

CONSTRUCTION DOCUMENTS
CLASS II CONSTRUCTION

KATHERINE NICOLE PARK
BIKE PATH / TRAIL
CITY PROJECT NO. 4552.90

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TITLE

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TRAFFIC CONTROL

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 (788-2551) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS.

ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET.

THE FOLLOWING ALSO APPLY WHEN CHECKED

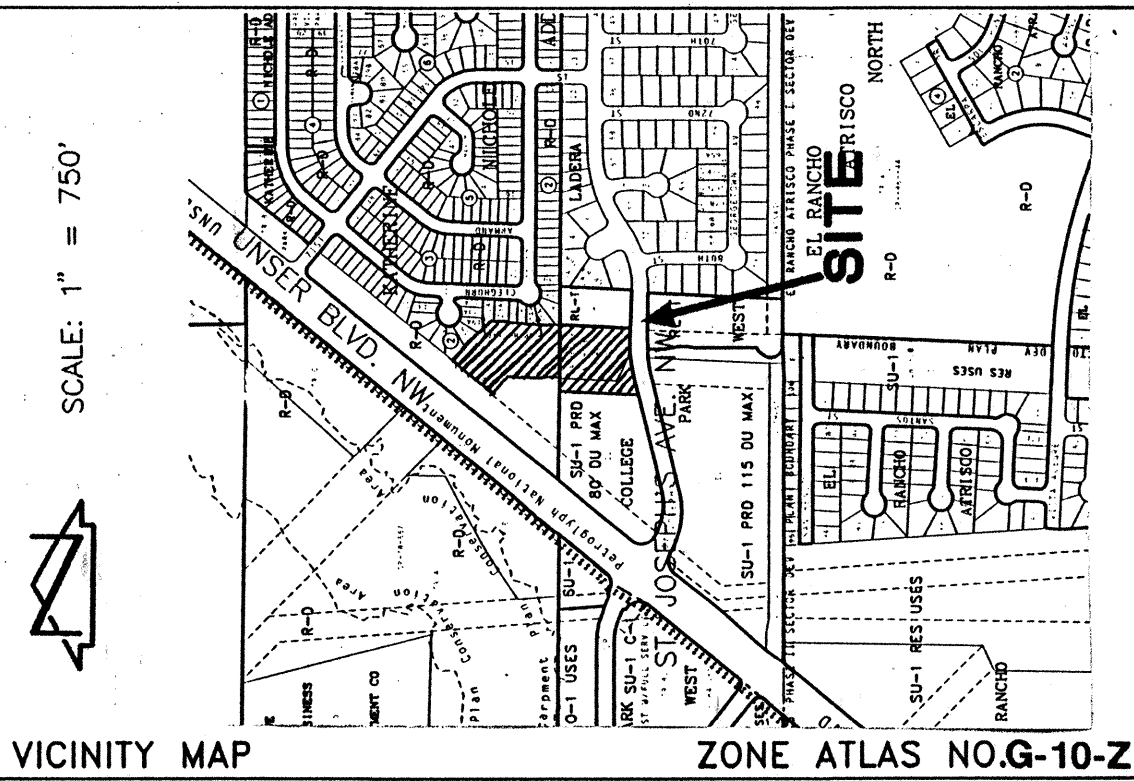
- ☒ All utilities and utility service lines shall be installed prior to paving.
- ☐ Backfill compaction shall be according to specified street use.
- ☐ Tack coat requirements shall be determined by the city engineer.
- ☐ Sidewalks and wheelchair ramps within the curb returns shall be constructed wherever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

GENERAL PROJECT LEGEND

CONTOURS	— 39 —
SPOT ELEVATION	37.1
WATER VALVE	⋈
MH = MANHOLES	⊙
ELECTRIC BOX	⊠
FOUND PROPERTY CORNER	⊙
EDGE OF ASPHALT	///
POWER POLE W/ ANCHORS	—>
EXISTING POWER LINE	---
FENCE LINE	—x—x—
SPRINKLERS	⊕
CONSTRUCTION OFFSET POINTS	*
POWER POLES	○
NEW SPOT ELEVATION	35.70
NEW CONTOUR LINE	— 33 —

- DETAIL KEY
- DETAIL NUMBER 2
 - SHEET NUMBER WHERE 7
- DETAIL IS SHOWN

CP = CONTROL POINT
BCB = BACK OF CURB ELEVATION
FL = FLOWLINE ELEVATION
CONC. = CONCRETE



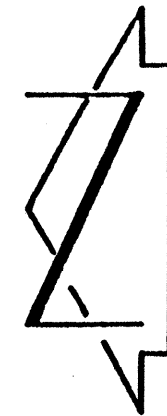
GENERAL NOTES

- ALL WORK TO BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS, 1986 EDITION (AS UPDATED WITH REVISION #6), 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 DAMAGE CAUSED BY FAILURE TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
- 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 UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- 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.

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	APPROVED FOR CONSTRUCTION				
		DRC Chairman	Bill G. Johns	8-8-96					
		Transportation	John P. Johns	7-29-96					
		Water/Wastewater	John P. Johns	7-26-96					
		Hydrology	C. Johns	7-31-96					
		Parks	D. Johns	7-24-96					
		Constr. Mngmt.			City Engineer Date				
May 1, 1996		City Project No. 4552.90			Sheet C-1 of 8				

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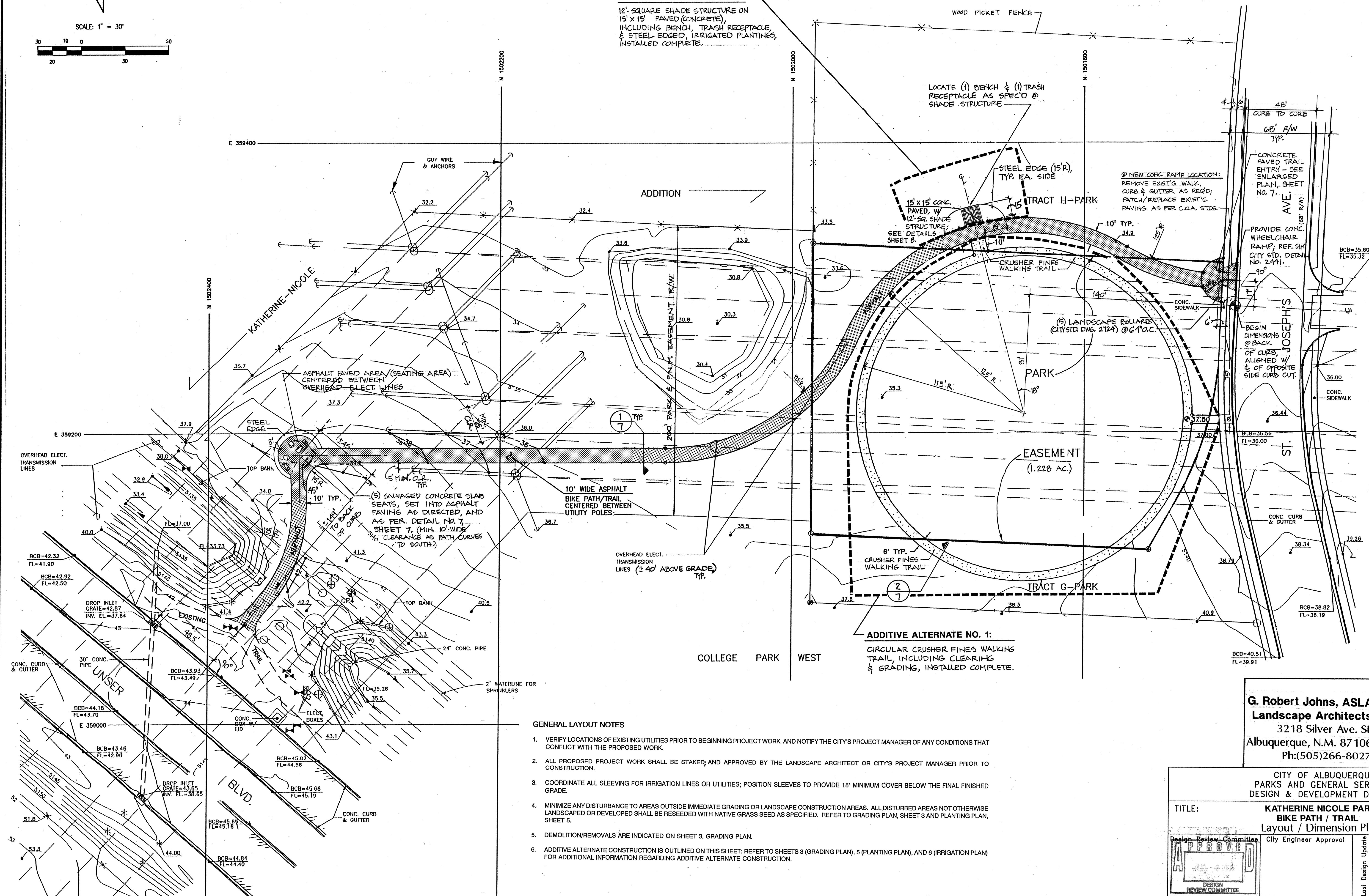
SCALE: 1" = 30'



ADDITIVE ALTERNATE NO. 2:

12' SQUARE SHADE STRUCTURE ON 15' X 15' PAVED (CONCRETE) INCLUDING BENCH, TRASH RECEPTACLE, & STEEL EDGED, IRRIGATED PLANTINGS, INSTALLED COMPLETE.

ADDITION



ADDITIVE ALTERNATE NO. 1:

CIRCULAR CRUSHER FINES WALKING TRAIL, INCLUDING CLEARING & GRADING, INSTALLED COMPLETE.

GENERAL LAYOUT NOTES

1. VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING PROJECT WORK, AND NOTIFY THE CITY'S PROJECT MANAGER OF ANY CONDITIONS THAT CONFLICT WITH THE PROPOSED WORK.
2. ALL PROPOSED PROJECT WORK SHALL BE STAKED, AND APPROVED BY THE LANDSCAPE ARCHITECT OR CITY'S PROJECT MANAGER PRIOR TO CONSTRUCTION.
3. COORDINATE ALL SLEEVING FOR IRRIGATION LINES OR UTILITIES; POSITION SLEEVES TO PROVIDE 18" MINIMUM COVER BELOW THE FINAL FINISHED GRADE.
4. MINIMIZE ANY DISTURBANCE TO AREAS OUTSIDE IMMEDIATE GRADING OR LANDSCAPE CONSTRUCTION AREAS. ALL DISTURBED AREAS NOT OTHERWISE LANDSCAPED OR DEVELOPED SHALL BE RESEED WITH NATIVE GRASS SEED AS SPECIFIED. REFER TO GRADING PLAN, SHEET 3 AND PLANTING PLAN, SHEET 5.
5. DEMOLITION/REMOVALS ARE INDICATED ON SHEET 3, GRADING PLAN.
6. ADDITIVE ALTERNATE CONSTRUCTION IS OUTLINED ON THIS SHEET; REFER TO SHEETS 3 (GRADING PLAN), 5 (PLANTING PLAN), AND 6 (IRRIGATION PLAN) FOR ADDITIONAL INFORMATION REGARDING ADDITIVE ALTERNATE CONSTRUCTION.

G. Robert Johns, ASLA
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Albuquerque, N.M. 87106
Ph: (505) 266-8027

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **KATHERINE NICOLE PARK
BIKE PATH / TRAIL
Layout / Dimension Plan**



City Engineer Approval

City Project No. 4552.90 Zone Map No. G-10 Sheet 2 of 8

AS BUILT INFORMATION		BENCH MARK		SURVEY INFORMATION		ARCHITECTS / ENGINEERS SEAL		REVISIONS/REMARKS		NO. DATE	
CONTRACTOR	DATE:	CONTRACTOR	DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
WORK STAKED BY	DATE:	A.C.S. 60-PENNY NAIL "ACS BM, 2-G10"	DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
INSPECTOR'S APPROVAL	DATE:	APPROX. 1 FT. ABOVE GROUND ON EAST SIDE OF EAST	DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
FIELD VERIFICATION BY	DATE:	POLE OF THE EASTERN MOST OF TWELVE PLYONS.	DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
DRAWING CORRECTED BY	DATE:	POLE NUMBER W269.	DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
MICRO-FILM INFORMATION	DATE:	ELEVATION = 5134.60' (M.S.L.D.)	DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
RECORDED BY	DATE:		DATE:	DATE	BY	DATE	BY	DATE	BY	DATE	BY
				DESIGNED BY: GRS	DATE: 8-95						
				DRAWN BY: BGM	DATE: 8-95						
				CHECKED BY: BGM	DATE: 4-96						

CONTOURS 39
5140

SPOT ELEVATION 37.1

WATER VALVE

MH= MANHOLES

ELECTRIC BOX

EDGE OF ASPHALT

POWER POLE W/ ANCHORS

EXIST. POWER LINE

FENCE LINE

SPRINKLERS

CONSTR. OFFSET POINTS

POWER POLES

NEW SPOT ELEVATION 33.70

NEW CONTOUR LINE 33

EXISTING BASIN BOUNDARY

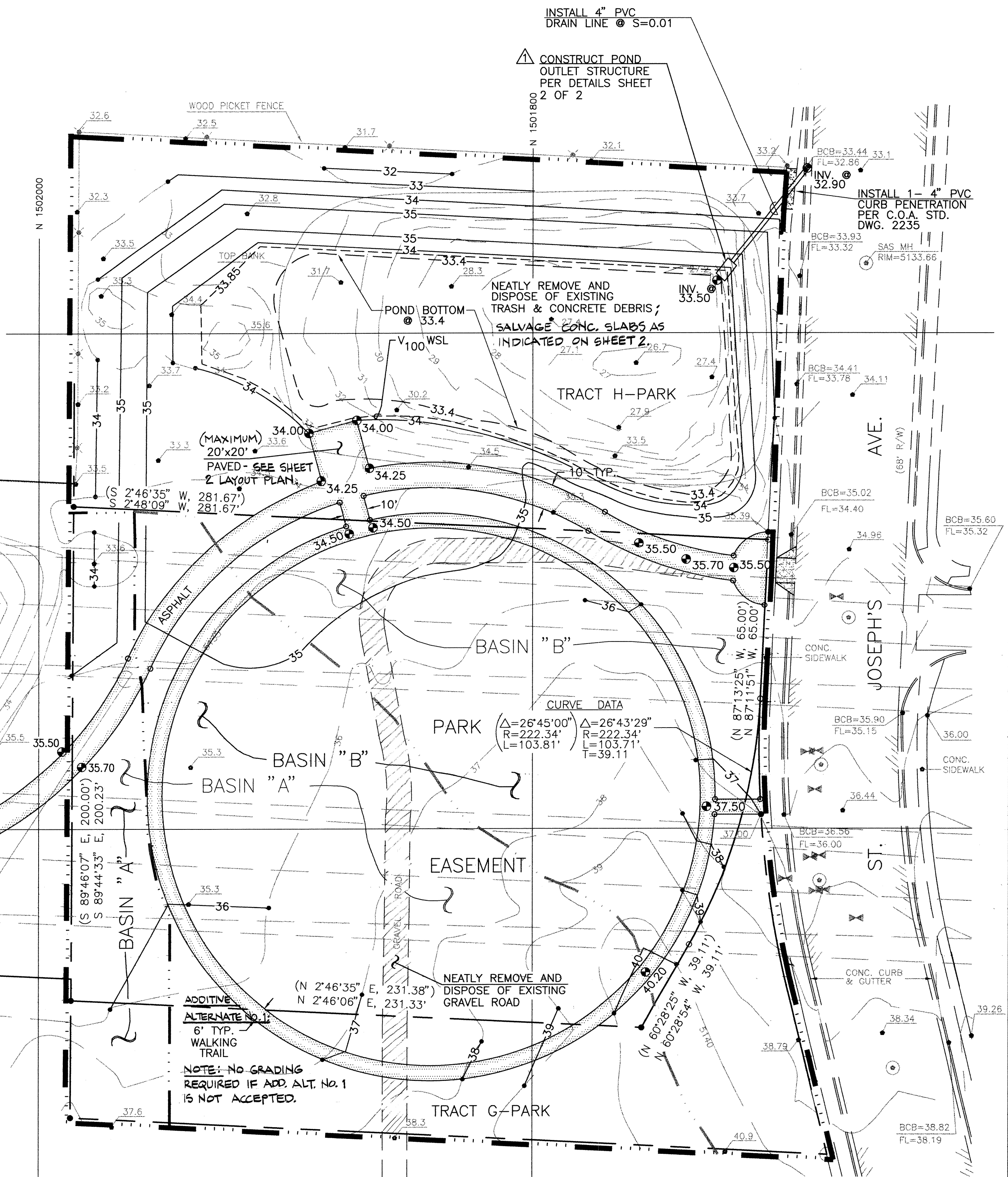
NEW BASIN BOUNDARY

LIMIT OF DRAINAGE STUDY

NEW ASPHALT PAVING

CP= CONTROL POINT
 BCB= BACK OF CURB ELEVATION
 FL= FLOWLINE ELEVATION
 CONC.= CONCRETE

KATHERINE NICOLE PARK, AS THE SAME IS SHOWN AND DESIGNATED ON THE REPLAT OF COLLEGE PARK WEST, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON APRIL 25, 1984, BOOK C23, PAGE 168.



1. Walkway / Trail grades shall not exceed 1:20 slope.
2. (Contractor shall) protect existing improvements at pond areas along Unser Blvd., including existing areas treated with soil cement. Any damaged areas shall be repaired / replaced to match existing conditions.
3. Refer to Sheet No. 2 Layout / Dimension Plan for delineation of Additive Alternate construction.

NOTE:
TOPOGRAPHIC SURVEY WAS NOT PREPARED
BY JEFF MORTENSEN & ASSOCIATES, INC.
TOPOGRAPHIC INFORMATION WAS OBTAINED
FROM A TOPOGRAPHIC SURVEY FOR P.N.M.
EASEMENT BY SANTIAGO ROMERO JR. AND
ASSOCIATES, INC. - AUGUST, 1993.

[illegible]

DRAINAGE PLAN

The following items concerning the Katherine Nicole Park Bike Path/Trail Grading and Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located on the east side of Unser Blvd. N.W. and on the north side of St. Joseph's Ave. N.W. At present, the site consists primarily of native vegetation, with an existing walking trail, a gravel road, and a retention pond (depression).

According to panel 21 of 50 of the National Flood Insurance Program, Flood Insurance Rate Maps published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, this site does not lie within a 100-year designated 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 existing improvements, 3) the limit and character of proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the proposed development consists of the construction of an asphalt bike path/trail and minimal grading.

At present, the site drains in an easterly direction to an existing ponding area at the southeast corner of the site. In the developed scenario, the site will continue to drain to this lowpoint. Whereas the pond now retains runoff, it will be modified to release runoff to St. Joseph's Avenue N.W. at a controlled rate (4" PVC pipe). No modifications will be made to the existing pond located offsite and to the north of the park site. It will continue to receive runoff in a manner consistent with the existing drainage pattern of the area. Runoff currently leaving this park site and draining into that pond will be redirected to the southeast corner of the park site thereby reducing the runoff leaving this site and entering this offsite area.

The offsite flows entering this site will not be impeded by the construction of this park. The flows will continue to flow in a manner consistent with the historic patterns.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The procedure for the 40-acre and smaller basins, as set forth in the revisions 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 the volume of runoff generated. As shown by these Calculations, a minimal increase in runoff volume and peak discharge rate is anticipated due to the proposed construction. The Average End Area Method has been utilized in calculating the pond volume, and the Orifice Equation to calculate the pond release rate.

Site Characteristics

1. Precipitation Zone = 1
2. $P_{6,100} = P_{360} = 2.20$ in.
3. Total Area (A_T) = 260 ac.
4. Existing Land Treatment

Basin 'A' Treatment	40,645/0.93	100
B	Area (sf/ac)	%
C	38,145/0.87	93.8
	2,500/0.06	6.2

Basin 'B' Treatment	72,735/1.67	100
B	Area (sf/ac)	%
C	66,135/1.52	90.9
	6,600/0.15	9.1

5. Developed Land Treatment

Basin 'A' Treatment	7,740/0.18	100
B	Area (sf/ac)	%
D	7,290/0.17	94.2
	450/0.01	5.8

Basin 'B' Treatment	105,640/2.42	100
B	Area (sf/ac)	%
C	96,270/2.21	91.1
D	5,600/0.13	5.3
	3,770/0.08	3.6

Existing Condition

A. Basin A

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_W = [0.67(0.87) + 0.99(0.06)] / (0.93) = 0.69 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$
$$V_{100} = (0.69 / 12)(0.93) = 0.0535 \text{ ac.ft.; } 2,330 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = 2.03(0.87) + 2.87(0.06) = 1.9 \text{ cfs}$$

B. Basin B

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_W = [0.67(1.52) + 0.99(0.15)] / (1.67) = 0.70 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$
$$V_{100} = (0.70 / 12)(1.67) = 0.0974 \text{ ac.ft.; } 4,250 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = 2.03(1.52) + 2.87(0.15) = 3.5 \text{ cfs}$$

CALCULATIONS

Developed Condition

A. Basin A

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_W = [0.67(0.17) + 1.97(0.01)] / (0.18) = 0.74 \text{ in.}$$
$$V_{100} = (E_W / 12) A_T$$
$$V_{100} = (0.74 / 12)(0.18) = 0.0111 \text{ ac.ft.; } 490 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = 2.03(0.17) + 4.37(0.01) = 0.4 \text{ cfs}$$

B. Basin B

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$
$$E_W = [0.67(2.21) + 0.99(0.13) + 1.97(0.08)] / (2.42) = 0.73 \text{ in.}$$
$$V_{100} = (E_W / 12) A_T$$
$$V_{100} = (0.73 / 12)(2.42) = 0.1472 \text{ ac.ft.; } 6,420 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = 2.03(2.21) + 2.87(0.15) + 4.37(0.08) = 5.3 \text{ cfs}$$

Basin B Pond Volume Calculations (Determined by the Average End Area Method)

Elev (ft)	Area (sf)	Vol (cf)	Σ Vol (cf)
33.40	12,560		
34.00	16,800	8,808	8,808
35.00	32,125	24,462	33,270

$$\text{Volume of Pond} = V_p = 33,270 \text{ cf}$$

$$V_{100} = 6,420 \text{ cf (developed condition)}$$

$$V_{100} \text{ W.S.L. @ } 33.85$$

Orifice Equation (4" Pipe Under Pressure)

$$Q = CA(2gh)^{1/2}$$

$$C = 0.6$$
$$A = 0.0873 \text{ sf}$$
$$g = 32.2$$
$$h = 0.167 \text{ ft}$$

$$Q = 0.17 \text{ cfs}$$

Comparison

A. Basin A

1. $\Delta V_{100} = 2,330 - 490 \text{ cf} = 1,840 \text{ cf (decrease)}$
2. $\Delta Q_{100} = 1.9 - 0.4 = 1.5 \text{ cfs (decrease)}$

B. Basin B

1. $\Delta V_{100} = 6,420 - 4,250 \text{ cf} = 2,170 \text{ cf (increase)}$
2. $\Delta Q_{100} = 3.5 - 0.17 = 3.33 \text{ cfs (decrease)}$

CONSTRUCTION NOTES:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay.

3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.

4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.

5. 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 therefor. 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.

6. An Excavation/Construction Permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.

7. Backfill compaction shall be according to arterial street use.

8. Maintenance of these facilities shall be the responsibility of the owner of the property served.

9. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

10. 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.

11. All storm drainage facilities shall be completed prior to final acceptance.

12. Caution: These drawings do not include necessary components for construction safety which shall remain the responsibility of the Contractor.

13. Any work occurring within an arterial roadway requires twenty-four hour construction.

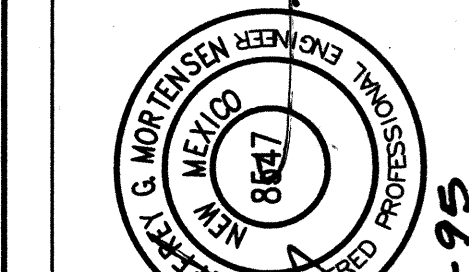
EROSION CONTROL MEASURES:

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.
4. Any areas of excess disturbance (traffic access, storage yard, excavated material, etc.) shall be re-seeded according to C.O.A. Specification 1012 "Native Grass Seeding". This will be considered incidental to construction; therefore, no separate payment will be made.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

950791

CITY OF ALBUQUERQUE PARKS AND GENERAL SERVICES DESIGN & DEVELOPMENT DIVISION			
TITLE: KATHERINE NICOLE PARK BIKE PATH/TRAIL GRADING PLAN			
DESIGN REVIEW COMMITTEE	City Engineer Approval	RD / DAY/YR	RD / DAY/YR
APPROVED			
DESIGN REVIEW COMMITTEE			
City Project No.	Zone Map No.	Sheet	Of
4552.90	G-10	4	8

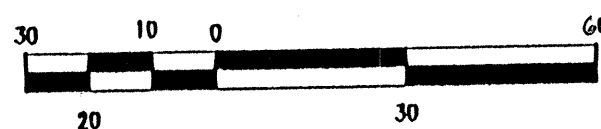


10-30-95

DATE: 10-95
DRAWN BY: JGM
CHECKED BY: JGM



SCALE: 1" = 30'



LEGEND

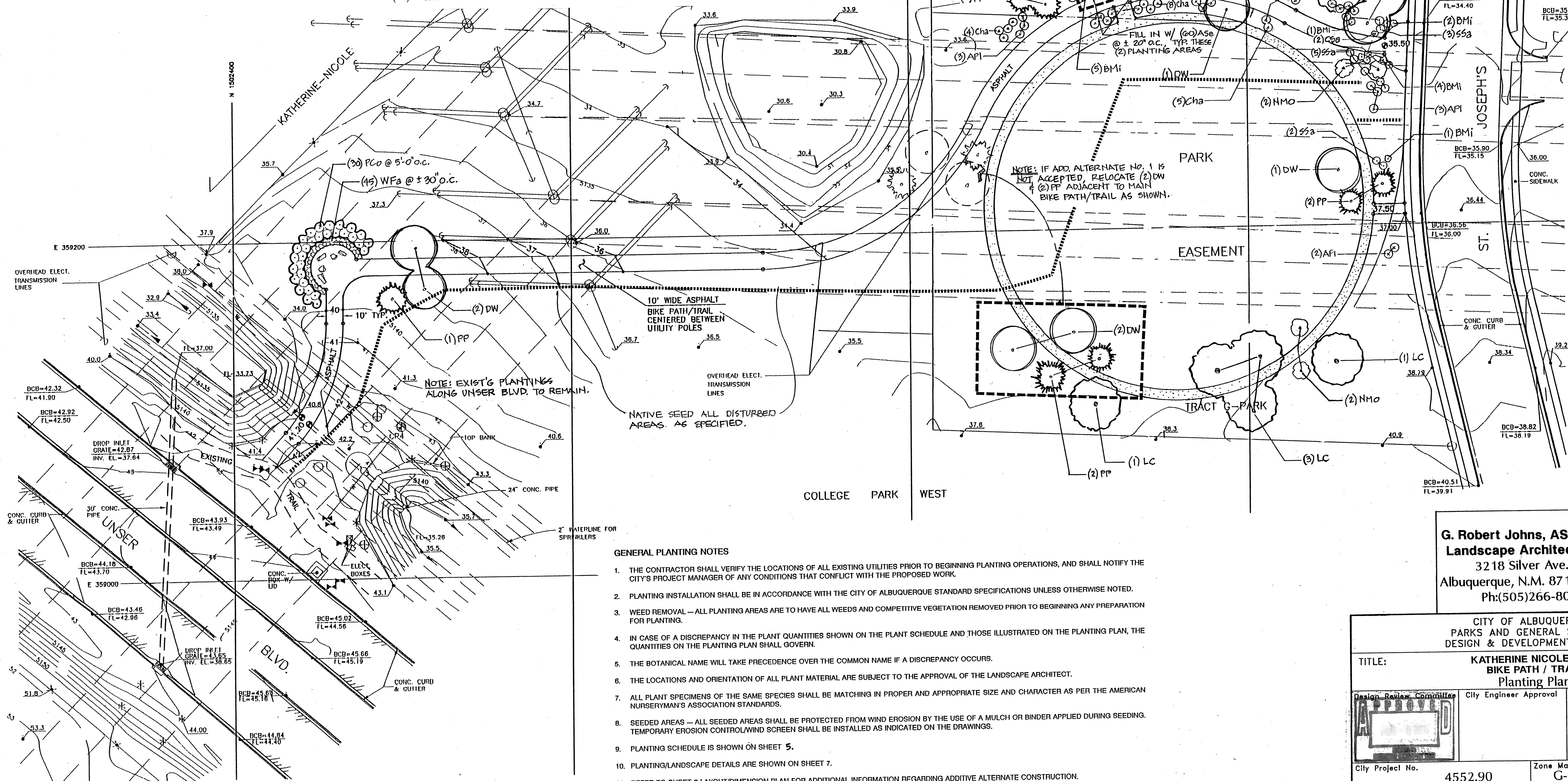
TEMPORARY EROSION CONTROL/
WIND SCREEN; REF. DETAIL
NO. 6, SHEET NO. 7.

PLANTING SCHEDULE

Note: Schedule of native grass and wildflower seed mixes is shown on sheet 7.

SYMBOL	PLANT NAME	QUANTITY	INSTALLED	MATURE	REMARKS
TREES					
DW	Chilopsis Linearis	9	1 1/2" cal, 6'-8' min ht x 3' min spd	20' ht x 20' spd	15 gallon
NMO	Desert Willow	5	1 1/2" cal, 4'-6' ht x 3' spd	8' ht x 6' spd	15 gallon
PP	Forestiera neomexicana	11	6' min ht x 3' min spd	15' ht x 12' spd	B & B
LC	New Mexico Olive	10	2" cal, 12'-15' ht x 4' spd	50' ht x 30' spd	24" box or B & B
SHRUBS					
SSa	Artemisia filifolia	15	2' min ht x 2' min spd	4' ht x 4' spd	5 gallon
BMI	Sand Sage	10(10)*	14"-18" ht x 16" spd	3' ht x 3' spd	5 gallon
WFa	Caryopteris x clandonensis	45	12"-14" ht x 14" spd	2' ht x 2' spd	1 gallon
Cha	Blue Mist Spirea	21	2' min ht x 2' min spd	5' ht x 5' spd	5 gallon
PCo	Ceratoides lanata	30	2'-3' ht x 2'-3' spd	5' ht x 5' spd	5 gallon
API	Winterfat	18	12"-14" ht x 14" spd	5' ht x 5' spd	1 gallon
CSa	Chrysothamnus naucosus	2(6)*	8" ht x 10" spd	3' ht x 3' spd	1 gallon
ASe	Chamisa/Rubber Rabbitbrush	(60)*	4"-6" ht x 6"-8" spd	12" ht x 18" spd	4" pot
	Cotoneaster lacteus				
	Parney Cotoneaster				
	Fallugia paradoxa				
	Apache Plume				
	Salvia greggii				
	Cherry Sage				
	Sedum spectabile 'Autumn Joy'				
	Autumn Joy Sedum				

(*) = Additive Alternate No. 2 Quantities



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 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. THE LOCATIONS AND ORIENTATION OF ALL PLANT MATERIAL ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
7. 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.
8. SEEDED AREAS - ALL SEEDED AREAS SHALL BE PROTECTED FROM WIND EROSION BY THE USE OF A MULCH OR BINDER APPLIED DURING SEEDING. TEMPORARY EROSION CONTROL/WIND SCREEN SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.
9. PLANTING SCHEDULE IS SHOWN ON SHEET 5.
10. PLANTING/LANDSCAPE DETAILS ARE SHOWN ON SHEET 7.
11. REFER TO SHEET 2 LAYOUT/DIMENSION PLAN FOR ADDITIONAL INFORMATION REGARDING ADDITIVE ALTERNATE CONSTRUCTION.

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

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **KATHERINE NICOLE PARK
BIKE PATH / TRAIL
Planting Plan**

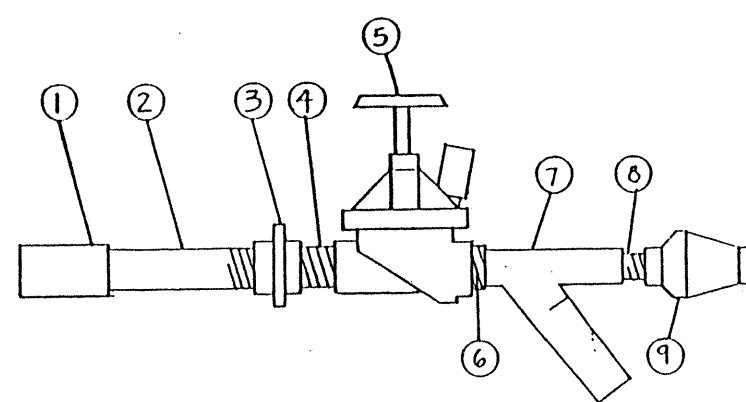
Design Review Committee	City Engineer Approval

City Project No. **4552.90** Zone Map No. **G-10** Sheet **5** of **8**

AS BUILT INFORMATION		BENCH MARK		SURVEY INFORMATION		ARCHITECTS' / ENGINEERS' SEAL		REVISIONS / REMARKS	
CONTRACTOR	DATE:	A.C.S. 60-PENNY NAIL "ACS BM, 2-GIO"	DATE:	FIELD NOTES	DATE:	BY	DATE:	NO.	DATE:
WORK STAKED BY	DATE:	APPROX. 1 FT. ABOVE GROUND ON EAST SIDE OF EAST	DATE:						
INSPECTOR'S APPROVAL	DATE:	POLE OF THE EASTERN MOST OF TWELVE PLYONS.	DATE:						
FIELD VERIFICATION BY	DATE:	POLE NUMBER W269.	DATE:						
DRAWING CORRECTED BY	DATE:	ELEVATION = 5134.60' (M.S.L.D.)	DATE:						
MICRO-FILM INFORMATION	DATE:		DATE:						
RECORDED BY	DATE:		DATE:						
NO.									

DESIGNED BY: GRS, BSM DATE: 09/95
DRAWN BY: BSM DATE: 09/95
CHECKED BY: BSM DATE: 4/96

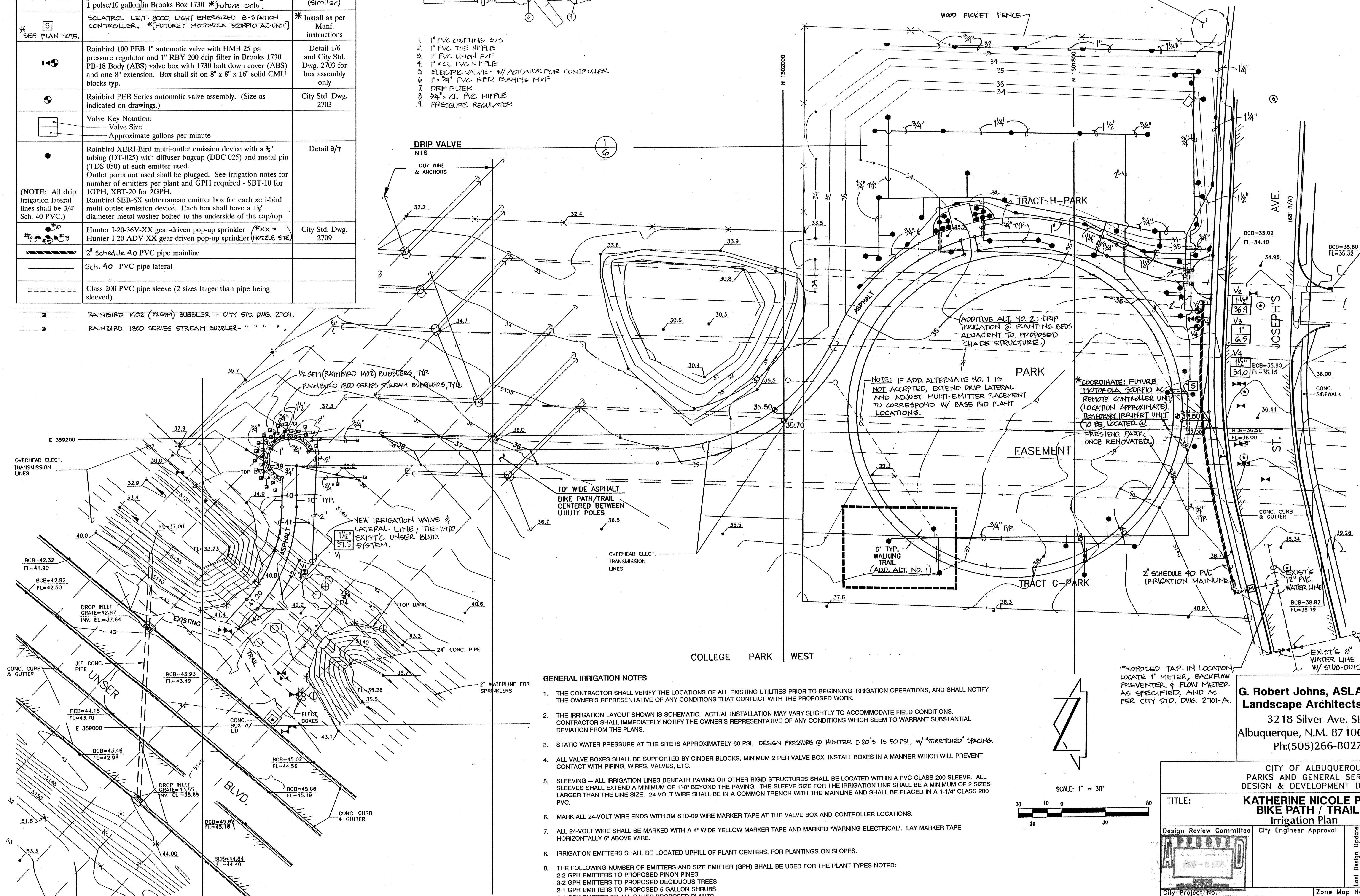
SYMBOL	DESCRIPTION	DETAIL
	New 1" Water Meter	
	1" FEBCO 765 pressure vacuum breaker backflow preventer [with 1½" Bernad 910-P-1½ flow meter] and control valve [with 1 pulse/10 gallon] in Brooks Box 1730 * [future only]	City Std. Dwg. 2702A (similar)
* SEE PLAN NOTE.	SOLATROL LEIT-8000 LIGHT ENERGIZED 8-STATION CONTROLLER. * [FUTURE : MOTOROLA SCORPIO AC-UNIT]	* Install as per Manf. instructions
	Rainbird 100 PEB 1" automatic valve with HMB 25 psi pressure regulator and 1" RBY 200 drip filter in Brooks 1730 PB-18 Body (ABS) valve box with 1730 bolt down cover (ABS) and one 8" extension. Box shall sit on 8" x 8" x 16" solid CMU blocks typ.	Detail 1/6 and City Std. Dwg. 2703 for box assembly only
	Rainbird PEB Series automatic valve assembly. (Size as indicated on drawings.)	City Std. Dwg. 2703
	Valve Key Notation: —— Valve Size —— Approximate gallons per minute	
	Rainbird XERI-Bird multi-outlet emission device with a ½" tubing (DT-025) with diffuser bugcap (DBC-025) and metal pin (TDS-050) at each emitter used. Outlet ports not used shall be plugged. See irrigation notes for number of emitters per plant and GPH required - SBT-10 for 1GPH, XBT-20 for 2GPH. Rainbird SEB-6X subterranean emitter box for each xeri-bird multi-outlet emission device. Each box shall have a 1½" diameter metal washer bolted to the underside of the cap/top.	Detail 8/7
(NOTE: All drip irrigation lateral lines shall be 3/4" Sch. 40 PVC.)		
	Hunter 1-20-36V-XX gear-driven pop-up sprinkler (*xx =)	City Std. Dwg. 2709
	Hunter 1-20-ADV-XX gear-driven pop-up sprinkler (NOZZLE SIZE)	
	2" Schedule 40 PVC pipe mainline	
	Sch. 40 PVC pipe lateral	
	Class 200 PVC pipe sleeve (2 sizes larger than pipe being sleeved).	



1. 1" PVC COUPLING S x S
2. 1" PVC TEE NIPPLE
3. 1" PVC UNION F x F
4. 1" x 1/2" PVC NIPPLE
5. ELECTRIC VALVE - W/ ACTUATOR FOR CONTROLLER
6. 1" 3/4" PVC RED BUSHING M x F
7. DRAIN FILTER
8. 3/4" x 1/2" PVC NIPPLE
9. PRESSURE REGULATOR

FOR FUTURE RADIO-CONTROL MOTOROLA SCORPIO AC-UNIT _____

* NOTE: POWER SOURCE @ P.N.M. PEDESTAL LOCATED AT BACK YARD CORNER (2ND LOT IN @ ADJACENT RESIDENTIAL DEVELOPMENT), 7513 ST. JOSEPH'S AVE; COORDINATE W/ ERROL SINGER % P.N.M. (PH: 241-3648) & LOT OWNER FOR ACCESS AGREEMENT/ADD'L EASEMENT AS REQ'D.



1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING IRRIGATION OPERATIONS, AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE 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 OWNER'S REPRESENTATIVE OF ANY CONDITIONS WHICH SEEM TO WARRANT SUBSTANTIAL DEVIATION FROM THE PLANS.
3. STATIC WATER PRESSURE AT THE SITE IS APPROXIMATELY 60 PSI. DESIGN PRESSURE @ HUNTER I 20's IS 50 PSI, w/ "STRETCHED" SPACING
4. ALL VALVE BOXES SHALL BE SUPPORTED BY CINDER BLOCKS, MINIMUM 2 PER VALVE BOX. INSTALL BOXES IN A MANNER WHICH WILL PREVENT CONTACT WITH PIPING, WIRES, VALVES, ETC.
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. MARK ALL 24-VOLT WIRE ENDS WITH 3M STD-09 WIRE MARKER TAPE AT THE VALVE BOX AND CONTROLLER LOCATIONS.
7. 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.
8. IRRIGATION EMITTERS SHALL BE LOCATED UPHILL OF PLANT CENTERS, FOR PLANTINGS ON SLOPES.
9. THE FOLLOWING NUMBER OF EMITTERS AND SIZE EMITTER (GPH) SHALL BE USED FOR THE PLANT TYPES NOTED:
 2-2 GPH EMITTERS TO PROPOSED PINON PINES
 3-2 GPH EMITTERS TO PROPOSED DECIDUOUS TREES
 2-1 GPH EMITTERS TO PROPOSED 5 GALLON SHRUBS
 1-1 GPH EMITTER TO ALL OTHER PROPOSED PLANTS

PROPOSED TAP-IN LOCATION
LOCATE 1" METER, BACKFLOW
PREVENTER & FLOW METER
AS SPECIFIED, AND AS
PER CITY STD. DWG. 2701-A.

G. Robert Johns, ASLA
Landscape Architects
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Albuquerque, N.M. 87106
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CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: **KATHERINE NICOLE PARK**
BIKE PATH / TRAIL
Irrigation Plan

Design Review Committee	City Engineer Approval	date	HO 7
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APPROVE _____

Design

					Last	
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City Project No.	4552.90	Zone Map No.	G-10
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[illegible]

NO.	DATE	REVISIONS/REMARKS	BY	ARCHITECTS / ENGINEERS SEAL	SURVEY INFORMATION		BENCH MARK	AS BUILT INFORMATION
					FIELD NOTES		A.C.S. 60-PENNY NAIL "ACS BM. 2-1010" APPROX. 1 FT. ABOVE GROUND ON EAST SIDE OF EAST POLE OF THE EASTERN MOST OF TWELVE PYLONS. POLE NUMBER: WM289. ELEVATION = 5134.60' (M.S.L.D.)	CONTRACTOR WORK STRAKED BY INSPECTOR'S APPROVAL FIELD VERIFICATION BY DRAWING CORRECTED BY MICRO-FILM INFORMATION RECORDED BY NO.
NO.	DATE	BY						
					N/A			
DESIGNED BY: GRT, BSM				DATE:				
DRAWN BY: BSM				DATE: 10/95				
CHECKED BY: GRT				DATE: 4/96				

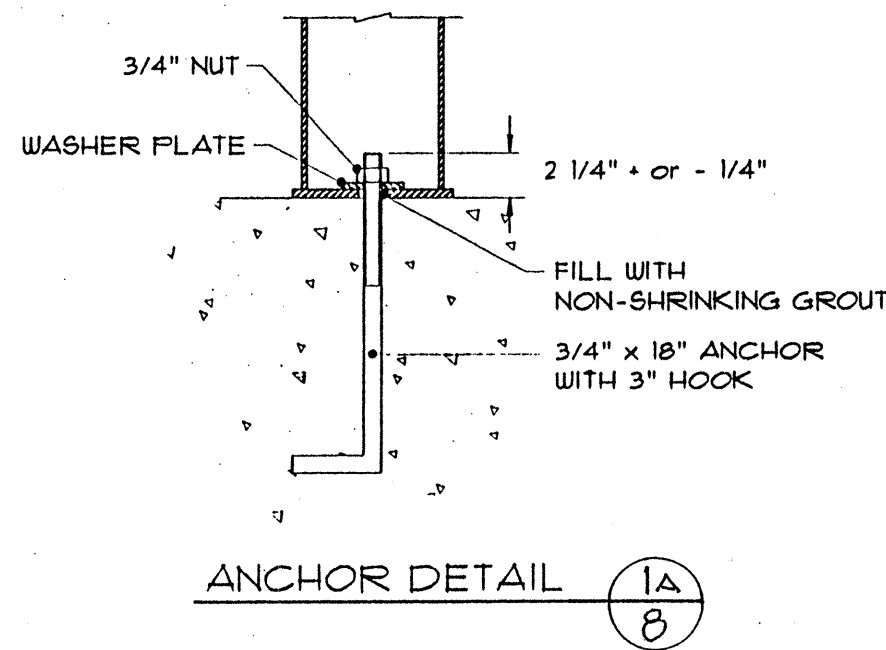
DESIGNED BY: GRT, BSM	DATE:
DRAWN BY: BSM	DATE: 10/95
CHECKED BY: GRT	DATE: 4/96

NOTES:
FOR FINAL TIGHTENING, USE TURN OF NUT METHOD:
USING A SPUD WRENCH, TIGHTEN AS MUCH AS
POSSIBLE WITH A NORMAL MAN'S STRENGTH.
THEN, USING AN EXTENSION, TIGHTEN AN ADDITIONAL
1/2 TURN.
FASTENERS: ALL BOLTS ARE ASTM A325.
DO NOT SUBSTITUTE WITH A LESSER GRADE.

FINISH: STANDARD FRAME IS PRIME PAINTED ONLY.
FRAME TO BE FINISH PAINTED IN THE FIELD WITH
MATERIALS AND LABOR BY OTHERS.

Note:

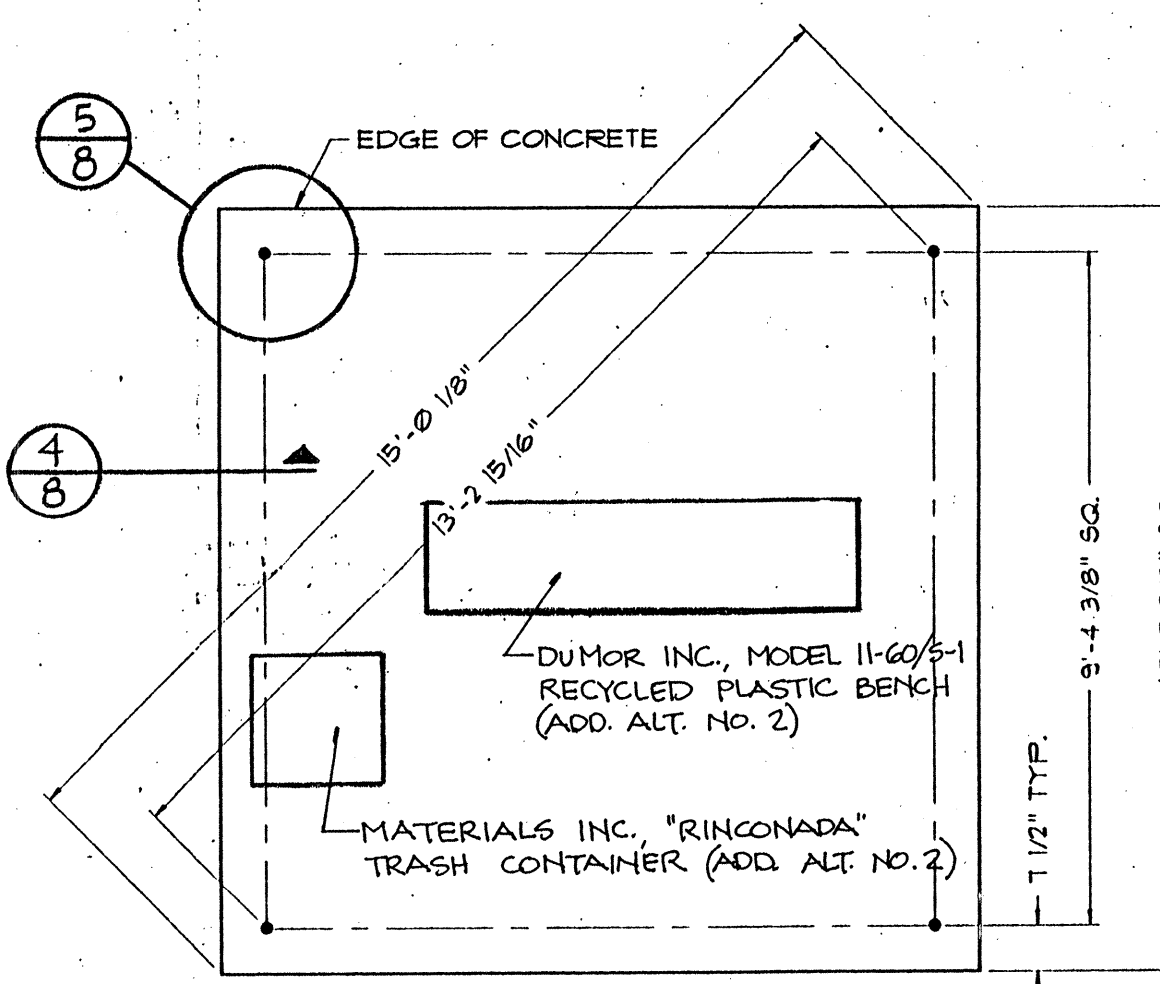
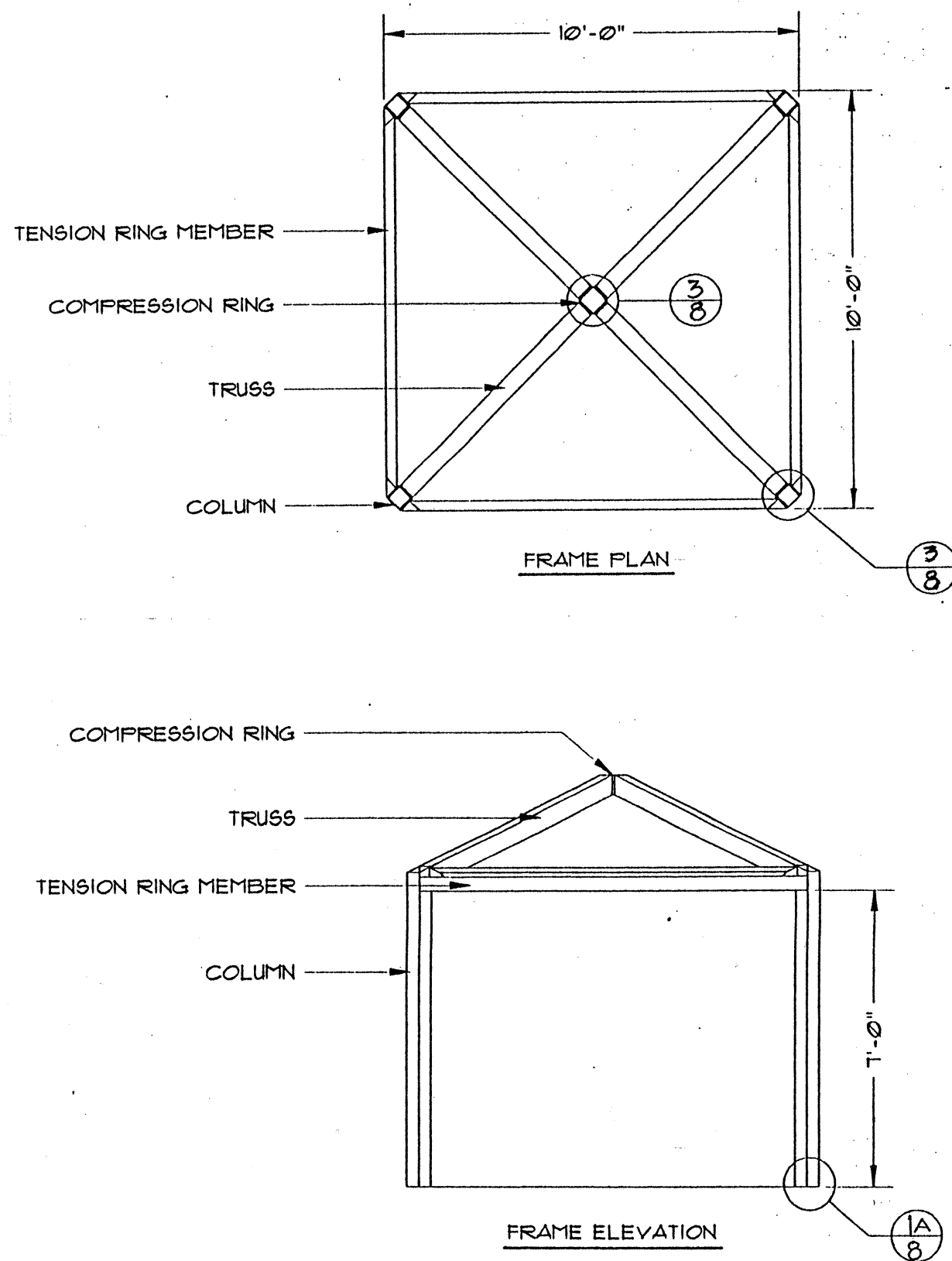
Metal shade structure components shall be blue in color.



ADDITIVE ALTERNATE NO. 2:

POLIGON 'SQUARE 12' SHADE STRUCTURE

NT6



POLIGON 'SQUARE 12' FOUNDATION / FLOOR PLAN

NT6

SURFACE MOUNTING ON CONCRETE FOUNDATION

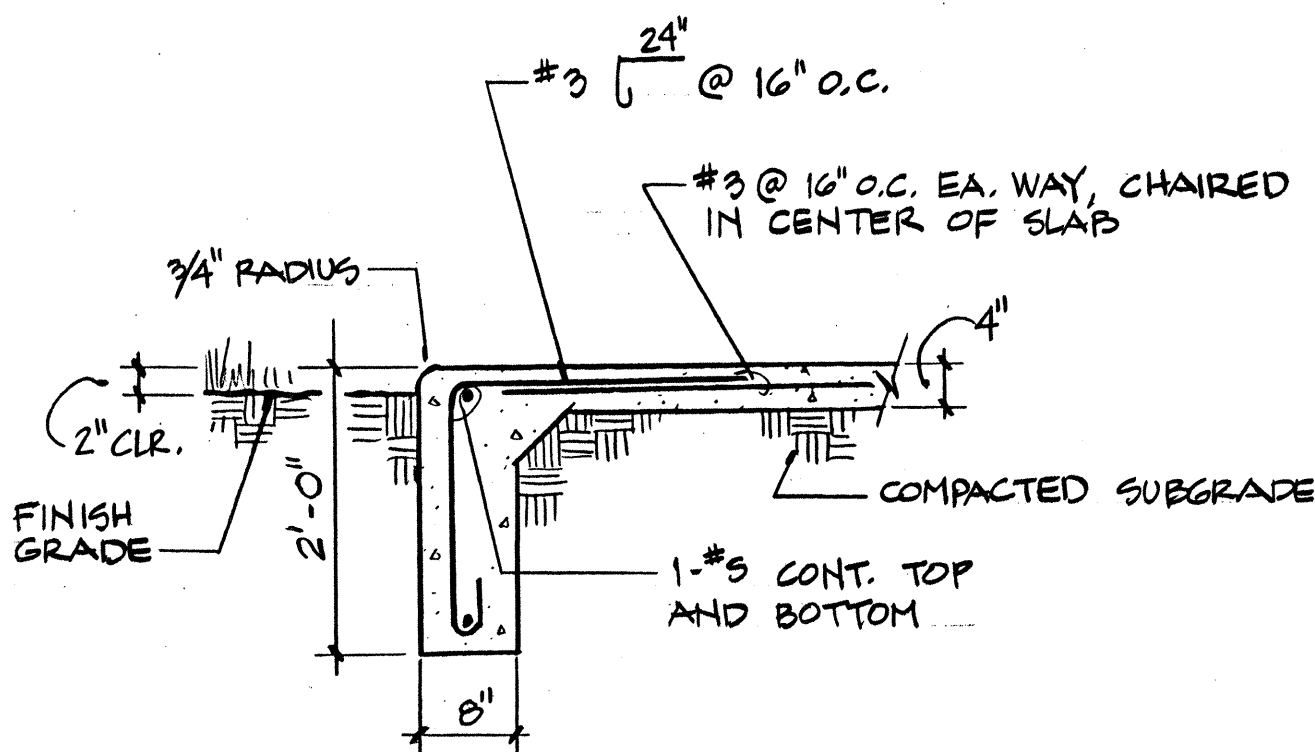
The shelter shall be set on prepared footings and/or concrete slab. Foundation will be constructed to local codes, the shelter manufacturer's specifications, and good construction practices for the specific site conditions. The structure shall be attached to the top of the concrete by use of anchor bolts as specified and furnished by the manufacturer. Anchor bolts shall be inside the column.

SIZE

The structure shall be square. The POLYGON SQ12-4 shall be 12' on a side from tip of eave to tip of eave and 9'-10 1/2" from outside of column to outside of column. The height below the tension ring shall be 7'-0". The height below the compression ring shall be 9'-2". The area under roof shall be 144 SF. The interior clear spanned space encompassed by the columns shall be 98 SF. There shall be no center column or knee bracing.

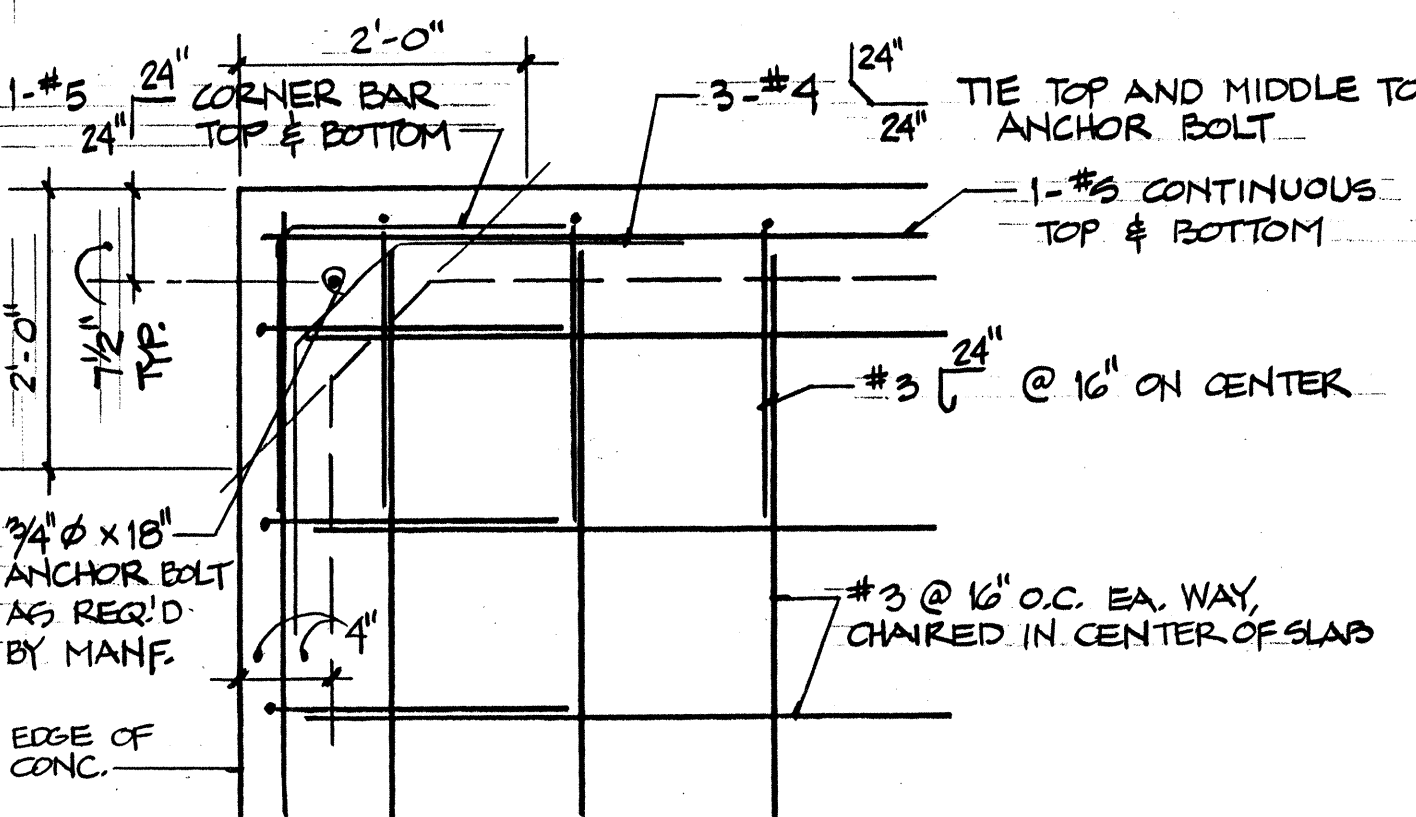
ROOF PITCH

The roof pitch shall be 6:12.



SECTION: TYPICAL SLAB EDGE

3/4" = 1'-0"



TYPICAL CORNER DETAIL

3/4" = 1'-0"

SPECIFICATIONS: POLIGON 'SQUARE 12' W/ SANDWICH PANEL ROOF

GENERAL

The structure shall be a POLYGON SQ12-4 manufactured BY W. H. Porter, Inc. of Holland, Michigan. It shall be designed in strict accordance with the Uniform Building Code (current edition) using a minimum Snow Load of 30 psf, a minimum Wind Load based on a 100 mph wind speed, and a Seismic (earthquake) Load based on Zone 4. (Consult factory if heavier loads are required.)

The POLYGON SQ12-4 shall be designed as a Space Frame using three dimensional (3-D) structural analysis to determine member loads and forces. The structure shall be surface mounted over internal anchor bolts.

All structural framing of the POLYGON SQ12-4 shall be steel tubes or structural steel sections with cover plates to form a clean, neat appearance and no place for bird nesting. The compression ring shall be structural steel plate. Since all connections will bolt together, field welding shall not be required. Bolts shall be concealed within the tubing where possible.

All steel members of the POLYGON SQ12-4 shall be designed in strict accordance with the requirements of the "American Institute of Steel Construction" (AISC) Specifications and the "American Iron and Steel Institute" (AISI) Specifications for Cold Formed Members.

All structural field connections of the POLYGON SQ12-4 shall be designed and made with High Strength bolted connections using ASTM A325 structural bolts.

All shop welded connections of the POLYGON SQ12-4 shall be designed and made in strict accordance with the requirements of the "American Welding Society" (AWS) Specifications. Structural welds shall be made in compliance with the requirements of the "Prequalified" welded joints where applicable and "Special" welded joints developed by W. H. Porter, Inc. (tested and certified in accordance with AWS requirements). All "Special" welded joint procedures are the property of and for the exclusive use by W. H. Porter, Inc.

The steel frame of the POLYGON SQ12-4 shall be prime painted with a rust inhibitive modified alkyl primer according to Steel Structures Painting Council (SSPC-SP2) as outlined in AISC 6.5. The frame shall be finish painted in the field with a weather resistant paint, supplied and applied by the contractor.

FRAME

COLUMNS shall be 5"x 5" structural steel tubes. There shall be 4 columns.

The COMPRESSION RING shall be a structural steel tube.

The TENSION MEMBERS shall be structural steel tubes.

The TRUSS MEMBERS shall be structural steel tubes.

ROOF SYSTEM

The roof system for the POLYGON SQ12-4 shall be structural sandwich panels composed of simulated tongue and groove decking on the underside, foam core, and a wood decking on top. Panel size shall be based on 4' wide module with lengths and angles pre-cut.

The simulated tongue and groove decking shall be 5/8" rough sawn fir plywood (APA T 1-11 18W) with grooves 4" on center. It shall have 18 or fewer patches per 4'x8' unit. It shall have no plastic or synthetic filler.

The foam core shall be 3 5/8" expanded polystyrene with a nominal 1 pound density.

The exterior surface shall be 7/16" strand board.

Sandwich panels shall be joined by 2x4 wood splines and attached to the steel frame with self tapping screws according to the shelter manufacturer's schedule.

Fascia shall be 5/4 x 6 quality deck grade or better inland cedar.

All plywood and structure wood components of the POLYGON SQ12-4 shall be approved by the American Plywood Association (APA).

All laminated structural sandwich panels of the POLYGON SQ12-4 shall have available test data done by a BOCA licensed third party professional engineering agency. Testing has been done for racking, compressive, and transverse loadings in accordance with the American Society for Testing Materials (ASTM) E-72-80.

Panels shall be laminated with adhesive approved by the International Congress of Building Officials (ICBO) test report #3462.

Most standard roofing systems, such as fiberglass shingles, cedar shakes, tile or metal roofing are appropriate to be applied over POLYGON sandwich panels. (If heavy tiles are used, check local codes for additional loading.)

PRE-ENGINEERED PACKAGE

The POLYGON SQ12-4 shall be a pre-cut and pre-fabricated package that shall include the structural frame, panelized roof, fasteners, trim and installation instructions. The structure shall be shipped in a knocked down manner for minimum shipping charges.



Consulting Structural Engineer:

J.M. Westbrook & Assoc.

Ph:(505)881-8544

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

CITY OF ALBUQUERQUE
PARKS AND GENERAL SERVICES
DESIGN & DEVELOPMENT DIVISION

TITLE: KATHERINE NICOLE PARK
BIKE PATH / TRAIL
Site Details



City Engineer Approval

Last Design Update

City Project No. 4552.90

Zone Map No. G-10

Sheet 8

Of 8