

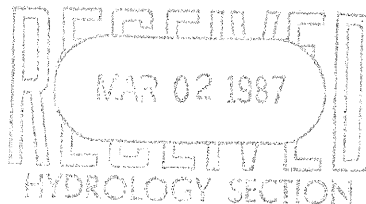


**CHAVEZ-GRIEVES / CONSULTING ENGINEERS, INC.**

4600 MONTGOMERY N.E., BUILDING C, #101  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 881-7376

February 24, 1987

Mr. Carlos A. Montoya, P.E.  
City of Albuquerque  
Hydrology Section  
P.O. Box 1293  
Albuquerque, N.M. 87103



RE: CONCEPTUAL DRAINAGE PLAN FOR HIGHLAND POST OFFICE  
(K-18/D12)

Dear Carlos:

In response to your letter dated January 5, 1987, I offer the following:

1. Downstream capacity exists with the current construction of System 210-01A (AMDS). This system eliminates flooding in San Mateo Boulevard.
2. See the revised grading and drainage plan for elevations adjacent to retaining walls.
3. See the revised grading and drainage plan for clarification of the curb opening on the north side of the parking lot.
4. We have advised the U.S. Post Office of the need to sign a drainage covenant as required when flows cross lot lines. At this time, we are awaiting their response. We are looking for a conceptual drainage plan approval with the contingency that these above items are done prior to release of building permit.

Should you have any questions regarding the above, please do not hesitate to call me.

Cordially yours,

CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.

Jackie S. McDowell

JSM:mf



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 4, 1992

D. Mark Goodwin  
D. Mark Goodwin & Associates  
Post Office Box 90606  
Albuquerque, New Mexico 87199

RE: GRADING/PAVING PLAN FOR U.S.P.S. HIGHLAND STATION  
(K-18/D12) ENGINEER'S STAMP DATED FEBRUARY 20, 1992

Dear Mr. Goodwin:

Based on the information provided on your submittal of February 21, 1992, the referenced site is approved for Grading/Paving.

Please be advised that a separate permit is required for construction within the City right-of-way. A copy of this approval letter must be on hand when applying for the excavation permit.

Upon completion of the project, a request for inspection must be called in.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya, C.E.  
Engineering Assistant

xc: Darlene Saavedra  
Alan Martinez

BJM/bsj  
(WP+11)

PUBLIC WORKS DEPARTMENT

# EXISTING ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C" X A	COMPOSITE "C" = C X A / A
Streets, Drives, Walks	0.95	1.4852	1.4110	
Roofs	0.90	-	-	
Lawns & Landscaping	0.25	-	-	
Undeveloped	0.40	3.7658	1.5063	
TOTAL		5.251	2.9173	0.5556

$$Q(100) = (5.52)(5.251)(0.5556) = 16.1044 \text{ cfs}$$

$$Q(10) = (0.657)(16.1044) = 10.5806 \text{ cfs}$$

$$CN = 74 \quad \text{Plate 22.2 C-2}$$

$$\text{Direct Runoff} = .6 \text{ in.} \quad \text{Plate 22.2 C-4}$$

$$V(100) = (.6)(5.251)(43560)/12 = 11.437 \text{ cu. ft.}$$

$$V(10) = (0.657)(11.437) = 7.514 \text{ cu. ft.}$$

# PROPOSED ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C" X A	COMPOSITE "C" = C X A / A
Streets, Drives, Walks	0.95	2.0798	1.9758	
Roofs	0.90	0.7894	0.7104	
Lawns & Landscaping	0.25	0.2611	0.0653	
Undeveloped	0.40	2.1207	0.8483	
TOTAL		5.251	3.5998	0.6855

$$Q(100) = (5.52)(0.6855)(5.251) = 19.8709 \text{ cfs}$$

$$Q(10) = (0.657)(19.8709) = 13.0552 \text{ cfs}$$

$$CN = 88 \quad \text{Plate 22.2 C-3}$$

$$\text{Direct Runoff} = 1.4 \text{ in.} \quad \text{Plate 22.2 C-4}$$

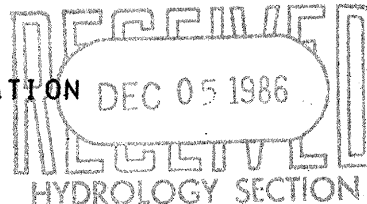
$$V(100) = (1.4)(5.251)(43560)/12 = 26,686 \text{ cu. ft.}$$

$$V(10) = (0.657)(26,686) = 17,532 \text{ cu. ft.}$$

CONCEPTUAL DRAINAGE PLAN

U. S. POST OFFICE - HIGHLAND STATION

ALBUQUERQUE, NEW MEXICO



LOCATION AND DESCRIPTION:

The site is located on the Southwest corner of Central Avenue and Alvarado Street Southeast in Albuquerque, New Mexico. The site, containing approximately 5.215 acres, is presently partially developed and slopes from east to the west with an average slope of 1.6 percent. The site is located within a flood plain. However, Isaacson & Arfman, Consulting Engineering Associates performed an engineering study on a request to change the status on this site. The finished floor elevation will be two feet above the flow line in Alvarado Drive.

EXISTING CONDITIONS:

Presently, runoff from the site discharges onto the adjacent property to the west. No off-site runoff enters the site due to existing elevations.

PROPOSED CONDITIONS:

Proposed development of the site includes a U.S. Post Office with related parking and landscaping. Due to proposed development, runoff from the site will increase from 16.10 cfs to 19.87 cfs. The flow will be routed to Coal Avenue via two swales and discharge through a proposed drivepad.

Easements, if any, should be rerouted and replatted as to not interfere with the building layout.

CALCULATIONS: (Based on the City of Albuquerque Development Process Manual, Volume II).

Area = 5.25 acres

$I = 2.4 \text{ in./hr.}$  Plate 22.2 D-2

6-hour, 100-year rainfall = 2.3 in. Plate 22.2 D-1

$i = (2.4)(2.3) = 5.52 \text{ in./hr.}$

### DRAINAGE INFORMATION SHEET

PROJECT TITLE: U.S.P.S. HIGHLAND STATION ZONE ATLAS/DRNG. FILE #: K-18 / D12  
LEGAL DESCRIPTION: Tracts B-1 & B-2 Brown Place Addition  
CITY ADDRESS: Alvarado & Central SE  
ENGINEERING FIRM: D. Mark Goodwin & Assoc., PA CONTACT: Zane Goodwin, PE  
ADDRESS: PO Box 90606 87199 PHONE: 828-2200  
OWNER: U.S.P.S. CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
ARCHITECT: dcs CONTACT: Marc Schiff  
ADDRESS: 105 4th Street SW PHONE: 843-9369  
SURVEYOR: D. Mark Goodwin & Assoc., PA CONTACT: Richard Borgel, PS  
ADDRESS: PO Box 90606 87199 PHONE: 828-2200  
CONTRACTOR: N/A CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

#### PRE-DESIGN MEETING

☒ YES  
☐ NO  
☒ COPY OF CONFERENCE RECAP  
SHEET PROVIDED

DRB NO. \_\_\_\_\_  
EPC NO. \_\_\_\_\_  
PROJ. NO. \_\_\_\_\_

#### TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT  
☒ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION

#### CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☐ SITE DEVELOPMENT PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY APPROVAL  
☐ ROUGH GRADING PERMIT APPROVAL  
☒ GRADING/PAVING PERMIT APPROVAL  
☐ OTHER \_\_\_\_\_ SPECIFY

FEB 21 1992

DATE SUBMITTED: 2/20/92

BY: Mark Goodwin  
Mark Goodwin, PE

Highland Post Office (K18/D12)

Verbal chain of events -Roger Green

1. I informed Jackie I felt it was the responsibility of the City to install inlet, but to check with Jim Fink for sure.
2. Jackie informed me that Jim Fink agreed to install inlet.
3. Jim Fink later informed me he changed his mind and that the Post Office must install inlet, due to them changing conditions.
4. Jackie agreed to follow up with Post Office.

(WEEKS LATER)

5. I talked to Dwayne Sheppard. He said to research existence of previous R.O.W. easement across property
6. My research showed no easements ever existed and Dwayne said let the pieces fall where they may.

(WEEKS LATER)

7. Contacted by architect on status of City installing inlet, and ~~he~~ wondered if the Post Office contractor could just go ahead and install inlet himself. I said a work order was required with a bonded contractor, which current contractor was not.
8. Dwayne offered to cost share inlet installation, but City process would be required which would greatly increase cost and require considerable amount of time.
9. I recommended to architect that Post Office install the inlet at their expense and have Jackie prepare the design to process through DRC.
10. John Gallegos from storm drain maintenance stopped in the office and asked status of getting inlet installed. He said it is too expensive to keep pumping and would install inlet himself with maintenance funds
11. I wrote the latest memos to Jackie on May 24, 1988

FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR  
KEN SCHULTZ

CHIEF  
ADMINISTRATIVE OFFICER

GENE ROMO

DEPUTY CAO  
PUBLIC SERVICES

FRANK MARTINEZ

DEPUTY CAO  
PLANNING/DEVELOPMENT

BILL MUELLER

May 24, 1988

Jackie McDowell  
Chavez-Grieves Consulting Engineers  
4600-C Montgomery Boulevard, NE  
Albuquerque, New Mexico 87109

RE: HIGHLAND POST OFFICE (K-18/D12)

Dear Ms. McDowell:

As a follow-up to our previous conversations in regards to the off-site drainage problem of the Highlands Post Office, I have the following comments:

I have not heard back from John Manzanares of BPLW or yourself on the post office's position on correcting the flooding problem on Alvarado Drive adjacent to their new development. It was previously discussed that the City was willing to participate by including construction of a catch basin with an existing Public Works Contract and possibly cost share the actual construction expenses. The construction drawings and specifications would be provided by the Post Office and processed through the City's Design Review Committee.

This flooding has become a constant source of complaints and is requiring pumping by the Storm Drain Maintenance crews every time it rains.

I feel that this development, by regrading the Post Office site, has substantially increased the flooding problem by blocking previous overland flow paths. These off-site flows were not identified by your Preliminary Site Plan and Grading Plan submitted on March 2, 1987. At that time I brought to your attention that the elevations shown indicated a low area of the street with no drainage outfall, and you stated that this was a surveying error.

Based upon your response, the drainage scheme of your Preliminary Plan was approved, with a more detailed plan being required prior to building construction. No further drainage submittals have been made. It was later agreed that the survey was in fact correct, and that a substantial area of flooding would occur, and also be increased by development of this site as shown on the Preliminary Grading Plan.

Jackie McDowell  
May 24, 1988  
Page 2

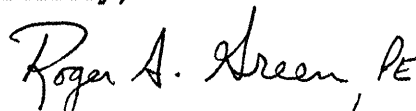
Since the Post Office has not requested any plat actions or building permits, this office has no mechanism to require that this development be responsible for correcting the flooding problem in the street. My understanding is that the City has no authority to even stop construction of the current development of the site.

In regards to previous questions about whether the project site once contained right-of-way for Coal Avenue, my research found that there never existed any right-of-way for Coal Avenue or drainage easements across the subject property. In 1959, there was a vacation action to vacate a cul-de-sac on Coal Avenue west of the subject property, and to extend Coal Avenue through the site, but this was never done.

In summary, I feel it is the responsibility of the Post Office, architect, and yourself to design and have constructed a storm drain inlet to eliminate the street flooding. If the original Conceptual Drainage Grading Plan had correctly identified off-site flows and addressed the surveyed street elevations, our requirement at that time would have been that the inlet be required at the time of Site Development.

Please contact this office with the status of the inlet design and construction schedule.

Cordially,

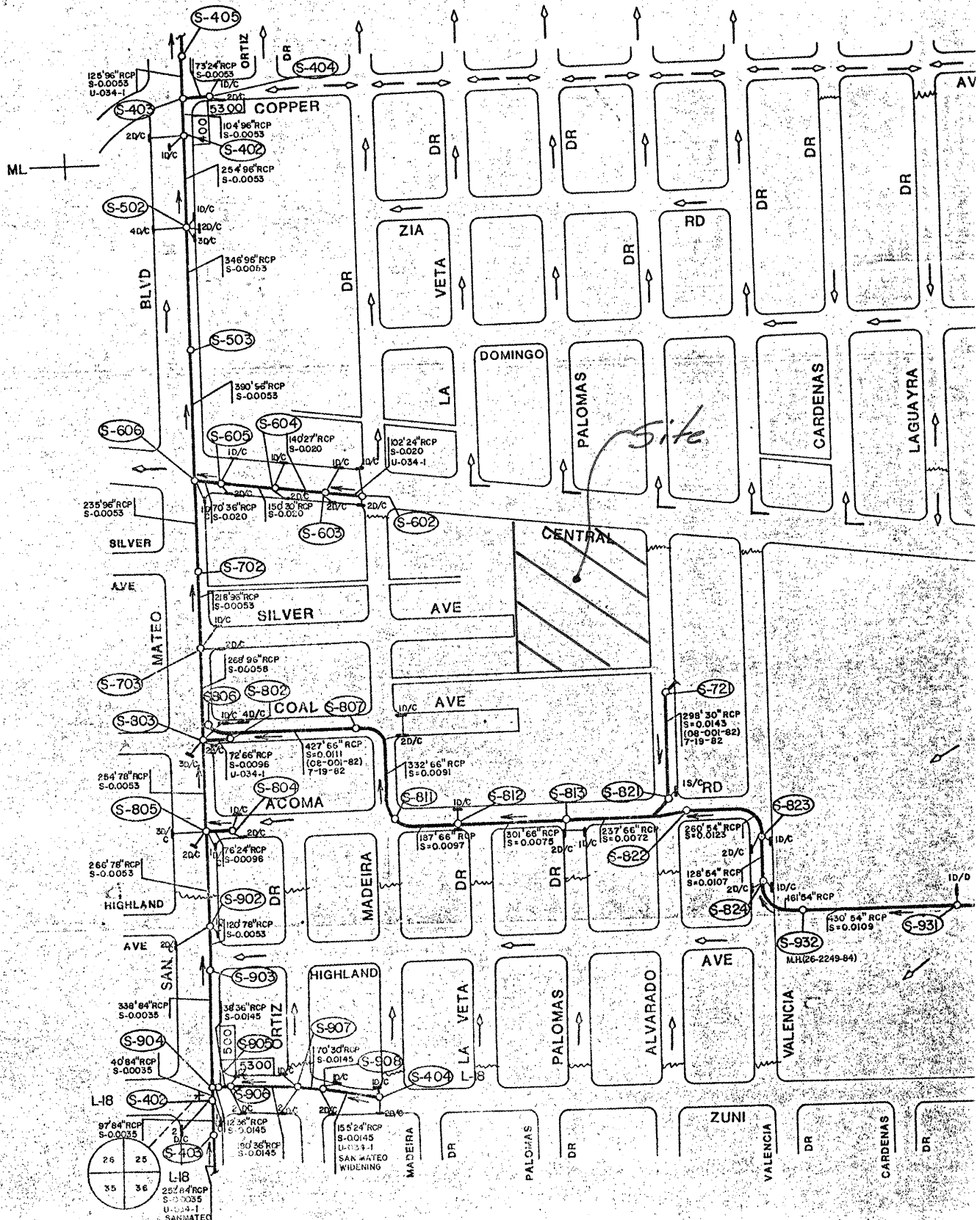
  
Roger A. Green, P.E.  
C.E./Hydrology Section

xc: John Manzanares, BPLW  
Dwayne Sheppard, COA  
Jim Fink, COA

RAG/bsj



NEXT SHEET No. K-175





D. Mark Goodwin & Associates, P.A.  
Consulting Engineers and Surveyors

JOB HIGHLAND POST OFFICE

SUBJECT HYDRAULICS

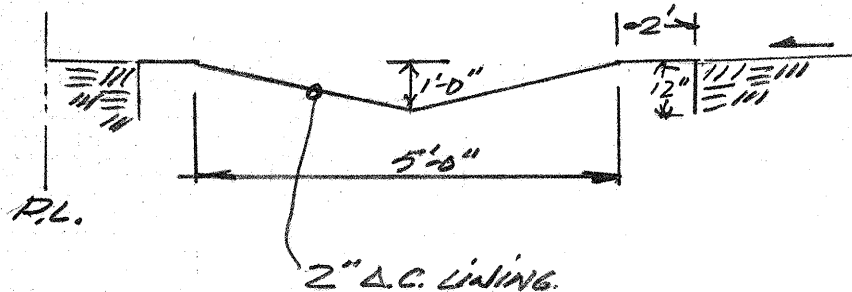
JOB NO. \_\_\_\_\_ SHEET 2 OF \_\_\_\_\_

BY ZG DATE FEB 19, 1992

CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

DRAIN PARKING LOT ADDITION FROM N.W. CORNER OF PARKING LOT STRAIGHT NORTH TO CENTRAL AVE, ENTERING THE STREET UNDER A 5' WIDE SIDEWALK DRAIN!

PROPOSED DRAIN CHANNEL



CHANNEL CAP @ BRIM

$$A = 5 \times 1/2 = 2.5$$

$$WP = 2 \times 2.69 = 5.38$$

$$R = \frac{2.5}{5.38} = 0.46$$

$$Q = 2.5 \frac{1.49}{.02} (0.46)^{.67} (.0074)^{1/2}$$

$$= 10 \text{ CFS, OK}$$

$$\frac{2.5}{2.69}$$



D. Mark Goodwin & Associates, P.A.  
Consulting Engineers and Surveyors

JOB HIGHLAND Post Office  
SUBJECT HYDROLOGY  
JOB NO. \_\_\_\_\_ SHEET 1 OF \_\_\_\_\_  
BY ZMG DATE 2-19-92  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

PREPROJECT FLOWS - 100 YR -  $T_C = 10$  mins.

$$A_D = 0.61 \text{ AC.}$$

$$A_C = 0.78 \text{ AC.}$$

$$\underline{1.39 \text{ AC.}}$$

FEB 21 1992

$$\text{COMP. } C = \frac{0.95(0.61) + 0.40(0.78)}{1.39} = 0.64$$

$$I = 2.28(6.84)(10)^{0.51} = 4.82$$

$$Q = 0.64(4.82)(1.39) = 4.3 \text{ CFS} \quad \leftarrow$$

POST-PROJECT FLOWS -

$$A_D = 0.89$$

$$A_C = \underline{0.50}$$

$$\underline{1.39 \text{ AC.}}$$

$$\text{COMP } C = \frac{0.95(0.89) + 0.40(0.50)}{1.39} = 0.76$$

$$I = 4.82$$

$$Q = 0.76(4.82)(1.39) = 5.1 \text{ CFS} \quad \leftarrow$$

$$\Delta Q = 5.1 - 4.3 = \underline{\underline{0.8 \text{ CFS.}}} \quad \leftarrow$$

SO, ON-SITE FLOW WILL INCREASE FROM 4.3 TO 5.1 CFS (0.8 CFS INCREASE) DURING 100 YR STORM.

TRYING TO FORCE THE FLOW IN THE NEW PARKING AREA TO FLOW SOUTH, AS DOES THE EXIST. PARKING AREA, WOULD REQUIRE A POSITIVE GRADE IN A NORTHERLY DIRECTION WITHIN THE NEW PARKING AREA. IF THE GRADE WERE APPROX 2%, THE AVERAGE ELEV ALONG THE NORTHERN EDGE OF THE FINISHED PARKING LOT WOULD BE 740, WHICH WOULD REQUIRE A 3 FT RETAINING WALL ALONG THE N EDGE. RUNNING THE FLOW TO THE NORTH WOULD TAKE ADVANTAGE OF EXIST. TOPOGRAPHY WHICH FLOWS GENERALLY NORTHWEST ACROSS THE PROPERTY TOWARD CENTRAL AVE.

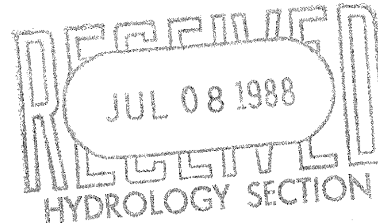


KEN SCHULTZ  
MAYOR

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 8, 1988



Scott C. Richardson  
KE Services Corporation  
1135 Broadway NE Room 202  
Albuquerque, New Mexico 87101

RE: Change Order for Highland Post Office (File No. K-18/D12)

Dear Mr. Richardson:

As per our discussion attached is an approved design for a catch basin to be construction in front of the new Highland Post Office presently being built at 111 Alvarado SE. It is my understanding that you will have this constructed as soon as possible. As you are aware it is extremely important that this improvement be constructed immediately since without, you are placing private property in danger of being flooded, a situation that did not exist before the construction of the Post Office facility.

Please be advised that a separate excavation permit is required for construction within City right-of-way. Also, the contractor must have on hand a copy of this approval letter when applying for his excavation permit.

When requesting the final inspection, please provide the inspector with the file number.

If I can be of further assistance, please feel free to call me at 768-2778.

Cordially,

Dan Hogan P.E., L.S.  
Chief Drainage Engineer

DH:cma

xc: *Fred Aguirre*  
Becky Sandoval  
WPUDD426

RECEIVED

JUL 07 1988

CITY OF ALBUQUERQUE

Albuquerque, New Mexico

LIQUID WASTE DIVISION

INTER-OFFICE MEMORANDUM

July 6, 1988

TO: Mike Ciesielski, Asst. to Deputy CAO, Mayor's Office  
FROM: Glenn Jurgensen, *Glenn Jurgensen* Engineering Asst., Storm Maint., PWD  
SUBJECT: FLOODING ON THE 100 BLOCK OF ALVARADO S.E.

The flooding experienced on the 100 block of Alvarado S.E. was created by the installation of a U.S. Post Office on the west side of the block. The development of this lot has cut off the natural drainage path that the rain water would have followed prior to the construction. Due to the fact that any Federal Building project does not need a building permit to construct their project, it was not discovered that this drainage path had been destroyed.

After flooding of this street was reported to this office we have been engaged in an on-going battle to determine as to who should be the responsible party for the installation of a drop inlet and approximately 20 feet of 18 inch sewer line to tie into the existing system. Our office has been in close contact with Mr. Dan Hogan of the City of Albuquerque Hydrology Design Division to expedite a solution to this oversight. We are aware of the extreme annoyance and cost to the public that this problem causes and hope for a quick solution.

For any further information on the status of this problem, contact myself at 291-6214 or Dan Hogan at 768-2778.

GJ/ds

xc: Ed Archuleta, Asst. Director, Operations, PWD  
David Brosman, Manager, Liquid Waste Division, PWD  
James A. Fink, P.E., Line Maintenance Engineer, LWD, PWD  
David Salcido, Superintendent, Storm Maintenance, LWD, PWD  
File

*Rogee*  
*Is the post office going to*  
*take care of this problem?*  
*Glenn Jurgensen*



**CHAVEZ—GRIEVES / CONSULTING ENGINEERS, INC.**

4600 MONTGOMERY N.E., BUILDING C, #101  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 881-7376

November 11, 1987

Mr. Don Fletcher/ Mr. John Manzanares  
BPLW ARCHITECTS & ENGINEERS  
American Financial Center  
Building #5, Suite 400  
2400 Louisiana NE  
Albuquerque, New Mexico 87110

RE: HIGHLAND POSTAL STATION SITE DRAINAGE

Dear Don/John:

As requested, we have prepared the following sequence of events, relating to the drainage problem in Alvarado Drive adjacent to the Highland Postal Station Site.

Upon assignment of the above mentioned project, the USPO supplied us with a survey prepared by A & E Engineering, a drainage report prepared by Isaacson & Arfman Consulting Engineering Assoc., and a site plan dated January 1986. The site plan had the building and parking lot located adjacent to Central Avenue and did not encroach into the old Coal Avenue right-of-way. ?

As the project proceeded through the design phases, the building and parking lot locations shifted to the south side of the property, directly over the old Coal Avenue right-of-way. At the time the change was made, we expressed our concerns to the Post Office regarding the building being located over the historic flood plain in the area.

We were told to review the report prepared by Isaacson & Arfman, in reference, which was addressed to the Federal Emergency Management Agency (FEMA) and which indicated that the flood plain areas in the vicinity of the Highland site had been significantly reduced. In addition, their calculations indicated that the storm drain which was located at the intersection of Valencia and Acoma had a capacity in excess of the required flow rate. This indicated to us that as a result of his calculations and the installation of the State Fair Grounds Storm Drainage System that, in fact, the area upon which the building was located had been effectively removed from the flood plain. Further investigations indicated

was never a vacation, nor did R.O.W  
ever exist,  
that the vacation of Coal Avenue right-of-way had eliminated the original easement and did not retain any drainage easement through the site. This further indicated that the need for accommodating upstream flows had been eliminated as a design consideration on the site.

At this time, we recommended that the final plans be reviewed by the City in order to obtain a complete review and approval of the proposed development. The preliminary plans were reviewed and approved by the City, however, the type of review which occurs during a Conceptual Drainage Plan Review is not as thorough as those provided during a issuance of a construction permit. As a result, the project was designed in accordance with the information provided both by the Post Office and shown on the original survey. As developed, it has turned out that the site is subject to some overland flows as a result of a low spot in Alvarado which does accumulate flows from upstream areas and has not been provided with a drop inlet to the existing storm sewer. It should be noted that the installation of the drop inlet would not overtax the storm sewer capacity and would eliminate the overland flows as they presently exist.

Presently, there are three options available to the Post Office:

- a. Install the storm inlet at the lower elevation in Alvarado Drive and eliminate the overland flows.
- b. Relocate and regrade the site to allow the storm water from Alvarado Drive to continue to cross the site along with the Public Drainage easement recorded for the City or,
- c. Approach the City with the problem listing the sequence of events and request that the City determine the responsible parties for construction of the storm inlet.

Normal design of City projects would have provided for the installation of a drop inlet at the low point in Alvarado during the "San Mateo<sup>storm</sup> Drain Improvements Phase III" project in 1981. The alternative would have been that they obtain a drainage easement through the Post Office site in order to allow the overland flows to continue. Since the easement was not obtained, it is our opinion that the responsible party is the City of Albuquerque. However, there is precedence that indicates that whether an easement exists or not, areas that have historically transported flood flows are required to continue to handle them. It would appear that it would be in the Post Office's best interest to request that the

City investigate the problem and provide a solution at the City's cost. We have initiated this process and will be available to assist the Post Office in any future meeting. Should a decision be made by the City prior to hearing from the Post Office, we will forward the information to you.

Please call if we can be of any further assistance in this matter.

Very truly yours,

CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.

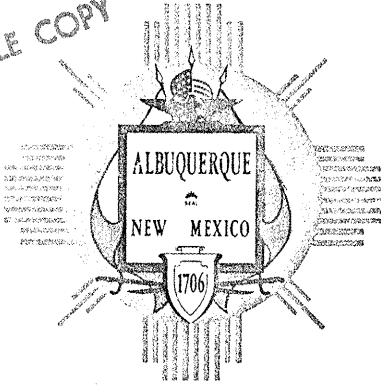
*Jackie S. McDowell for*

Victor J. Chavez, P.E.

JSM:mf



FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

March 17, 1987

Jackie McDowell  
Chavez-Grievess Consulting Engineers  
4600-C Montgomery Blvd., NE  
Albuquerque, New Mexico 87109

RE: CONCEPTUAL GRADING PLAN FOR HIGHLAND POST OFFICE RECEIVED MARCH  
2, 1987 FOR FOUNDATION PERMIT APPROVAL (K-18/D12)

Dear Jackie:

The above referenced submittal dated February 27, 1987, is approved for Foundation Permit sign-off by Hydrology. Locate the TBM on the plan view and include copies of this approved plan with the construction sets routed for sign-off.

Prior to Building Permit sign-off, a detailed Drainage and Grading Plan is required. Be sure to include off-site elevations, typical cross-sections along adjacent properties where retaining walls are required, and a Drainage Easement between the two tracts involved.

If you have any questions regarding this project, call me at 768-2650.

Cordially,

Roger A. Green, P.E.  
C.E./Hydrology Section

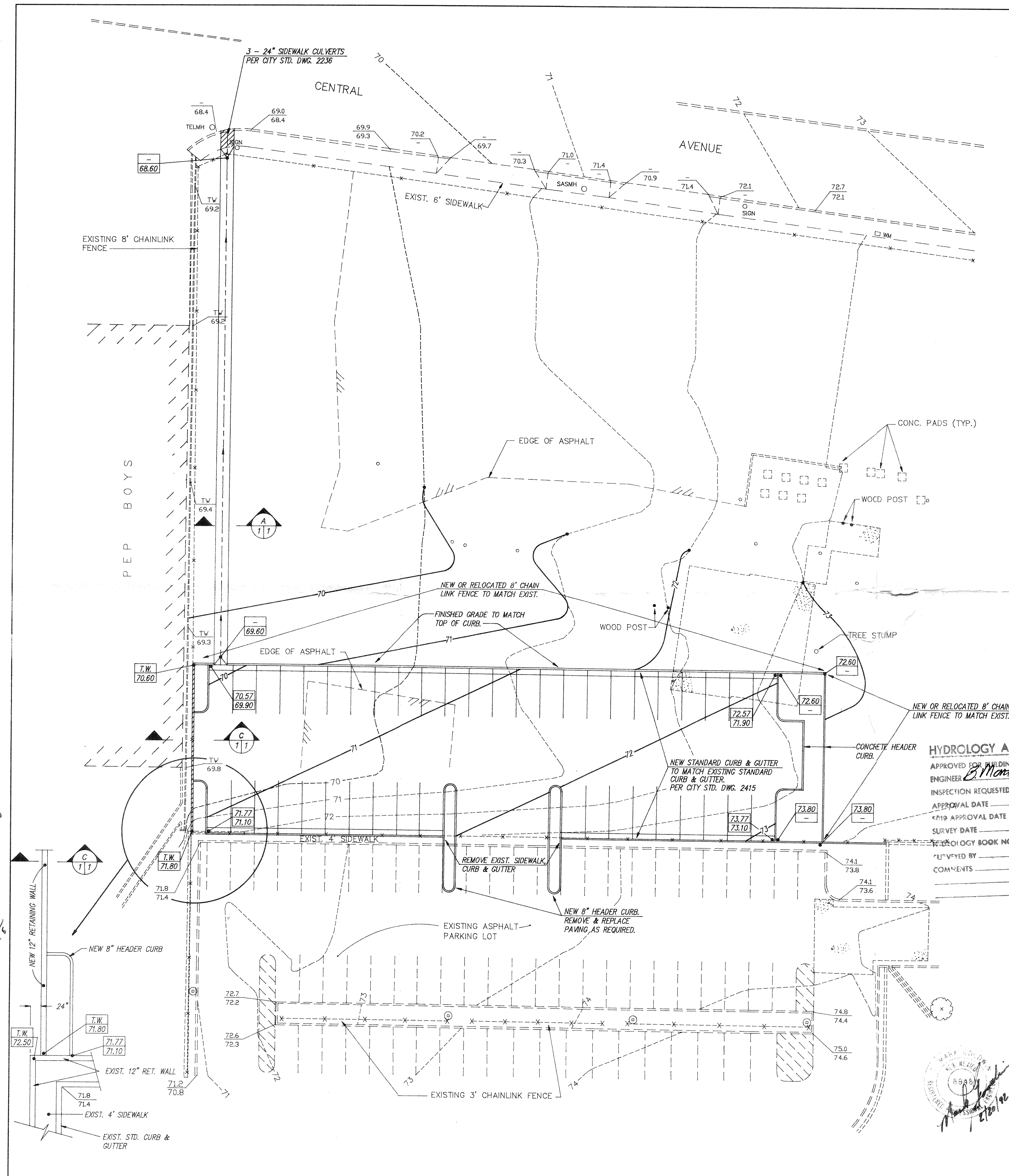
RAG/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500



NOTICE TO CONTRACTOR

1. 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.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "City of Albuquerque Standard Specifications for Public Works Construction" (1986 Edition).
3. Two working days prior to any excavation, Contractor must contact the Line Locating Service, 765-1234, for location of existing utilities.
4. 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 of delay.
5. Backfill compaction shall be according to residential street use.
6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.
7. Contractor is responsible for obtaining excavation permit for the S.O. 19 and provide proof of acceptance by the City prior to Hydrology sign-off for Certificate of Occupancy.

DRAINAGE FACILITIES WITHIN CITY RIGHT OF WAY

Design Approval

*Bernie Montoya*  
Hydrology Section

3/3/92  
Date

Inspection Approval

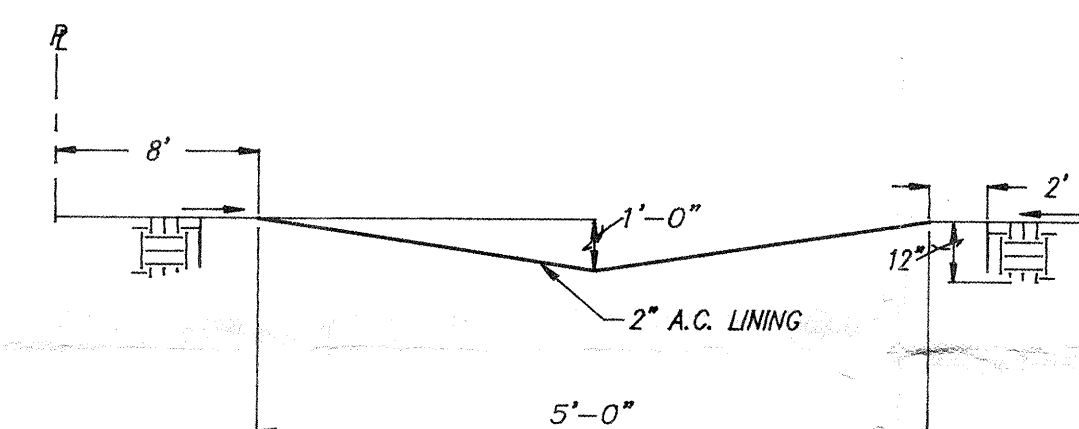
Construction Section

Date

Acceptance

Construction Section/Permits

Date



SECTION

N.T.S.

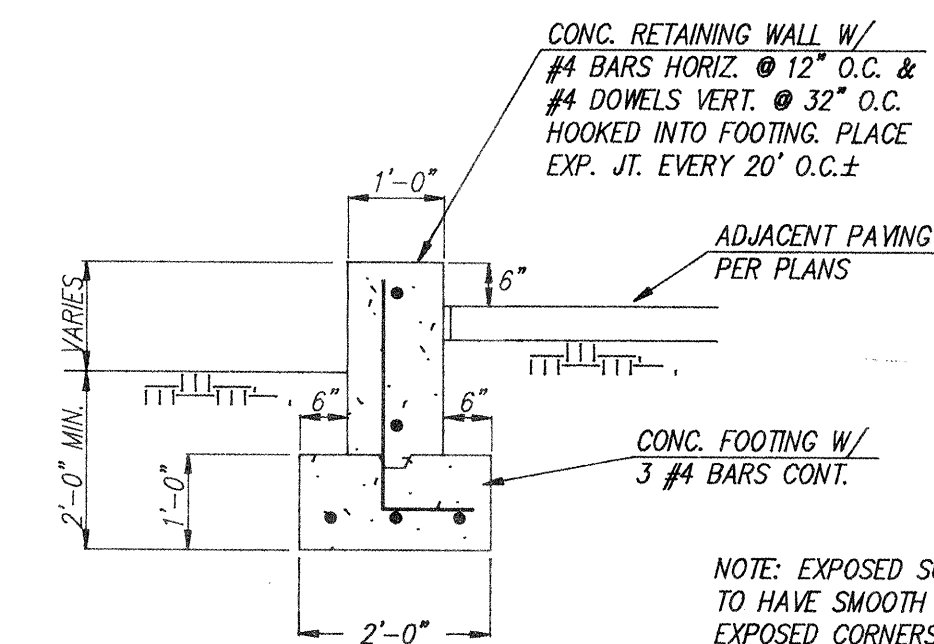
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1/1

HYDROLOGY APPROVAL & INSPECTION

APPROVED FOR BUILDING PERMIT  
ENGINEER *B. Montoya* DATE 3/3/92  
INSPECTION REQUESTED DATE  
APPROVAL DATE  
CHIP APPROVAL DATE  
SURVEY DATE  
HYDROLOGY BOOK NO. / PAGE NO.  
CHECKED BY  
COMMENTS

CONCRETE HEADER CURB-PAVEMENT SECTION

N.T.S.

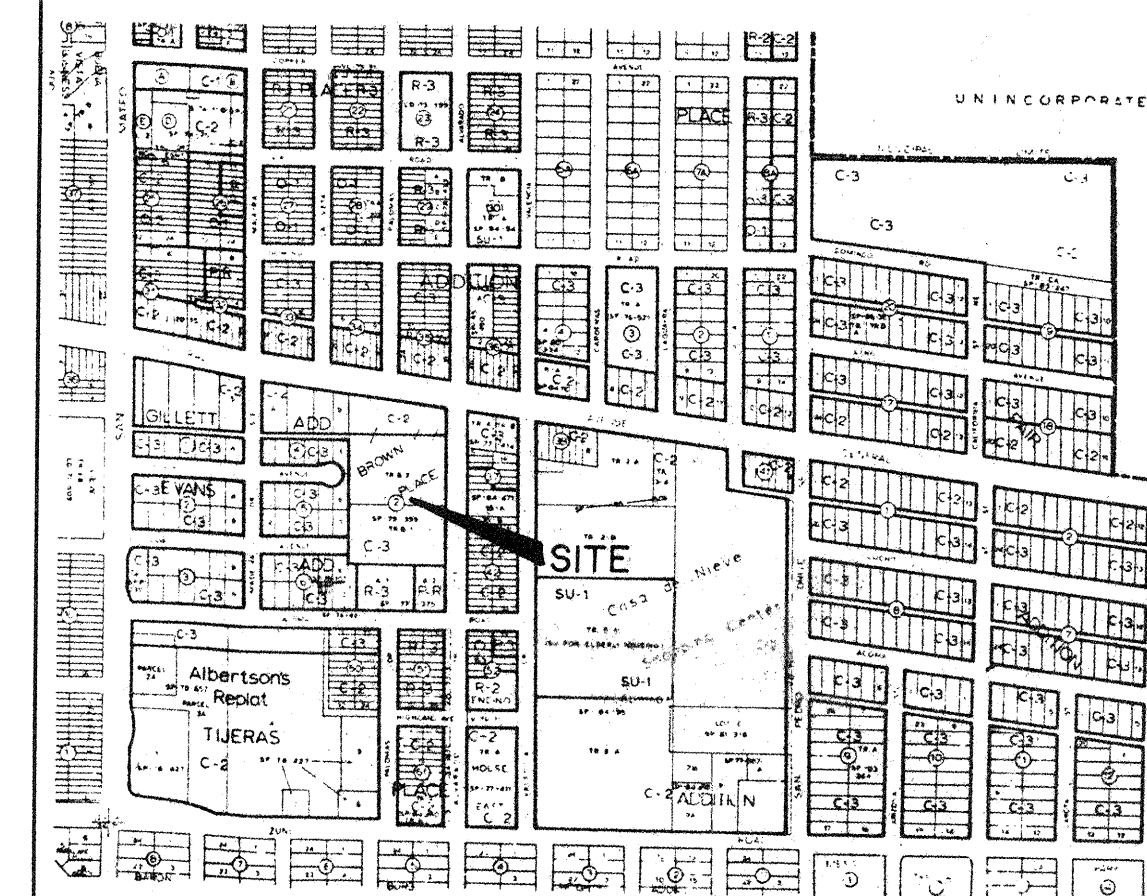


NOTE: EXPOSED SURFACES OF WALL TO HAVE SMOOTH RUBBED FINISH. EXPOSED CORNERS TO HAVE 3/4\"/>

RETAINING WALL SECTION

N.T.S.

C  
1/1



VICINITY MAP

ZONE MAP: K-18-Z

TBM (TEMPORARY BENCHMARK)

STATION IS LOCATED 41.4 FT. NORTH FROM CENTERLINE OF CENTRAL, 130.7 FT. EAST FROM CENTERLINE OF ALVARADO N.E. AND 132.0 FT. WEST FROM CENTERLINE OF VALENCIA N.E.  
STATION IS A 2\"/>

BENCHMARK

STATION IS LOCATED 41.4 FT. NORTH FROM CENTERLINE OF CENTRAL, 130.7 FT. EAST FROM CENTERLINE OF ALVARADO N.E. AND 132.0 FT. WEST FROM CENTERLINE OF VALENCIA N.E.  
STATION IS A 2\"/>

LEGAL DESCRIPTION

TRACTS "B-1", "B-2" BROWN PLACE ADDITION

LEGEND

- EXISTING CONCRETE CURB
- PROPERTY LINE
- CONTOUR
- EXIST. SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- FINISHED CONTOUR

NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR DETAILED DIMENSIONS.
2. CONTRACTOR SHALL LEAVE EARTHEN SWALE ADJACENT TO NORTH PROPERTY LINE IN PLACE UNTIL FINAL GRADING FOR EROSION & SEDIMENTATION CONTROL.
3. OFF-SITE FLOWS DO NOT ENTER THIS SITE.
4. SITE DOES NOT LIE WITHIN A FLOOD ZONE, BUT DOES CONTRIBUTE FLOWS.
5. ADD 5200 TO ALL ELEVATIONS.  
ALL ELEVATIONS ARE MEAN SEA LEVEL (M.S.L.)

FEB 2 1992

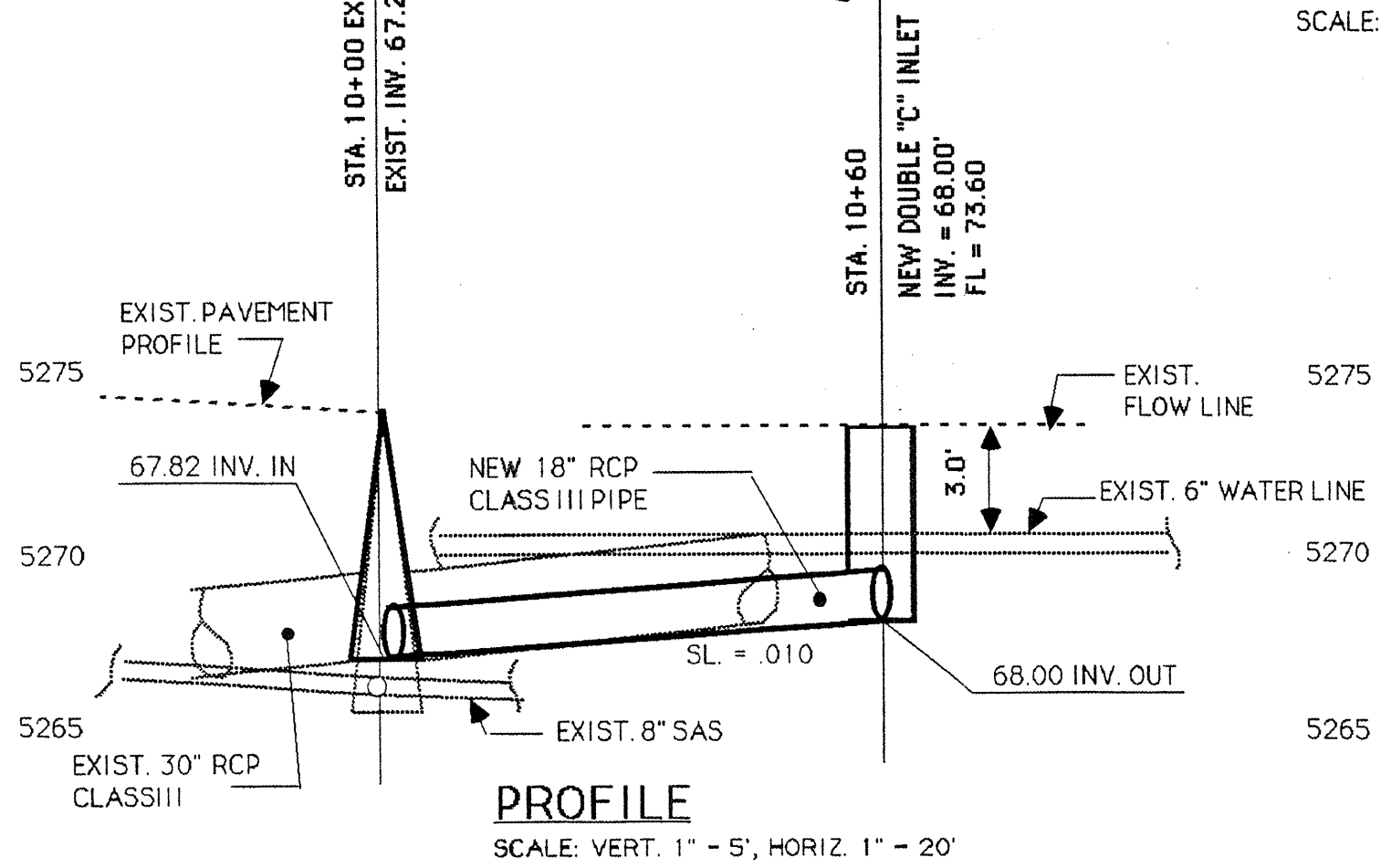
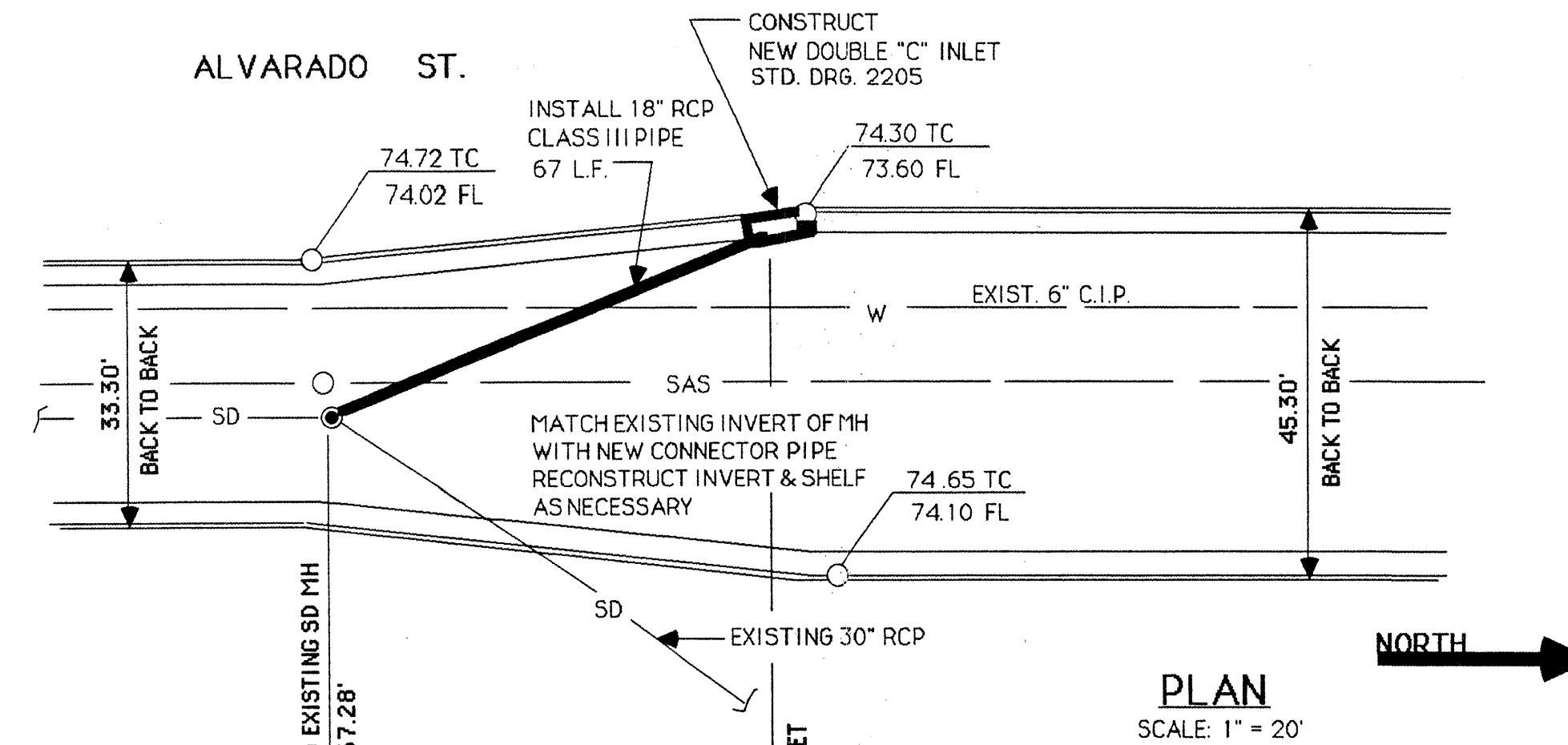
U.S.P.S. - HIGHLAND STATION

GRADING & DRAINAGE PLAN

*dmg*

D. MARK GOODWIN & ASSOCIATES, P.A.  
CONSULTING ENGINEERS & SURVEYORS  
P.O. BOX 90606  
ALBUQUERQUE, NEW MEXICO 87199  
(505) 828-2200

Designed: ZMG	Drawn: JMB	Checked: DMG	Sheet C1 of 1
Scale: 1"=20'	Date: 2/92	Job: 9209	



S.O. 19	
ALVARADO DRAINAGE IMPROVEMENTS	
DESIGNED BY: DAN HOGAN P.E. L.S.	
DRAWN BY: R. BACA	SHT. 1 OF 1
DATE: 7-7-88	
APPROVED BY: <i>[Signature]</i>	