

CITY OF ALBUQUERQUE



December 8, 2006

Patrick J. Conley, P.E.
Smith Engineering Company
2201 San Pedro Dr NE
Albuquerque, NM 87110

Re: Northwest Quadrant Skate Park Hydrology Plan
Engineer's Stamp dated 11-27-06 (B13/D23)

Dear Mr. Conley,

Based upon the information provided in your submittal dated 11-30-06, the above referenced plan is approved for Building Permit and SO19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit is required for construction within City R/W. A copy of this approval letter must be on hand when applying for the excavation permit.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, E.I.
Engineering Associate, Planning Dept.
Development and Building Services

C: file
Antoinette Baldonado, Excavation and Barricading
Edward Elwell, Street/Storm Drain Maintenance

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov



Smith Engineering Company

A Full Service Engineering Company

November 30, 2006

City of Albuquerque
Development and Building Services
Planning Department
PO Box 1293
Albuquerque, NM 87103

Attention: Mr. Brad Bingham, PE

**Re: Northwest Quadrant Skate Park
Coors Bypass Rd. NW
SEC# 105632**

Mr. Bingham:

Attached is the grading and drainage plan for your review and approval. We are performing this work for the City Parks and Recreation. Please let us know if you have any questions or need additional information.

Sincerely,

Smith Engineering Company

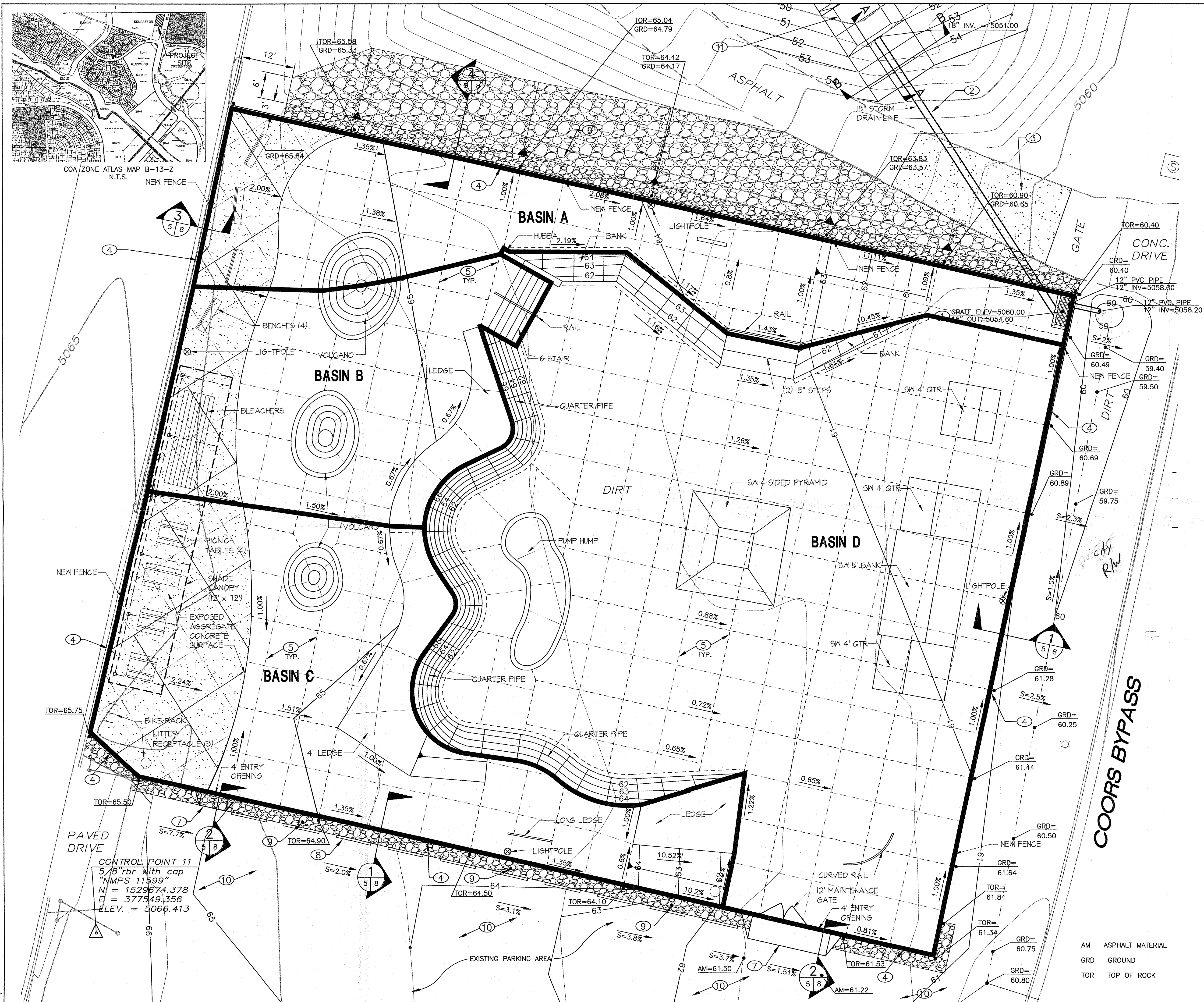
Ray C. Chavez, EI
Engineering Associate

Reviewed By:

Patrick J. Conley, PE
Project Manager

Enclosure

cc: File



KEYED NOTES:

1. CONSTRUCT SINGLE "D" CATCH BASIN PER COA STD DWG 2206.
2. INSTALL 72 LF OF CLASS IV 18" RCP STORM DRAIN AT S=0.050 FT/FT.
3. REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT FOR INSTALLATION OF THE NEW STORM DRAIN. SEE NEW PAVEMENT SECTION ON DETAIL SHEET.
4. FENCE SECTION AND CURB. SEE DETAIL SHEET.
5. CONTROL JOINTS. SEE ARCHITECTURAL FOR DETAILS.
6. INSTALL 6" TYPE VL RIP-RAP WITH FILTER FABRIC. SEE DETAIL SHEET.
7. CONTRACT ACCESS RAMP. SEE DETAIL SHEET.
8. INSTALL 10'-8" PRE-CAST CONCRETE BUMPERS AT LOCATIONS SHOWN.
9. INSTALL "NO PARKING" SIGN PER MUTCD STANDARDS. POST INSTALLATION SHALL BE PER COA STANDARD SPECIFICATIONS.
10. GRADE THIS AREA TO GRADES SHOWN. PLACE ASPHALT MILLINGS OVER AREAS WHEN GRADING IS COMPLETE.
11. RIP RAP BASIN, SEE SITE DATA SHEET.

HYDROLOGY:

PROJECT DESCRIPTION:

THE PROJECT SITE IS LOCATED NEAR THE COTTONWOOD MALL OFF OF THE COORS BYPASS ROAD NEXT TO THE CIBOLA HIGH SCHOOL PARKING LOT. THE SITE IS AN UNDEVELOPED LOT WITH NATURAL VEGETATION IN ITS EXISTING CONDITION. THE SITE IS APPROXIMATELY 0.661 ACRES IN AREA AND WILL BE DEVELOPED INTO A SKATE PARK WITH 100 PERCENT IMPERVIOUS AREA. THE RUNOFF WILL DRAIN TO A PROPOSED TYPE "D" INLET LOCATED IN THE NORTHEAST CORNER OF THE SITE. AN 18" STORM DRAIN WILL BE UTILIZED AS AN OUTFALL TO AN EXISTING DETENTION POND. THE AREA OF THE SITE IS VERY SMALL RELATIVE TO THE TOTAL BASIN AREA THAT DRAINS TO THE EXISTING DETENTION POND. CONSEQUENTLY, THE INCREASE IN THE VOLUME OF RUNOFF DUE TO THE DEVELOPMENT WAS DETERMINED TO BE NEGLIGIBLE BY THE COA HYDROLOGY DEPARTMENT. FROM TABLE A-1 OF THE DPM, THE SITE IS LOCATED IN ZONE 1 (WEST OF THE RIO GRANDE).

BASIN AREAS:

BASIN A:	4,198 SF = 0.096 AC
BASIN B:	3,763 SF = 0.086 AC
BASIN C:	6,061 SF = 0.139 AC
BASIN D:	14,758 SF = 0.339 AC
TOTAL AREA:	28,780 SF = 0.661 AC

LAND TREATMENT PERCENTAGES:

ALL BASINS ARE 100% TREATMENT D (CONCRETE SURFACES).

FROM TABLE A-9 OF THE DPM, THE 100-YR PEAK DISCHARGE FROM THE PROPOSED SITE IS:

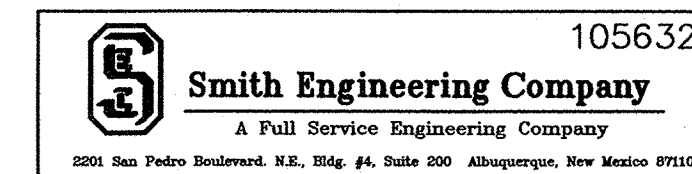
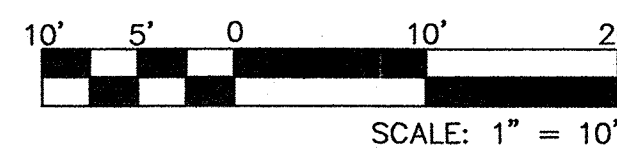
BASIN A:
QPA = (4.37 CFS/AC)(0.096 AC) = 0.42 CFS

BASIN B:
QPB = (4.37 CFS/AC)(0.086 AC) = 0.38 CFS

BASIN C:
QPC = (4.37 CFS/AC)(0.139 AC) = 0.61 CFS

BASIN D:
QPD = (4.37 CFS/AC)(0.339 AC) = 1.48 CFS

TOTAL SITE:
QPT = 0.42 + 0.38 + 0.61 + 1.48 = 2.89 CFS



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT PARK DESIGN AND CONSTRUCTION DIVISION	
TITLE: NORTHWEST QUADRANT SKATE PARK HYDROLOGY	
Design Review Committee	City Engineer Approval
City Project No. 782203	Zone Map No. B13
Sheet 5A	Of 12

