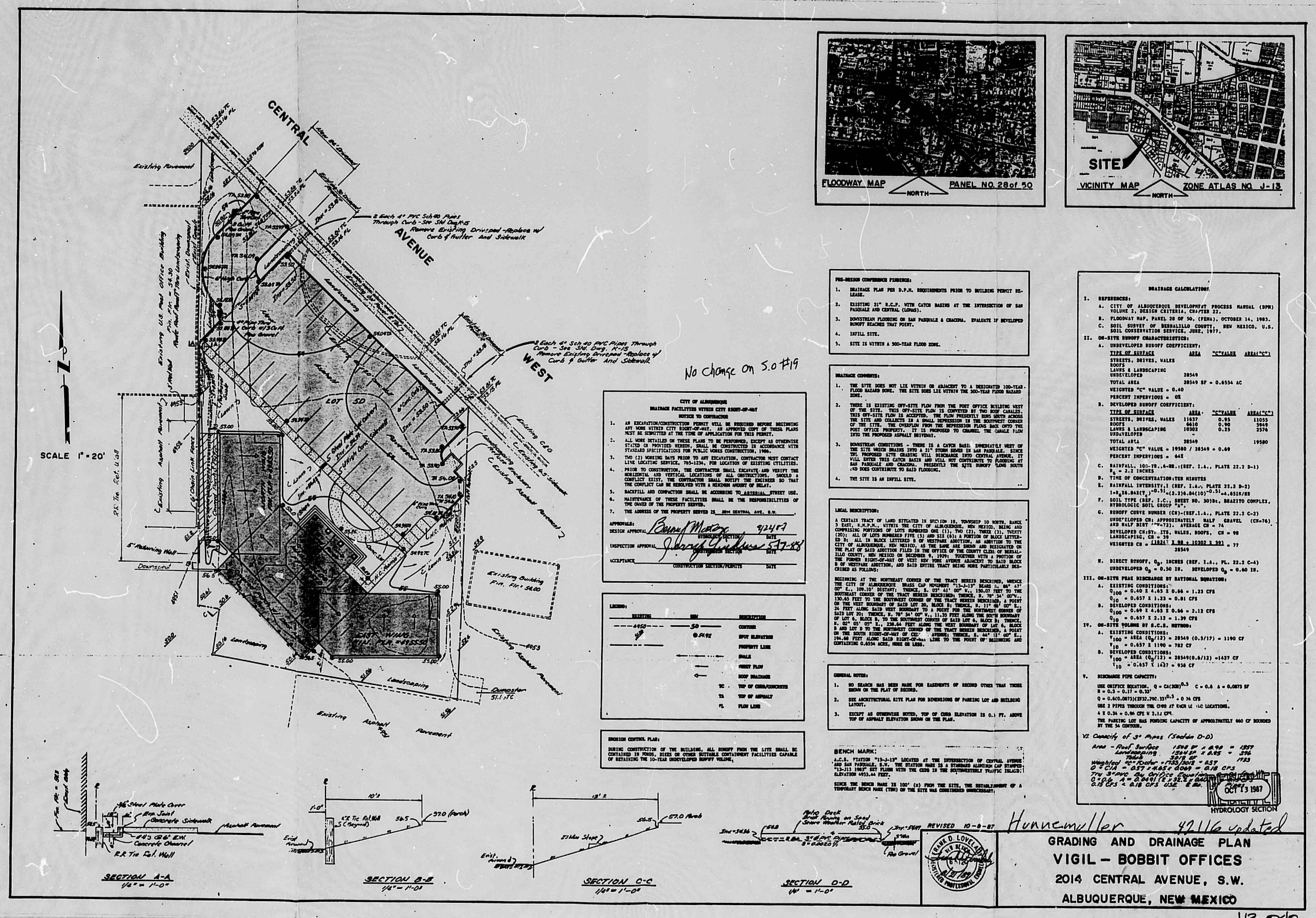


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R# 21 DATE 2/24/52 OP 15P  
 CITY OF ALBUQUERQUE  
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*Kara Adams*  
 CITY CLERK RECORDER  
 OFFICIAL SEAL  
 NORBERTA SANCHEZ  
 NOTARY PUBLIC  
 STATE OF NEW MEXICO  
 My Commission Expires MAY 8 1994  
*Norberta Sanchez*

THIS PLAN SHOT TWICE  
 ONCE ON LIGHT AND  
 ONCE ON DARK.  
 CITY OF ALBUQUERQUE  
 THIS MICROIMAGE IS THE BEST  
 POSSIBLE REPRODUCTION DUE  
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PLANS/PLATS ON FILE

FILE DESC:  
J-13/D040

# PLANS/PLATS 2

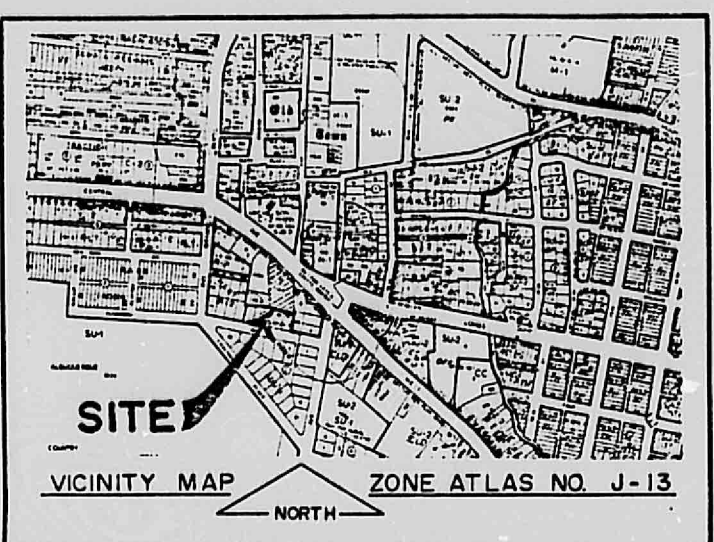
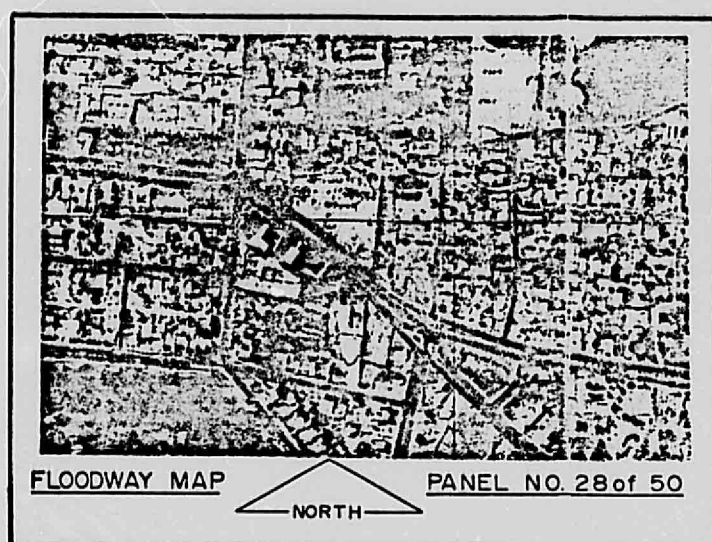
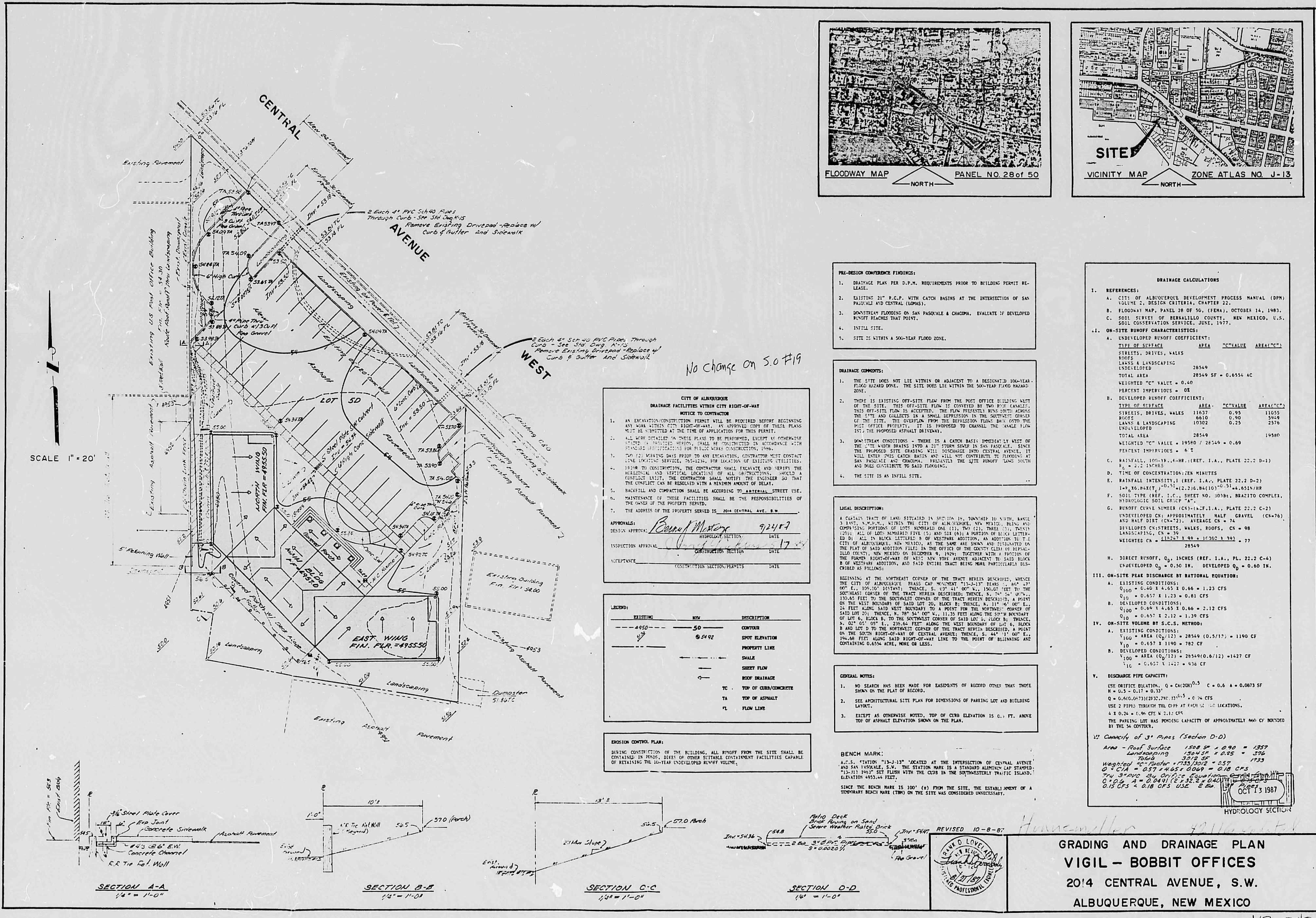
CITY OF ALBUQUERQUE

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- #### PRELIMINARY CONFERENCE FINDINGS:
1. DESIGN PLAN PER D.P.R. REQUIREMENTS FROM BUILDING PERMIT RELEASE.
  2. EXISTING 24" R.C.P. WITH CATCH BASINS AT THE INTERSECTION OF SAN PABLO AND CENTRAL AVENUE.
  3. DOWNSTREAM FLOODING ON SAN PABLO & CENTRAL. EVALUATE IF DEVELOPED BEFORE FLOODING THAT POINT.
  4. INITIAL SITE.
  5. SITE IS WITHIN A 300-FT FLOOD ZONE.

- #### MINOR COMMENTS:
1. THE SITE DOES NOT LIE WITHIN AN ADJACENT TO A REGULATED FLOODWAY FLOOD HAZARD ZONE. THE SITE DOES LIE WITHIN THE 300-FT FLOOD HAZARD ZONE.
  2. THERE IS EXISTING OFF-SITE PLAN FROM THE MOST OFFICE BUILDING WEST OF THE SITE. THE OFF-SITE PLAN IS CONTROLLED BY THE CITY OF ALBUQUERQUE. THIS OFF-SITE PLAN IS ACCEPTED. THE PLAN PRESENTS MINOR AREAS OF CONFLICT WITH THE CITY OF ALBUQUERQUE. THE CITY OF ALBUQUERQUE HAS REVIEWED THE PLAN AND HAS APPROVED THE PLAN WITH THE EXCEPTED AREAS. THE CITY OF ALBUQUERQUE HAS REVIEWED THE PLAN AND HAS APPROVED THE PLAN WITH THE EXCEPTED AREAS.
  3. UNUSUAL CONDITIONS - THERE IS A CATCH BASIN LOCATED TO THE WEST OF THE PROJECT SITE. THIS CATCH BASIN IS LOCATED TO THE WEST OF THE PROJECT SITE. THIS CATCH BASIN IS LOCATED TO THE WEST OF THE PROJECT SITE.
  4. THE SITE IS AN INFILL SITE.

#### LEGAL DESCRIPTION:

A CATCH BASIN OF 1,500 GALLONS CAPACITY IS LOCATED TO THE WEST OF THE PROJECT SITE. THE CATCH BASIN IS LOCATED TO THE WEST OF THE PROJECT SITE. THE CATCH BASIN IS LOCATED TO THE WEST OF THE PROJECT SITE.

- #### GENERAL NOTES:
1. NO STAIRS HAS BEEN MADE FOR EASING OF SHOULDER OTHER THAN THOSE SHOWN ON THE PLAN OF RECORD.
  2. SEE ARCHITECTURAL SITE PLAN FOR DIMENSIONS OF PARKING LOT AND BUILDING FOOTPRINT.
  3. EXISTING AS CONVERSE WITH TOP OF CURB ELEVATION IS 0.11 FT. ABOVE TOP OF ASPHALT ELEVATION SHOWN ON THE PLAN.

#### BENCH MARK:

A.C.L. STATION "13-137" LOCATED AT THE INTERSECTION OF CENTRAL AVENUE AND SAN PABLO. THE BENCH MARK IS A STAINLESS STEEL CIP STATION. ELEVATION 5710.11 FT. THE BENCH MARK IS A STAINLESS STEEL CIP STATION. ELEVATION 5710.11 FT.

#### DRAINAGE CALCULATIONS

ITEM	DESCRIPTION	AREA	Coefficient	AREAL CFS
1.	UNDEVELOPED ROOFTOP COEFFICIENT	15850	0.75	11887
2.	DEVELOPED ROOFTOP COEFFICIENT	15850	0.75	11887
3.	UNDEVELOPED PAVEMENT COEFFICIENT	2564	0.75	1923
4.	DEVELOPED PAVEMENT COEFFICIENT	2564	0.75	1923
5.	UNDEVELOPED LANDSCAPING COEFFICIENT	2564	0.75	1923
6.	DEVELOPED LANDSCAPING COEFFICIENT	2564	0.75	1923
7.	UNDEVELOPED TOTAL AREA	2564	0.75	1923
8.	DEVELOPED TOTAL AREA	2564	0.75	1923
9.	UNDEVELOPED TOTAL AREA	2564	0.75	1923
10.	DEVELOPED TOTAL AREA	2564	0.75	1923

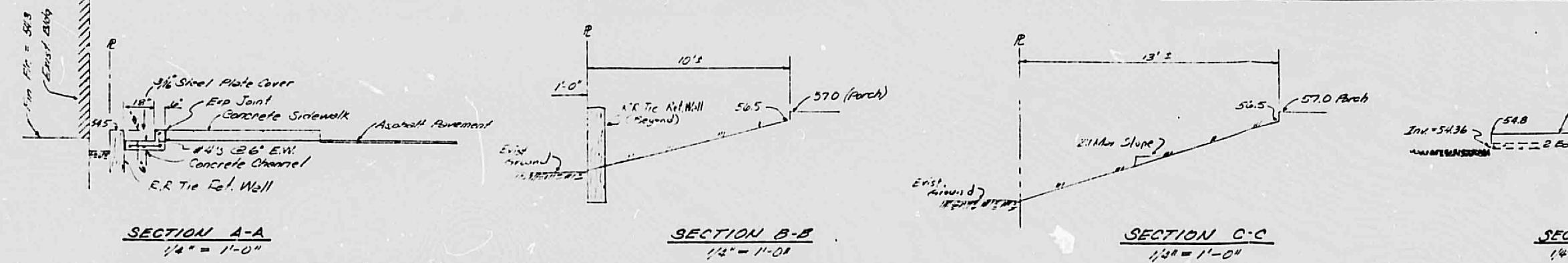
#### HYDROLOGY SECTION

ITEM	DESCRIPTION	AREA	COEFFICIENT	AREAL CFS
1.	UNDEVELOPED ROOFTOP COEFFICIENT	15850	0.75	11887
2.	DEVELOPED ROOFTOP COEFFICIENT	15850	0.75	11887
3.	UNDEVELOPED PAVEMENT COEFFICIENT	2564	0.75	1923
4.	DEVELOPED PAVEMENT COEFFICIENT	2564	0.75	1923
5.	UNDEVELOPED LANDSCAPING COEFFICIENT	2564	0.75	1923
6.	DEVELOPED LANDSCAPING COEFFICIENT	2564	0.75	1923
7.	UNDEVELOPED TOTAL AREA	2564	0.75	1923
8.	DEVELOPED TOTAL AREA	2564	0.75	1923
9.	UNDEVELOPED TOTAL AREA	2564	0.75	1923
10.	DEVELOPED TOTAL AREA	2564	0.75	1923

SCALE 1" = 20'

#### LEGEND

SYMBOL	DESCRIPTION
---	EXISTING
---	PROPOSED
---	ROOFTOP
---	PAVEMENT
---	LANDSCAPING
---	UNDEVELOPED
---	DEVELOPED



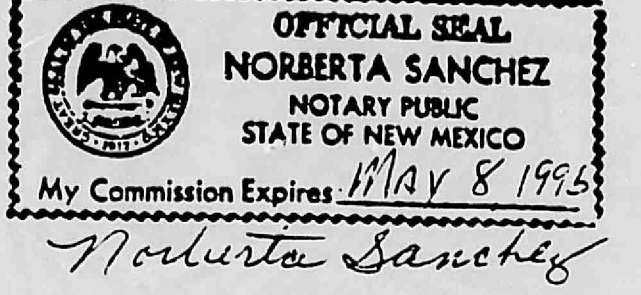
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R# 21 DATE 2/24/82 OP LRP

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*Karen Ames*  
CITY CLERK RECORDER

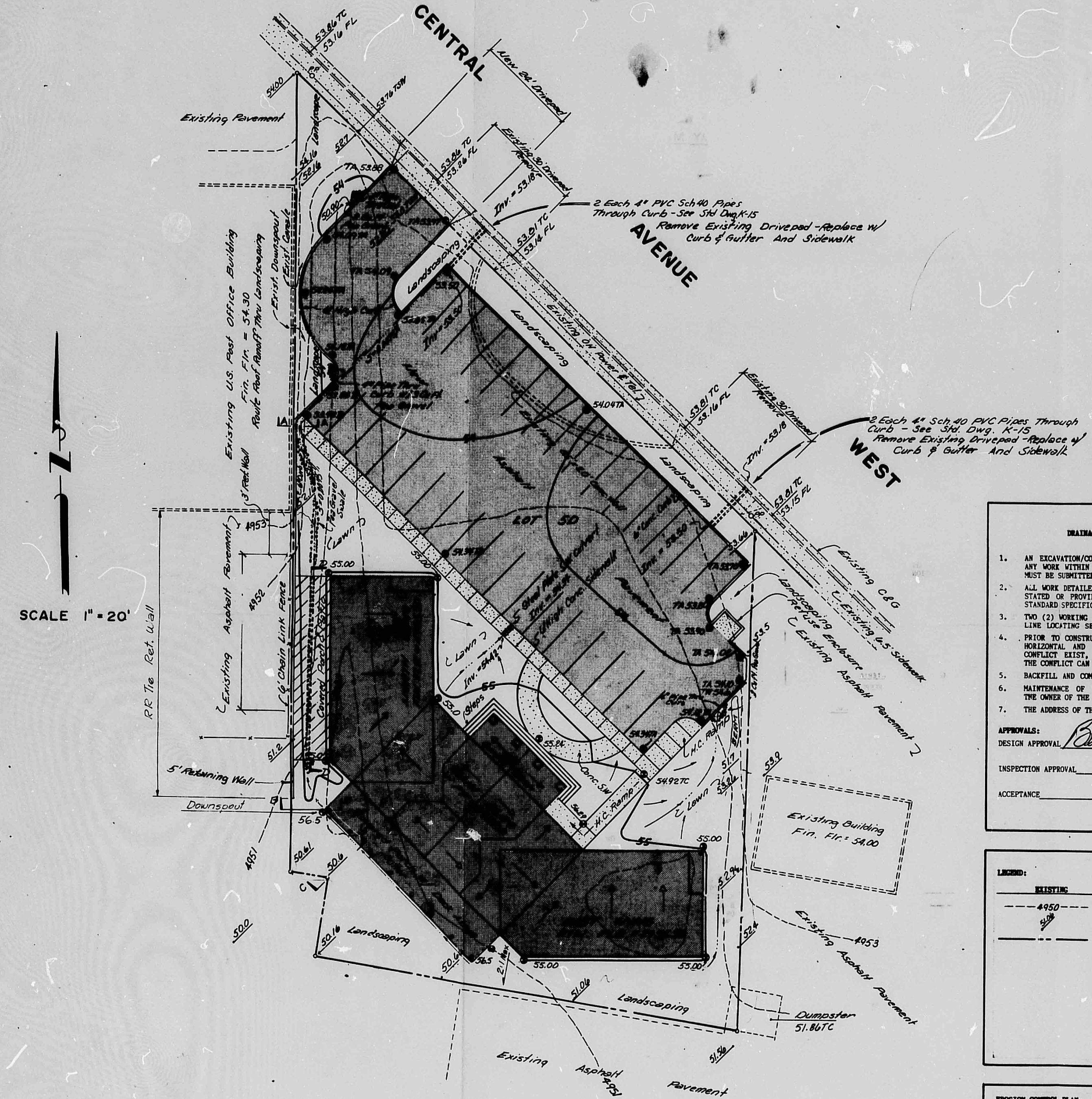
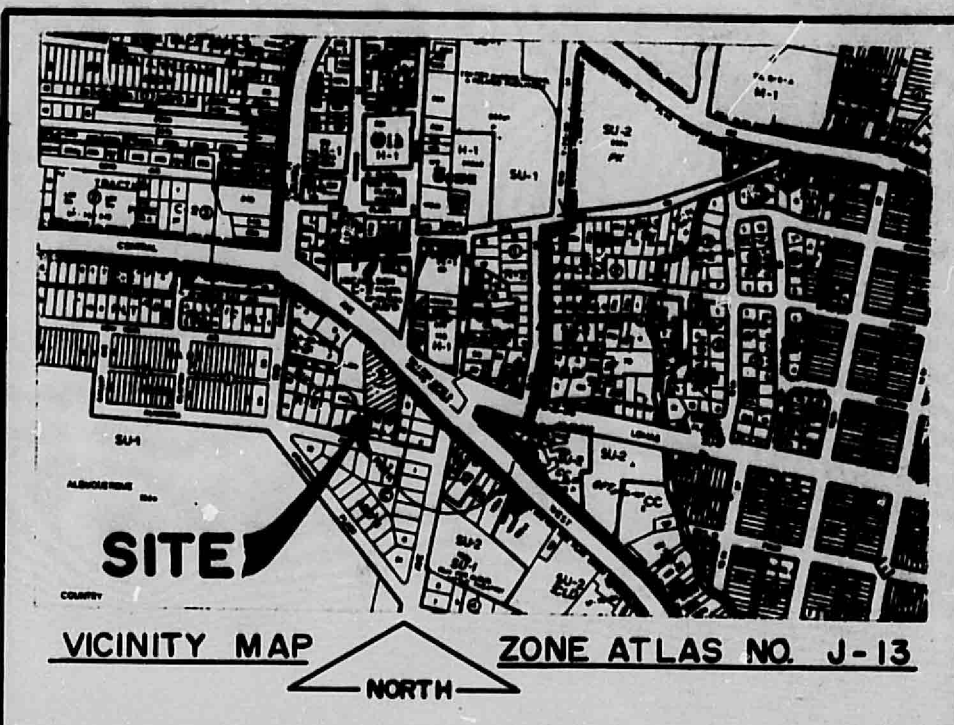
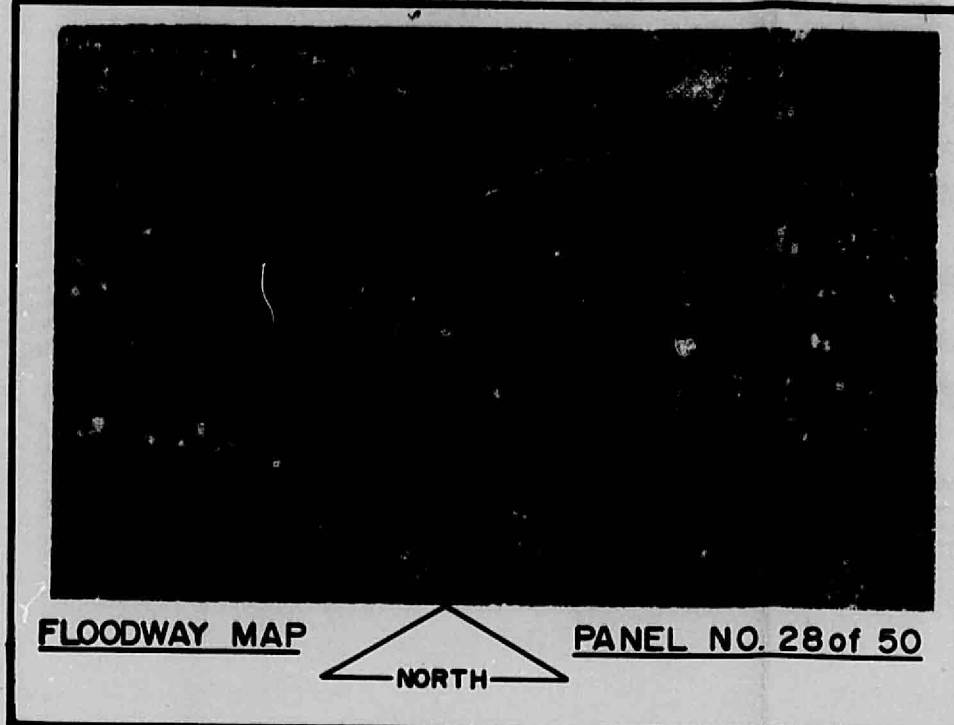


GRADING AND DRAINAGE PLAN  
VIGIL - BOBBIT OFFICES  
2014 CENTRAL AVENUE, S.W.  
ALBUQUERQUE, NEW MEXICO



B  
16

A  
12



SCALE 1" = 20'

No change on 5.0 #19

**CITY OF ALBUQUERQUE**  
**DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY**  
**NOTICE TO CONTRACTOR**

- 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.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL AND COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- THE ADDRESS OF THE PROPERTY SERVED IS 2014 CENTRAL AVE. S.W.

APPROVALS:  
 DESIGN APPROVAL: *Benny Moxey* 9/24/87  
 INSPECTION APPROVAL: \_\_\_\_\_  
 ACCEPTANCE: \_\_\_\_\_

**LEGEND:**

EXISTING	NEW	DESCRIPTION
---	---	BOUNDARY
---	---	SPOT ELEVATION
---	---	PROPERTY LINE
---	---	SHALE
---	---	SHIRT PLOW
---	---	ROOF DRAINAGE
---	---	TC - TOP OF CURB/CONCRETE
---	---	TA - TOP OF ASPHALT
---	---	PL - PLAN LINE

**EROSION CONTROL PLAN:**  
 DURING CONSTRUCTION OF THE BUILDING, ALL RUNOFF FROM THE SITE SHALL BE CONTAINED IN PONDS, DYES OR OTHER SUITABLE CONTAINMENT FACILITIES CAPABLE OF RETAINING THE 10-YEAR UNDEVELOPED RUNOFF VOLUME.

**PRE-DESIGN CONFERENCE FINDINGS:**

- DRAINAGE PLAN PER D.P.M. REQUIREMENTS PRIOR TO BUILDING PERMIT RELEASE.
- EXISTING 21" R.C.P. WITH CATCH BASINS AT THE INTERSECTION OF SAN PASQUALE AND CENTRAL (LOMAS).
- DONSTREAM FLOODING ON SAN PASQUALE & CHACO. EVALUATE IF DEVELOPED RUNOFF REACHES THAT POINT.
- INFILL SITE.
- SITE IS WITHIN A 500-YEAR FLOOD ZONE.

**DRAINAGE COMMENTS:**

- THE SITE DOES NOT LIE WITHIN OR ADJACENT TO A DESIGNATED 100-YEAR FLOOD HAZARD ZONE. THE SITE DOES LIE WITHIN THE 500-YEAR FLOOD HAZARD ZONE.
- THERE IS EXISTING OFF-SITE FLOW FROM THE POST OFFICE BUILDING WEST OF THE SITE. THIS OFF-SITE FLOW IS COLLECTED BY TWO ROOF DRAINS. THIS OFF-SITE FLOW IS ACCEPTED. THE FLOW PRESENTLY RUNS SOUTH ACROSS THE SITE AND COLLECTS IN A SMALL DEPRESSION IN THE SOUTHWEST CORNER OF THE SITE. THE OVERFLOW FROM THE DEPRESSION FLOWS BACK INTO THE POST OFFICE PROPERTY. IT IS PROPOSED TO CHANGE THE CANAL FLOW INTO THE PROPOSED ASPHALT DRIVEWAY.
- DONSTREAM CONDITIONS - THERE IS A CATCH BASIN IMMEDIATELY WEST OF THE SITE WHICH DRAINS INTO A 21" STORM SEWER IN SAN PASQUALE. SINCE THE PROPOSED SITE GRADING WILL DISCHARGE INTO CENTRAL AVENUE, IT WILL ENTER THIS CATCH BASIN AND WILL NOT CONTRIBUTE TO FLOODING AT SAN PASQUALE AND CHACO. PRESENTLY THE SITE RUNOFF FLOWS SOUTH AND DOES CONTRIBUTE TO SAID FLOODING.
- THE SITE IS AN INFILL SITE.

**LEGAL DESCRIPTION:**  
 A CERTAIN TRACT OF LAND SITUATED IN SECTION 18, TOWNSHIP 10 NORTH, RANGE 3 EAST, R.M.P.M., WITHIN THE CITY OF ALBUQUERQUE, NEW MEXICO, BEING AND COMPRISING PORTIONS OF LOTS NUMBERED ONE (1), TWO (2), THREE (3), FOUR (4), FIVE (5) AND SIX (6); A PORTION OF BLOCK LETTERED "D"; ALL IN BLOCK LETTERED "B" OF WESTPARK ADDITION, AN ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAN OF SAID ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 9, 1929; TOGETHER WITH A PORTION OF THE FORMER RIGHT-OF-WAY OF WEST NEW YORK AVENUE ADJACENT TO SAID BLOCK "B" OF WESTPARK ADDITION, AND SAID ENTIRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 BEGINNING AT THE NORTHEAST CORNER OF THE TRACT HEREIN DESCRIBED, WHENCE 3 EAST, R.M.P.M., WITHIN THE CITY OF ALBUQUERQUE, NEW MEXICO, BEING 66° 37' 00" E., 105.10' DISTANT; THENCE, S. 03° 41' 00" W., 150.07' FEET TO THE SOUTHWEST CORNER OF THE TRACT HEREIN DESCRIBED; THENCE, N. 78° 54' 00" W., 130.65' FEET TO THE SOUTHWEST CORNER OF THE TRACT HEREIN DESCRIBED; A POINT ON THE WEST BOUNDARY OF SAID LOT 6, BLOCK B, THENCE, N. 11° 16' 00" E., 24' FEET ALONG SAID WEST BOUNDARY TO A POINT; FROM THE NORTHEAST CORNER OF LOT 6, BLOCK B, TO THE SOUTHWEST CORNER OF SAID LOT 6, BLOCK B, THENCE, N. 02° 05' 00" E., 238.66' FEET ALONG THE WEST BOUNDARY OF LOT 6, BLOCK B AND LOT B TO THE NORTHEAST CORNER OF THE TRACT HEREIN DESCRIBED; A POINT ON THE SOUTH RIGHT-OF-WAY OF CENTRAL AVENUE; THENCE, S. 44° 11' 00" E., 194.68' FEET ALONG SAID RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING AND CONTAINING 0.6534 ACRES, MORE OR LESS.

**GENERAL NOTES:**

- NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN THOSE SHOWN ON THE PLAN OF RECORD.
- SEE ARCHITECTURAL SITE PLAN FOR DIMENSIONS OF PARKING LOT AND BUILDING LAYOUT.
- EXCEPT AS OTHERWISE NOTED, TOP OF CURB ELEVATION IS 0.5 FT. ABOVE TOP OF ASPHALT ELEVATION SHOWN ON THE PLAN.

**BENCH MARK:**  
 A.C.S. STATION "13-J-13" LOCATED AT THE INTERSECTION OF CENTRAL AVENUE AND SAN PASQUALE, S.W. THE STATION MARK IS A STANDARD ALUMINUM CAP STAMPED "13-13" SET FLUSH WITH THE CURB IN THE SOUTHWESTERLY TRAFFIC ISLAND. ELEVATION 4953.44 FEET.  
 SINCE THE BENCH MARK IS 100' (4) FROM THE SITE, THE ESTABLISHMENT OF A TEMPORARY BENCH MARK (TBM) ON THE SITE WAS CONSIDERED UNNECESSARY.

**DRAINAGE CALCULATIONS**

**I. REFERENCES:**

- CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) VOLUME 2, DESIGN CRITERIA, CHAPTER 22.
- FLOODWAY MAP, PANEL 28 OF 50, (FEMA), OCTOBER 14, 1983.
- SOIL SURVEY OF BERNALILLO COUNTY, NEW MEXICO, U.S. SOIL CONSERVATION SERVICE, JUNE, 1977.

**II. ON-SITE RUNOFF CHARACTERISTICS:**

**A. UNDEVELOPED RUNOFF COEFFICIENT:**

TYPE OF SURFACE	AREA	"C" VALUE	AREA ("C")
STREETS, DRIVES, WALKS			
ROOFS			
LAWNS & LANDSCAPING	28549	0.50	14274.5
UNDEVELOPED			
<b>TOTAL AREA</b>	<b>28549 SF</b>	<b>0.655</b>	<b>AC</b>
<b>WEIGHTED "C" VALUE</b>	<b>= 0.40</b>		
<b>PERCENT IMPERVIOUS</b>	<b>= 0%</b>		

**B. DEVELOPED RUNOFF COEFFICIENT:**

TYPE OF SURFACE	AREA	"C" VALUE	AREA ("C")
STREETS, DRIVES, WALKS	11637	0.95	11055
ROOFS	6610	0.90	5949
LAWNS & LANDSCAPING	10302	0.25	2576
UNDEVELOPED			
<b>TOTAL AREA</b>	<b>28549</b>		<b>19580</b>
<b>WEIGHTED "C" VALUE</b>	<b>= 0.69</b>		
<b>PERCENT IMPERVIOUS</b>	<b>= 64%</b>		

**C. RAINFALL, 100-YR., 6-HR. (REF. I.A., PLATE 22.2 D-1)**  
 $R_p = 2.2$  INCHES

**D. TIME OF CONCENTRATION, TEN MINUTES**

**E. RAINFALL INTENSITY, I (REF. I.A., PLATE 22.2 D-2)**  
 $I = 8.684(I_p)^{-0.51} = (2.2)(6.84(10)^{-0.51})^{0.51} = 4.651$  IN/HR

**F. SOIL TYPE (REF. I.C., SHEET NO. 30)B1, BRAZILTO COMPLEX, HYDROLOGIC SOIL GROUP "A"**

**G. RUNOFF CURVE NUMBER (CN) (REF. I.A., PLATE 22.2 C-2)**  
 UNDEVELOPED CN: APPROXIMATELY HALF GRAVEL (CN=76) AND HALF SILT (CN=73); AVERAGE CN = 74  
 DEVELOPED CN: STREETS, WALKS, ROOFS, CN = 98  
 LANDSCAPING, CN = 39  
 WEIGHTED CN =  $(19247 \times 98 + 10302 \times 39) / 28549 = 77$

**H. DIRECT RUNOFF,  $Q_p$ , INCHES (REF. I.A., PL. 22.2 C-4)**  
 UNDEVELOPED  $Q_p = 0.50$  IN. DEVELOPED  $Q_p = 0.60$  IN.

**III. ON-SITE PEAK DISCHARGE BY RATIONAL EQUATION:**

**A. EXISTING CONDITIONS**  
 $Q_{100} = 0.40 \times 4.65 \times 0.66 = 1.23$  CFS  
 $Q_{10} = 0.657 \times 1.23 = 0.81$  CFS

**B. DEVELOPED CONDITIONS**  
 $Q_{100} = 0.69 \times 4.65 \times 0.66 = 2.12$  CFS  
 $Q_{10} = 0.657 \times 2.12 = 1.39$  CFS

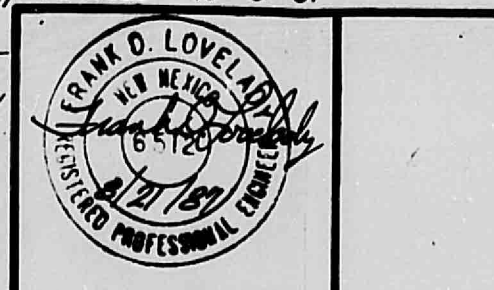
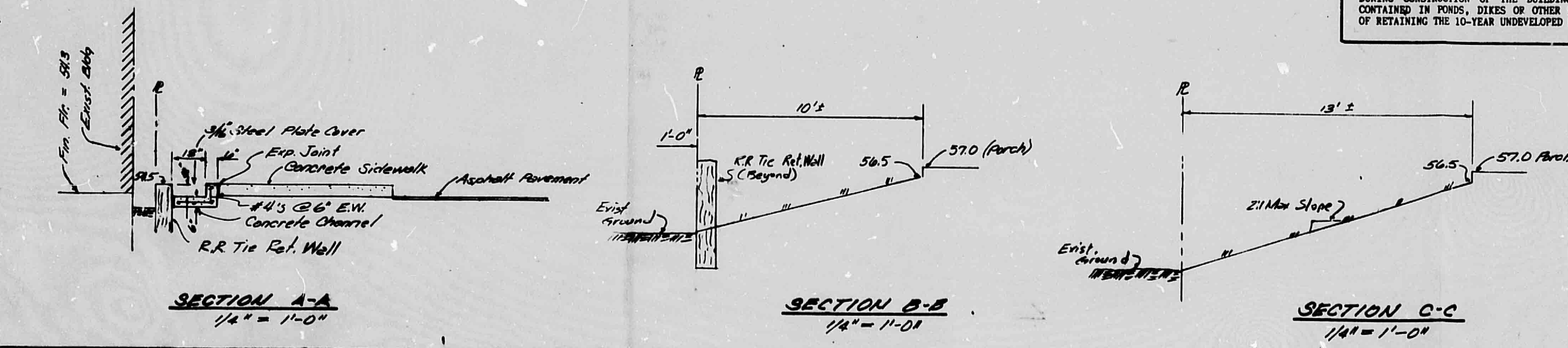
**IV. ON-SITE VOLUME BY S.C.S. METHOD:**

**A. EXISTING CONDITIONS:**  
 $V_{100} = \text{AREA} (Q_p/12) = 28549 (0.5/12) = 1190$  CF  
 $V_{10} = 0.657 \times 1190 = 782$  CF

**B. DEVELOPED CONDITIONS:**  
 $V_{100} = \text{AREA} (Q_p/12) = 28549 (0.6/12) = 1427$  CF  
 $V_{10} = 0.657 \times 1427 = 938$  CF

**V. DISCHARGE PIPE CAPACITY:**  
 USE ORIFICE EQUATION:  $Q = CA(20H)^{0.5}$  C = 0.6 A = 0.0873 SF  
 $H = 0.25 - 0.17 = 0.08$   
 $Q = 0.6(0.0873)(230.230.33)^{0.5} = 0.24$  CFS  
 USE 2 PIPES THROUGH THE CURB AT EACH (1) LOCATION.  
 $4 \times 0.24 = 0.96$  CFS  $\approx 2.12$  CFS.  
 THE PARKING LOT HAS PONDING CAPACITY OF APPROXIMATELY 660 OF BOUNDARY BY THE 54 CURB.

**VI. Capacity of 3" Pipes (Section D-D)**  
 Area - Roof Surface  $1508 \text{ SF} \times 0.90 = 1357$   
 Landscaping  $1504 \text{ SF} \times 0.25 = 376$   
 Total  $1733$   
 Weighted  $40\% \text{ Roofs} = 733/1733 = 0.42$   
 $C = \text{CIA} = 0.57(1.405 + 0.069) = 0.18$  CFS  
 $734 \text{ S.F.} \times 0.42 \times 0.18 = 5.6$  CFS  
 $0.18 \text{ CFS} \times 0.18 \text{ CFS} \times 0.18 \text{ CFS} = 0.59$  CFS  
 $0.18 \text{ CFS} \times 0.18 \text{ CFS} \times 0.18 \text{ CFS} = 0.59$  CFS



**GRADING AND DRAINAGE PLAN**  
**VIGIL - BOBBIT OFFICES**  
 2014 CENTRAL AVENUE, S.W.  
 ALBUQUERQUE, NEW MEXICO

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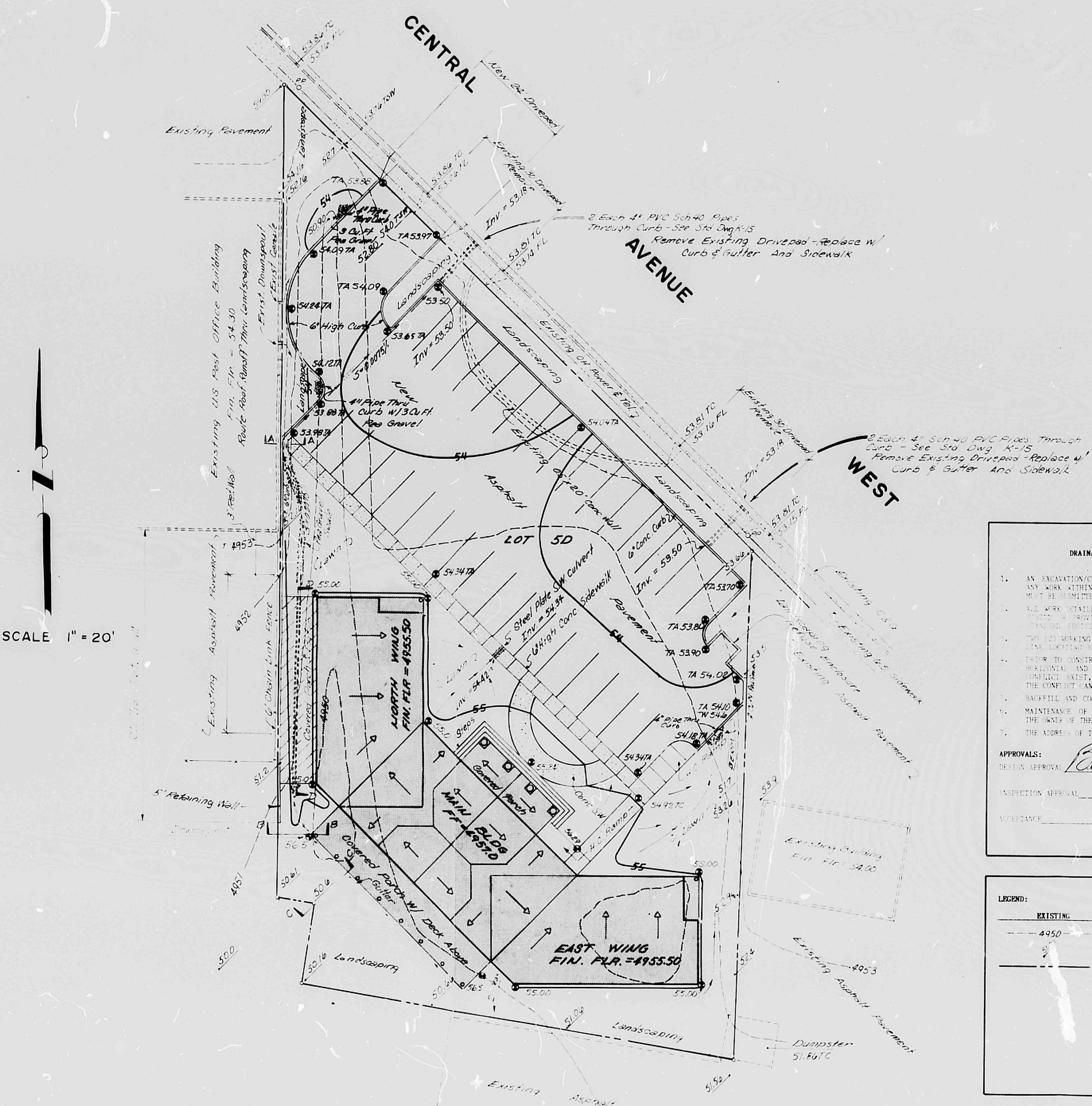
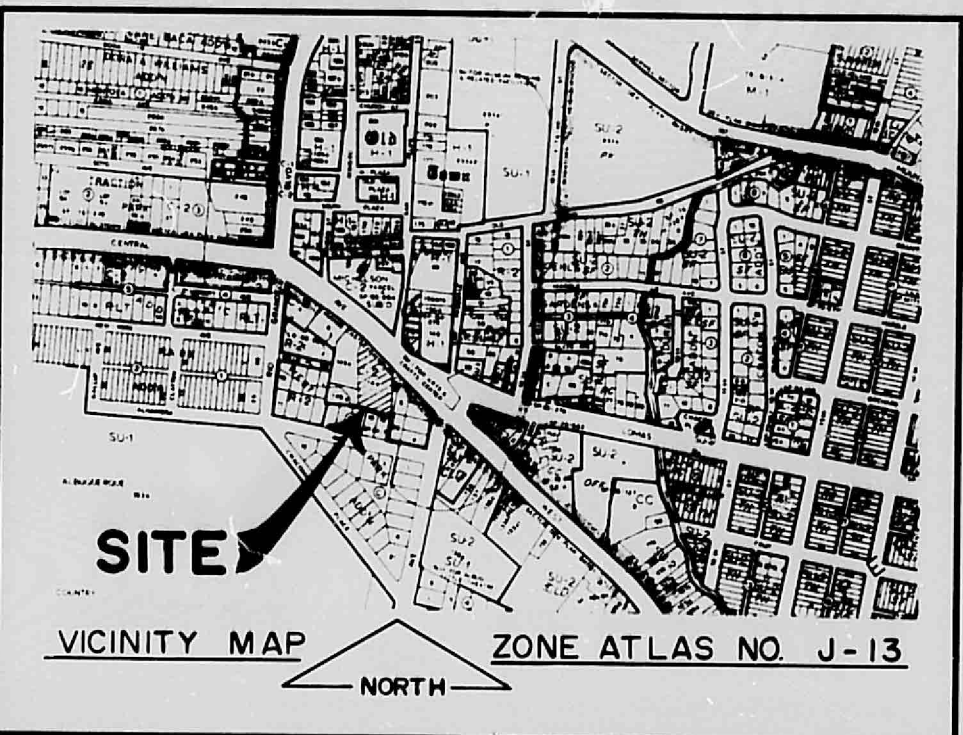
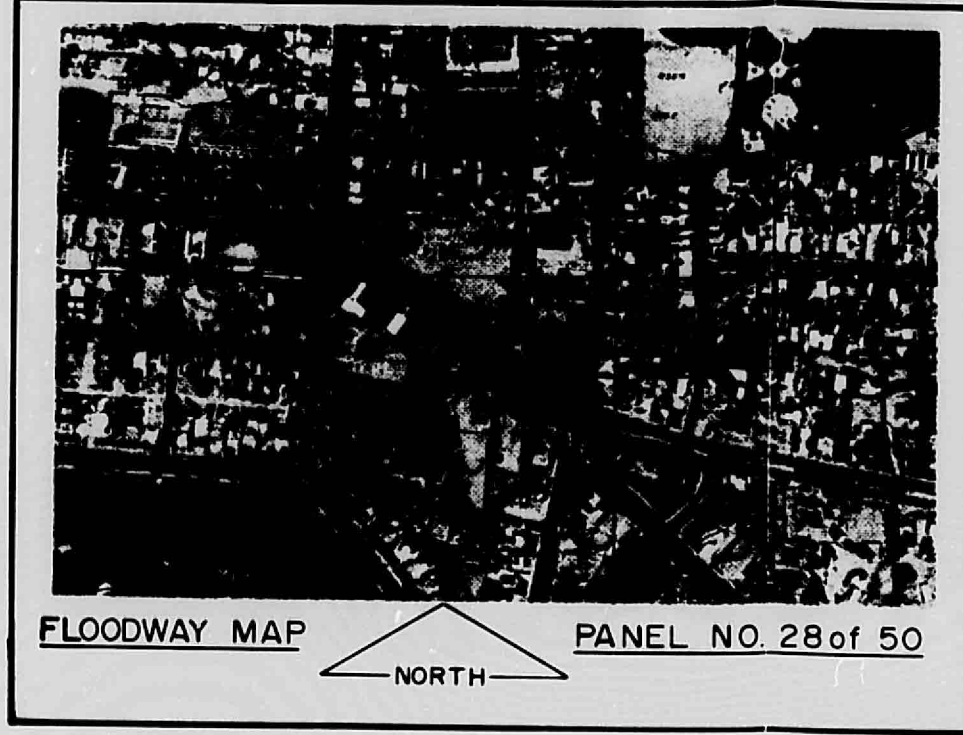
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*Kara Jones*  
 CITY CLERK RECORDER





SCALE 1" = 20'

No change on 50 #19

**CITY OF ALBUQUERQUE  
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY  
NOTICE TO CONTRACTOR**

1. AN EVALUATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS SHALL BE OBTAINED AT THE TIME OF APPLICATION FOR THIS PERMIT.

2. ALL WORK INSTALLED IN THESE PLANS IS TO BE PERFORMED, EXCEPT AS OTHERWISE SPECIFIED IN WRITTEN NOTICES, UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER REGISTERED WITH THE STATE OF NEW MEXICO.

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EVALUATE AND VERIFY THE PRESENT AND PROPOSED ELEVATIONS OF ALL STRUCTURES, UTILITIES, AND EXISTING AND PROPOSED PAVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES THAT MAY BE ENCOUNTERED WITHIN A MINIMUM AMOUNT OF DELAY.

4. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

5. THE ADDRESS OF THE PROPERTY SERVED IS: 2014 CENTRAL AVE. S.W.

APPROVALS: *Karen Alvarez* 9/24/07  
 DESIGN APPROVAL: *Karen Alvarez* 9/24/07  
 INSPECTION APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_ DATE: \_\_\_\_\_

**LEGEND:**

EXISTING	NEW	DESCRIPTION
—	—	CURB
—	—	SPOT ELEVATION
—	—	PROPERTY LINE
—	—	SHANK
—	—	REAR DRAINAGE
—	—	SHOULDER
—	—	TOP OF CURB/CONCRETE
—	—	TOP OF ASPHALT
—	—	FIN. FLR.

**BENCH MARKS:**

1. THE BENCH MARK IS LOCATED AT THE INTERSECTION OF CENTRAL AVENUE AND 2014 CENTRAL AVE. S.W. THE BENCH MARK IS A STANDARD ALUMINUM MARK WITH THE TOP OF THE MARK AT THE SURFACE ELEVATION OF 5000.00 FEET.

2. THE BENCH MARK IS 10' (4) FROM THE SITE. THE ESTABLISHMENT OF A TEMPORARY BENCH MARK (TBM) ON THE SITE WAS CONSIDERED UNDESIRABLE.

- PRE-DESIGN CONFERENCE FINDINGS:**
- DRAINAGE PLAN PER DIRM REQUIREMENTS PRIOR TO BUILDING PERMIT RELEASE.
  - EXISTING 24" PIPE WITH CATCH BASIN AT THE INTERSECTION OF SAN FASCAL AND CENTRAL (LOHAS).
  - DOWNSTREAM FLOODING ON SAN FASCAL & CENTRAL. EVALUATE IF DEVELOPER WOULD BEAR THIS POINT.
  - INSTALL SITE.
  - SITE IS WITHIN A 100-YEAR FLOOD ZONE.

- DRAINAGE COMMENTS:**
- THE SITE DOES NOT LIE WITHIN A DESIGNATED 100-YEAR FLOOD HAZARD ZONE. THE SITE DOES LIE WITHIN THE 100-YEAR FLOOD HAZARD ZONE.
  - THERE IS EXISTING OFF-SITE FLOW FROM THE POST OFFICE BUILDING WEST OF THE SITE. THIS OFF-SITE FLOW IS CONVEYED BY TWO 6" DIA. CAST-IRON PIPES TO A SMALL DEPRESSION IN THE SOUTHWEST CORNER OF THE SITE. THE DRAINAGE FROM THE DEPRESSION FLOWS INTO THE POST OFFICE PROPERTY. IT IS PROPOSED TO CHANNEL THE CATCH FLOW INTO THE PROPOSED REAR DRAINAGE.
  - DOWNSTREAM CONDITIONS - THERE IS A CATCH BASIN IMMEDIATELY WEST OF THE SITE WHICH DRAINS INTO A 24" STORM SEWER IN SAN FASCAL. SINCE THE PROPOSED SITE GRADING WILL DISBURGE INTO CENTRAL AVENUE, IT WILL ENTER THIS CATCH BASIN AND WILL NOT CONTRIBUTE TO FLOODING AT SAN FASCAL AND CENTRAL. PRELIMINARY SITE RUNOFF FLOWS SOUTH AND DOES NOT CONTRIBUTE TO SAID FLOODING.
  - THE SITE IS AN INSTALL SITE.

**LOCAL DESCRIPTION:**

A TRACT OF LAND SITUATED IN SECTION 10, TOWNSHIP 19 NORTH, RANGE 12 EAST, COUNTY OF BERNALILLO, STATE OF NEW MEXICO, BEING AN UNDIVIDED PART OF THE 100 ACRES MORE OR LESS, TRACT 131, TRACT 132, TRACT 133, TRACT 134, ALL OF WHICH WERE DEED TO AND ARE OWNED BY THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESCRIBED IN THE PLAT OF SAID ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON DECEMBER 9, 1903, TOGETHER WITH A PORTION OF THE FORMER HIGHWAY OF WEST AND 19TH AVENUE ADJACENT TO SAID BLOCK #1 OF SAID ADDITION, AND SAID TRACT BEING NOW PARTICULARLY DESCRIBED AS FOLLOWS:

**GENERAL NOTES:**

- NO SEARCH HAS BEEN MADE FOR EASEMENTS OR RECORD OTHER THAN THOSE SHOWN ON THE PLAT OF RECORD.
- SEE ARCHITECTURAL SITE PLAN FOR DIMENSIONS OF PARKING LOT AND BUILDING FOOTPRINT.
- EXCEPT AS OTHERWISE NOTED, TOP OF CURB ELEVATION IS 3.0 FT. ABOVE TOP OF ASPHALT ELEVATION SHOWN ON THE PLAN.

**DISCHARGE PIPE CAPACITY:**

USE TABLE 10.2.1.1 (SECTION D.1) OF THE 2003 IBC

Area - Roof Surface 1500 SF x 0.90 = 1350  
 Landscaping 250 SF x 0.25 = 62.5  
 Driveway 100 SF x 0.25 = 25  
 Total = 1437.5 SF x 0.08 = 115.0 GPM  
 115.0 GPM x 2.31 = 264.63 GPM  
 264.63 GPM x 2.31 = 611.29 GPM  
 611.29 GPM x 2.31 = 1412.08 GPM  
 1412.08 GPM x 2.31 = 3261.90 GPM

**DRAINAGE CALCULATIONS**

**I. REFERENCES:**

- ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) VOLUME 1, DESIGN (FEDERAL CHAPTER 22)
- FLOODWAY MAP, PANEL 28 OF 50, (FEMA), OCTOBER 14, 1993
- SOIL SURVEY OF BERNALILLO COUNTY, NEW MEXICO, U.S. SOIL CONSERVATION SERVICE, 1977

**II. ON-SITE RUNOFF CHARACTERISTICS:**

**A. UNDEVELOPED RUNOFF COEFFICIENT:**

TYPE OF SURFACE	AREA	"C" VALUE	AREA("C)"
STREETS, DRIVEWAYS, WALKS			
ROOFS			
LANDSCAPING			
UNDEVELOPED			
TOTAL AREA	28740 SF = 0.6561		
WEIGHTED "C" VALUE	28740 SF x 0.6561		
RESIDENT IMPERVIOUS	0		

**B. DEVELOPER FINISH COEFFICIENT:**

TYPE OF SURFACE	AREA	"C" VALUE	AREA("C)"
STREETS, DRIVEWAYS, WALKS	11637	0.45	5236
ROOFS	4610	0.90	4149
LANDSCAPING	10302	0.25	2576
UNDEVELOPED			
TOTAL AREA	28740		12961
WEIGHTED "C" VALUE	12961 x 0.649		
PERCENT IMPERVIOUS	64.9		

**III. ON-SITE PEAK DISCHARGE BY RATIONAL EQUATION:**

**A. EXISTING CONDITIONS:**

1. RAINFALL INTENSITY (REF. I.A., PLATE 2212 D-1)  
 $I = 2.31 \text{ INCHES}$

2. TIME OF CONCENTRATION (MINUTES)  
 1. RAINFALL INTENSITY (REF. I.A., PLATE 2212 D-2)  
 $I = 2.31 \text{ INCHES}$

3. SOIL TYPE (REF. I.A., SHEET NO. 3008), BRADYTON COMPLEX, HYDROLOGIC SOIL GROUP "A"

4. RUNOFF COEFFICIENT (REF. I.A., PLATE 2212 C-2)  
 UNDEVELOPED (C) APPROXIMATELY 0.45 (GRAVEL (C) 0.7) AND HALF DEVELOPED (C) AVERAGE (C) = 0.6

5. DEVELOPER FINISH COEFFICIENT (C) = 0.65

6. WEIGHTED (C) VALUE = 0.6561

**B. DEVELOPER CONDITIONS:**

1. RAINFALL INTENSITY (REF. I.A., PLATE 2212 D-1)  
 $I = 2.31 \text{ INCHES}$

2. TIME OF CONCENTRATION (MINUTES)  
 1. RAINFALL INTENSITY (REF. I.A., PLATE 2212 D-2)  
 $I = 2.31 \text{ INCHES}$

3. SOIL TYPE (REF. I.A., SHEET NO. 3008), BRADYTON COMPLEX, HYDROLOGIC SOIL GROUP "A"

4. RUNOFF COEFFICIENT (REF. I.A., PLATE 2212 C-2)  
 UNDEVELOPED (C) APPROXIMATELY 0.45 (GRAVEL (C) 0.7) AND HALF DEVELOPED (C) AVERAGE (C) = 0.6

5. DEVELOPER FINISH COEFFICIENT (C) = 0.65

6. WEIGHTED (C) VALUE = 0.6561

**IV. ON-SITE VOLUME BY S.C.S. METHOD:**

**A. EXISTING CONDITIONS:**

1. AREA (AC) = 28740 SF = 0.6561 AC

2. TIME OF CONCENTRATION (MINUTES) = 11.637

3. SOIL TYPE (REF. I.A., SHEET NO. 3008), BRADYTON COMPLEX, HYDROLOGIC SOIL GROUP "A"

4. RUNOFF COEFFICIENT (REF. I.A., PLATE 2212 C-2)  
 UNDEVELOPED (C) APPROXIMATELY 0.45 (GRAVEL (C) 0.7) AND HALF DEVELOPED (C) AVERAGE (C) = 0.6

5. DEVELOPER FINISH COEFFICIENT (C) = 0.65

6. WEIGHTED (C) VALUE = 0.6561

**B. DEVELOPER CONDITIONS:**

1. AREA (AC) = 28740 SF = 0.6561 AC

2. TIME OF CONCENTRATION (MINUTES) = 11.637

3. SOIL TYPE (REF. I.A., SHEET NO. 3008), BRADYTON COMPLEX, HYDROLOGIC SOIL GROUP "A"

4. RUNOFF COEFFICIENT (REF. I.A., PLATE 2212 C-2)  
 UNDEVELOPED (C) APPROXIMATELY 0.45 (GRAVEL (C) 0.7) AND HALF DEVELOPED (C) AVERAGE (C) = 0.6

5. DEVELOPER FINISH COEFFICIENT (C) = 0.65

6. WEIGHTED (C) VALUE = 0.6561

**V. DISCHARGE PIPE CAPACITY:**

USE TABLE 10.2.1.1 (SECTION D.1) OF THE 2003 IBC

Area - Roof Surface 1500 SF x 0.90 = 1350  
 Landscaping 250 SF x 0.25 = 62.5  
 Driveway 100 SF x 0.25 = 25  
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 115.0 GPM x 2.31 = 264.63 GPM  
 264.63 GPM x 2.31 = 611.29 GPM  
 611.29 GPM x 2.31 = 1412.08 GPM  
 1412.08 GPM x 2.31 = 3261.90 GPM



**GRADING AND DRAINAGE PLAN  
VIGIL - BOBBIT OFFICES  
2014 CENTRAL AVENUE, S.W.  
ALBUQUERQUE, NEW MEXICO**

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CITY CLERK RECORDER

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