

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 20, 1994

Kim Kemper Kemper-Vaughan 3700 Coors Rd. SW Albuquerque, NM 87121

RE: DRAINAGE PLAN FOR MCDONALD'S PLAY PLACE @ 12601 MONTGOMERY BLVD. NE (F23-D4C) ENGINEER'S STAMP DATED 12/1/9.

Dear Mr. Kemper:

Based on the information provided on your December 2, 1994 submittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

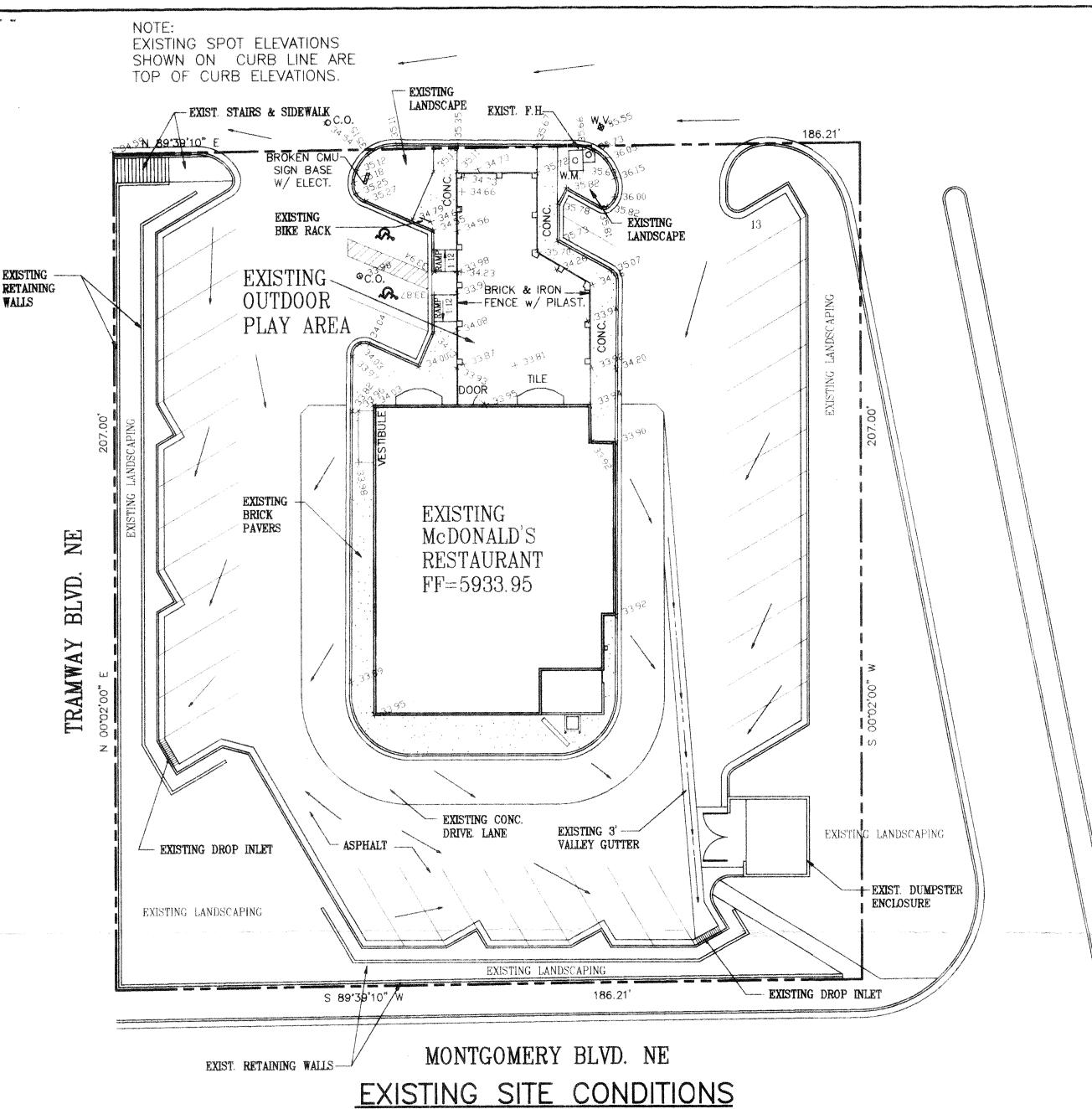
Bernie J. Montoya, CE Engineering Associate

BJM/dl

c:

Andrew Garcia

File



GENERAL NOTES

- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- 2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- 4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHTS—OF—WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
- 5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY BERNALILLO COUNTY FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

DRAINAGE PLAN

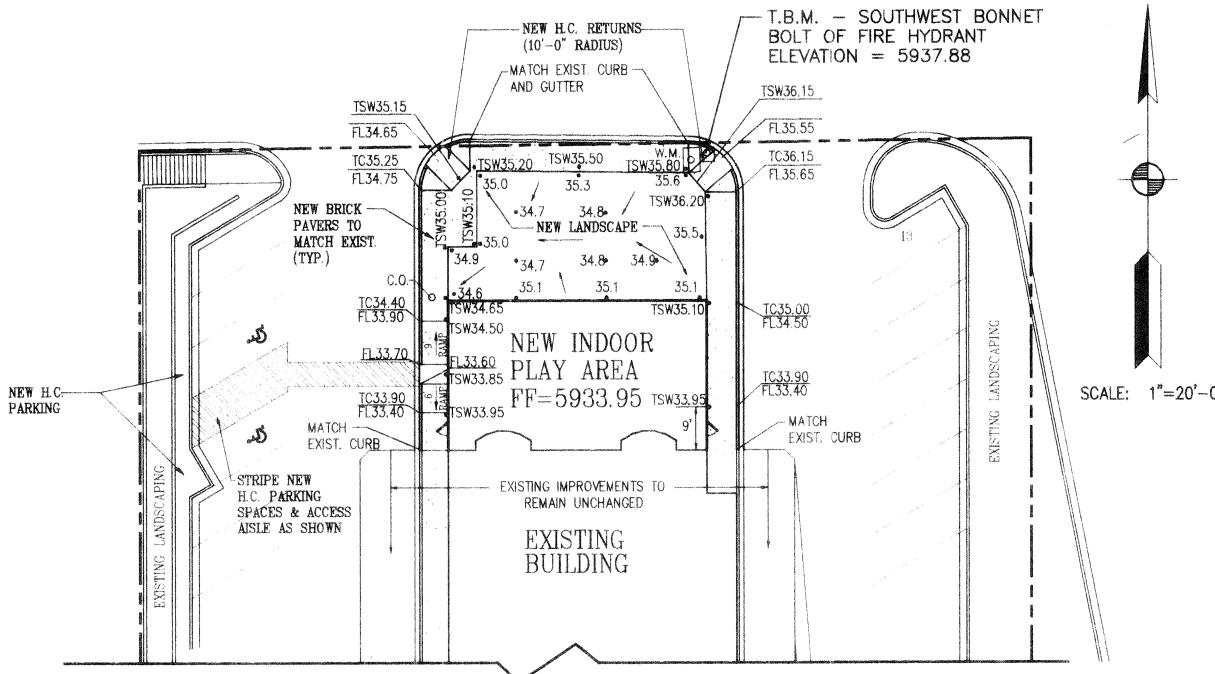
THE SUBJECT SITE IS LOCATED ON THE NORTHEAST CORNER OF TRAMWAY BOULEVARD N.E. AND MONTGOMERY BOULEVARD N.E. AS SHOWN ON PANEL 18 OF THE FEDERAL EMERGENCY MANAGMENT AGENCY FLOOD BOUNDARY AND FLOODWAY MAP THE SITE IS NOT WITHIN A DESIGNATED FLOOD HAZARD AREA.

THE EXISTING SITE IS A MCDONALD'S RESTAURANT WITH AN OUTDOOR PLAY GROUND AREA. THE PLAY AREA SURFACE IS EITHER TILE, BRICK, OR A RUBBER MAT MATERIAL BUT, ALL ARE ON A CONCRETE SURFACE. THE PLANNED IMPROVEMENT INCLUDE CONSTRUCTING AND INDOOR PLAY GROUND AREA WITH RENOVATIONS TO THE PARKING LOT AND LANDSCAPE. THE AREA TO THE NORTH OF THE SITE IS A LARGE ASPHALT PARKING LOT FOR A SMITHS FOOD STORE.

THE ORIGINAL GRADING AND DRAINAGE PLAN FOR THIS SITE WAS PREPARED BY WILSON & COMPANY IN AUGUST OF 1988. AS SHOWN ON THAT PLAN, AND AS MAINTAINED ON THIS PLAN, THERE IS A WATERBLOCK AT THE TWO DRIVEWAY ENTRANCES TO THE RESTAURANT. THE NEW H.C. RETURNS BEING INSTALLED AT THE NORTH END OF THE PROPERTY ARE SHOWN TO BE PLACED AT NEARLY THE IDENTICAL GRADE AS THE EXISTING RETURNS TO MAINTAIN AREA DRAINAGE PATTERNS.

THIS MCDONALD'S PROPERTY DRAINS TO TWO EXISTING DROP INLETS IN THE SOUTH END OF THE PARKING LOT AREA WHICH THEN DRAINS INTO EXISTING CITY STORM SEWER FACILITES (C.O.A. PROJECT 3521). AS SHOWN ON THE CALCULATION HEREON, THE NET RESULT OF THE PLANNED IMPROVEMENTS IS A SMALL REDUCTION IN PEAK DISCHARGE AND VOLUMETRIC RUNOFF.

THE EXISTING SURVEY DATA SHOWN WAS PREPARED BY RIO GRANDE ENGINEERING AND SURVEYING, INC., IN NOVEMBER 1994. A SUBSEQUENT FIELD INSPECTION PERFORMED BY THIS OFFICE REVEALED THAT ALL THE INFORMATION SHOWN IS CONSISTANT WITH THE ACTUAL CONDITIONS THAT EXIST IN THE FIELD.



PROPOSED SITE CONDITIONS

CALCULATIONS

THE FOLLOWING CALCULATIONS WERE DEVELOPED USING THE CITY OF ALBUQUERQUE DPM SECTION 22.2

SITE CHARACTERISTICS:
SITE LOCATION: ZONE 4
PRECIPITATION: P = 2.90 inches

LAND TREATMENT:

UNCOMPACTED SOIL — TREATMENT A

LANDSCAPE — TREATMENT B

COMPACTED SOIL — TREATMENT C

BUILDINGS & PAVING — TREATMENT D

EXCESS PRECIPITATION: TREATMENT A E=0.80 inches TREATMENT B E=1.08 inches TREATMENT C E=1.46 inches TREATMENT D E=2.64 inches

PEAK DISCHARGE:

TREATMENT A = 2.20 cfs/acre
TREATMENT B = 2.92 cfs/acre
TREATMENT C = 3.73 cfs/acre
TREATMENT D = 5.25 cfs/acre

| | | | | EXISTING | | PF | ROP | OSED |
|-------------|-----------------------------|-----------|---|----------|-------|-----|------------------------------|-------|
| TOTAL AREA | sindonini. dimenini | 0.885 AC. | | | | | | |
| TREATMENT A | -paragraphic appropriate | 0.000 AC. | Materials condition | 0.00% | 0.000 | AC. | oreactions: | 0.00% |
| TREATMENT B | elitariani seturani | 0.210 AC. | CONTRACTOR | 23.7% | 0.227 | AC. | (Alley Allen (Alley Pile) | 25.7% |
| TREATMENT C | agentos (storpes | 0.000 AC. | canant canant | 0.00% | 0.000 | AC. | September | 0.00% |
| TREATMENT D | nderson- ediments | 0.675 AC. | adicustes aniquesa | 76.3% | 0.658 | AC. | MANAGE TO | 74.3% |
| | | | | | | | | |

ONSITE — EXCESS PRECIPITATION & VOLUMETRIC RUNOFF: EXISTING RUNOFF:

WEIGHTED E = [(1.08)(0.210) + (2.64)(0.675)]/0.885= 2.27 inches

V100-6hr = (2.27)(0.885)/12 = 0.1674 acre ft = 7,290 cf DEVELOPED RUNOFF:

WEIGHTED E = [(1.08)(0.227) + (2.64)(0.658)]/0.885= 2.24 inches

V100-6hr = (2.24)(0.885)/12 = 0.1652 acre ft = 7,195 cf

ONSITE - PEAK DISCHARGE:

EXISTING DISCHARGE: Q100 = (2.92)(0.210) + (5.25)(0.675) = 4.16 cfs

DEVELOPED DISCHARGE: Q100 = (2.92)(0.227) + (5.25)(0.658) = 4.12 cfs

RESULTS:

DEVELOPED VOLUMETRIC RUNOFF:

7,290 - 7,195 = 95 cfs DECREASE IN RUNOFF VOLUME DEVELOPED PEAK DISCHARGE:

4.16 - 4.12 = 0.04 cfs DECREASE IN PEAK DISCHARGE

GENERAL LEGEND

CLEAN OUT

| EXISTING SPOT ELEV. | F 36.36 | | | | |
|---------------------------|-------------------|--|--|--|--|
| PROPOSED SPOT ELEVATION | 56.4 _% | | | | |
| FLOWLINE | | | | | |
| FLOW DIRECTION ARROW | | | | | |
| CONCRETE/BRICK | | | | | |
| TOP OF CURB ELEVATION | TC | | | | |
| TOP OF SIDEWALK ELEVATION | TSW | | | | |
| FLOWLINE ELEVATION | FL | | | | |
| WATER METER | W.M. | | | | |
| | | | | | |

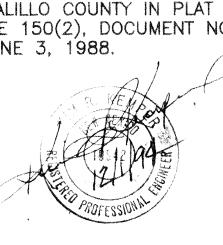
BENCH MARK

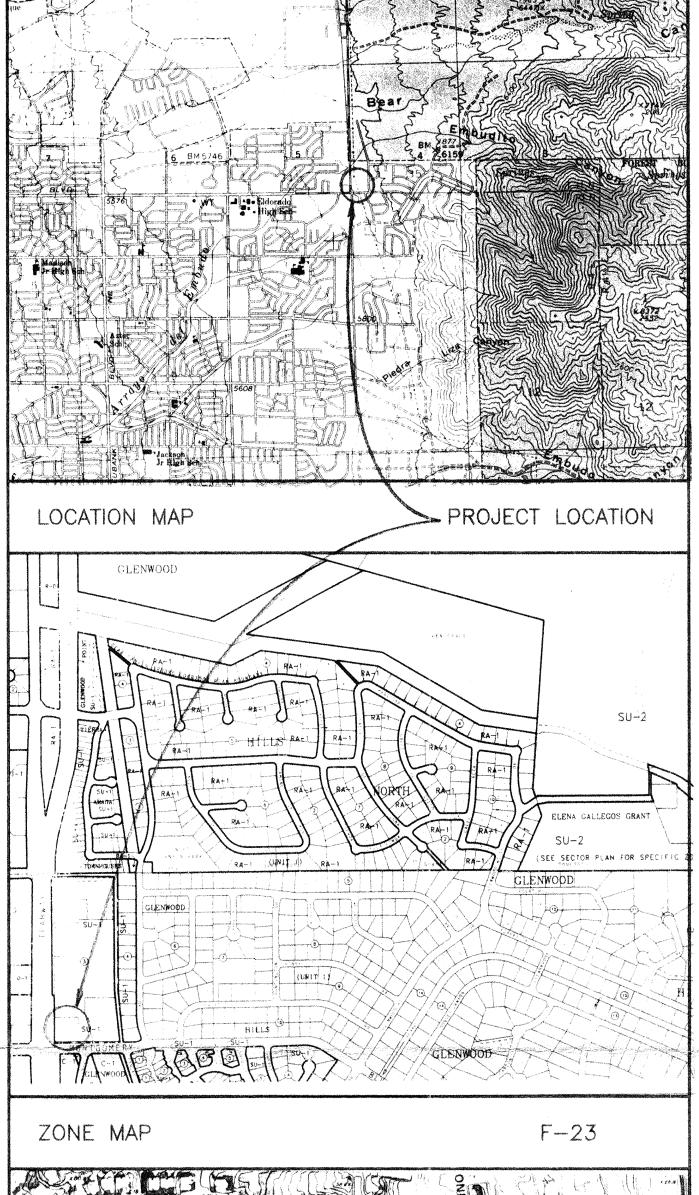
CITY OF ALBUQUERQUE CONTROL STATION 18-F23. A 1-3/4" ALUMINUM DISK STAMPED "ACS BM, 18-F23", EPOXIED TO THE TOP OF THE CURB AT THE ENE CURB RETURN AT THE NORTHEAST CORNER OF MONTGOMERY BLVD. AND BLACKSTONE ROAD.

C.O.

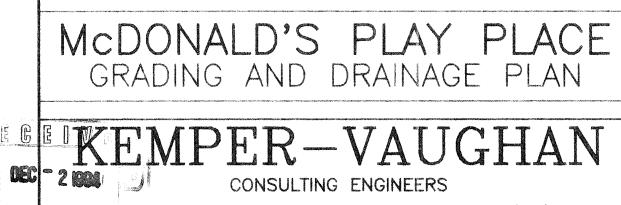
LEGAL DESCRIPTION

TRACT C OF REPLAT OF LOTS 1 THROUGH 3, BLOCK 3 OF GLENWOOD HILLS ADDITION, UNIT 1 SITUATED IN SECTION 35, T.11 N, R. 4 E., N.M.P.M., BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK IN BERNALILLO COUNTY IN PLAT BOOK C36, PAGE 150(2), DOCUMENT NO. 8849870 ON JUNE 3, 1988.









CONSULTING ENGINEERS

3700 COORS RD. N.W. • ALBUQUERQUE, NEW MEXICO 87120 • (505) 831-4520

Designed KRK Drawn SE Checked KRK Sheet of

File McDONALD Date NOVEMBER 1994