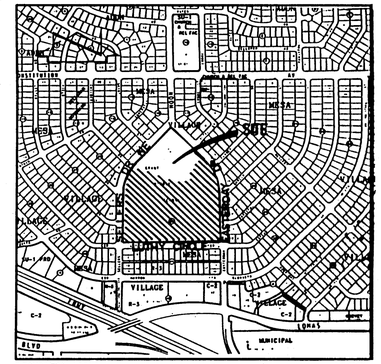
CONSTRUCTION DOCUMENTS

GRANT MIDDLE SCHOOL
NEW PARK DEVELOPMENT- PHASE I

CITY PROJECT NO. 5396

INDEX OF DRAWINGS



VICINITY MAP J-20
SCALE: 1" = 750'

THE FOLLOWING ALSO APPLY WHEN CHECKED

- [X] All utilities and utility service lines shall be installed prior to paving.
- [X] Backfill compaction shall be according to specified street use.
- [X] Tack coat requirements shall be determined by the city engineer.
- [X] Sidewalks and wheelchair ramps within the curb returns shall be constructed wherever a new curb return is constructed.
- [X] If curb is depressed for a drivepad or ramp, it shall be constructed prior to acceptance of the curb and gutter.
- [X] All storm drainage facilities shall be completed prior to final acceptance.

GENERAL NOTES

- ALL WORK TO BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS, 1986 EDITION (AS UPDATED WITH REVISION #9), OR PER ATTACHED SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE WITH THE WATER SYSTEM DIVISION FOR THE EXECUTION OF THE VALVE SHUT-OFF PLAN, NOT LESS THAN FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. ONLY WATER SYSTEM DIVISION PERSONNEL SHALL OPERATE EXISTING VALVES, REFER TO SECTION 18 OF THE SPECIFICATIONS.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- UTILITY LINES AND COVERS ARE SHOWN ON THESE DRAWINGS IN AN APPROXIMATE MANNER ONLY. LINES MAY EXIST WHERE NONE ARE SHOWN. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- SHOULD A CONFLICT EXIST BETWEEN THE PLANS AND THE ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE LANDSCAPE ARCHITECT IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH THE MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
- ALL EXISTING IMPROVEMENTS ARE TO REMAIN UNLESS SPECIFICALLY NOTED TO BE REMOVED. CONTRACTOR SHALL REPAIR ANY CONTRACTOR CAUSED DAMAGE TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE. ALL REPAIRS WITHIN THE CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS, BOTH HORIZONTAL AND VERTICAL, AND SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL DIMENSIONS OF ALL OBSTRUCTIONS.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- CONTRACTOR SHALL NOTIFY CITY SURVEYING NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT CITY SURVEYING MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF CITY SURVEYING AND SHALL NOTIFY CITY SURVEYING AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY CITY SURVEYING. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE STANDARD SPECIFICATIONS.
- ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION.

APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Russell D. Lisko
DATE 8-28-97

AS-BUILT DWGS.
8-18-97

G. Robert Johns, ASLA
Landscape Architects
3218 Silver Ave. SE
Albuquerque, N.M. -87106-
Ph:(505)266-8027

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

ENGINEERS STAMP & SIGNATURE	APPROVALS	ENGINEER	DATE	
STATE OF NEW MEXICO GARY R. JOHNS REGISTERED LANDSCAPE ARCHITECT	DRC Chairman	Billy J. Goolsby	6-7-96	APPROVED FOR CONSTRUCTION
	Transportation	for	6-7-96	
	Water/ Wastewater	Roger L. Green	6-7-96	
	Hydrology	Carl A. Metz	6-7-96	
	Parks	Robert E. McDonald	6-7-96	Billy J. Goolsby 6/1/96 City Engineer Date
	Constr. Mngt.			

May 30, 1996

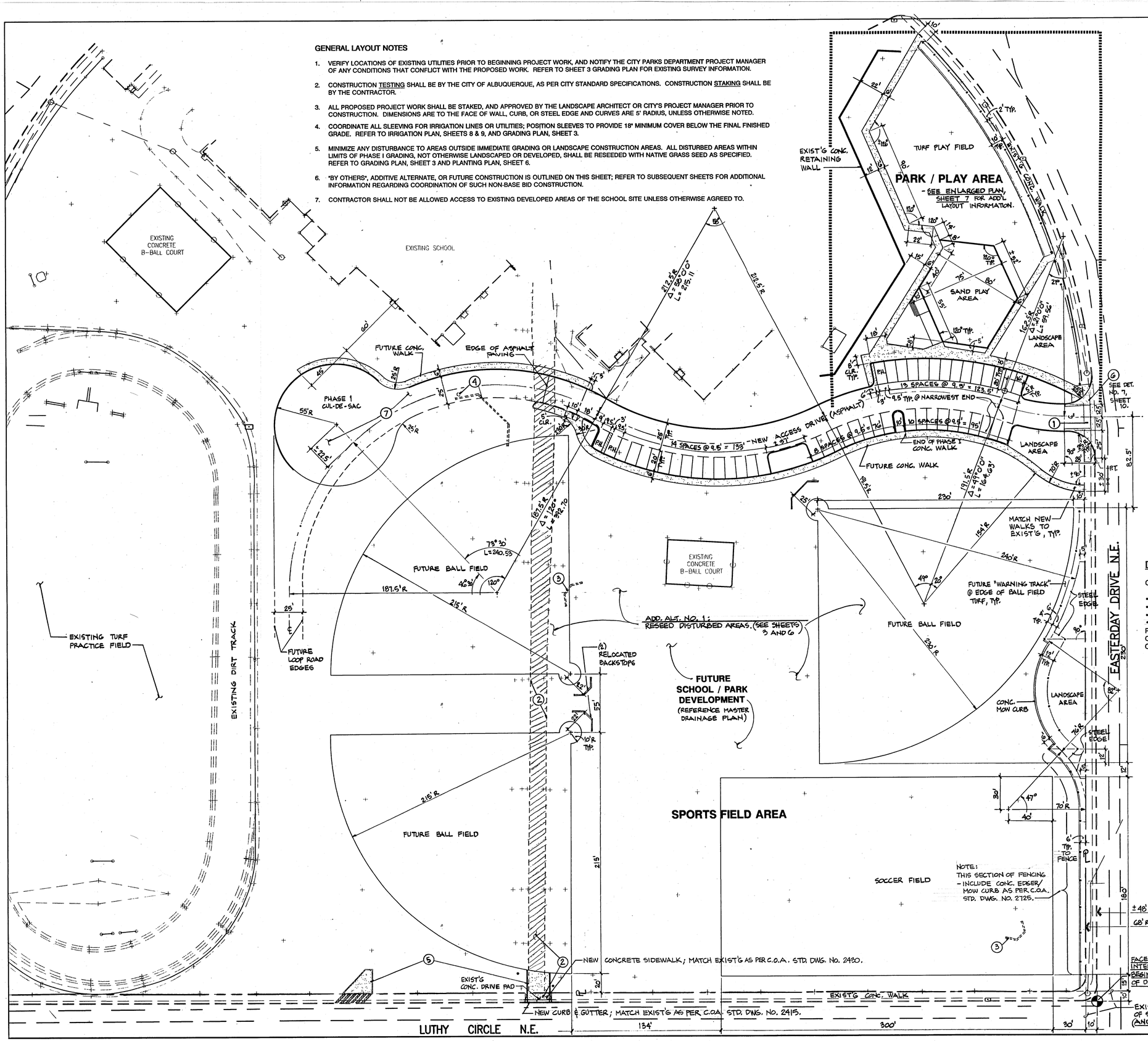
City Project No. 5396.90

Sheet C-1 Of 10

26-5396.90C0197

GENERAL LAYOUT NOTES

1. VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING PROJECT WORK, AND NOTIFY THE CITY PARKS DEPARTMENT PROJECT MANAGER OF ANY CONDITIONS THAT CONFLICT WITH THE PROPOSED WORK. REFER TO SHEET 3 GRADING PLAN FOR EXISTING SURVEY INFORMATION.
2. CONSTRUCTION TESTING SHALL BE BY THE CITY OF ALBUQUERQUE, AS PER CITY STANDARD SPECIFICATIONS. CONSTRUCTION STAKING SHALL BE BY THE CONTRACTOR.
3. ALL PROPOSED PROJECT WORK SHALL BE STAKED, AND APPROVED BY THE LANDSCAPE ARCHITECT OR CITY'S PROJECT MANAGER PRIOR TO CONSTRUCTION. DIMENSIONS ARE TO THE FACE OF WALL, CURB, OR STEEL EDGE AND CURVES ARE 5' RADIUS, UNLESS OTHERWISE NOTED.
4. COORDINATE ALL SLEEVING FOR IRRIGATION LINES OR UTILITIES; POSITION SLEEVES TO PROVIDE 18" MINIMUM COVER BELOW THE FINAL FINISHED GRADE. REFER TO IRRIGATION PLAN, SHEETS 8 & 9, AND GRADING PLAN, SHEET 3.
5. MINIMIZE ANY DISTURBANCE TO AREAS OUTSIDE IMMEDIATE GRADING OR LANDSCAPE CONSTRUCTION AREAS. ALL DISTURBED AREAS WITHIN LIMITS OF PHASE I GRADING, NOT OTHERWISE LANDSCAPED OR DEVELOPED, SHALL BE RESEEDED WITH NATIVE GRASS SEED AS SPECIFIED. REFER TO GRADING PLAN, SHEET 3 AND PLANTING PLAN, SHEET 6.
6. "BY OTHERS", ADDITIVE ALTERNATE, OR FUTURE CONSTRUCTION IS OUTLINED ON THIS SHEET; REFER TO SUBSEQUENT SHEETS FOR ADDITIONAL INFORMATION REGARDING COORDINATION OF SUCH NON-BASE BID CONSTRUCTION.
7. CONTRACTOR SHALL NOT BE ALLOWED ACCESS TO EXISTING DEVELOPED AREAS OF THE SCHOOL SITE UNLESS OTHERWISE AGREED TO.



SCALE: 1" = 40'

40' 0 80'
20' 40'

KEYED NOTES

DEMOLITION/REMOVALS

1. REMOVE AND DISPOSE PORTION OF EXISTING CONCRETE WALK AND CURB & GUTTER TO ACCOMODATE NEW DRIVE ENTRANCE.
2. REMOVE AND DISPOSE ENTIRE LENGTH OF EXISTING ASPHALT SERVICE DRIVE SOUTH OF NEW ACCESS DRIVE; REMOVE AND DISPOSE EXIST'G CONC. DRIVE PAD @ LUTHY CIRCLE.
3. SALVAGE AND RELOCATE EXISTING BACKSTOP TO NEW LOCATION AS INDICATED
4. REMOVE EXISTING SPORTS/MISCELLANEOUS EQUIPMENT TO A.P.S. STORAGE UNLESS OTHERWISE DIRECTED

NEW CONSTRUCTION [SEE SHEETS 6 & 7 FOR INFORMATION REGARDING ADDITIVE ALT'S NO. 2 & NO. 3]

5. NEW DRAINAGE STRUCTURES; REFER TO GRADING AND DRAINAGE PLANS, SECTIONS AND DETAILS, SHEETS 3-5
6. NEW PRIVATE DRIVE ENTRANCE AS PER C.O.A. STD. DWG. 2426 AND SUPPLEMENTAL DETAIL AS INDICATED
7. 6" GRAVEL BASE COURSE COMPACTED TO 95%, AS PER C.O.A. STD. SPECIFICATIONS

LEGEND

NEW/FUTURE CONCRETE PAVING/WALKWAY

NEW 4' HEIGHT CHAIN LINK FENCING

DETAIL REFERENCES

CITY OF ALBUQUERQUE (C.O.A.) STANDARD DETAIL DRAWINGS:

- CHAIN LINK FENCING (4' HT.) ..... C.O.A. #2252
- CONCRETE MOW CURB ..... C.O.A. #2726
- TURN-DOWN SLAB AT PLAY AREA ..... C.O.A. #2728
- LANDSCAPE CONCRETE EDGER AT FENCE ..... C.O.A. #2725

PLANTING AND IRRIGATION DETAILS SHALL BE C.O.A. STANDARDS UNLESS OTHERWISE INDICATED. ALL OTHER NON-STANDARD DETAILS ARE SHOWN ON SHEETS 5 AND 10.

N 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 - 5 3 9 6 . 9 0 1 0 2 9 7

AS-BUILT DWGS.
8.18.97

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JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. NE.
☐☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐☐ ENGINEERS ☐ SURVEYORS (505) 345-4250
950614

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **Layout / Dimension Plan**
GRANT MIDDLE SCHOOL PARK IMPROVEMENTS . **PHASE I**

APPROVED JUN 6 1996 DESIGN REVIEW COMMITTEE
APPROVED CITY ENGINEER
City Engineer Approval
Last Design Update

City Project No. 5396.90 | Zone Map No. J-20 | Sheet 2 Of 10

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

BENCH MARKS

A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S. B.M. 10-120" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.W. QUADRANT OF THE INTERSECTION.
ELEVATION = 5404.375 FEET (M.S.L.D.)

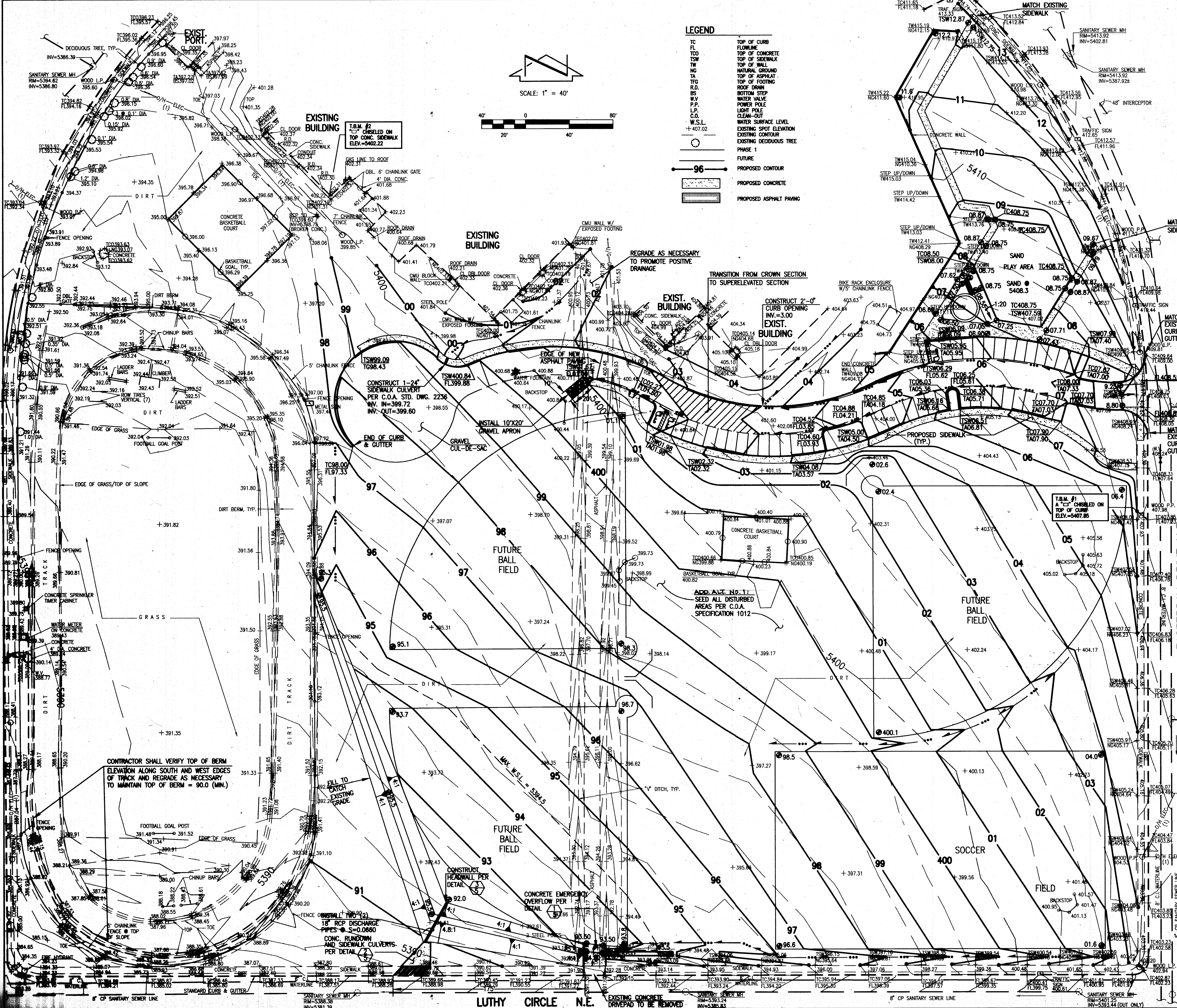
AS BUILT INFORMATION

CONTRACTOR Brad's Trees, Inc. DATE 11-96
WORK STAKED BY Contractor DATE
FINAL ACCEPTANCE BY COA DATE
FIELD LOCATION BY COA DATE
DRAWINGS CORRECTED BY G.R. Johns DATE 8-18-97
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

NO.	DATE	REVISIONS/REMARKS	BY
		Date	
		Date	
		Date 5-30-96	

Designed By GRJ, PBM
Drawn By PBM
Checked By PBM

C:\DATA\ACADDWG\5506144 Mon Mar 11 09:13:42 1996 -Surveyors


LEGEND
TC TOP OF CURB
FL FLOWLINE
TCO TOP OF CONCRETE
TSW TOP OF SIDEWALK
TW TOP OF WALL
NG NATURAL GROUND
TA TOP OF ASPHALT
TFG TOP OF FOOTING
R.D. ROOF DRAIN
BS BOTTOM STEP
W.V. WATER VALVE
P.P. POWER POLE
L.P. LIGHT POLE
C.O. CLEAN-OUT
W.S.L. WATER SURFACE LEVEL
EXISTING SPOT ELEVATION
EXISTING CONTOUR
EXISTING DECIDUOUS TREE
PHASE 1
FUTURE
PROPOSED CONTOUR
PROPOSED CONCRETE
PROPOSED ASPHALT PAVING
SCALE: 1" = 40'
EXISTING BUILDING
EXIST. PORT.
T.B.M. #2 "□" CHISELED ON TOP CONC. SIDEWALK ELEV.=5402.22
T.B.M. #1 A "□" CHISELED ON TOP OF CURB ELEV.=5407.85
REGRADE AS NECESSARY TO PROMOTE POSITIVE DRAINAGE
TRANSITION FROM CROWN SECTION TO SUPERELEVATED SECTION
CONSTRUCT 2'-0" CURB OPENING INV.=3.00
CONSTRUCT 1-24" SIDEWALK CULVERT PER C.O.A. STD. DWG. 2236 INV. IN=399.72 INV. OUT=399.60
END OF CURB & GUTTER
INSTALL 10'X20' GRAVEL APRON
GRAVEL CUL-DE-SAC
CONCRETE BASKETBALL COURT
FUTURE BALL FIELD
SOCCER
FIELD
SAND PLAY AREA
MATCH EXISTING SIDEWALK
MATCH EXISTING CONCRETE SIDEWALK GRADE
MATCH EXISTING CURB & GUTTER
PROPOSED SIDEWALK (TYP.)
ADD. ALT. NO. 1: SEED ALL DISTURBED AREAS PER C.O.A. SPECIFICATION 1012
CONTRACTOR SHALL VERIFY TOP OF BERM ELEVATION ALONG SOUTH AND WEST EDGES OF TRACK AND REGRADE AS NECESSARY TO MAINTAIN TOP OF BERM = 90.0 (MIN.)
MAX. W.S.L. = 5394.5
FILL TO CATCH EXISTING GRADE
CONSTRUCT HEADWALL PER DETAIL
CONCRETE EMERGENCY OVERFLOW PER DETAIL
INSTALL TWO 12" RCP DISCHARGE PIPES @ S=0.0660
CONC. RUNDOWN AND SIDEWALK CULVERTS PER DETAIL
EXISTING CONCRETE DRIVEPAD TO BE REMOVED
TRACK
DIRT
GRASS
LUTHY CIRCLE N.E.
EASTERDAY DRIVE N.E.
8" CP SANITARY SEWER LINE
STANDARD CURB & GUTTER

26-5396.90 0397

AS-BUILT DWGS. 8-18-97

AS BUILT INFORMATION
CONTRACTOR BACAS TREES, INC. DATE 11-96
INSPECTED BY (CONTRACTOR)
FIELD VERIFICATION BY COA
DRAFTED BY G.R. JOHNS DATE 8-18-97

BENCH MARKS
A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S. B.M. 10-J20" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.W.N. QUADRANT OF THE INTERSECTION.
ELEVATION = 5404.375 FEET (M.S.L.D.)

SURVEY INFORMATION
FIELD NOTES: JMA 11/95

JEFF MORTENSEN & ASSOCIATES, INC. — ALBUQUERQUE, NEW MEXICO 87109 — ENGINEERS / SURVEYORS (505) 345-4250

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: GRADING PLAN
GRANT MIDDLE SCHOOL PHASE I PARK IMPROVEMENTS

APPROVED — CITY ENGINEER

City Project No. 5396.90 | Zone Map No. J-20 | Sheet 3

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 3
2. $P_{6,100} = P_{360}$ = 2.60 in.
3. Total Area (A_T) = 980,350 sf/22.51 ac
4. Existing Land Treatment

A. Basin 'B' – A_{TB} = 247,690 sf/5.69 ac

Treatment	Area (sf/ac)	%
B	68,610/1.58	27.8
C	145,680/3.34	58.7
D	33,400/0.77	13.5

B. Basin 'C' – A_{TC} = 139,720 sf/3.21 ac

Treatment	Area (sf/ac)	%
C	139,720/3.21	100

C. Basin 'E' – A_{TE} = 417,440 sf/9.58 ac

Treatment	Area (sf/ac)	%
C	378,540/8.69	90.7
D	38,900/0.89	9.3

5. Developed Land Treatment

A. Basin 'B' – A_{TB} = 244,600 sf/5.62 ac

Treatment	Area (sf/ac)	%
B	68,610/1.58	28.1
C	142,590/3.27	58.2
D	33,400/0.77	13.7

B. Basin 'C' – A_{TC} = 14,220 sf/0.38 ac

Treatment	Area (sf/ac)	%
C	14,220/0.33	100

C. Basin 'E' – A_{TE} = 537,960 sf/12.35 ac

Treatment	Area (sf/ac)	%
B	40,240/0.93	7.6
C	346,820/7.96	64.4
D	150,900/3.46	28.0

6. Existing Condition

A. Basin 'B'

I. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

$E_W = (0.92(1.58)+1.29(3.34)+2.36(0.77))/5.69 = 1.33$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.33/12)5.69 = 0.6306$ ac.ft. = 27,470 cf

II. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = 2.60(1.58)+3.45(3.34)+5.02(0.77) = 19.5$ cfs

B. Basin 'C'

I. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

$E_W = (1.29(3.21))/3.21 = 1.29$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.29/12)3.21 = 0.3451$ ac.ft. = 15,030 cf

II. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = 3.45(3.21) = 11.1$ cfs

C. Basin 'E'

I. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

$E_W = (1.29(8.69)+2.36(0.89))/9.58 = 1.39$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.39/12)9.58 = 1.1097$ ac.ft. = 48,340 cf

II. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = 3.45(8.69)+5.02(0.89) = 34.4$ cfs

7. Developed Condition

A. Basin 'B'

I. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

$E_W = (0.92(1.58)+1.29(3.27)+2.36(0.77))/5.62 = 1.33$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.33/12)5.62 = 0.6229$ ac.ft. = 27,130 cf

II. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = 2.60(1.58)+3.45(3.27)+5.02(0.77) = 19.3$ cfs

B. Basin 'C'

I. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

$E_W = (1.29(0.33))/0.33 = 1.29$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.29/12)0.33 = 0.0355$ ac.ft. = 1,550 cf

II. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = 3.45(0.33) = 1.1$ cfs

C. Sub-Basin 'E'

I. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

$E_W = (0.92(0.93)+1.29(7.96)+2.36(3.46))/12.35 = 1.56$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.56/12)12.35 = 1.6055$ ac.ft. = 69,940 cf

II. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = 2.60(0.93)+3.45(7.96)+5.02(3.46) = 47.2$ cfs

8. Hydrograph Calculations – Sub-Basin 'E
Phase I Development – Worst Case Scenario

A. Base Time

$t_B = 2.107E(A_T/Q_p) - 0.25\,(A_D/A_T)$

E = 1.56 in

A_T = 12.35 ac

Q_p = 47.2 cfs

A_D = 3.46 ac

t_B = 0.79 hr = 47.4 min

B. Time to Peak

$t_p = 0.7t_c + (1.6 - A_D/A_T)/12$

t_c = 0.2 hr

A_D = 3.46 ac

A_T = 12.35 ac

t_p = 0.25 hr = 15.0 min

C. Time of Peak

$t_{pk} = 0.25(A_D/A_T)$

A_D = 3.46 ac

A_T = 12.35 ac

t_{pk} = 0.07 hr = 4.2 min

9. Pond Discharge Rate

A. Pressure Condition

$Q = CA(2gh)^{0.5}$

C = 0.6
g = 32.2 ft/s
h = 94.5 – 92.0 – 0.75 = 1.75 ft
A = 1.77 sf/pipe (2 pipes) = 3.54 sf (2 – 18" pipes)

Q = 22.5 cfs

B. Gravity Flow Condition

Using Feild's Calculator for Gravity Flow in Pipes

Let: D = 18"
S = 0.0520
n = 0.013

Therefore: Q = 24.0 cfs/pipe = 48.0 cfs total capacity

C. Pressure Condition Governs Discharge Rate: Q = 22.5 cfs

10. Comparison

Basins C & E

A. Phase I

ΔV_{100} = 1,550 + 69,940 – 48,340 – 15,030 = 8,120 cf (increase)

ΔQ_{100} = 11.1 + 34.4 – 1.1 – 22.5 = 21.9 cfs (decrease)

B. Fully Developed

ΔV_{100} = 1,550 + 1,630 + 64,560 – 48,340 – 15,030 = 4,370 cf (increase)

ΔQ_{100} = 11.1 + 34.4 – 1.1 – 1.0 – 22.5 = 20.9 cfs (decrease)

11. Emergency Overflow Capacity

$Q = CLH^{1.5}$

C = 2.70
L = 24.0 ft
H = 1.0 ft

$Q_{overflow}$ = 64.8 cfs >> Q_{E-2} = 47.2 cfs

12. Sidewalk Culvert Requirements

A. 24" Sidewalk Culvert Entrance Condition

$Q = CLH^{1.5}$

C = 2.60
L = 2.83 ft (24" culvert ● 45 degree skew)
H = 0.67 ft

$Q_{culvert}$ = 4.0 cfs

B. Number of Sidewalk Culverts Required

$Q_{release}/Q_{culvert}$ = # REQUIRED

22.5 cfs/4.0 cfs = 5.625 culverts

Therefore: Five 24" culverts and one 15" culvert are required

13. Pond Volume Calculations Basin 'E'

Elevation	Area (sf)	Volume (cf)	Σ Volume (cf)
92.0	0		
93.0	5,250	2,625	2,625
94.0	20,225	12,738	15,363
94.5	27,250	11,869	27,232

Pond Volume = 27,232 cf > Pond Required = 22,980 cf

DRAINAGE PLAN

The following items concerning the Grant Middle School Park and Playground Expansion are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located north of Luthy Circle N.E. It is bounded on the north, east, and west sides by Easterday Drive N.E. and Sellers Drive N.E. All of these roadways are fully developed residential public streets with curb and gutter, sidewalks and asphalt concrete paving.

As shown by Panel 30 of 50 of the Flood Insurance Program Flood Insurance Rate Maps published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, the extreme southwest corner of the site lies within a Flood Hazard Zone AO (Depth 1). Portions of this site contribute to this flood hazard zone.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. The development shown hereon, proposed for Grant Middle School, consist of the Phase I improvements for the City of Albuquerque Park and Playground Improvements. As part of these Phase I improvements, a playground area, some associated landscaping, a portion of the access road, a gravel cul-de-sac and associated parking, and mass grading for future improvements at the site are proposed. The grading shown on the plan is consistent with the grading scenario indicated by the Master Drainage Plan submitted by this office for the site. The basin boundaries shown are the same as shown on the Master Drainage Plan.

As outlined in the Master Drainage Plan, improvements will be limited to Basin E, which will reduce the size of Basins C and B. The runoff from Basin E will flow in a southwesterly direction to a new onsite detention pond. The detention facility will have a limited discharge rate of 22.5 cfs, which is less than the existing runoff discharged by Basins C and E which totals 45.5 cfs. The runoff will be conveyed via two 18" RCP storm drain pipes to a new concrete rundown which will then discharge into Luthy Circle N.E. in historic patterns, via six sidewalk culverts. An existing drivepad to the east of the proposed rundown and sidewalk culverts will be utilized as an emergency overflow spillway. This emergency overflow spillway has more than enough capacity to handle the anticipated 100-year runoff event.

Basins B and C will continue in their historic runoff patterns. Basin C will continue to discharge by sheetflow into Luthy Circle N.E. Basin B will continue to drain southwesterly into the existing dirt running track to the southwestern corner, where it is contained by the one foot berm surrounding the track. As identified by the Master Drainage Plan, no additional facilities are proposed for Basin B. The impact of development on Basin B is very minor, and the amount of runoff discharged by Basin B is reduced by this development, therefore, thereby not negatively impacting this basin.

With the reduction of peak discharge rate being released from this site, the effects of the runoff on the downstream flood hazard zone are reduced. This flood hazard zone will be eliminated in the future with the development of the storm drain system, 325-01B, as shown on AMDS Plate J-20 which consists of a 48" storm drain from Luthy Circle to 170 feet south of Luthy Circle to connect with Manhole S802. In the interim, onsite detention ponding will serve to mitigate the effects that this site has on downstream flooding. This site lies within an infill area and the watershed is fully developed, limiting significant future increases in runoff. Because this project is reducing the amount of runoff being discharged from the site, the site lies within an infill area with a fully developed watershed and future plans are in place for the installation of a storm drain system that will effectively eliminate the downstream flood hazard zone, it is felt that this drainage scenario is appropriate for this project.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, an increase of 8,120 cf in volume of runoff is anticipated with this development. Because of the detention facility, a decrease of 21.9 cfs in the peak discharge rate is anticipated. The Weir Equation has been used to quantify the emergency overflow capacity and the sidewalk culvert entrance condition. The Average End Area Method has been used to quantify the pond capacity. At a discharge rate of 22.5 cfs, the detained runoff will drain from the pond in approximately 17.0 minutes.

14. Basin 'B' Ponding Volume

Elev	Area (sf)	Vol (cf)	Σ Vol (cf)
87.5	0		
		1,125	1,125
88.0	4,500		
		9,375	10,500
89.0	14,250		
		18,375	28,875
90.0	22,500		

Volume at 90.0 = 28,875 cf > $V_{req'd}$ = 27,470 cf

15. 2-YEAR AND 5-YEAR EXISTING PEAK DISCHARGE RATE COMPARISON FROM BASINS 'C' AND 'E' FROM FROM TABLE A-3, DPM SECTION 22.2

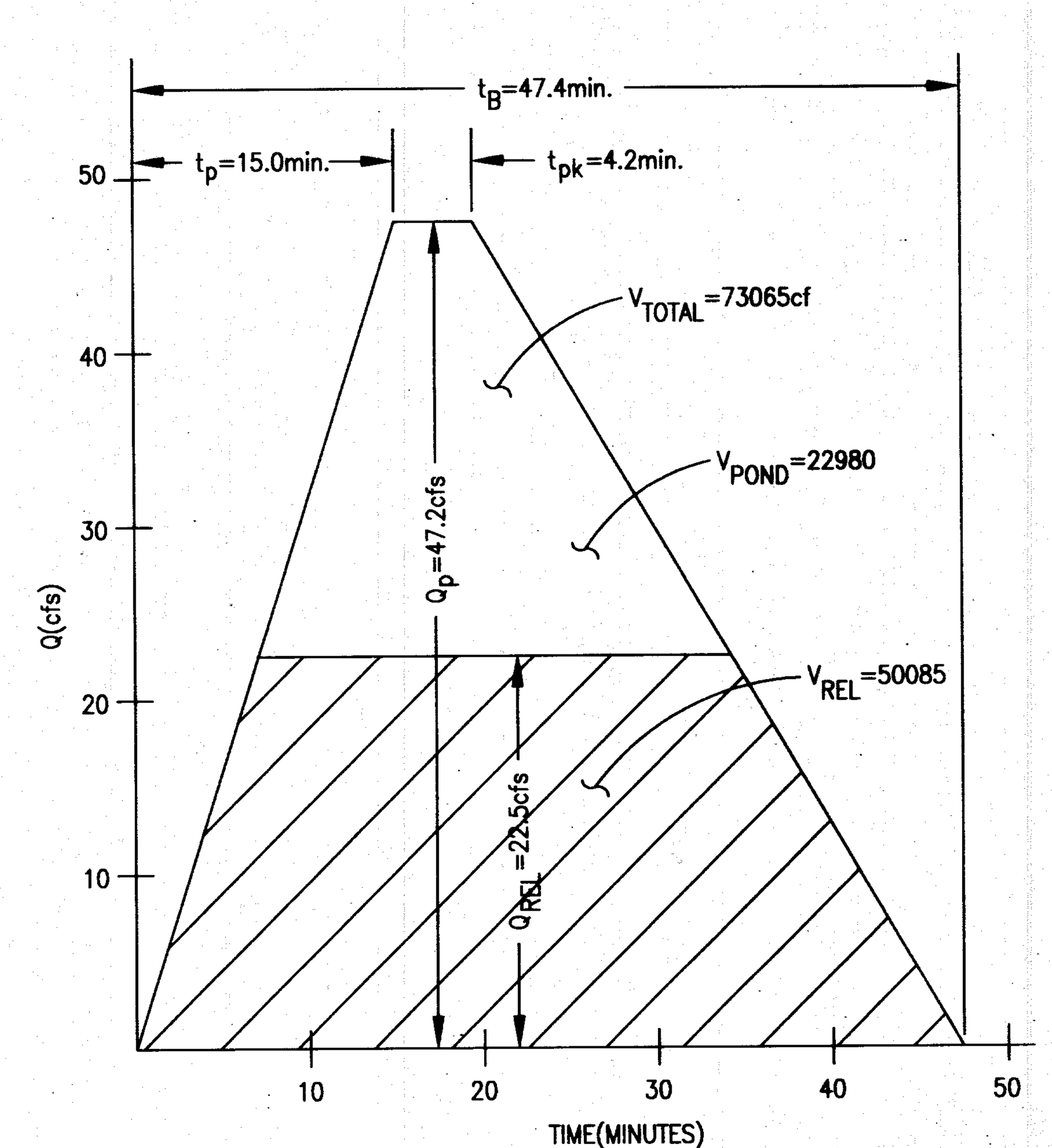
$Q_2 = Q_{100}(0.434)=(11.1+34.4)(0.434)=19.7$CFS

$Q_5 = Q_{100}(0.567)=(11.1+34.4)(0.567)=25.8$ CFS

Q_{REL} =22.5 CFS = POND RELEASE RATE

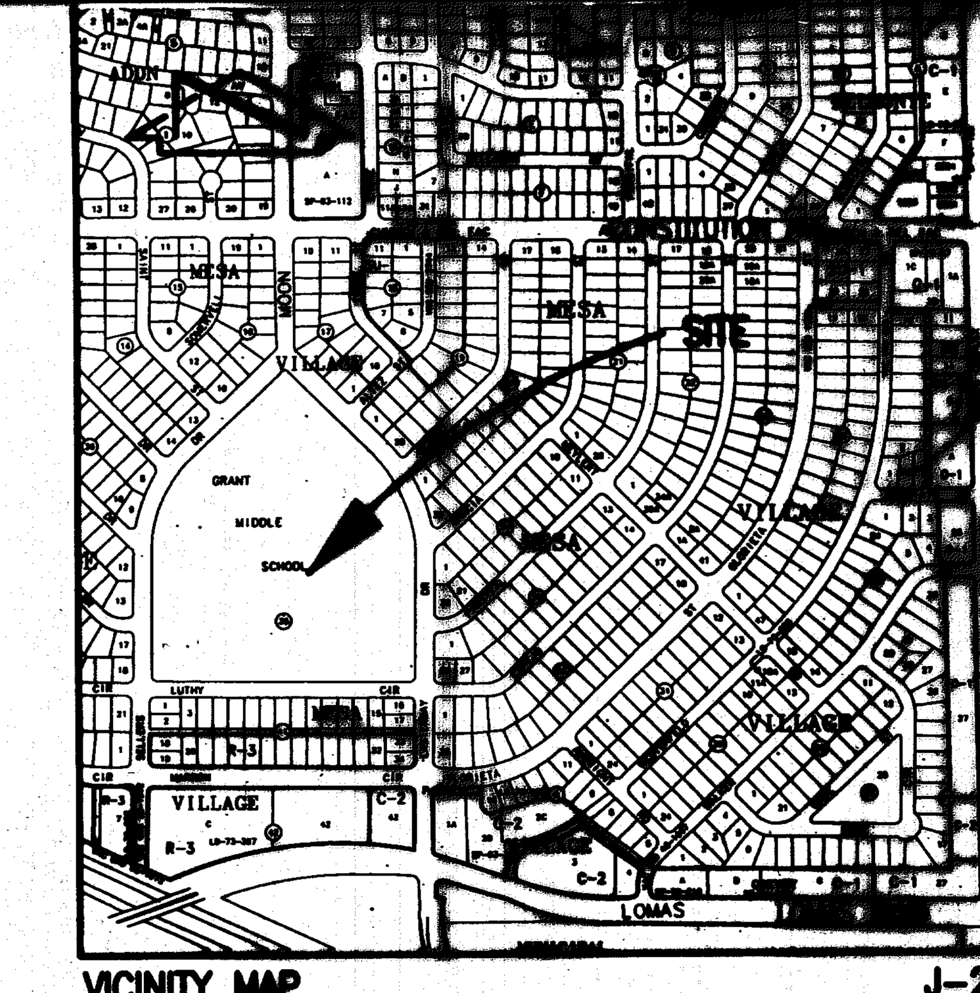
THEREFORE : Q_2 =19.7CFS < Q_{REL} =22.5CFS < Q_5=25.8CFS

THE PEAK DISCHARGE RATE FROM THE POND IS BETWEEN THE ESTIMATED PEAK DISCHARGE RATES FOR THE 2 AND 5 YEAR STORM EVENTS.



GENERAL NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, REVISION G. AMERICAN PUBLIC WORKS ASSOCIATION.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO SCHOOL FACILITIES DURING CONSTRUCTION.
6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
7. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING AND MAINTAINING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
8. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
9. CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.
10. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO ENSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER.
11. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL (CONTAMINATED OR OTHERWISE), ASPHALTIC PAVING, CONCRETE PAVING, ETC. SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
12. A BORROW SITE FOR IMPORT MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A BORROW SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY OBTAINING THE REQUIRED COMPACTION. THE CONTRACTOR SHALL SELECT AND USE METHODS WHICH SHALL NOT BE INJURIOUS OR DAMAGING TO THE EXISTING FACILITIES AND STRUCTURES WHICH SURROUND THE WORK AREAS.
14. THE CONTRACTOR SHALL CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS IN ORDER TO PRESERVE THE EXISTING IMPROVEMENTS AND SO AS NOT TO INTERFERE WITH THE OPERATIONS OF THE EXISTING FACILITIES.
15. CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.



VICINITY MAP
SCALE: 1" = 750'±

T.B.M.

T.B.M. #1; A "□" CHISELED ON THE TOP OF CURB AS SHOWN ON THE DRAWING. (SHEET 3 OF 3)
ELEVATION = 5407.85 FEET

T.B.M. #2; A "□" CHISELED ON TOP OF CONCRETE SIDEWALK AS SHOWN ON THE DRAWING. (SHEET 3 OF 3)
ELEVATION = 5402.22 FEET

LEGAL DESCRIPTION

BLOCK 35, MESA VILLAGE

Erosion Control Measures:

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

BENCH MARKS: A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S., B.M. 10-J20" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.N.W. QUADRANT OF THE INTERSECTION. ELEVATION = 5404.375 FEET (M.S.L.D.)

SURVEY INFORMATION: 950612 JMA 11-95

AS BUILT INFORMATION: CONTRACTOR BACAS TREES, INC. DATE 11-96 — INSPECTOR'S ACCEPTANCE BY COA — FIELD VERIFICATION BY COA — DRAWINGS CORRECTED BY G. R. JOHNS DATE 8/18/97

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26-5397.90 0497

AS-BUILT DWGS.
8-18-97

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **DRAINAGE PLAN, CALCULATIONS AND VICINITY MAP GRANT MIDDLE SCHOOL PHASE I PARK IMPROVEMENTS**

APPROVED JUN 6 1996 DESIGN REVIEW COMMITTEE

APPROVED CITY ENGINEER

City Project No.	Zone Map No.	Sheet	of
5396.90	J-20	4	10


SECTION A – A
SCALE: 1" = 5'
TOP OF WALL (BEYOND)
PROPOSED BACKFILL GRADE (BEYOND)
VARIES 19' – 21'
VARIES 10'-12'
TC93.50
TC94.50
TOP OF BERM = 95.50
VARIES 4.0 TO 4.1
MATCH EXISTING DRIVEPAD GRADE INSTALL 1/2" EXPANSION JOINT
SUBGRADE/BACKFILL COMPACTED @ 90% A.S.T.M. D-1557
EXISTING DRIVEPAD
SECTION B – B
SCALE: 1" = 5'
25'-0"
24'-0"
VARIES 6" - 12"
2 1/2" CLR.
BACKFILL COMPACTED @ 90% A.S.T.M. D-1557
SUBGRADE COMPACTED @ 90% A.S.T.M. D-1557
CONSTRUCT OVERFLOW SPILLWAY WITH 4000 P.S.I. CONCRETE
#4 REBARS @ 6" O.C. LONGITUDINALLY AND 12" O.C. TRANSVERSELY.
SECTION C – C
SCALE: 1" = 4'
VARIES 7' TO 24' - 0 5/8"
VARIES 6'-5" TO 22'-10 1/8"
CONSTRUCT RUNDOWN WITH 4000 P.S.I. CONCRETE
SUBGRADE AND BACKFILL COMPACTED @ 90% A.S.T.M. D-1557
INSTALL #4 REBARS @ 0'-6" O.C. LONGITUDINALLY AND 1'-0" O.C. TRANSVERSELY
* LAST 4' OF CHANNEL SHALL TAPER FROM 2'-0" TO 0'-8" AT CONNECTION TO SIDEWALK CULVERT.
SECTION D – D
SCALE: 1" = 1'
7'-0"
18" R.C.P. (SKEWED)
#4 REBAR GRID PER DIMENSIONS
CONSTRUCT HEADWALL WITH 4000 P.S.I. CONCRETE
REBAR EXPOSED IN CENTER OF PIPE OPENINGS, TYP.
SECTION E – E
SCALE: 1" = 1'
TC91.36
TOP OF CURB (BEYOND)
BACKFILL COMPACTED @ 90% A.S.T.M. D-1557
INV OUT 89.36
SLOPE VARIES 0.0075 TO 0.0200
S=0.0420
CONSTRUCT RUNDOWN PER DETAIL 2
INSTALL 1/2" EXPANSION JOINT
SECTION F – F
SCALE: HORIZONTAL: 1" = 2' VERTICAL: 1" = 1'
6" THICK 4000 PSI CONCRETE WITH MEDIUM BROOM FINISH
12" X 12" #4 REBAR REINFORCEMENT, TYP.
EXPOSED REBAR IN PIPE OPENING
INV. IN = 92.00
6" SUBGRADE COMPACTED @ 95% A.S.T.M. D-1557
18" R.C.P. STORM DRAIN @ S=0.0660
DETAIL 1/3
SCALE: 1" = 5'
FUTURE BALL FIELD
TOP OF BERM @ 5395.5
TC093.50
TC94.00
TC094.50
TC95.50
INSTALL 1/2" EXPANSION JOINT
MATCH EXISTING DRIVEPAD GRADE
TC92.17
TC92.79
TC091.97
TC092.29
INSTALL BOLLARDS @ 6'-0" O.C. (TYP. OF 3)
EXISTING 24' DRIVEPAD TO BE REMOVED AND REPLACED W/ SIDEWALK (REFER TO ARCHITECHTURAL PLANS)
MATCH EXISTING CONCRETE SIDEWALK GRADE
EXISTING CONCRETE SIDEWALK
392.28
EXISTING CURB AND GUTTER
LUTHY CIRCLE N.E.
TC391.83 FL391.27 (MATCH EXIST.)
TC392.15 FL391.48 (MATCH EXIST.)
1' MIN.
NEW CONCRETE CURB & GUTTER
NEATLY SAWCUT, REMOVE, DISPOSE & REPLACE EXISTING RESIDENTIAL PAVING PER C.O.A. STD.DWG.2465.
DETAIL 2/3
SCALE: 1" = 4'
TWO 18" R.C.P. DISCHARGE PIPES
TC089.36
TC089.36
INV OUT 89.36
TC91.36
CONSTRUCT FIVE (5) 24" AND ONE (1) 15" SIDEWALK CULVERTS PER C.O.A. STD. DWG. 2236
NEATLY SAWCUT, REMOVE, AND DISPOSE AND REPLACE EXISTING CONCRETE SIDEWALK PER C.O.A. STD. DWG. 2430 TO NEAREST CONSTRUCTION OR EXPANSION JOINT TO FACILITATE CULVERT CONSTRUCTION.
4' TAPER FROM 2'-0" TO 8" HEIGHT @ BACK OF SIDEWALK
TC89.58 TSW89.58
TC088.91
TC089.24
TC89.91 TSW89.91
CONCRETE GUTTER
1' MIN.
EXISTING CURB AND GUTTER
TC89.23 FL88.56
NEATLY SAWCUT, REMOVE, DISPOSE, AND REPLACE EXISTING RESIDENTIAL PAVING PER C.O.A. STD. DWG. 2465
TC89.56 FL88.89
22'-7 5/8"
NEATLY SAWCUT, REMOVE, DISPOSE, AND REPLACE EXISTING CURB AND GUTTER PER C.O.A. STD. DWG. 2415 TO NEAREST CONSTRUCTION OR EXPANSION JOINT TO FACILITATE CULVERT CONSTRUCTION.
DETAIL 3/3
SCALE: 1" = 2'
BEVELED STORM DRAIN OPENING
EXPOSED REBAR IN PIPE ENTRANCE
INV. IN = 92.00
TYPICAL BOLLARD SECTION
SCALE: 1" = 2' - 0"
CONCRETE WASH CAP
2" WIDE REFLECTIVE TAPE, TYP.
6" DIA. STANDARD STEEL PIPE COLUMN PAINT WITH ONE COAT RUST INHIBITIVE PRIMER AND ONE COAT "CHROME YELLOW" ENAMEL
FILL PIPE SOLID WITH 4000 PSI PORTLAND CEMENT CONCRETE
FINISHED GRADE
4000 PSI PORTLAND CEMENT CONCRETE
26-5396.90 0597
AS-BUILT DWGS. 8.18.97
AS BUILT INFORMATION
CONTRACTOR BACA'S TREES, INC.
BENCH MARKS
A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S., B.M. 10-J20" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.N.W. QUADRANT OF THE INTERSECTION.
ELEVATION = 5404.375 FEET (M.S.L.D.)
SURVEY INFORMATION
FIELD NOTES
950612 JMA 11-95
ENGINEER'S SEAL
REVISIONS/REMARKS
Designed By G.R.B. Date 05-96
Drawn By E.M.S. Date 05-96
JEFF MORTENSEN & ASSOCIATES, INC.
CITY ENGINEER
DESIGN REVIEW COMMITTEE

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: SECTIONS AND DETAILS
GRANT MIDDLE SCHOOL PHASE I PARK IMPROVEMENTS

City Project No. 5396.90 | Zone Map No. J-20 | Sheet 5 of 10

GENERAL PLANTING NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING PLANTING OPERATIONS, AND SHALL NOTIFY THE CITY'S PROJECT MANAGER OF ANY CONDITIONS THAT CONFLICT WITH THE PROPOSED WORK.
2. PLANTING INSTALLATION SHALL BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS AND DETAILS UNLESS OTHERWISE NOTED.
3. WEED REMOVAL — ALL PLANTING AREAS ARE TO HAVE ALL WEEDS AND COMPETITIVE VEGETATION REMOVED PRIOR TO BEGINNING ANY PREPARATION FOR PLANTING.
4. IN CASE OF A DISCREPANCY IN THE PLANT QUANTITIES SHOWN ON THE PLANT SCHEDULE AND THOSE ILLUSTRATED ON THE PLANTING PLAN, THE QUANTITIES ON THE PLANTING PLAN SHALL GOVERN.
5. THE BOTANICAL NAME WILL TAKE PRECEDENCE OVER THE COMMON NAME IF A DISCREPANCY OCCURS.
6. ALL PLANT SPECIMENS OF THE SAME SPECIES SHALL BE MATCHING IN PROPER AND APPROPRIATE SIZE AND CHARACTER AS PER THE AMERICAN NURSERYMAN'S ASSOCIATION STANDARDS.
7. ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY THE USE OF A MULCH OR BINDER APPLIED AS SPECIFIED DURING SEEDING.
8. PLANTING SCHEDULE IS SHOWN ON SHEET 7.

SCALE: 1" = 40'

40' 0 80'
20' 40'

LEGEND

- PROPOSED EVERGREEN TREE
- PROPOSED DECIDUOUS TREES
- PROPOSED SHRUB/GROUND COVER/ PERENNIAL PLANTINGS
- PROPOSED NATIVE GRASS/WILDFLOWER SEEDING (IRRIGATED; UNMOWN)
- NEW 4' HEIGHT CHAIN LINK FENCING

EXISTING CONCRETE B-BALL COURT

EXISTING SCHOOL

EXISTING CONCRETE B-BALL COURT

PARK / PLAY AREA
- SEE ENLARGED PLAN, SHEET 7, FOR LANDSCAPE/ PLANTING NORTH OF NEW ACCESS DRIVE.

NEW ACCESS DRIVE

(FUTURE: CONTINUE PL'S ALONG ACCESS DRIVE)

MAINTAIN 35'X35' CLEAR SIGHT △, TYP.

(1) PL
(5) NO
(16) RSa
(3) CM @ 20' o.c. W/ (30) GSw
STEEL EDGE
(1) NO
(1) AP
(32) Cha CONC. MOW CURB
(4) PL
(1) AP
(2) NO
STEEL EDGE
(3) CM @ 20' o.c. W/ (17) GSw
(4) RA @ 30' o.c.
(6) SVi @ 15' o.c.
STL. EDGE
(2) NO

EASTERDAY DRIVE N.E.

NOTE: ADDITIVE ALTERNATE No. 1:
ALL PHASE I AREAS DISTURBED BY GRADING AND NOT OTHERWISE LANDSCAPED OR DEVELOPED, SHALL BE SEEDED W/ NATIVE GRASS MIX AS SPECIFIED (NON-IRRIGATED).

SPORTS FIELD AREA

SOCCER FIELD BOUNDARIES
BOUNDARIES OF PLAY FIELD TURF SEED AS PER C.O.A. SPECIFICATION SECTION 1011

210'

MAINTAIN 35'X35' CLEAR SIGHT △

7.5' 15' 6' 6'

330'

NOTE: ADDITIVE ALTERNATE No. 3:
(3" MIN. DEPTH) CRUSHER FINES MULCH, TYP. BETWEEN WALK & CURB AND @ ALL PLANTING AREAS.

LUTHY CIRCLE N.E.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
216-5396.00 06/97

AS-BUILT DWGS.
8.18.97

G. Robert Johns, ASLA
Landscape Architects
3218 Silver Avenue, SE
Albuquerque, N.M. 87106
Ph: (505) 266-8027
Fax: (505) 266-6234

JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6020-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

950614

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **Landscape /Planting Plan**
GRANT MIDDLE SCHOOL PARK IMPROVEMENTS . **PHASE I**

Design Review Committee: APPROVED JUN 0 1997 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED AUG 0 8 1997 CITY ENGINEER
Last Design Update: Mo./Day/Yr. / Mo./Day/Yr.

City Project No. 5396.00 | Zone Map No. J-20 | Sheet 6 Of 10

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

BENCH MARKS
A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S., B.M. 10-J20" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.W. QUADRANT OF THE INTERSECTION.
ELEVATION = 5404.375 FEET (M.S.L.D.)

AS BUILT INFORMATION
CONTRACTOR BACA'S TREES, INC. DATE 11/96
CONSTRUCTION STAKED BY (CONTRACTOR) DATE
INSPECTION'S ACCEPTANCE BY COA DATE
FIELD VERIFICATION BY COA DATE
AS-BUILT DRAWINGS CORRECTED BY G.R. JOHNS DATE 8/18/97
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

REVISIONS/REMARKS

NO.	DATE	BY
	Date	
	Date	
	Date 5-30-96	

Designed By GRJ, ASM
Drawn By BBM
Checked By BBM

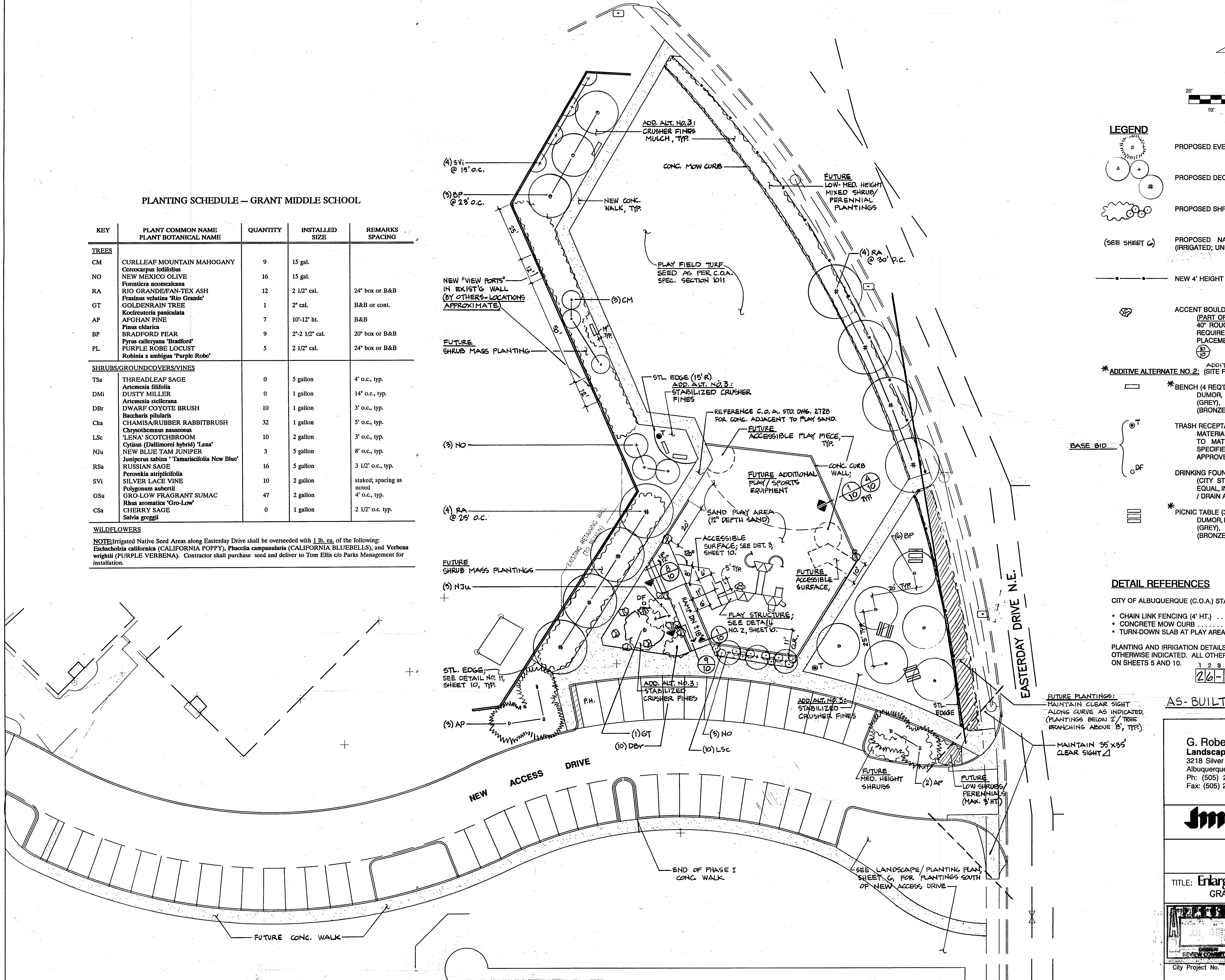
C:\DATA\ACADDWG\5960J4A Tue May 13 15:45:44 1996 -ENS

PLANTING SCHEDULE – GRANT MIDDLE SCHOOL

KEY	PLANT COMMON NAME PLANT BOTANICAL NAME	QUANTITY	INSTALLED SIZE	REMARKS SPACING
TREES				
CM	CURLLEAF MOUNTAIN MAHOGANY **Cercocarpus ledifolius**	9	15 gal.	
NO	NEW MEXICO OLIVE **Forestiera neomexicana**	16	15 gal.	
RA	RIO GRANDE/FAN-TEX ASH **Fraxinus velutina 'Rio Grande'**	12	2 1/2" cal.	24" box or B&B
GT	GOLDENRAIN TREE **Koelreuteria paniculata**	1	2" cal.	B&B or cont.
AP	AFGHAN PINE **Pinus eldarica**	7	10'-12' ht.	B&B
BP	BRADFORD PEAR **Pyrus calleryana 'Bradford'**	9	2"-2 1/2" cal.	20" box or B&B
PL	PURPLE ROBE LOCUST **Robinia x ambigua 'Purple Robe'**	5	2 1/2" cal.	24" box or B&B
SHRUBS/GROUNDCOVERS/VINES				
TSa	THREADLEAF SAGE **Artemesia filifolia**	0	5 gallon	4' o.c., typ.
DMi	DUSTY MILLER **Artemesia stellerana**	0	1 gallon	14" o.c., typ.
DBr	DWARF COYOTE BRUSH **Baccharis pilularis**	10	1 gallon	3' o.c., typ.
Cha	CHAMISA/RUBBER RABBITBRUSH **Chrysothemnus nauseosus**	32	1 gallon	5' o.c., typ.
LSc	'LENA' SCOTCHBROOM **Cytisus (Dallimorei hybrid) 'Lena'**	10	2 gallon	3' o.c., typ.
NJu	NEW BLUE TAM JUNIPER **Juniperus sabina ' Tamariscifolia New Blue'**	3	5 gallon	8' o.c., typ.
RSa	RUSSIAN SAGE **Perovskia atriplicifolia**	16	5 gallon	3 1/2' o.c., typ.
SVi	SILVER LACE VINE **Polygonum aubertii**	10	2 gallon	staked; spacing as noted
GSu	GRO-LOW FRAGRANT SUMAC **Rhus aromatica 'Gro-Low'**	47	2 gallon	4' o.c., typ.
CSa	CHERRY SAGE **Salvia greggii**	0	1 gallon	2 1/2' o.c. typ.

WILDFLOWERS

NOTE: Irrigated Native Seed Areas along Easterday Drive shall be overseeded with 1 lb. ea. of the following: **Eschscholzia californica** (CALIFORNIA POPPY), **Phacelia campanularia** (CALIFORNIA BLUEBELLS), and **Verbena wrightii** (PURPLE VERBENA). Contractor shall purchase seed and deliver to Tom Ellis c/o Parks Management for installation.



SCALE: 1" = 20'

20' 0 10' 20' 40'

LEGEND

PROPOSED EVERGREEN TREE

PROPOSED DECIDUOUS TREES

PROPOSED SHRUB/GROUND COVER

(SEE SHEET 6) PROPOSED NATIVE GRASS/WILDFLOWER SEEDING (IRRIGATED; UNMOWN)

NEW 4' HEIGHT CHAIN LINK FENCING

ACCENT BOULDER:
(PART OF ADDITIVE ALTERNATE NO. 3): ± 24" - 40" ROUGH DIAMETER RIVER ROCK (15 TOTAL REQUIRED), FOR GROUP OR INDIVIDUAL PLACEMENT AS INDICATED; REFERENCE DETAIL 10/10.

*ADDITIVE ALTERNATE NO. 2: ADDITIONAL (SITE FURNITURE)

*BENCH (4 REQ'D):
DUMOR, INC. MODEL 11-60 RECYCLED PLASTIC (GREY), WITH EMBEDDED STEEL SUPPORTS (BRONZE), OR APPROVED EQUAL.

BASE BID

TRASH RECEPTACLE (2 REQ'D):
MATERIALS, INC. "RINCONADA" MODEL, COLOR TO MATCH RECYCLED PLASTIC COLOR OF SPECIFIED BENCH / PICNIC TABLE, OR APPROVED EQUAL.

DRINKING FOUNTAIN:
(CITY STD.) MDF MODEL 410, OR APPROVED EQUAL, INCLUDING HOOK-UP TO WATER SUPPLY / DRAIN AS SPECIFIED.

*PICNIC TABLE (3 REQ'D):
DUMOR, INC. MODEL 76-42PL RECYCLED PLASTIC (GREY), WITH EMBEDDED STEEL SUPPORTS (BRONZE), OR APPROVED EQUAL.

DETAIL REFERENCES

CITY OF ALBUQUERQUE (C.O.A.) STANDARD DETAIL DRAWINGS:

- CHAIN LINK FENCING (4' HT.) .... C.O.A. #2252
- CONCRETE MOW CURB .... C.O.A. #2726
- TURN-DOWN SLAB AT PLAY AREA .... C.O.A. #2728

PLANTING AND IRRIGATION DETAILS SHALL BE C.O.A. STANDARDS UNLESS OTHERWISE INDICATED. ALL OTHER NON-STANDARD DETAILS ARE SHOWN ON SHEETS 5 AND 10.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26-5396.90 0797

AS-BUILT DWGS.
8.18.97

AS BUILT INFORMATION
CONTRACTOR BACA'S TREES, INC. DATE 11.96
WORK STAKED BY (CONTRACTOR) DATE
INSPECTOR'S ACCEPTANCE BY COA DATE
FIELD VERIFICATION BY G. R. JOHNS DATE 8.18.97
DRAWINGS CORRECTED BY
MICRO-FILM INFORMATION DATE
RECORDED BY
NO.

BENCH MARKS
A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S. B.M. 10-J20" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.W. QUADRANT OF THE INTERSECTION.
ELEVATION = 5404.375 FEET (M.S.L.D.)

SURVEY INFORMATION
FIELD NOTES | NO. | BY | DATE

REVISIONS/REMARKS | NO. | DATE | BY

G. Robert Johns, ASLA
Landscape Architects
3218 Silver Avenue,
Albuquerque, N.M. 87106
Ph: (505) 266-8027
Fax: (505) 266-6234

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250
950614

Designed By GRJ, BBM Date
Drawn By BBM Date
Checked By BBM Date 5.20.96

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN AND DEVELOPMENT DIVISION

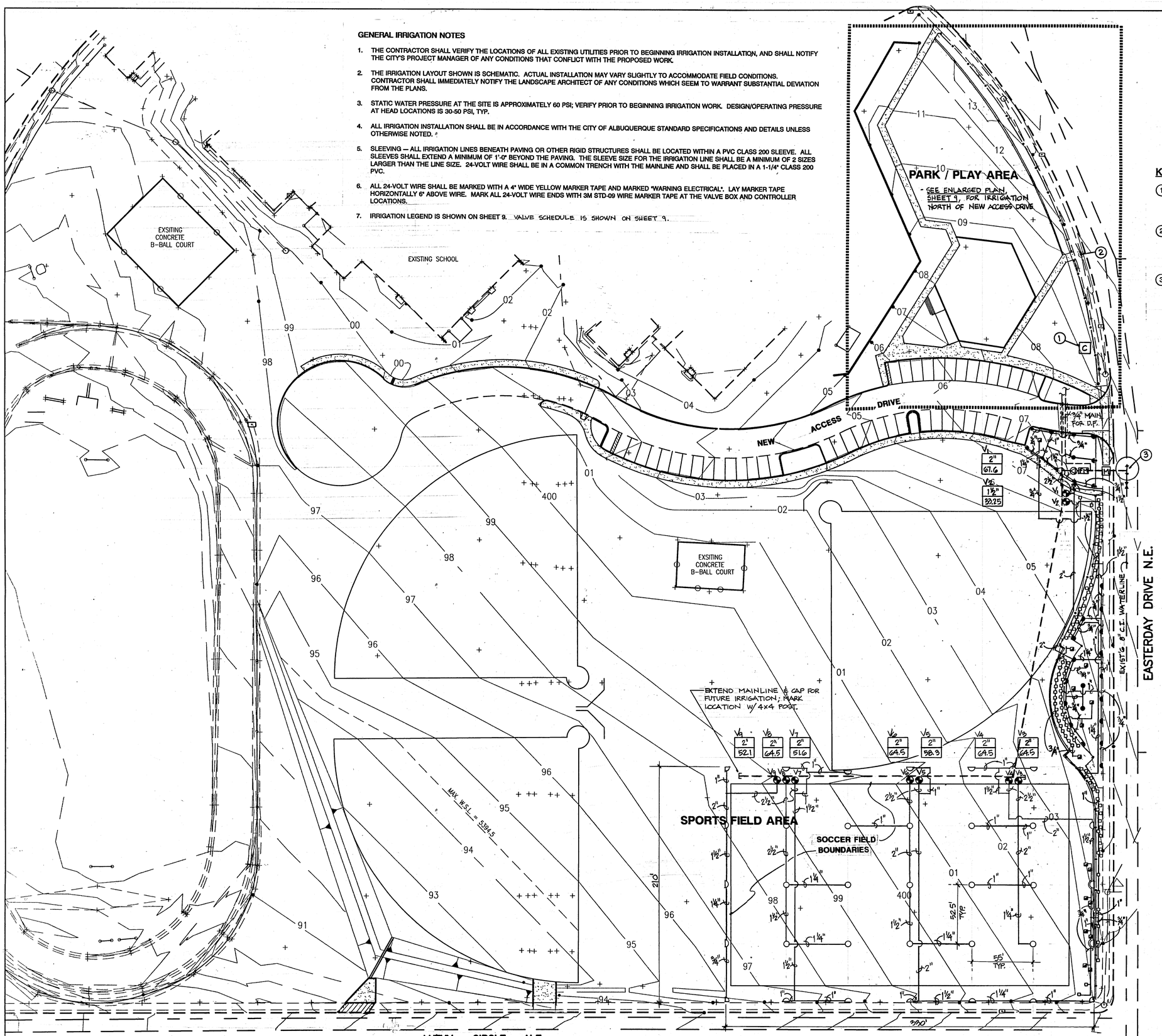
TITLE: **Enlarged Landscape/Planting Plan @ Park/Play Area**
GRANT MIDDLE SCHOOL PARK IMPROVEMENTS . PHASE I

APPROVED — DESIGN REVIEW COMMITTEE
APPROVED — CITY ENGINEER
Last Design Update

City Project No. 5396.90 | Zone Map No. J-20 | Sheet 7 Of 10

GENERAL IRRIGATION NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING IRRIGATION INSTALLATION, AND SHALL NOTIFY THE CITY'S PROJECT MANAGER OF ANY CONDITIONS THAT CONFLICT WITH THE PROPOSED WORK.
2. THE IRRIGATION LAYOUT SHOWN IS SCHEMATIC. ACTUAL INSTALLATION MAY VARY SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONDITIONS WHICH SEEM TO WARRANT SUBSTANTIAL DEVIATION FROM THE PLANS.
3. STATIC WATER PRESSURE AT THE SITE IS APPROXIMATELY 60 PSI; VERIFY PRIOR TO BEGINNING IRRIGATION WORK. DESIGN/OPERATING PRESSURE AT HEAD LOCATIONS IS 30-50 PSI, TYP.
4. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS AND DETAILS UNLESS OTHERWISE NOTED.
5. SLEEVING — ALL IRRIGATION LINES BENEATH PAVING OR OTHER RIGID STRUCTURES SHALL BE LOCATED WITHIN A PVC CLASS 200 SLEEVE. ALL SLEEVES SHALL EXTEND A MINIMUM OF 1'-0" BEYOND THE PAVING. THE SLEEVE SIZE FOR THE IRRIGATION LINE SHALL BE A MINIMUM OF 2 SIZES LARGER THAN THE LINE SIZE. 24-VOLT WIRE SHALL BE IN A COMMON TRENCH WITH THE MAINLINE AND SHALL BE PLACED IN A 1-1/4" CLASS 200 PVC.
6. ALL 24-VOLT WIRE SHALL BE MARKED WITH A 4" WIDE YELLOW MARKER TAPE AND MARKED "WARNING ELECTRICAL". LAY MARKER TAPE HORIZONTALLY 6" ABOVE WIRE. MARK ALL 24-VOLT WIRE ENDS WITH 3M STD-09 WIRE MARKER TAPE AT THE VALVE BOX AND CONTROLLER LOCATIONS.
7. IRRIGATION LEGEND IS SHOWN ON SHEET 9. VALVE SCHEDULE IS SHOWN ON SHEET 9.



SCALE: 1" = 40'

40' 0 80'
20' 40'

KEYED NOTES

1. PROVIDE AND INSTALL NEW IRRIGATION CONTROLLER, INCLUDING ALL ELECTRICAL CONNECTIONS, AS SPECIFIED. EXACT CONTROLLER LOCATION SHALL BE AS APPROVED BY A.P.S., BUT MUST BE WITHIN 100' OF NEW ELECTRIC METER.
2. EXISTING 35' HEIGHT P.N.M. POLE / POWER SOURCE LOCATION FOR NEW IRRIGATION CONTROLLER. CONTRACTOR SHALL INSTALL METER BASE AND WIRING, AND SHALL COORDINATE CITY PERMITTING, INSPECTION / METER INSTALLATION WITH P.N.M. AND CITY PARKS DEPARTMENT PROJECT MANAGER.
3. PROPOSED TAP-IN LOCATION AT EXISTING 8" C.I. WATER LINE. * LOCATE 2" METER, INSTALL FLOW METER AND BACKFLOW PREVENTER AS SPECIFIED. * (METER SHALL BE PROVIDED AND INSTALLED / SET BY THE CITY OF ALBUQUERQUE, INCLUDING U.E.C.'S. CONTRACTOR SHALL PROVIDE / INSTALL TAP-IN / PIPE FROM EXISTING 8" C.I. WATER LINE, AND METER BOX ACCORDING TO CITY STANDARDS.) PAVEMENT REPLACEMENT PER C.O.A. STD. DWG. NO. 2465.

SPECIAL NOTE:
FUTURE PROJECT BUILD-OUT SHALL REQUIRE LARGER METER, BACKFLOW PREVENTER, FLOW METER AND SECTION OF MAINLINE TO SERVE FUTURE FIELDS' IRRIGATION.

AS BUILT INFORMATION
CONTRACTOR BACAS TREES, INC. DATE 11-96
WORK INSPECTED BY CONTRACTOR
INSPECTOR'S ACCEPTANCE BY COA DATE
VERIFICATION BY COA DATE
CORRECTED BY G.R. JOHNS DATE 5-12-97
MICRO-FILM INFORMATION DATE
RECORDED BY
NO.

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

BENCH MARKS
A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S., B.M. 10-120" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.W. QUADRANT OF THE INTERSECTION.
ELEVATION = 5404.375 FEET (M.S.L.D.)

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26-5396.00 0897

AS-BUILT DWGS.
8-18-97

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JEFF MORTENSEN & ASSOCIATES, INC.
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ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505) 345-4250
950614

REVISIONS/REMARKS
NO. DATE BY
Designed By GRJ, PSM Date
Drawn By BSM Date 5-30-96
Checked By PSM

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **Irrigation Plan**
GRANT MIDDLE SCHOOL PARK IMPROVEMENTS . **PHASE I**

Design Review Committee Approved — JUN 06 1997 — REVIEW
Approved — CITY ENGINEER
Last Design Update — Mo./Day/Yr.

City Project No. 5396.00 | Zone Map No. J-20 | Sheet 8 Of 10

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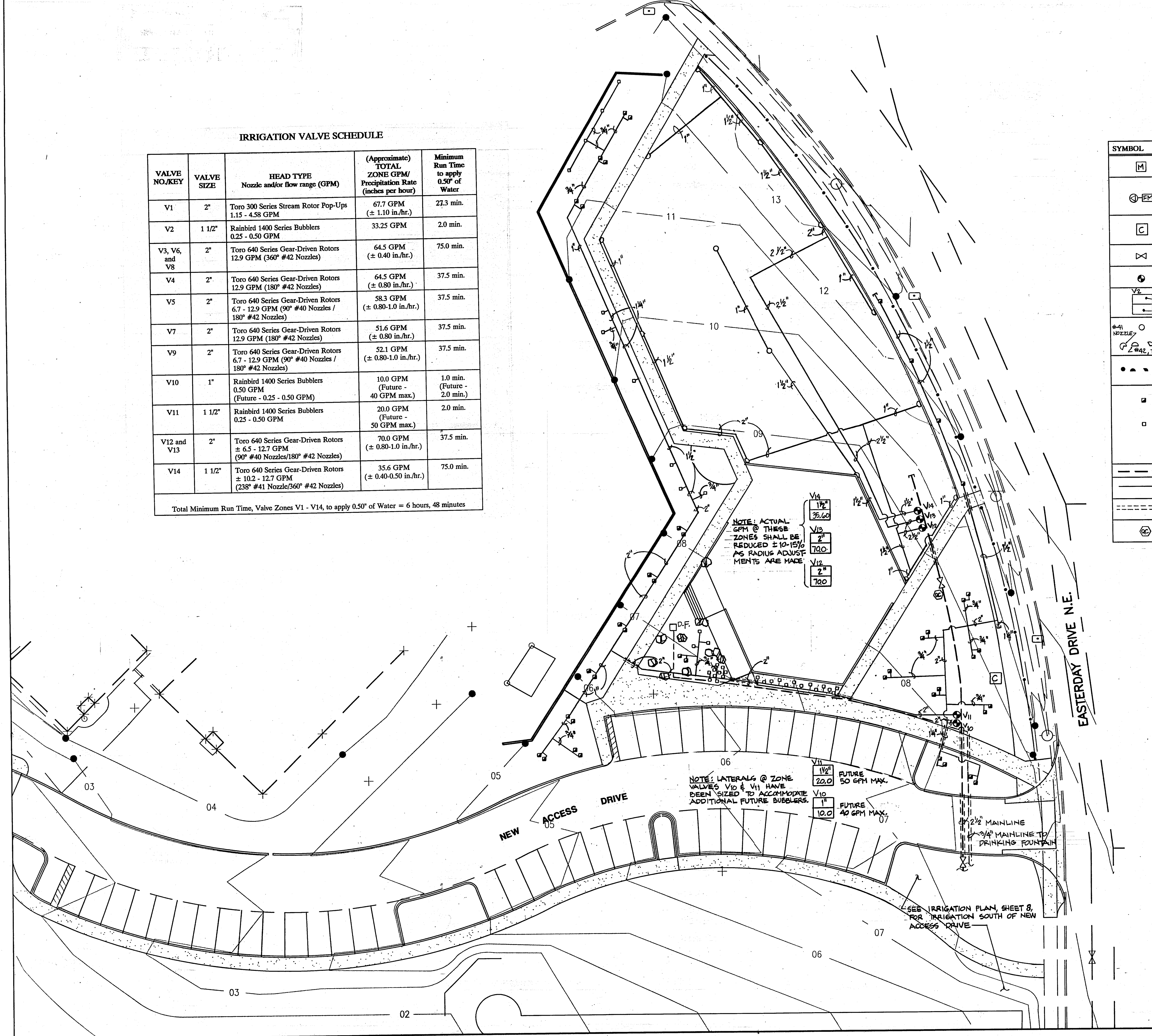
IRRIGATION VALVE SCHEDULE

VALVE NO./KEY	VALVE SIZE	HEAD TYPE Nozzle and/or flow range (GPM)	(Approximate) TOTAL ZONE GPM/ Precipitation Rate (inches per hour)	Minimum Run Time to apply 0.50" of Water
V1	2"	Toro 300 Series Stream Rotor Pop-Ups 1.15 - 4.58 GPM	67.7 GPM (± 1.10 in./hr.)	27.3 min.
V2	1 1/2"	Rainbird 1400 Series Bubblers 0.25 - 0.50 GPM	33.25 GPM	2.0 min.
V3, V6, and V8	2"	Toro 640 Series Gear-Driven Rotors 12.9 GPM (360° #42 Nozzles)	64.5 GPM (± 0.40 in./hr.)	75.0 min.
V4	2"	Toro 640 Series Gear-Driven Rotors 12.9 GPM (180° #42 Nozzles)	64.5 GPM (± 0.80 in./hr.)	37.5 min.
V5	2"	Toro 640 Series Gear-Driven Rotors 6.7 - 12.9 GPM (90° #40 Nozzles / 180° #42 Nozzles)	58.3 GPM (± 0.80-1.0 in./hr.)	37.5 min.
V7	2"	Toro 640 Series Gear-Driven Rotors 12.9 GPM (180° #42 Nozzles)	51.6 GPM (± 0.80 in./hr.)	37.5 min.
V9	2"	Toro 640 Series Gear-Driven Rotors 6.7 - 12.9 GPM (90° #40 Nozzles / 180° #42 Nozzles)	52.1 GPM (± 0.80-1.0 in./hr.)	37.5 min.
V10	1"	Rainbird 1400 Series Bubblers 0.50 GPM (Future - 0.25 - 0.50 GPM)	10.0 GPM (Future - 40 GPM max.)	1.0 min. (Future - 2.0 min.)
V11	1 1/2"	Rainbird 1400 Series Bubblers 0.25 - 0.50 GPM	20.0 GPM (Future - 50 GPM max.)	2.0 min.
V12 and V13	2"	Toro 640 Series Gear-Driven Rotors ± 6.5 - 12.7 GPM (90° #40 Nozzles/180° #42 Nozzles)	70.0 GPM (± 0.80-1.0 in./hr.)	37.5 min.
V14	1 1/2"	Toro 640 Series Gear-Driven Rotors ± 10.2 - 12.7 GPM (238° #41 Nozzle/360° #42 Nozzles)	35.6 GPM (± 0.40-0.50 in./hr.)	75.0 min.
Total Minimum Run Time, Valve Zones V1 - V14, to apply 0.50" of Water = 6 hours, 48 minutes				



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	DETAIL
M	New 2" Water Meter; City installed; box and pipe by Contractor	City Std. Dwg. 2637
FM	2" FEBCO 765 reduced pressure backflow preventer with 2" Bermad 910-P-2 flow meter and control valve with pulse transmission in Brooks Box 1730 with locking cover	City Std. Dwg. 2702A
C	Motorola/Toro MIR 5000S "Scorpio" 16-Station controller; in Strong Box enclosure; coordinate radio tie-in to existing Irrinet at McCollum School	Install as per Manf. instructions
⋈	Gate valve/Isolation valve	City Std. Dwg. 2706
⊕	Rainbird PEB Series automatic valve assembly. (Valve as indicated on drawings, in valve box.)	City Std. Dwg. 2703
V2	Valve Key Notation: Valve Size; Approximate gallons per minute	
#41 NOZZLE, #40 NOZZLE, #42, TYP.	Toro 640 Series with #42 nozzle gear-driven pop-up sprinkler - 360° full circle (at ± 45-50 psi, typ.) Toro 640 Series w/ #40-#42 nozzle gear-driven pop-up sprinkler - part circles (at ± 45-50 psi, typ.)	Detail No. 5, Sheet 10
● ◓ ◒ ◗	Toro 300 Series stream rotor pop-up sprinkler - 360° full circle and adjustable radius (± 21' radius at 35 psi, typ.)	City Std. Dwg. 2709
◪ / □	Rainbird 1402 full circle pressure compensating bubbler, 0.5 gpm (at 20-90 psi, typ.) Rainbird 1401 full circle pressure compensating bubbler 0.25 gpm (at 20-90 psi, typ.)	For tree locations (in seeded, mulched or sodded areas): Detail No. 6, Sheet 10; All other bubbler locations: reference City Std. Dwg. 2710
— — —	2½" SDR-21 Class 200 PVC 1120 or 1220 pipe mainline	
———	Schedule 40 PVC pipe lateral (size as indicated on plans)	
= = = =	Class 200 PVC pipe sleeve (2 sizes larger than pipe being sleeved)	
QC	Rainbird 33 DRC Quick-Coupling Valve	City Std. Dwg. 2708

AS BUILT INFORMATION
CONTRACTOR BACA'S TREES, INC. DATE 11-96
WORK STAKED BY (CONTRACTOR) DATE
INSPECTOR'S ACCEPTANCE BY COA DATE
FIELD VERIFICATION BY COA DATE
DRAWINGS CORRECTED BY G. R. JOHNS DATE 8/18/97
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BENCH MARKS
A.C.S. 1 3/4" ALUMINUM DISK STAMPED "A.C.S. B.M. 10-J20" SET IN THE S.E. CORNER OF A TRAFFIC LIGHT BASE LOCATED AT THE INTERSECTION OF LOMAS BLVD. N.E. AND EASTERDAY DR. N.E. IN THE N.N.W. QUADRANT OF THE INTERSECTION.
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SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26-5396.90 0997

AS-BUILT DWGS.
8-18-97

G. Robert Johns, ASLA
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ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250
950614

REVISIONS/REMARKS
NO. DATE BY

Designed By: GRJ, BBM Date
Drawn By BBM Date
Checked By BBM Date 5-30-96

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: Enlarged Irrigation Plan @ Park/Play Area
GRANT MIDDLE SCHOOL PARK IMPROVEMENTS . PHASE I

APPROVED
CITY ENGINEER
Last Design Update
Mo./Day/Yr. Mo./Day/Yr.

City Project No. 5396.90
Zone Map No. J-20
Sheet 9 Of 10

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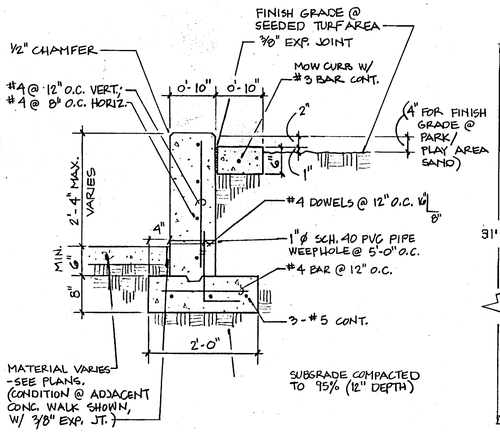
GENERAL NOTE:

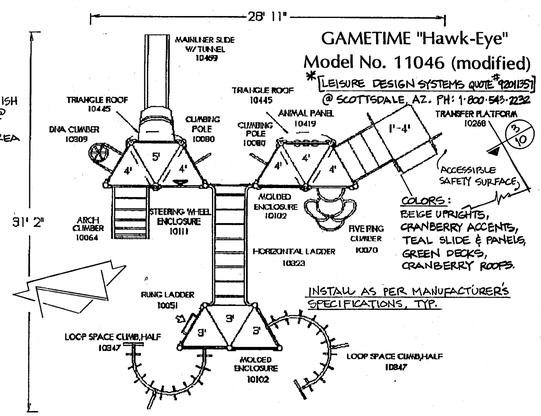
TOP SURFACES SHALL BE BROOM FINISH CONCRETE; VERTICAL SURFACES SHALL BE SANDED OR GROUND SMOOTH, WITH FORM-TIE HOLES LEFT UNFILLED. CONTROL JOINTS SHALL BE PLACED @ 5' O.C.; ½" EXPANSION JOINTS SHALL BE DOWELED (REF. SIM. CITY STD. DWG 2450), AND PLACED @ 20' O.C. (4000 PSI CONCRETE, TYP.)



FOR CURBWALL HEIGHT GREATER THAN 10":

CONCRETE CURBWALL / RETAINING WALL @ PARK / PLAY AREA (1/10)

3/4" = 1'-0"

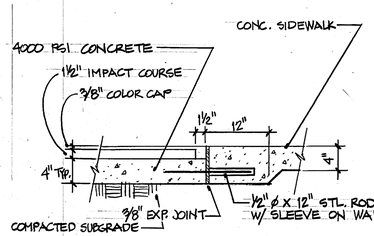


GAMETIME "Hawk-Eye"
Model No. 11046 (modified)
*[LEISURE DESIGN SYSTEMS QUOTE #020135]
@ SCOTTSDALE, AZ. PH: 1-800-543-2232

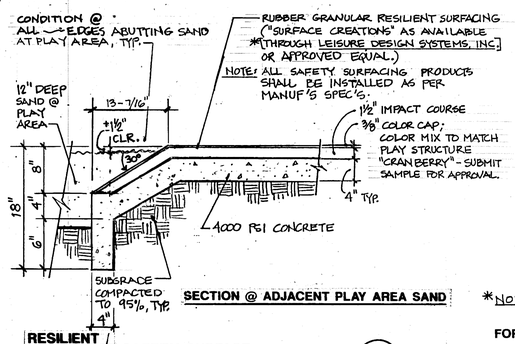
[*OR APPROVED EQUAL]

PLAY STRUCTURE - PLAN (2/10)

NTS



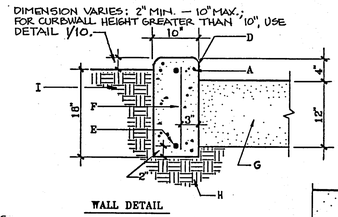
SECTION @ ADJACENT SIDEWALK

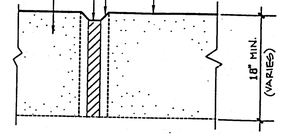


SECTION @ ADJACENT PLAY AREA SAND

RESILIENT ACCESSIBLE SAFETY SURFACE (3/10)

NTS





GENERAL NOTES:

1. CONTROL JOINTS SHALL BE PLACED AT 5' O.C..
2. EXPANSION JOINTS SHALL BE PLACED AT 20' O.C..

CONSTRUCTION NOTES:

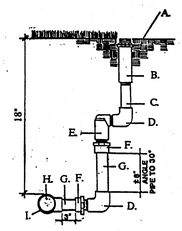
A. 4000 PSI CONCRETE WITH SPEC'D FINISH. (SEE SECTION 101).
B. 1" CHAMFER.
C. 1/2" EXPANSION JOINT MATERIAL.
D. TOOLED EDGE.
E. #4 REBAR, HORIZONTAL AND CONTINUOUS.
F. #4 REBAR AT 4' O.C..
G. BRICK SAND. (FUTURE)
H. SUBGRADE COMPACTED TO 95%. (SEE SECTION 501).
I. MATERIAL VARIES. (REFERENCE THE DRAWINGS).

*NOTE: FOR CURBWALL HEIGHT GREATER THAN 10", USE DETAIL NO. 1/10 THIS SHEET.

FOR CURBWALL HEIGHT 10" OR LESS:

CONCRETE CURBWALL @ PARK / PLAY AREA (4/10)

NTS



GENERAL NOTES

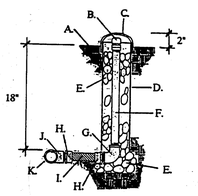
1. Swing joint assembly shall be Lasco-manuf. by Philips Industries Inc., Denver, Co., Dallas, Tx. et al.
2. All glue fittings shall be assembled & dry prior to assembly of threaded fittings.
3. No teflon tape or pipe dope shall be used.
4. All threaded fittings shall be hand tightened only & then loosened one full turn prior to installation in trench.
5. Lateral line pressure testing shall be completed prior to installation of swing joint assembly. Lateral line testing shall be accomplished by installing caps at the first male adapters downstream of the tees and ells.
6. Top of sprinkler head shall be set flush with finish grade.

CONSTRUCTION NOTES

A. Finish grade.
B. Sprinkler head (reference the drawing).
C. Sch 80 PVC toe nipple. Size length as required.
D. 90 elbow with Acme threads.
E. 90 street ell with Acme M&F threads.
F. Male adapter with Acme threads.
G. Sch 40 PVC pipe.
H. Sch 40 PVC SxSxT tee or SxT ell.
I. Lateral Pipe.

GEAR-DRIVEN SPRINKLER HEAD W/ SWING JOINT ASSEMBLY (5/10)

NTS



GENERAL NOTES

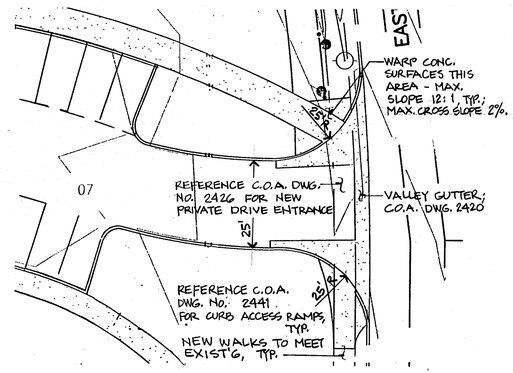
1. Lateral line pressure testing shall be completed prior to installation of flex pipe assembly. Lateral line testing shall be accomplished by installing a plug in the outlet of lateral line tees and ells.
2. FOR BUBBLER LOCATIONS FOR SHRUBS IN NATIVE SEED/ MULCHED PLANTING AREAS, REFERENCE CITY STD. DETAIL 2710.
3. LOCATE BUBBLER 12" OUT FROM EDGE OF FOOTBALL, ON UPHILL SIDE, TYP.

CONSTRUCTION NOTES

A. Finish grade.
B. Bubbler head (reference the Drawings).
C. 4" PVC slip cap. Do not weld.
D. 4" perforated pvc drain pipe. Pipe shall be wrapped in Tevlar filter fabric. Secure filter fabric to pipe with 3 evenly spaced plastic snap ties.
E. 1/2" - 3/4" washed rock.
F. Sch. 80 PVC nipple.
G. Sch. 40 PVC threaded ell.
H. Sch. 40 PVC MIP adapter.
I. PVC flexible vinyl pipe, std., IPS from Agricultural Products, Inc., (818/768-3303).
J. Sch. 40 PVC SxSxT tee or SxT ell.
K. Lateral pipe.

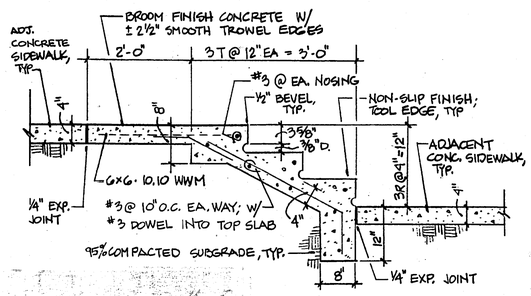
BUBBLER HEAD @ TREE IN SEED/SOD TURF AREA (6/10)

NTS



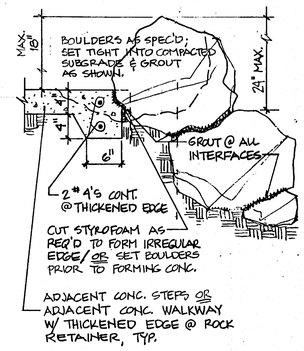
PRIVATE DRIVE ENTRANCE / SPECIAL CONDITION ACCESS RAMPS (7/10)

1" = 20'-0"



SECTION @ CONCRETE STEPS (8/10)

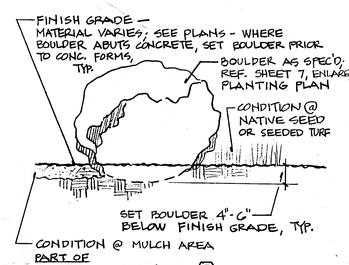
NTS



BASE BID:

BOULDER RETAINER (9/10)

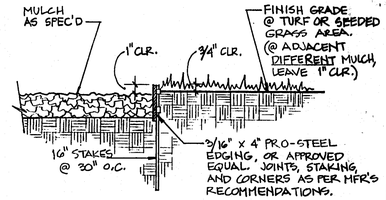
NTS



PART OF ADDITIVE ALTERNATE (3):

ACCENT BOULDER INSTALLATION (10/10)

NTS



STEEL EDGING (11/10)

NTS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

2 6 - 5 3 9 6 . 9 0 1 1 0 9 7

AS-BUILT DWGS.

8.18.97

G. Robert Johns, ASLA
Landscape Architects
3218 Silver Avenue, SE
Albuquerque, N.M. -87106-
Ph: (505)266-8027

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

BENCH MARK

AS BUILT INFORMATION
CONTRACTOR BAGAS TREES, INC.
WORK STAKED BY OWN TRACTOR DATE: 11-96
INSPECTORS APPROVAL QA DATE:
FIELD VERIFICATION BY QA DATE:
DRAWING CORRECTED BY GR. JOHNS DATE: 5/19/97
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

NO. | DATE | REVISIONS / REMARKS | BY
DESIGNED BY: GRJ, PBM — DATE:
DRAWN BY: PBM — DATE:
CHECKED BY: PBM — DATE: 5-30-96

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **GRANT MIDDLE SCHOOL PARK IMPROVEMENTS . PHASE I**
Site / Landscape Details

Design Review Committee	City Engineer Approval	Last Design Update	MO./DAY/YR.	MO./DAY/YR.
APPROVED JUN 6 1997 PARKS & RECREATION	APPROVED JUN 11 1997 CITY ENGINEER			

City Project No. 5396.90 | Zone Map No. J-20 | Sheet 10 OF 10