities shall be the responsibility of the owner of the property
- 9. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping

Erosion Control Measures:

- 1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto
- 2. The contractor shall promptly clean up any material excavated within the public right-ofway so that the excavated material is not susceptible to being washed down the street.
- 3. The contractor shall secure 'Topsoil Disturbance Permit' prior to beginning

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR	production and a graph part agreement of the form of the second of the s	
A.C.E./FIELD		





TC57.46 FL56.74

GRADING AND DRAINAGE PLAN JAGUAR PRECISION MACHINE CORPORATION

		ND.	DATE	BY	REVISIONS	JOB NO.			
DESIGNED BY	G,R.B						941131		
	E.M.S./S.G.H.					DATE			
DRAWN BY	Zirion Sidiri			,			11-1994		
APPROVED BY	J.G.M.					SHEET	1 OF 2		
							1		