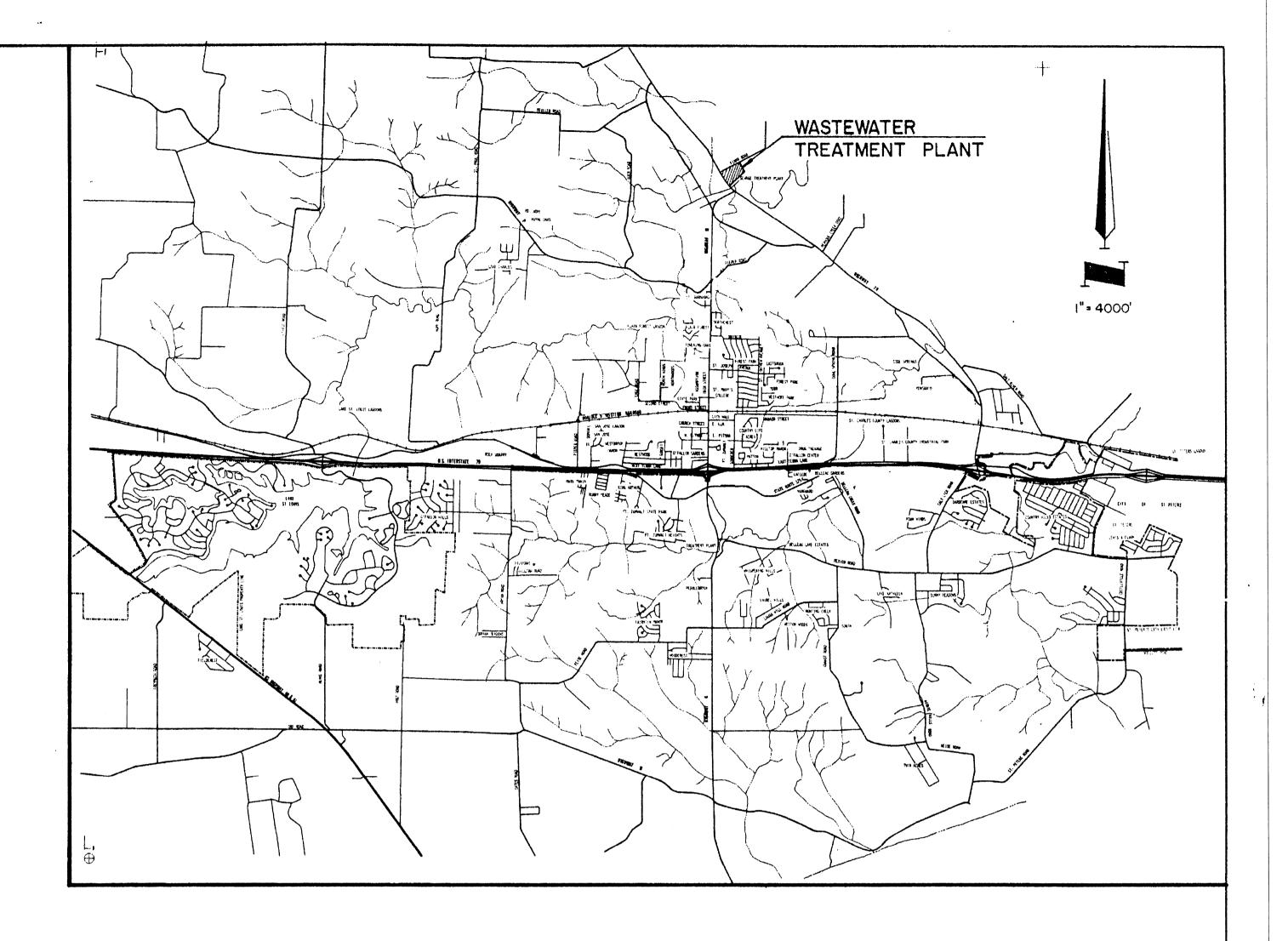
	WASTEWATER TREATMENT PLANT CITY OF O'FALLON, MISSOURI					
,	INDEX OF DRAWINGS					
1.	TITLE SHEET		57. DRIVEWAYS	A, B, AND C - PROFILES		
2.	INDEX OF DRAWINGS AND LOCATION MAPS		58. SITE PIPI	NG - PLANS AND PROFILES		
3.	FLOW DIAGRAM AND HYDRAULIC PROFILE		59. SITE PIPI	59. SITE PIPING - PLANS AND PROFILES		
4.	SITE GRADING PLAN	•	60. MISCELLAN	EOUS ROADWAY SECTIONS AND DETAILS		
5.	PLANTING PLAN		61. MISCELLAN	EOUS DETAILS - DISTRIBUTION BOXES		
6.	SITE PIPING AND DIMENSIONAL PLAN - 1		62. MISCELLAN	EOUS DETAILS - JUNCTION AND DISTRIBUTION BOXES		
7.	SITE PIPING AND DIMENSIONAL PLAN - 2		63. MISCELLAN	EOUS DETAILS - JUNCTION BOXES		
8.	SITE PIPING AND DIMENSIONAL PLAN - 3		64. MISCELLAN	EOUS DETAILS - SUMP PUMPS, SAMPLER AND HATCHWAY		
9.	METER VAULT AND COMMINUTOR		65. MISCELLAN	EOUS PIPING DETAILS		
10.	PRIMARY CLARIFIERS - PLAN		66. MISCELLAN	EOUS SITE DETAILS		
11.	PRIMARY CLARIFIERS - SECTIONS		67. BIO-FILTE	R NO. 3 FLOOR PLAN		
12.	PRIMARY CLARIFIERS - STRUCTURAL PLAN AND SECTIONS		68. NOT USED	•		
13.	BIO-FILTER COMPLEX - NORTH AND SOUTH ELEVATIONS		69. "	n .		
14.	BIO-FILTER COMPLEX - EAST AND WEST ELEVATIONS		70.	D.		
15.	BIO-FILTER COMPLEX - GENERAL LAYOUT		71.	h		
16.	BIO-FILTER COMPLEX - LONGITUDINAL SECTION		72. "	. 11		
17.	BIO-FILTER COMPLEX - BIO-FILTER PLANS AND SECTIONS		73.	11		
18.	BIO-FILTER COMPLEX - BIO-FILTER SECTIONS		MECHANICAL	• •		
19.	BIO-FILTER COMPLEX - BIO-FILTER BUILDING UPPER, BLOWER AND COPLANS	BUILDING UPPER, BLOWER AND OPERATING FLOOR		SITE PLAN - PLUMBING		
20.	BIO-FILTER COMPLEX - BIO-FILTER BUILDING BASEMENT FLOOR PLAN		75. OR M-2			
	BIO-FILTER COMPLEX - PROCESS PIPING SECTIONS		76. OR M-3			
	BIO-FILTER COMPLEX - PARTIAL SITE PIPING LAYOUT		77. OR M-4			
	BIO-FILTER COMPLEX - FOUNDATION PLAN - NORTH		78. OR M-5			
	BIO-FILTER COMPLEX - FOUNDATION PLAN - SOUTH		79. OR M-6	BIO-FILTER COMPLEX - GARAGE, BIO-FILTERS HVAC AND PLUMBIN	4G	
			ELECTRICAL			
	BIO-FILTER COMPLEX - FOUNDATION SECTIONS  BIO FILTER COMPLEX - STRUCTURAL SECTIONS		80. OR E-1	ELECTRICAL SITE PLAN		
	BIO-FILTER COMPLEX - STRUCTURAL SECTIONS  BIO-FILTER COMPLEX - STRUCTURAL FLOOR PLANS		81. OR E-2	BIO-FILTER BASEMENT FLOOR PLAN - ELECTRICAL	rn ( a l	
				OPERATING FLOOR, BLOWER FLOOR AND COMMINUTOR PLAN - ELECT		
	BIO-FILTER COMPLEX - STRUCTURAL SECTIONS  BIO-FILTER COMPLEX - STRUCTURAL SECTIONS		83. OR E-4	ROOF AND CATWALK PLAN AND MISCELLANEOUS DETAILS - ELECTRI	CAL.	
20	BIO-FILTER COMPLEX - STRUCTURAL SECTIONS  BIO-FILTER COMPLEX - BIO-FILTER BUILDING OPERATING FLOOR SECTIONS		84. OR E-5	GARAGE AND BIO-FILTER PLAN - ELECTRICAL		
31.				OFFICE BUILDING BASEMENT FLOOR PLAN - ELECTRICAL		
	BIO-FILTER COMPLEX - STRUCTURAL SECTIONS AND DETAILS  BIO-FILTER COMPLEX - BIO-FILTER FLOOR PLANS AND SECTIONS		86. OR E~7	OFFICE BUILDING FIRST FLOOR PLAN - ELECTRICAL		
	BIO-FILTER COMPLEX - BIO-FILTER STRUCTURAL STEEL FRAMING PLANS AND SECTIONS		87. OR E-8	ELECTRICAL RISER DIAGRAM AND MISCELLANEOUS DETAILS		
	BIO-FILTER COMPLEX - GARAGE ROOF FRAMING PLAN AND SECTIONS	MAS AND SECTIONS	88. OR E-9	ELECTRICAL SCHEDULES AND DETAILS		
35.	BIO-FILTER COMPLEX - GIRT LAYOUTS			•		
	BIO-FILTER COMPLEX - CATWALK PLAN AND SECTIONS		GENE			
	AERATION TANKS - PLAN			designed in accordance with recommendations contained.	– (12) Ine	
38.	AERATION TANKS - SECTIONS	in a soils report by Soils Consultant, Inc. dated June 1981.  (2) Anchor bolts shall be located by means of a template.  (13) The Special Consultant in the special Consultant				
39.	AERATION TANKS - STRUCTURAL PLAN AND SECTIONS					
40.	FINAL CLARIFIERS - PLAN	(3) All foundations shall				
41.	FINAL CLARIFIERS - SECTIONS	(4) Grout below column base plates. Grout shall be dry and stiff to prevent shrinkage. Thoroughly compact grout beneath base plate.				



## PROJECT LOCATION MAP

- 41. FINAC CLARIFIERS SECTIONS
- 42. FINAL CLARIFIERS STRUCTURAL PLAN AND SECTIONS
- 43. MAIN OFFICE BUILDING ELEVATIONS
- 44. MAIN OFFICE BUILDING OPERATING FLOOR PLAN
- 45. MAIN OFFICE BUILDING FOUNDATION PLAN
- 46. MAIN OFFICE BUILDING OPERATING FLOOR FRAMING PLAN
- 47. MAIN OFFICE BUILDING ROOF PLAN AND ROOF FRAMING PLAN
- 48. MAIN OFFICE BUILDING TYPICAL WALL SECTIONS
- 49. MAIN OFFICE BUILDING TYPICAL WALL SECTIONS
- 50. MAIN OFFICE BUILDING TYPICAL WALL SECTIONS
- 51. THICKENER / AEROBIC DIGESTER MODIFICATION PLAN 52. THICKENER / AEROBIC DIGESTER MODIFICATION - SECTION

The state of the s

- 53. DOOR SCHEDULE
- 54. INTERIOR FINISH AND GATE SCHEDULES
- 55. FIRMA ROAD PLAN AND PROFILE
- 56. FIRMA ROAD CROSS SECTIONS

- compact grout beneath base plate.
- (5) Reinforcing bars shall meet ASTM A615 Grade 60.
- (6) Concrete protection and reinforcement, unless otherwise noted, shall be:
- Cast against and permanently exposed to earth ---- 3.00' Exposed to earth or weather: #6 through #18 ----- 2.00" #5 and Smaller ----- 1.50" Not exposed to weather or in contact with earth ----- 0.75"
- (7) Bars marked continuous and vertical reinforcing, not otherwise noted, shall be lapped 30 bar diameters at splices.
- (8) At corners of all walls and grade beams, supply corner bars 4'-0" long (min. 2'\_0" in each direction or 30 bar diameters) in outside face of wall, matching size and spacing of horizontal bars. Where there are not vertical bars in outside face of wall, supply three (3) #4 vertical support bars for corner bars.
- (9) All bars are to be supported in the forms and spaced with wire bar supports per ACI "Manual of Standard Practice for Detailing Concrete Structures" (latest edition). Bars shall be securely wired per latest edition of CRSI Recommended Practice for Placing Reinforcing Bars. Accessories for exposed concrete shall be plastic or have plastic-tipped feet.
- (10) Welded wire fabric shall have end laps of one full mesh plus 2" between cross wires and ledge laps by overlapping longitudinal selvage wire 2" and wiring all laps securely together.
- (11) Welded wire fabric shall conform to ASTM A-185.

## The Contractor shall notify the Engineer of any discrepancies in dimensioning, detailing, or other items as shown on the plans or specified prior to proceeding with work relating to said discrepancies.

- the current edition of "Building Code Requirements for Reinforced Concrete, ACI-318", is hereby made a part of this pecification and shall have the same effect as if it were repeated herein.
- Wil concrete shall be classified as Class "A". Class """ on class "C". Otheroth characteristics shall be as follows: (See specifications for mix design)
- 1) Class A Concrete -- 3501 pst 0 20 days\* CSM reside ? days
- 2) Stass B Concrete 3000 psi 9 20 days\* Marsi 9 7 days
- 3) Class C Concrete -- 4000 psi 8 28 days\* 3000 psi 0 7 davs

والمالية المالية المواجعة متواجعة والمعارف المعارف والمالية والمالية والمتناور ويمس يواطي والمالية

- \*13 day average concrete test strength values chall be 110% of 20 may strength shown above.
- Class 3 concrete shall be used for Main Office Pullding Oberating Clear Class (6) concrete shall be used for a precast concrete piling. All remaining concrete shall be Class A.
- (14) to aluminum items shall be imbedded in any concrete.
- (15) Expansion joints in maxenry construction shall be as shown
- (18) All structural steel shall conform to the following Structural Tube Col. - ASIM 450
  - All other Structural and Piscellaneous Steel-ASIC A36.
  - All Structural Steel work shall conform to requirements of the current Standard Specifications of the American Institute of Steel Construction. All bolts for structura: steel connections small conform to ASTM A325. All anchor bolts shall conform to ASTM ABO7. Fabricators to detail connections not specifically shown - fully develop critical load of member being connected. Thop drawings shall be submitted to the Engineer for approval in accordance with the specifications. All structural steel is to receive one coat of approved primer, minimum.
- (17) Welding shall conform to latest publications of applicable codes set forth by the American Welding Societ. Welding electrodes shall be E70XX Electrodes. Velds not shown shall be 1/4 min.
- (18) Steel joists shall be of the size and series shown on the framing clans and shall conform to requirements set forth by the Steel Joist Institute. Alterations to joist spacing and locations of mechanical and electrical equipment shall be coordinated with and approved by the Engineer. Joists are to be welded to structural steel beams with 3/10  $\times$  1 1/2" long fillet welds each side of joist chord typ. except at expansion joints or where shown otherwise.

## UTILITY OWNERSHIPS

272-6231 724-4300
272-6244
272-6203
327-5111 343-9531
ion 966-3800

EPA PROJECT NO. C291090

GEORGE BUTLER ASSOCIATES CONSULTING ENGINEERS/ARCHITECTS LANDSCAPE ARCHITECTS/PLANNERS

SUITE 305-A FAIRWAY OFFICE CENTER 4210 JOHNSON DRIVE / SHAWNEE MISSION / KANSAS 66205 1100 CITY CENTER SQUARE 1100 MAIN / KANSAS CITY / MISSOURI 84105 SUITE 134 LAKESIDE PLAZA II 6700 CORPORATE DRIVE / KANSAS CITY / MISSOURI 64120

WASTE WATER TREATMENT Plant expansion INDEX OF DRAWINGS

AND LOCATION MAPS CITY OF O'FALLON, MISSOURI

DESIGNED BY: W.C.C. /J.L.S. DRAWN BY: SPW CHECKED BY W.A.C.

JOB NO. 79-2065 DATE July 30,1981

Rev 3-82 MKK

SCALE AS Shown NO. 2 OF 88