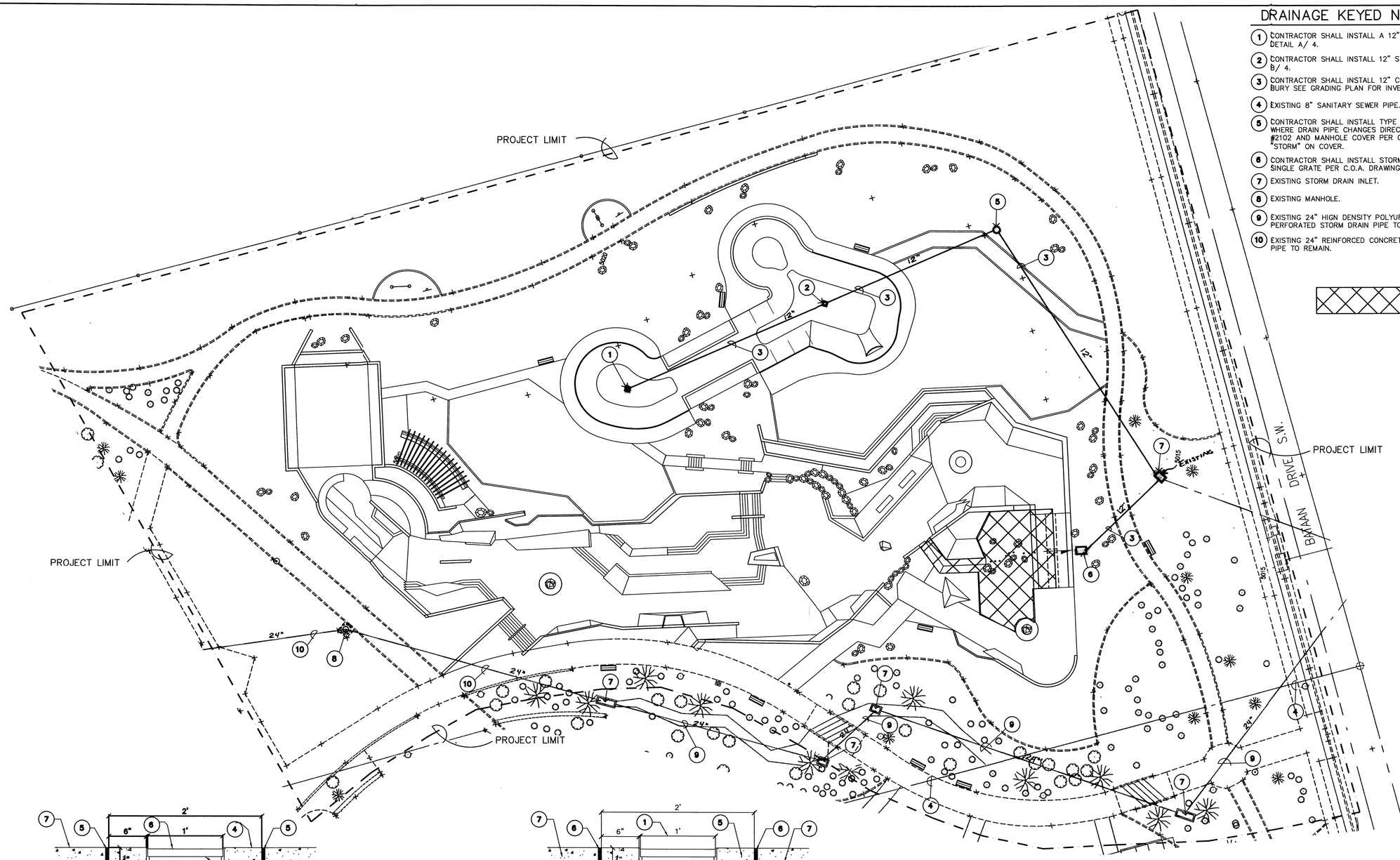
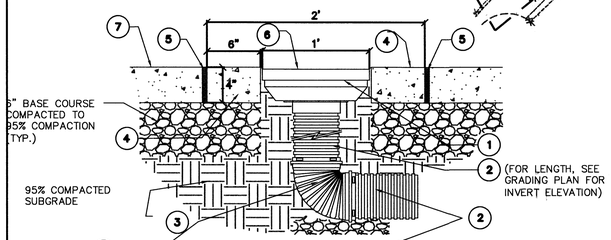


DRAINAGE KEYED NOTES

1. CONTRACTOR SHALL INSTALL A 12" STORM DRAIN INLET PER DETAIL A/ 4.
2. CONTRACTOR SHALL INSTALL 12" STORM DRAIN INLET PER DETAIL B/ 4.
3. CONTRACTOR SHALL INSTALL 12" CORRUGATED PIPE. FOR DEPTH OF BURY SEE GRADING PLAN FOR INVERT ELEVATIONS.
4. EXISTING 8" SANITARY SEWER PIPE.
5. CONTRACTOR SHALL INSTALL TYPE "E" MANHOLE AT LOCATION WHERE DRAIN PIPE CHANGES DIRECTION PER C.O.A. DRAWING #2102 AND MANHOLE COVER PER C.O.A. DRAWING 2110 WITH "STORM" ON COVER.
6. CONTRACTOR SHALL INSTALL STORM DRAIN INLET TYPE "D", WITH SINGLE GRATE PER C.O.A. DRAWING # 2206.
7. EXISTING STORM DRAIN INLET.
8. EXISTING MANHOLE.
9. EXISTING 24" HIGN DENSITY POLYURETHANE PIPE (HDPE) PERFORATED STORM DRAIN PIPE TO REMAIN.
10. EXISTING 24" REINFORCED CONCRETE PIPE (RCP) STORM DRAIN PIPE TO REMAIN.

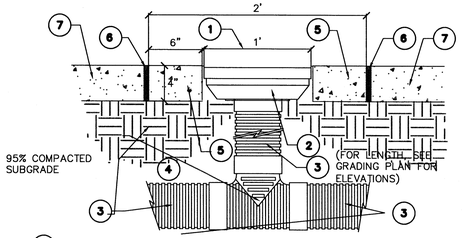
PONDING AREA



1. NDS 12" X 12" SQUARE, LOW PROFILE SPIGOT ADAPTER, MODEL #1222. AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
2. 8" CORRUGATED PIPE.
3. 8" CORRUGATED ELBOW.
4. 6" WIDE CONCRETE COLLAR AROUND DRAIN INLET.
5. 1/2" WIDE MASTIC EXPANSION JOINT WITH PLASTIC CAPXX ON TOP. THE TOP OF CAP SHALL BE FLUSH WITH TOP OF CONCRETE.
6. NDS 12" X 12" MANGANESE BRONZE SQUARE GRADE, MODEL #1214. AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
7. CONCRETE SLAB. SEE CONSTRUCTION PLAN.

A/4 12" DRAIN INLET

12INCHDRAINLINLE 4/29/05 1-1/2"=1'



1. NDS 12" X 12" MANGANESE BRONZE SQUARE GRATE, MODEL #1214 AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
2. NDS 12" X 12" SQUARE, LOW PROFILE SPIGOT ADAPTOR, MODEL #1222 AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
3. 8" CORRUGATED PIPE.
4. 8" "T" CORRUGATED PIPE CONNECTION.
5. 6" WIDE CONCRETE COLLAR AROUND DRAIN INLET.
6. 1/2" WIDE MASTIC EXPANSION JOINT WITH PLASTIC CAPXX ON TOP. THE TOP OF CAP SHALL BE FLUSH WITH TOP OF CONCRETE.
7. CONCRETE SLAB. SEE CONSTRUCTION PLAN.

B/4 12" DRAIN INLET/"T"

DRAININLET2.DWG 5/08/05 1-1/2"=1'

0 10 20 40 60

SCALE: 1" = 20'-0"

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

BENCHMARK

AS BUILT INFORMATION
CONTRACTOR DATE:
WORK STAKED BY DATE:
INSPECTOR'S APPROVAL DATE:
FIELD VERIFICATION BY DATE:
DRAWING CORRECTED BY DATE:
MICRO-FILM INFORMATION
RECORDED BY DATE:
NO.

SEAL

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: GM	DATE: JUNE 6, 2005
		DRAWN BY: JSP	DATE: JUNE 6, 2005
		CHECKED BY: JSP	DATE: JUNE 6, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: *WESTSIDE SKATE PARK – PHASE 1-A*
DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXX	K & L-11-Z	4	11

MORROW REARDON WILKINSON MILLER, LTD., LANDSCAPE ARCHITECTS
210 La Veta NE, Albuquerque, NM 87108
505.266.2266 FAX 505.265.9637
mrw@mrwnm.com

HYDROLOGY SECTION: AUG 08 2005

EX 20.19
EX 20.20
EX 21.78
EX 21.41
EX 21.59
EX 21.87
EX 21.94
EX 22..05
EX 21.80
EX 21.01
EX 20.41
EX 19.61
EX 19.71
EX 19.59
5020
5000
TW 23.88
BW 18.88
TW 23.48
BW 18.48
FG 18.73
FG 18.62
TW 20.45
FG 18.46
FG 21.15
TW 18.67
TW 22.16
TW 19.04
FG 18.25
TW 21.36
TW 21.79
FG 21.7
TW 21.54
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TW 21.63
TW 21.47
TW 21.18
TW 21.07
EX 19.43
EX 19.28
EX 19.38
EX 19.48
TW 19.81
TW 19.74
TW 19.19
TW 22.27
TW 22.04
TW 20.5
TW 20.00
EX 19.01
TG 17.95
INV. 15.87
FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.
FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.
SEE SHEET 6
MATCHLINE A
PROJECT LIMIT

LEGEND

KEY	DESCRIPTION
BW	BOTTOM OF WALL
EX	EXISTING ELEVATION
INV	INVERT
SD	EXISTING STORM DRAIN
SI	STORM INLET
TC	TOP OF CONCRETE
TG	TOP OF GRATE
TW	TOP OF WALL

SHEET 5 SHEET 6

KEY MAP NTS

N

0 5 10 20 30

SCALE: 1" = 10'-0"

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LANDSCAPE ARCHITECTS
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mrw@mrwnm.com

AS BUILT INFORMATION
CONTRACTOR DATE:
WORK STAKED BY DATE:
INSPECTOR'S APPROVAL DATE:
FIELD VERIFICATION BY DATE:
DRAWING CORRECTED BY DATE:
MICRO-FILM INFORMATION
RECORDED BY DATE:
NO.

BENCHMARK

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

SEAL

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		DESIGNED BY: GM	DATE: JUNE 6, 2005
		DRAWN BY: JSP	DATE: JUNE 6, 2005
		CHECKED BY: JSP	DATE: JUNE 6, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: *WESTSIDE SKATE PARK – PHASE 1–A*
GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No. XXXXX | Zone Map No. K & L–11–Z | Sheet 5 | Of 11

RECEIVED AUG 08 2005 HYDROLOGY SECTION

MATCHLINE A SEE SHEET 5

FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.

18" CONC. SPILLWAY

12" TALL BERM UNDER CENTER LINE OF BRIDGE.

5015

LEGEND

KEY	DESCRIPTION
BW	BOTTOM OF WALL
EX	EXISTING ELEVATION
INV	INVERT
SD	EXISTING STORM DRAIN
SI	STORM INLET
TC	TOP OF CONCRETE
TG	TOP OF GRATE
TW	TOP OF WALL

SHEET 5 SHEET 6

KEY MAP NTS

N

0 5 10 20 30

SCALE: 1" = 10'-0"

AS BUILT INFORMATION

CONTRACTOR DATE:
WORK STAKED BY DATE:
INSPECTOR'S APPROVAL DATE:
FIELD VERIFICATION BY DATE:
DRAWING CORRECTED BY DATE:
MICRO-FILM INFORMATION DATE:
RECORDED BY
NO.

BENCHMARK

SURVEY INFORMATION

NO.	FIELD NOTES BY	DATE

SEAL

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: GM	DATE: JUNE 6, 2005
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: *WESTSIDE SKATE PARK – PHASE 1–A*
GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No. XXXXX | Zone Map No. K & L-11-Z | Sheet 6 Of 11

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mrw@mrwnm.com

HYDROLOGY SECTION AUG 08 2005

LEGEND

KEY	DESCRIPTION
EX	EXISTING ELEVATION
INV	INVERT
SD	EXISTING STORM DRAIN
SI	STORM INLET
TG	TOP OF GRATE
TW	TOP OF WALL
BH	BRIDGE HIGH POINT
TB	TOP OF BANK
FG	FINISH GRADE

NOTE:
1. FG IN THE ELEVATION OF GRADE PRIOR TO APPLICATION OF MULCH OR SOD.
2. SPOT ELEVATION THAT DO NOT HAVE A KEY INDICATION SHALL BE TOP OF CONCRETE.

MATCHLINE A SEE SHEET 5

MATCH EXISTING CONCRETE ELEVATION

FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.

6" DEEP SWALE

18" WIDE SPILL WAY

12" TALL BERM UNDER CENTER LINE OF BRIDGE.

spillway must be handlined

Ponding Area (Per Basin Map) Depth: 1 ft

Show the proposed and existing storm drain

SHEET 5 SHEET 6

KEY MAP NTS

SCALE: 1" = 10'-0"

BENCHMARK

ACS STATION "2-L10", 1989. THE STATION IS IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF COORS BLVD. AND BRIDGE IN THE NORTHWEST NOSE OF A TRAFFIC ISLAND.
ELEVATION 5033.25 FEET

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

AS BUILT INFORMATION

CONTRACTOR DATE:
WORK STAKED BY DATE:
INSPECTOR'S APPROVAL DATE:
FIELD VERIFICATION BY DATE:
DRAWING CORRECTED BY DATE:
MICRO-FILM INFORMATION
RECORDED BY DATE:
NO.

Prepared & reviewed under my supervision.

SEAL — STATE OF NEW MEXICO — BRISCOE MILLER — 12 — REGISTERED LANDSCAPE ARCHITECT — 6/2/05

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: JSP	DATE: JUNE 20, 2005
		DRAWN BY: JSP	DATE: JUNE 20, 2005
		CHECKED BY: GM	DATE: JUNE 20, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: ***WESTSIDE SKATE PARK - PHASE 1-A GRADING PLAN***

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No. 764591 — Zone Map No. K & L-11-Z — Sheet 6 Of 12

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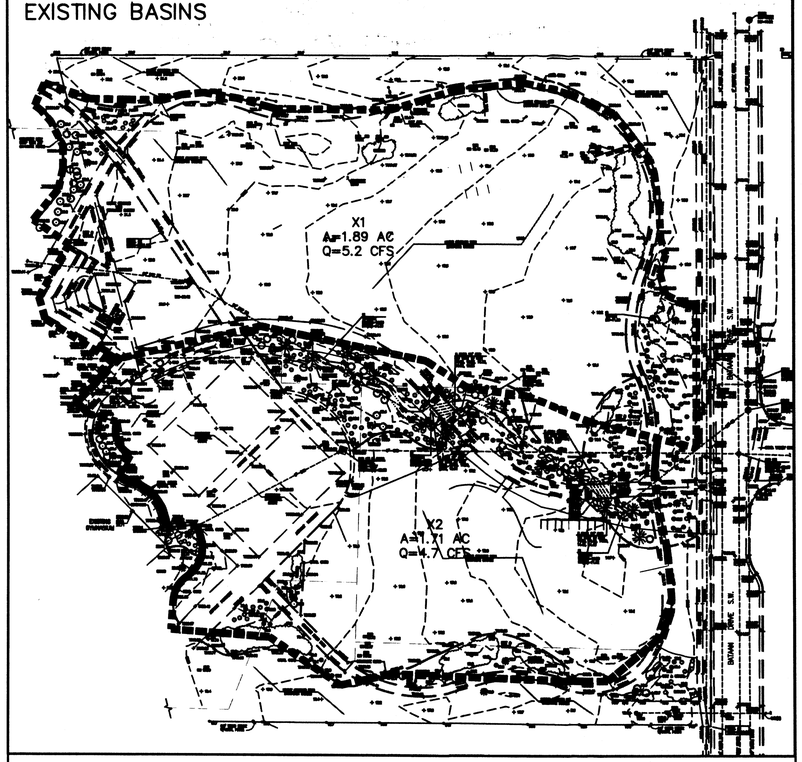
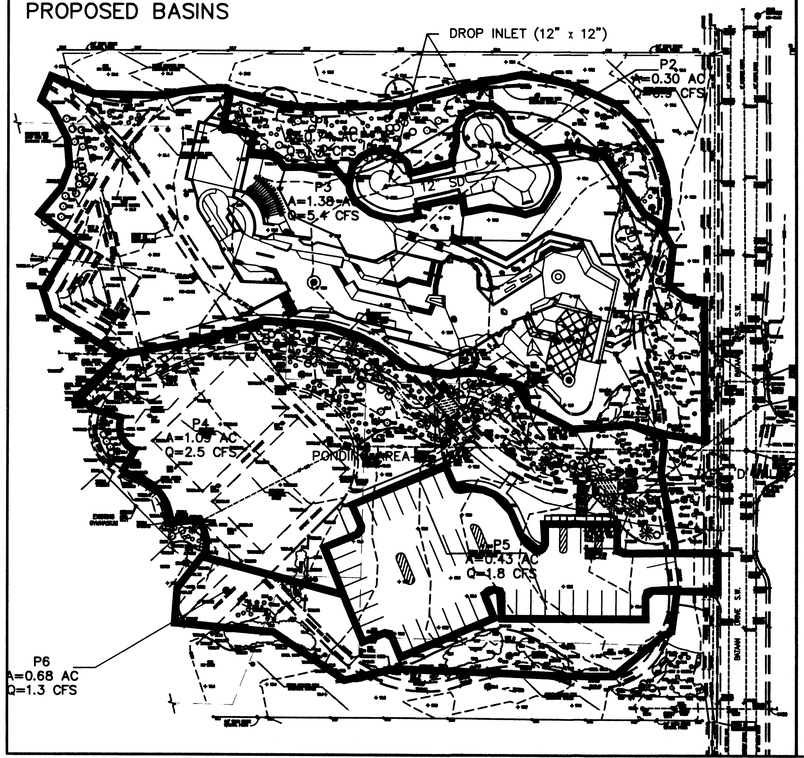
EXISTING BASINS



PROPOSED BASINS



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DRAINAGE REPORT

Site Location: The Alamosa Community Center and Skate Park is a 3.6 acre property located in southwest Albuquerque, NM, bordered by Coors Boulevard to the west, Gonzales Road to the north, Ivy Place to the south, and Bataan Drive to the east. This drainage report assumes full build of the skate park facility and accompanying landscaping improvements; however, actual construction of the project will occur in two phases. Phase I will include the skate park and associated landscaping improvements, while Phase II will include the parking lot, concession facilities, and associated landscaping improvements. This report seeks approval only for Phase I computations, though Phase II conditions and computations have been included for information.

Methodology: Section 22.2 of the City of Albuquerque DPM was followed to calculate design flows. The procedure in Part A, for 40 acre or smaller basins, was followed using the 100-year, 24-hour storm event frequency. All basins were delineated using AutoCAD software to determine areas. The site is located in Zone 1, west of the Rio Grande, as designated in Table A-1. The basis of this drainage report is the Alamosa Community Center Drainage Report (1995) by Jeff Mortenson and Associates (hereafter Reference 1).

Existing Conditions: The existing topography of the site is relatively flat with some areas of local ponding, sloping slightly to the east-southeast with slopes typically less than 1.5%. The site also contains concrete and asphalt site work from existing facilities. Runoff from existing infrastructure to the west discharges to an existing storm drain system, and existing slopes of the land are such that offsite flows do not enter the project site. Onsite areas are currently drained by an existing 24" to 30" storm drain system with five (5) median drop inlets which convey flow into the 54" storm drain in Bataan Road.

Hydrologic Analysis Basins X1 and X2 delineate the existing drainage boundary. It should be noted that Basin X2 does not contribute to Phase I improvements. The existing drainage boundary is approximately 3.6 acres and is made up of asphalt paving, concrete site work, and vegetated area with mature trees. Basin X1 at the north portion of the site drains via an existing swale to an existing drop inlet at the east portion of the site. Basin X2 drains to one of four (4) median drop inlets along a swale. Peak discharge rates for watersheds smaller than 40 acres may be computed using the Rational Method, QP = CiA (ft3/s), where QP is the peak discharge, i is the 12-minute peak intensity, C is the rational coefficient, and A is the area in acres.

For Zone 1, values of *C* are 0.27 for land treatment A, 0.43 for land treatment B, 0.61 for land treatment C, and 0.93 for land treatment D. The value of *i* is 4.70 inches/hour. Pre-development peak discharge is computed as follows:

Basin X1= [(0.27)(4.70 in/hr)(0.85 acres) + (0.43)(4.70 in/hr)(0.19 acres) + (0.61)(4.70 in/hr)(.66 acres) + (0.93)(4.70 in/hr)(0.19 acres)] = 4.2 ft3/s

Basin X2= [(0.27)(4.70 in/hr)(0.51 acres) + (0.43)(4.70 in/hr)(0.09 acres) + (0.61)(4.70 in/hr)(0.09 acres) + (0.93)(4.70 in/hr)(1.03 acres)] = 5.6 ft3/s

Proposed Conditions: Under proposed conditions (both Phases) miscellaneous buildings, a skate park, and parking lot will be constructed at the site. Phase I improvements will consist of the skate park and associated landscaping improvements; Phase II will consist of the parking area, concession facilities, and associated landscaping improvements. Runoff from the proposed site will continue to discharge to the existing storm drain system. Existing flow patterns (existing swales, drop inlets, etc.) will be maintained to the extent possible, although additional drop inlets will be constructed to facilitate drainage. Additional storm drain inlets will tie into the existing system, either directly into existing inlets, or with new manholes. Per Reference 1, this drainage report assumes adequate capacity in the Bataan Drive storm drain system at full build per the Sunset Gardens Master Plan Drainage Study.

Hydrologic Analysis Basins P1 through P3 represent proposed conditions for Phase I. Basins P4 through P6 represent proposed conditions for Phase II. Basins P1 and P6, at the north and south portions of the site, will contain landscaping improvents only and will continue to discharge to existing infrastructure, as under existing conditions. Basin P2 is a skate park bowl structure, and will be predominately land treatment 'D'. Basin P3 will contain the remainder of the skate park structures with landscaping. Drainage will be facilitated by new drop inlets. Basin P4 will contain landscaping improvments only, and Basin P5 contains the parking area. Drainage improvements for Phase II basins, P4 through P6, have not been finalized at this point. Proposed flows are computed in the same manner as presented above. In addition, the values of C and i are unchanged.

Basin P1 = [(0.27)(4.70 in/hr)(0.27 acres) + (0.93)(4.70 in/hr)(0.01 acres)]= 0.4 ft3/s
Basin P2 = [(0.61)(4.70 in/hr)(0.01 acres)] + [(0.93)(4.70 in/hr)(0.14 acres)] = 0.6 ft3/s
Basin P3 =[(0.27)(4.70 in/hr)(0.29 acres) + (0.61)(4.70 in/hr)(0.44 acres) + (0.93)(4.70 in/hr)(0.74 acres)] = 4.9 ft3/s
Basin P4 = [(0.27)(4.70 in/hr)(0.54 acres) + (0.93)(4.70 in/hr)(0.44 acres)] = 2.6 ft3/s
Basin P5 = [(0.61)(4.70 in/hr)(0.02 acres) + (0.93)(4.70 in/hr)(0.39 acres)] = 1.8 ft3/s
Basin P6 = [(0.27)(4.70 in/hr)(0.25 acres) + (0.43)(4.70 in/hr)(0.01 acres) + (0.93)(4.70 in/hr)(0.03 acres)] = 0.5 ft3/s

EXISTING BASIN SUMMARY

Basin	Total Area (Ac)	A %	A Ac	B %	B Ac	C %	C Ac	D %	D Ac	Peak Discharge (cfs)
X1	1.887	45	0.85	10	0.19	35	0.66	10	0.19	4.2
X2*	1.709	30	0.51	5	0.09	5	0.09	60	1.03	5.6
Σ=	3.596		1.36		0.27		0.75		1.21	9.8

PROPOSED BASIN SUMMARY

Basin	Total Area	A %	A Ac	B %	B Ac	C %	C Ac	D %	D Ac	Peak Discharge, Q
P1	0.282	95	0.27	0	0.00	0	0.00	5	0.01	0.4
P2	0.151	5	0.01	0	0.00	0	0.00	95	0.14	0.6
P3	1.471	20	0.29	0	0.00	30	0.44	50	0.74	4.9
P4*	0.985	55	0.54	0	0.00	0	0.00	45	0.44	2.6
P5*	0.413	0	0.00	0	0.00	5	0.02	95	0.39	1.8
P6*	0.294	85	0.25	5	0.01	0	0.00	10	0.03	0.5
Σ=	3.596		1.36		0.01		0.46		1.76	10.8
Phase I only:	**1.904**		**0.57**		**0.00**		**0.44**		**0.89**	**5.9**

*Denotes basins NOT associated with Phase I improvements

Detention Pond: The area upstream of the pedestrian bridge in Basin P3 will serve as a detention pond, and was sized following an assumed triangular inflow hydrograph and trapezoidal outflow hydrograph procedure. Values for excess precipitation, E, for the 100-year, 6-hour storm in Zone 1 are given in Table A-8. For the 100-year, 10-day storm, the required ponding area is approximately 0.0311 acre-ft. The ponding area is 1360 ft3 (0.0312 acre-ft) therefore, water depth in the pond will be 1.0 ft. **Discharge will be limited to Qallowable, 3.2 cfs. Pond calculations are as follows:**

Given: AC = 1.471 acres; E = 1.37 inches; (Qp)P3 = 4.9 cfs; (Qp)X1 = 4.2 cfs; (Qp)proposed = 5.9 cfs

Find: Volumetric runoff for the 100-year, 6-hour storm, V360, and the 100-year, 10-day storm, V10day

Soln:

Step 1, Compute V360 = Weighted E * Atotal = (1.37 * 1.471)/12 = 0.168 acre-ft

Step 2, Compute V10day = V360 + (AD * (P10day - P360))/12 = 0.168 + (0.74 * (3.67 - 2.20))/12 = 0.2580 acre-ft

Step 3, Compute Qallowable = (Qp)P3 - [(Qp)X1 - (Qp)proposed] = [4.9 cfs - (5.9 cfs - 4.2 cfs)] = 3.2 cfs

Step 4, Compute base, tD, of triangular inflow hydrograph → Vt = ½ tD*Qp → tD = (2*Vt)/Qp = (2*0.258 ac-ft)/4.9 cfs = (0.0874 acre-ft/cfs)*[(43560 ft2/acre)/(3600 sec/hr)] = 1.2742 hr

Step 5, Compute slope of rising limb of hydrograph = 4.9 cfs/0.6371 hr = 7.691 cfs/hr

Step 6, Compute intercepts at Qallowable (3.2 cfs)

a. = 4.2/(7.691 cfs/hr) = 0.42 hr

b. = 1.2742 hr - 0.42 hr = 0.86 hr

Step 7, Compute required storage = ½bh = ½ * (4.9-3.2 cfs) * (0.86 - 0.42 hr) * (3600 sec/hr) = 1353 ft3 = 0.0311 acre-ft

Step 8, Compute weir equation to verify Qw <= Qallow = 3.2 cfs = Cw * L * H^1.5

L = 3.2 cfs / [(3.0) * (1 ft)^1.5] = 1.1ft. For 18" trapezoidal weir, Lavg = 1.5 / 2 = 0.75 ft

Drop Inlet & Hydraulics Computations: Three new drop inlets are proposed for Phase I improvements, including 2-12"x12" drop inlets at the skate park bowl structure (Basin P2), and 1-Type "D" area inlet near the pedestrian bridge (Basin P3). Drop inlet capacities assume orifice flow, 50% reduction in opening area due to bars, and 50% clogging. All proposed pipes were checked to verify a minimum velocity of 3 fps. Pipe computations were verified using FlowMaster software.

Per the orifice equation, Q=co*A*(2gd)½

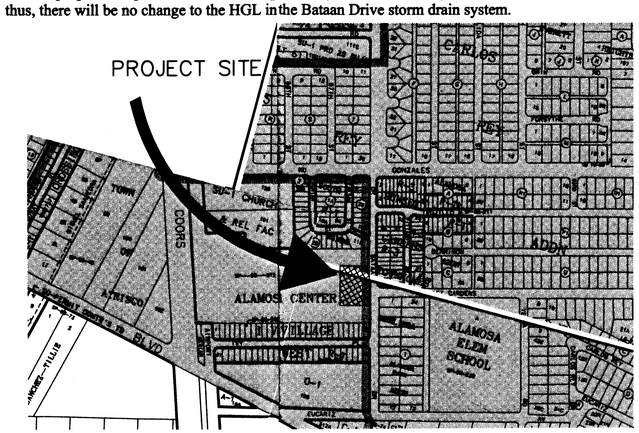
Where: co= orifice coefficient (0.67); A= opening area (ft2);

g= gravitational constant (32.2 ft/set2); d= ponding depth (ft)

12"x12" Grate Inlet: Q = 0.67*0.5*0.5*(1 ft*1 ft)*(2* 32.2 ft/sec2 * 0.5 ft)½ = 0.95 cfs

Type "D" Grate Inlet: Q = 0.67*0.5*0.5*(2ft*3 ft)*(2* 32.2 ft/sec2 * 0.5 ft)½ = 5.7 cfs

Conclusion: This site has been inspected, and no grading, filling, or excavation has occurred since this plan was prepared. Analysis indicates that the proposed improvements to the existing storm drain system adequately convey storm runoff generated by the proposed improvements at the site. It should be noted that the proposed improvements will not appreciably increase discharge from the site (less than 0.1%); thus, there will be no change to the HGL in the Bataan Drive storm drain system.



VICINITY MAP

GENERAL NOTES

PHASE I PROJECT LIMITS

EXISTING BASIN

PROPOSED BASIN

PONDING AREA

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

WCEA #X5218028
MAY 2005

WILSON &COMPANY

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

BENCH MARKS
ACS STATION "2-L10", 1989. THE STATION IS IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF COORS BLVD. AND BRIDGE IN THE NORTHWEST NOSE OF A TRAFFIC ISLAND.
X = 362077.14
Y = 1480935.16
GROUND TO GRID FACTOR = 0.99968111

AS-BUILT INFORMATION
CONTRACTOR | DATE
WORK STARTED BY | DATE
INSPECTOR'S ACCEPTANCE BY | DATE
FINAL VERIFICATION BY | DATE
DRAWINGS CHECKED BY | DATE

MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

WILSON & COMPANY, ENGINEERS & ARCHITECTS
DESIGNED BY JSD DATE 05/05
DRAWN BY JSD/JLB DATE 05/05
CHECKED BY MJI DATE 05/05

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

WESTSIDE SKATE PARK, PHASE I
GRADING AND DRAINAGE

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 764591 | Zone Map No. K & L-11-Z | Sheet 1 Of 1

RECEIVED
JUL 18 2005
HYDROLOGY SECTION

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6. CONTRACTOR SHALL INSTALL STORM DRAIN INLET TYPE "D", WITH SINGLE GRATE PER C.O.A. DRAWING # 2206.
7. EXISTING STORM DRAIN INLET.
8. EXISTING MANHOLE.
9. EXISTING 24" HIGH DENSITY POLYURETHANE PIPE (HDPE) PERFORATED STORM DRAIN PIPE TO REMAIN.
10. EXISTING 24" REINFORCED CONCRETE PIPE (RCP) STORM DRAIN PIPE TO REMAIN.

PROJECT LIMIT

PROJECT LIMIT

PROJECT LIMIT

PROJECT LIMIT

BAYAAN DRIVE S.W.

EXIST 24"

EX. 2030

EX. TG 18.32
EX. INV (NW) 14.84
EX. INV (SE) 14.29

EX. TG 16.28
EX. INV (SE) 13.40
EX. INV (NW) 13.52

EX. TG 16.36
EX. INV (SE) 12.98
EX. INV (SW) 13.01

EX. TG 12.48
EX. INV (NW) 11.76
EX. INV (NE) 11.62

EX. TG 14.21
EX. INV 11.8

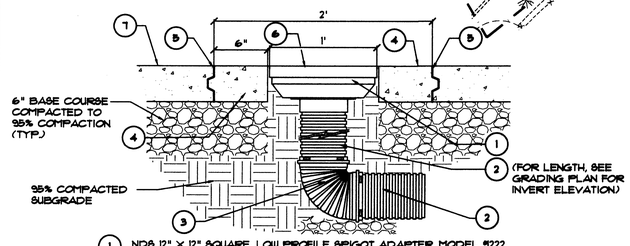
12"

SAS

5015

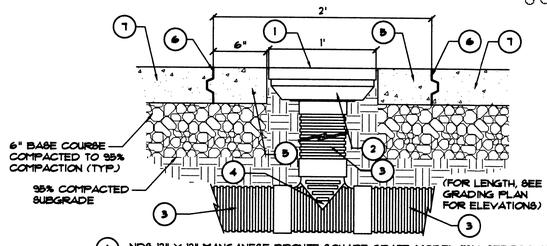
Reviewed & Revised Under My Supervision

6/2/05



1. NDS 12" X 12" SQUARE, LOW PROFILE SPIGOT ADAPTER, MODEL #222. AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
2. 12" CORRUGATED PIPE.
3. 12" CORRUGATED ELBOW.
4. 6" WIDE CONCRETE COLLAR AROUND DRAIN INLET.
5. CONTRACTOR SHALL INSTALL KEYWAY JOINT.
6. NDS 12" X 12" MANGANESE BRONZE SQUARE GRATE, MODEL #214. SET TOP OF GRATE FLUSH WITH TOP OF ADJACENT CONCRETE. AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
7. CONCRETE SLAB. SEE CONSTRUCTION PLAN.

A/4 **12" DRAIN INLET**
12INCHDRAINLINLE 4/29/05 1-1/2"=1'



1. NDS 12" X 12" MANGANESE BRONZE SQUARE GRATE, MODEL #214. SET TOP OF GRATE FLUSH WITH TOP OF ADJACENT CONCRETE. AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
2. NDS 12" X 12" SQUARE, LOW PROFILE SPIGOT ADAPTOR, MODEL #222 AVAILABLE FROM LOVING & ASSOCIATES (505) 299-1122.
3. 12" CORRUGATED PIPE.
4. 12" "T" CORRUGATED PIPE CONNECTION.
5. 6" WIDE CONCRETE COLLAR AROUND DRAIN INLET.
6. CONTRACTOR SHALL INSTALL KEYWAY JOINT.
7. CONCRETE SLAB. SEE CONSTRUCTION PLAN.

B/4 **12" DRAIN INLET/"T"**
DRAININLET2.DWG 5/06/05 1-1/2"=1'

0 10 20 40 60
SCALE: 1" = 20'-0"

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

BENCHMARK

ACS STATION "2-L10", 1989. THE STATION IS IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF COORS BLVD. AND BRIDGE IN THE NORTHWEST NOSE OF A TRAFFIC ISLAND.
ELEVATION 5033.25 FEET

AS BUILT INFORMATION

CONTRACTOR DATE:
WORK STAKED BY DATE:
INSPECTOR'S APPROVAL DATE:
FIELD VERIFICATION BY DATE:
DRAWING CORRECTED BY DATE:
MICRO-FILM INFORMATION
RECORDED BY DATE:
NO.

SEAL

STATE OF NEW MEXICO
GREGORY MILLER
12
REGISTERED LANDSCAPE ARCHITECT
6/2/05

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: JSP	DATE: JUNE 20, 2005
		DRAWN BY: JSP	DATE: JUNE 20, 2005
		CHECKED BY: GM	DATE: JUNE 20, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: ***WESTSIDE SKATE PARK - PHASE 1-A***
DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No. 764681 | Zone Map No. K & L-11-Z | Sheet 4 Of 12

MORROW READDON WILKINSON MILLER, LTD., LANDSCAPE ARCHITECTS
210 La Veta NE, Albuquerque, NM 87108
505.266.2266 FAX 505.266.2627
mrw@mrwnm.com

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JUL 18 2005
HYDROLOGY SECTION

P:\$Year-2004\3904\3904-acad\3904-$current\3904-grad\3904-Grading.dwg, 6/20/2005 12:25:23 PM, jpope, 1:1

FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.

FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.

MATCH EXISTING CONCRETE ELEVATION

MATCH EXISTING CONCRETE ELEVATION

PROJECT LIMIT

MATCHLINE A SEE SHEET 6

Show the proposed and existing storm drain

SCALE: 1" = 10'-0"

LEGEND

KEY	DESCRIPTION
EX	EXISTING ELEVATION
INV	INVERT
SD	EXISTING STORM DRAIN
SI	STORM INLET
TG	TOP OF GRATE
TW	TOP OF WALL
BH	BRIDGE HIGH POINT
TB	TOP OF BANK
FG	FINISH GRADE

NOTE:

1. FG IN THE ELEVATION OF GRADE PRIOR TO APPLICATION OF MULCH OR SOD.
2. SPOT ELEVATION THAT DO NOT HAVE A KEY INDICATION SHALL BE TOP OF CONCRETE.

SHEET 5 SHEET 6

KEY MAP NTS

AS BUILT INFORMATION

CONTRACTOR DATE:

WORK STAKED BY DATE:

INSPECTOR'S APPROVAL DATE:

FIELD VERIFICATION BY DATE:

DRAWING CORRECTED BY DATE:

MICRO-FILM INFORMATION

RECORDED BY DATE:

NO.

BENCHMARK

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ELEVATION 5033.25 FEET

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

SEAL

STATE OF NEW MEXICO — GREGORY MILLER — 1 — REGISTERED LANDSCAPE ARCHITECT — 6/2/05

MARIO DE JUAREZ-INFANTE — NEW MEXICO — 15310 — LICENSED PROFESSIONAL ENGINEER

Prepared & reviewed under my supervision

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: JSP	DATE: JUNE 20, 2005
		DRAWN BY: JSP	DATE: JUNE 20, 2005
		CHECKED BY: GM	DATE: JUNE 20, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: ***WESTSIDE SKATE PARK - PHASE 1-A***
GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No. **764591**

Zone Map No. **K & L-11-Z**

Sheet 5 Of 12

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505.266.2266 FAX 505.266.9637
mlrw@mlrwlm.com

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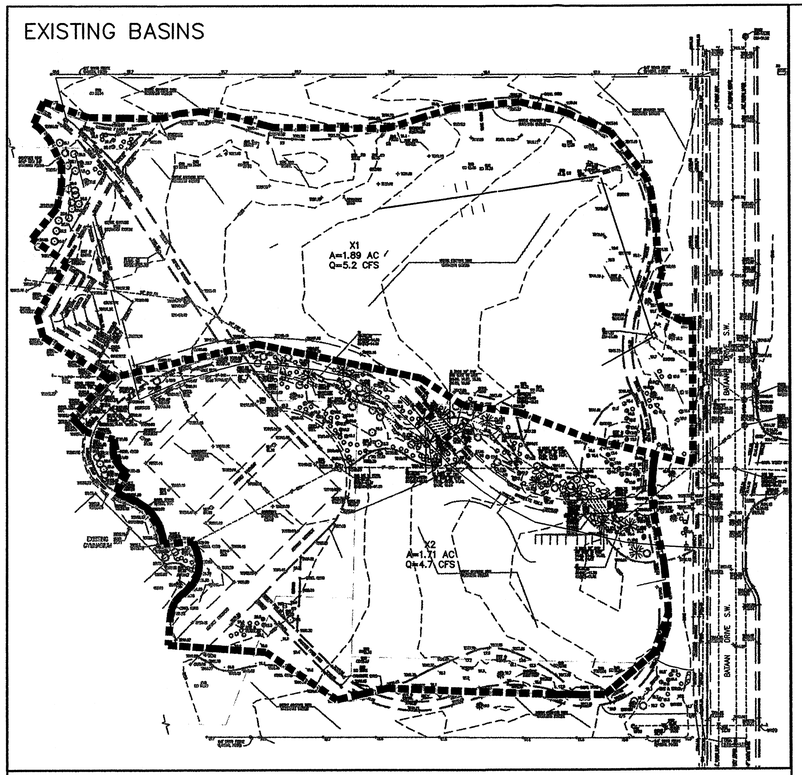
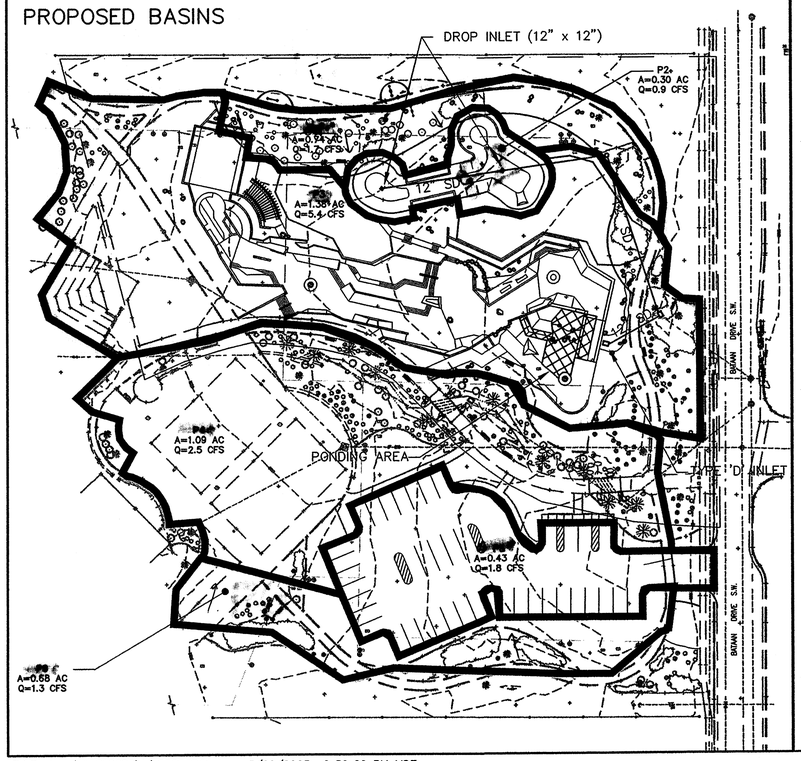
EXISTING BASINS



PROPOSED BASINS



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DRAINAGE REPORT

Site Location: The Alamosa Community Center and Skate Park is a 3.6 acre property located in southwest Albuquerque, NM, bordered by Coors Boulevard to the west, Gonzales Road to the north, Ivy Place to the south, and Bataan Drive to the east. This drainage report assumes full build of the skate park facility and accompanying landscaping improvements, however, actual construction of the project will occur in two phases. **Phase I will include the skate park and associated landscaping improvements, while Phase II will include the parking lot, concession facilities, and associated landscaping improvements.** This report seeks approval only for Phase I computations, though Phase II conditions and computations have been included for information.

Methodology: Section 22.2 of the City of Albuquerque DPM was followed to calculate design flows. The procedure in Part A, for 40 acre or smaller basins, was followed using the 100-year, 24-hour storm event frequency. All basins were delineated using AutoCAD software to determine areas. The site is located in Zone 1, west of the Rio Grande, as designated in Table A-1. The basis of this drainage report is the Alamosa Community Center Drainage Report (1995) by Jeff Mortenson and Associates (hereafter Reference 1).

Existing Conditions: The existing topography of the site is relatively flat with some areas of local ponding, sloping slightly to the east-southeast with slopes typically less than 1.5%. The site also contains concrete and asphalt site work from existing facilities. Runoff from existing infrastructure to the west discharges to an existing storm drain system, and existing slopes of the land are such that offsite flows do not enter the project site. **Onsite areas are currently drained by an existing 24" to 30" storm drain system with five (5) median drop inlets which convey flow into the 54" storm drain in Bataan Road.**

Hydrologic Analysis Basins X1 and X2 delineate the existing drainage boundary. It should be noted that Basin X2 does not contribute to Phase I improvements. The existing drainage boundary is approximately 3.6 acres and is made up of asphalt paving, concrete site work, and vegetated area with mature trees. Basin X1 at the north portion of the site drains via an existing swale to an existing drop inlet at the east portion of the site. Basin X2 drains to one of four (4) median drop inlets along a swale. Peak discharge rates for watersheds smaller than 40 acres may be computed using the Rational Method, QP = CiA (ft3/s), where QP is the peak discharge, i is the 12-minute peak intensity, C is the rational coefficient, and A is the area in acres.

For Zone 1, values of *C* are 0.27 for land treatment A, 0.43 for land treatment B, 0.61 for land treatment C, and 0.93 for land treatment D. The value of *i* is 4.70 inches/hour. Pre-development peak discharge is computed as follows:

Basin X1= [(0.27)(4.70 in/hr)(0.85 acres) + (0.43)(4.70 in/hr)(0.19 acres) + (0.61)(4.70 in/hr)(.66 acres) + (0.93)(4.70 in/hr)(0.19 acres)] = 4.2 ft3/s

Basin X2= [(0.27)(4.70 in/hr)(0.51 acres) + (0.43)(4.70 in/hr)(0.09 acres) + (0.61)(4.70 in/hr)(0.09 acres) + (0.93)(4.70 in/hr)(1.03 acres)] = 5.6 ft3/s

Proposed Conditions: Under proposed conditions (both Phases) miscellaneous buildings, a skate park, and parking lot will be constructed at the site. Phase I improvements will consist of the skate park and associated landscaping improvements; Phase II will consist of the parking area, concession facilities, and associated landscaping improvements. **Runoff from the proposed site will continue to discharge to the existing storm drain system. Existing flow patterns (existing swales, drop inlets, etc.) will be maintained to the extent possible, although additional drop inlets will be constructed to facilitate drainage. Additional storm drain inlets will tie into the existing system, either directly into existing inlets, or with new manholes.** Per Reference 1, this drainage report assumes adequate capacity in the Bataan Drive storm drain system at full build per the Sunset Gardens Master Plan Drainage Study.

Hydrologic Analysis Basins P1 through P3 represent proposed conditions for Phase I. Basins P4 through P6 represent proposed conditions for Phase II. Basins P1 and P6, at the north and south portions of the site, will contain landscaping improvents only and will continue to discharge to existing infrastructure, as under existing conditions. Basin P2 is a skate park bowl structure, and will be predominately land treatment 'D'. Basin P3 will contain the remainder of the skate park structures with landscaping. Drainage will be facilitated by new drop inlets. Basin P4 will contain landscaping improvments only, and Basin P5 contains the parking area. Drainage improvements for Phase II basins, P4 through P6, have not been finalized at this point. Proposed flows are computed in the same manner as presented above. In addition, the values of C and i are unchanged.

Basin P1 = [(0.27)(4.70 in/hr)(0.27 acres) + (0.93)(4.70 in/hr)(0.01 acres)]= 0.4 ft3/s
Basin P2 = [(0.61)(4.70 in/hr)(0.01 acres)] + [(0.93)(4.70 in/hr)(0.14 acres)] = 0.6 ft3/s
Basin P3 =[(0.27)(4.70 in/hr)(0.29 acres) + (0.61)(4.70 in/hr)(0.44 acres) + (0.93)(4.70 in/hr)(0.74 acres)] = 4.9 ft3/s
Basin P4 = [(0.27)(4.70 in/hr)(0.54 acres) + (0.93)(4.70 in/hr)(0.44 acres)] = 2.6 ft3/s
Basin P5 = [(0.61)(4.70 in/hr)(0.02 acres) + (0.93)(4.70 in/hr)(0.39 acres)] = 1.8 ft3/s
Basin P6 = [(0.27)(4.70 in/hr)(0.25 acres) + (0.43)(4.70 in/hr)(0.01 acres) + (0.93)(4.70 in/hr)(0.03 acres)] = 0.5 ft3/s

EXISTING BASIN SUMMARY

Basin	Total Area (Ac)	A %	A Ac	B %	B Ac	C %	C Ac	D %	D Ac	Peak Discharge (cfs)
X1	1.887	45	0.85	10	0.19	35	0.66	10	0.19	4.2 ✓
X2*	1.709	30	0.51	5	0.09	5	0.09	60	1.03	5.6 ✓
Σ=	3.596		1.36		0.27		0.75		1.21	9.8

PROPOSED BASIN SUMMARY

Basin	Total Area	A %	A Ac	B %	B Ac	C %	C Ac	D %	D Ac	Peak Discharge, Q
P1 I	0.282	95	0.27	0	0.00	0	0.00	5	0.01	0.4 ✓
P2 I	0.151	5	0.01	0	0.00	0	0.00	95	0.14	0.6 ✓
P3 I	1.471	20	0.29	0	0.00	30	0.44	50	0.74	4.9 ✓
P4* II	0.985	55	0.54	0	0.00	0	0.00	45	0.44	✓2.6
P5* II	0.413	0	0.00	0	0.00	5	0.02	95	0.39	✓1.8
P6* II	0.294	85	0.25	5	0.01	0	0.00	10	0.03	✓0.5
Σ=	3.596 ac		1.36		0.01		0.46		1.76	10.8
Phase I only:	**1.904**		**0.57**		**0.00**		**0.44**		**0.89**	**5.9** ✓

*Denotes basins NOT associated with Phase I improvements

Detention Pond: **The area upstream of the pedestrian bridge in Basin P3 will serve as a detention pond,** and was sized following an assumed triangular inflow hydrograph and trapezoidal outflow hydrograph procedure. Values for excess precipitation, E, for the 100-year, 6-hour storm in Zone 1 are given in Table A-8. For the 100-year, 10-day storm, the required ponding area is approximately 0.0311 acre-ft. The ponding area is 1360 ft3 (0.0312 acre-ft) therefore, **water depth in the pond will be 1.0 ft. Discharge will be limited to Qallowable, 3.2 cfs.** Pond calculations are as follows:

Given: AC = 1.471 acres; E = 1.37 inches; (Qp)P3 = 4.9 cfs; (Qp)X1 = 4.2 cfs; (Qp)proposed = 5.9 cfs

Find: Volumetric runoff for the 100-year, 6-hour storm, V360, and the 100-year, 10-day storm, V10day

Soln:

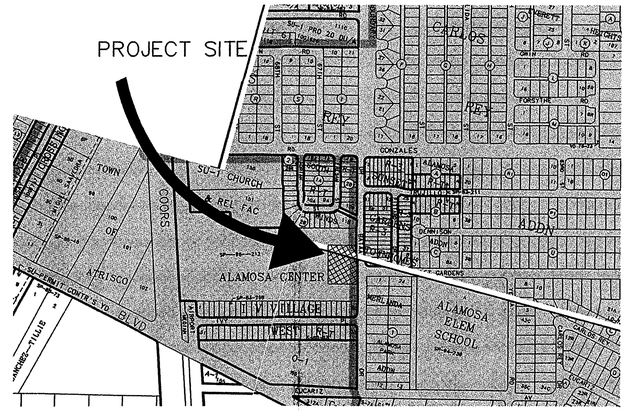
Step 1, Compute V360 = Weighted E * Atotal = (1.37 * 1.471)/12 = 0.168 acre-ft
Step 2, Compute V10day = V360 + (AD * (P10day - P360))/12 = 0.168 + (0.74 * (3.67 - 2.20))/12 = 0.2580 acre-ft
Step 3, Compute Qallowable = (Qp)P3 - [(Qp)X1 - (Qp)proposed] = [4.9 cfs - (5.9 cfs - 4.2 cfs)] = 3.2 cfs
Step 4, Compute base, tD, of triangular inflow hydrograph → Vt = ½ tD*Qp → tD = (2*Vt)/Qp = (2*0.258 ac-ft)/4.9 cfs = (0.0874 acre-ft/cfs)*[(43560 ft2/acre)/(3600 sec/hr)] = 1.2742 hr
Step 5, Compute slope of rising limb of hydrograph = 4.9 cfs/0.6371 hr = 7.691 cfs/hr
Step 6, Compute intercepts at Qallowable (3.2 cfs)
  a. = 4.2/(7.691 cfs/hr) = 0.42 hr
  b. = 1.2742 hr - 0.42 hr = 0.86 hr
Step 7, Compute required storage = ½bh = ½ * (4.9-3.2 cfs) * (0.86 - 0.42 hr) * (3600 sec/hr) = 1353 ft3 = 0.0311 acre-ft

Drop Inlet & Hydraulics Computations: **Three new drop inlets are proposed for Phase I improvements, including 2-12"x12" drop inlets at the skate park bowl structure (Basin P2), and 1-Type "D" area inlet near the pedestrian bridge (Basin P3).** Drop inlet capacities assume orifice flow, 50% reduction in opening area due to bars, and 50% clogging. All proposed pipes were checked to verify a minimum velocity of 3 fps. Pipe computations were verified using FlowMaster software.

Per the orifice equation, Q=co*A*(2gd)½
Where: co= orifice coefficient (0.67); A= opening area (ft2);
g= gravitational constant (32.2 ft/sec2); d= ponding depth (ft)

12"x12" Grate Inlet: Q = 0.67*0.5*0.5*(1 ft*1 ft)*(2* 32.2 ft/sec2 * 0.5 ft)½ = 0.95 cfs
Type "D" Grate Inlet: Q = 0.67*0.5*0.5*(2 ft*3 ft)*(2* 32.2 ft/sec2 * 0.5 ft)½ = 5.7 cfs

Conclusion: This site has been inspected, and no grading, filling, or excavation has occurred since this plan was prepared. Analysis indicates that the proposed improvements to the existing storm drain system adequately convey storm runoff generated by the proposed improvements at the site. It should be noted that the proposed improvements will not appreciably increase discharge from the site (less than 0.1%); thus, there will be no change to the HGL in the Bataan Drive storm drain system.



VICINITY MAP

GENERAL NOTES

PHASE I PROJECT LIMITS
EXISTING BASIN
PROPOSED BASIN
PONDING AREA

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

N

SURVEY INFORMATION FIELD NOTES		
NO.	BY	DATE

BENCH MARKS
A.C.S. Survey Monument "SANDBERN"
New Mexico State Plane Coord's, Central Zone (NAD XX) as published:
Y = XXXXXXXXX
X = XXXXXXXXX
Elevation = XXXXXXXXXXXX
Ground to grid factor = XXXXXXXXX

AS-BUILT INFORMATION
CONTRACTOR
WORK STARTED BY / DATE
WORK COMPLETED & ACCEPTANCE BY / DATE
VERIFICATION BY / DATE
DRAWINGS CORRECTED BY / DATE
MICRO-FILM INFORMATION
RECORDED BY / DATE
NO.

ENGINEER'S SEAL
MARIO C. JUAREZ 15340 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		WILSON & COMPANY, ENGINEERS & ARCHITECTS	
		DESIGNED BY JSD	DATE 05/05
		DRAWN BY JSD/JLB	DATE 05/05
		CHECKED BY MJI	DATE 05/05

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

WESTSIDE SKATE PARK, PHASE I
GRADING AND DRAINAGE

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

WCEA #X5218028
MAY 2005

City Project No.	Zone Map No.	Sheet	Of
XXXX.XX	K & L-11-Z	1	1

WILSON & COMPANY

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JUN 03 2005
HYDROLOGY SECTION

EX 20.19
EX 21.20
EX 21.78
EX 21.41
EX 21.59
EX 21.87
EX 21.94
EX 22..05
EX 21.80
EX 21.01
EX 20.41
TW 23.88
BW 18.88
TW 23.48
BW 18.48
FG 18.73
TW 20.45
TW 19.95
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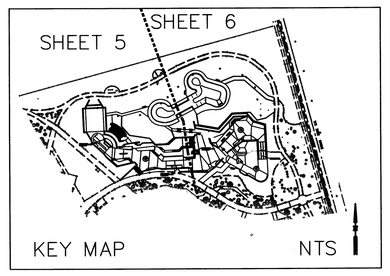
EX 19.13
EX 19.28
EX 19.38
EX 19.48
EX 19.01
EX 19.71
EX 19.59
TG 17.95
INV. 15.87
FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.
FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.
24" EXIST
24" EXIST
24" EXIST
5020
5000
MATCHLINE A SEE SHEET 6
PROJECT LIMIT
Where's the ramp?
Need inverts, TG Elev for existing structures

LEGEND

KEY	DESCRIPTION
BW	BOTTOM OF WALL
EX	EXISTING ELEVATION
INV	INVERT
SD	EXISTING STORM DRAIN
SI	STORM INLET
TC	TOP OF CONCRETE
TG	TOP OF GRATE
TW	TOP OF WALL



SCALE: 1" = 10'-0"

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AS BUILT INFORMATION
CONTRACTOR DATE:
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NO.

SURVEY INFORMATION
BENCHMARK
FIELD NOTES
NO. BY DATE

SEAL

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: GM	DATE: JUNE 6, 2005
		DRAWN BY: JSP	DATE: JUNE 6, 2005
		CHECKED BY: JSP	DATE: JUNE 6, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: *WESTSIDE SKATE PARK – PHASE 1–A*
GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXX	K 14 L 11–Z	5	11

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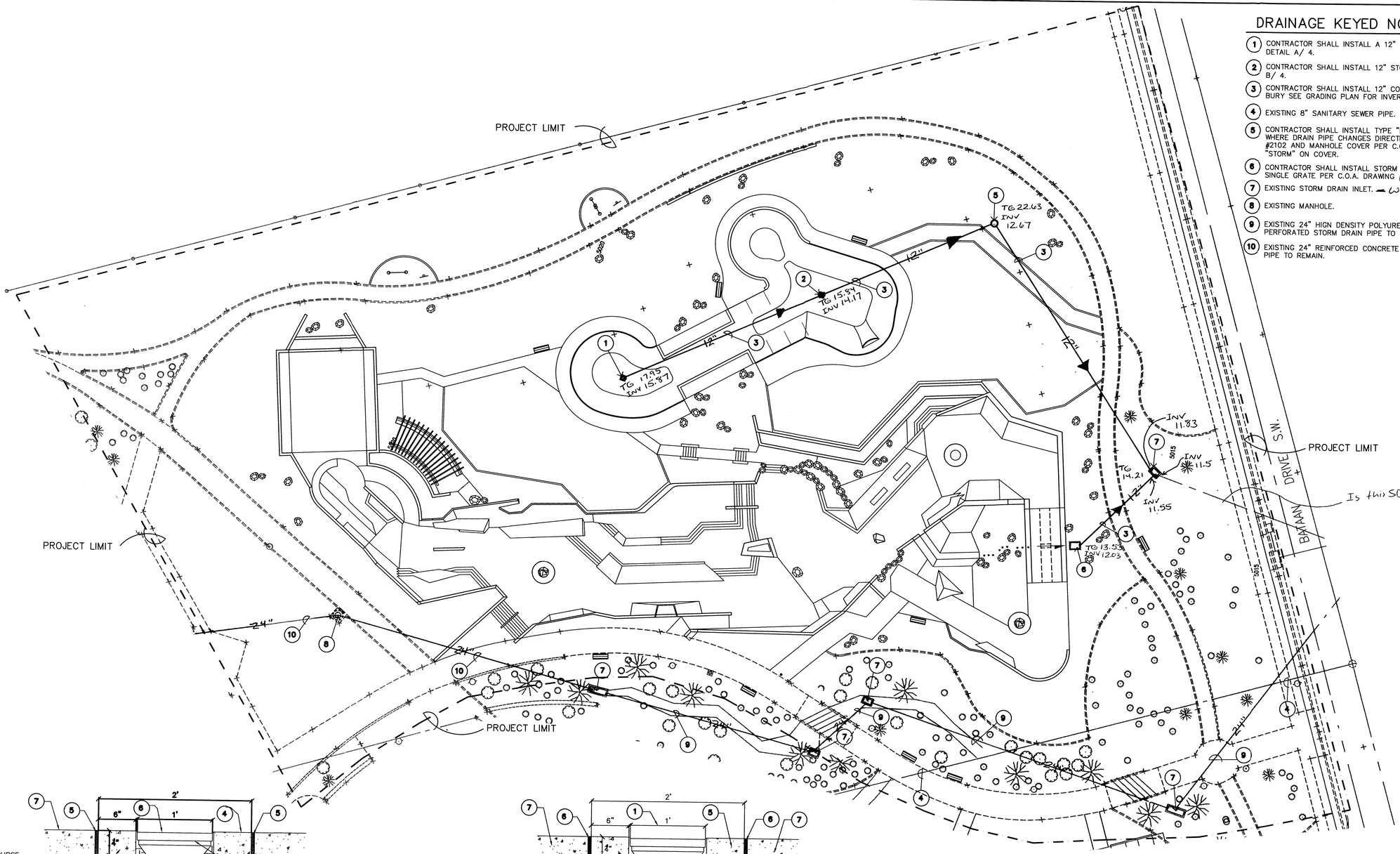

DRAINAGE KEYED NOTES

1. CONTRACTOR SHALL INSTALL A 12" STORM DRAIN INLET PER DETAIL A/ 4.
2. CONTRACTOR SHALL INSTALL 12" STORM DRAIN INLET PER DETAIL B/ 4.
3. CONTRACTOR SHALL INSTALL 12" CORRUGATED PIPE. FOR DEPTH OF BURY SEE GRADING PLAN FOR INVERT ELEVATIONS.
4. EXISTING 8" SANITARY SEWER PIPE.
5. CONTRACTOR SHALL INSTALL TYPE "E" MANHOLE AT LOCATION WHERE DRAIN PIPE CHANGES DIRECTION PER C.O.A. DRAWING #2102 AND MANHOLE COVER PER C.O.A. DRAWING 2110 WITH "STORM" ON COVER.
6. CONTRACTOR SHALL INSTALL STORM DRAIN INLET TYPE "D", WITH SINGLE GRATE PER C.O.A. DRAWING # 2206.
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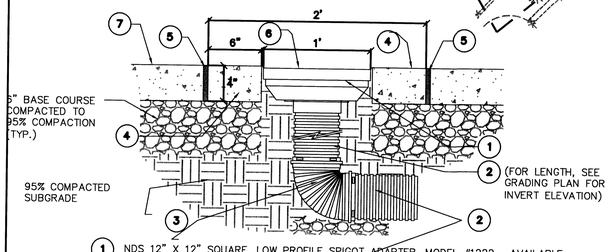
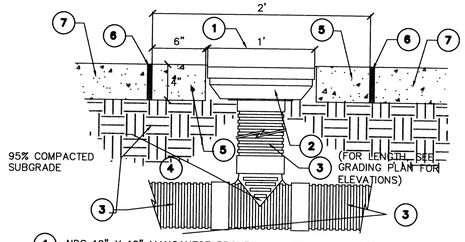
9. EXISTING 24" HIGN DENSITY POLYURETHANE PIPE (HDPE) PERFORATED STORM DRAIN PIPE TO REMAIN.
10. EXISTING 24" REINFORCED CONCRETE PIPE (RCP) STORM DRAIN PIPE TO REMAIN.



1. NDS 12" X 12" SQUARE, LOW PROFILE SPIGOT ADAPTER, MODEL #1222. AVAILABLE FROM LOVING & ASSOCIATES (505) 299–1122.
2. 8" CORRUGATED PIPE.
3. 8" CORRUGATED ELBOW.
4. 6" WIDE CONCRETE COLLAR AROUND DRAIN INLET.
5. 1/2" WIDE MASTIC EXPANSION JOINT WITH PLASTIC CAPXX ON TOP. THE TOP OF CAP SHALL BE FLUSH WITH TOP OF CONCRETE.
6. NDS 12" X 12" MANGANESE BRONZE SQUARE GRADE, MODEL #1214. AVAILABLE FROM LOVING & ASSOCIATES (505) 299–1122.
7. CONCRETE SLAB. SEE CONSTRUCTION PLAN.

A/4 **12" DRAIN INLET**

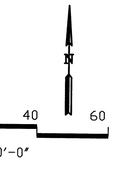
12INCHDRAINLINLE 4/29/05 1–1/2"=1'



1. NDS 12" X 12" MANGANESE BRONZE SQUARE GRATE, MODEL #1214 AVAILABLE FROM LOVING & ASSOCIATES (505) 299–1122.
2. NDS 12" X 12" SQUARE, LOW PROFILE SPIGOT ADAPTOR, MODEL #1222 AVAILABLE FROM LOVING & ASSOCIATES (505) 299–1122.
3. 8" CORRUGATED PIPE.
4. 8" "T" CORRUGATED PIPE CONNECTION.
5. 6" WIDE CONCRETE COLLAR AROUND DRAIN INLET.
6. 1/2" WIDE MASTIC EXPANSION JOINT WITH PLASTIC CAPXX ON TOP. THE TOP OF CAP SHALL BE FLUSH WITH TOP OF CONCRETE.
7. CONCRETE SLAB. SEE CONSTRUCTION PLAN.

B/4 **12" DRAIN INLET/"T"**

DRAININLET2.DWG 5/08/05 1–1/2"=1'



0 10 20 40 60

SCALE: 1" = 20'-0"

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SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

BENCHMARK

AS BUILT INFORMATION

	DATE:
CONTRACTOR	
WORK STAKED BY	DATE:
INSPECTOR'S APPROVAL	DATE:
FIELD VERIFICATION BY	DATE:
DRAWING CORRECTED BY	DATE:
MICRO-FILM INFORMATION	
RECORDED BY	DATE:
NO.	

SEAL

NO.	DATE	REVISIONS / REMARKS	BY
		DESIGNED BY: GM	DATE: JUNE 6, 2005
		DRAWN BY: JSP	DATE: JUNE 6, 2005
		CHECKED BY: JSP	DATE: JUNE 6, 2005

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: *WESTSIDE SKATE PARK – PHASE 1–A*
DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXX	K & L-10-Z	4	11

REVIEWED
MAY 27 2005
HYDROLOGY SECTION

MATCHLINE A SEE SHEET 5

FINISHED GRADE FOR PLANTER SHALL BE 5" BELOW TO OF CONCRETE.

18" WIDE SPILL WAY

12" TALL BERM UNDER CENTER LINE OF BRIDGE.

Ponding Area 7

24" EXIST

24" EXIST

LEGEND

KEY	DESCRIPTION
BW	BOTTOM OF WALL
EX	EXISTING ELEVATION
INV	INVERT
SD	EXISTING STORM DRAIN
SI	STORM INLET
TC	TOP OF CONCRETE
TG	TOP OF GRATE
TW	TOP OF WALL

SHEET 5 SHEET 6

KEY MAP NTS

N

0 5 10 20 30

SCALE: 1" = 10'-0"

AS BUILT INFORMATION
CONTRACTOR DATE:
WORK STAKED BY DATE:
INSPECTOR'S APPROVAL DATE:
FIELD VERIFICATION BY DATE:
DRAWING CORRECTED BY DATE:
MICRO-FILM INFORMATION
RECORDED BY DATE:
NO.

BENCHMARK

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

SEAL

NO.	DATE	REVISIONS / REMARKS	BY
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

TITLE: *WESTSIDE SKATE PARK – PHASE 1-A GRADING PLAN*

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXX	D & L-11-Z	6	11

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