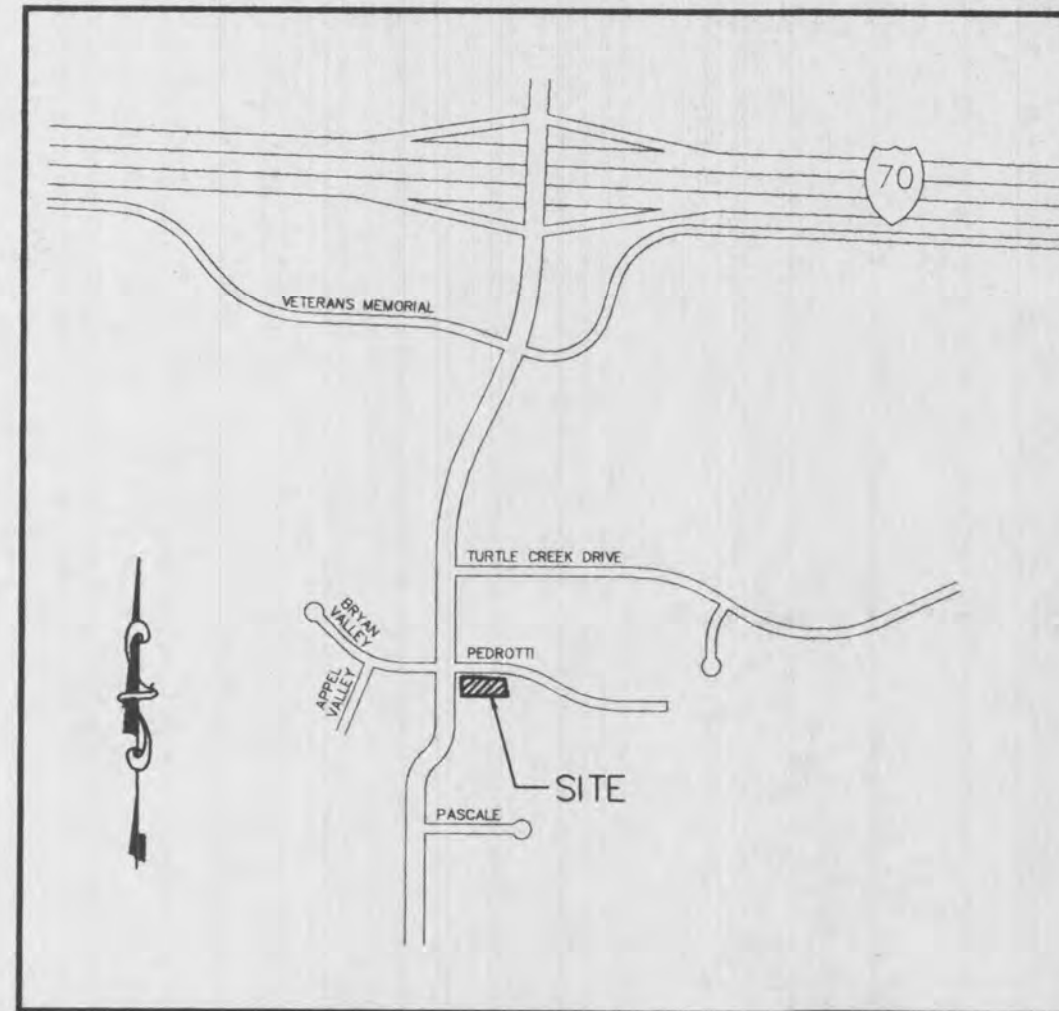


# 1070 BRYAN ROAD IMPROVEMENT PLANS

## LOCATION MAP



## DRAWING INDEX

Sheet	Description
1	COVER SHEET
2	SITE PLAN
3	GRADING PLAN
4	DETAIL SHEET

## CITY OF O'FALLON GENERAL NOTES

- Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
- Underground utilities have been plotted from available information and, therefore, their locations must be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to grading or construction of improvements.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
- Storm sewers 18" in diameter or smaller shall be ASTM C-14.
- Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
- All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise in the plans.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.T.O. See plans for gauge.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a soils engineer.
- All earthen filled places within State, County, or City roads (Highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.A.S.H.T.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.
- All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
- Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.
- No area shall be cleared without the permission of the developer.
- All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either seeded or mulched.
- Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices," end of roadway markers mounted on two (2) pound "U" channel sign post. Each marker shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.
- All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
- All standard street curb inlets to have front of inlet 2 feet behind curb.
- The minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding house connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2').
- Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority.
- All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
- All PVC sanitary sewer pipe shall be DR-35 or equal with crushed stone bedding uniformly graded between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
- All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed Right-of-Way markers shall be reset at the completion of grading.
- All streets must meet the specifications and installation requirements of the City of O'Fallon.
- All sanitary manholes top shall be set 0.2' higher than the proposed ground except in pavement areas.
- All sanitary manholes shall have a 31 mil thick coat of coal tar pitch waterproofing.
- All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for single-family developments.
- Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenan R-1736 or Deeter 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole.
- The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
- Brick shall not be used on manholes.
- Sewer contractor shall maintain 24" vertical separation between all storm sewers and the sludge force main. Contractor shall be responsible for verifying separation prior to storm sewer installation.
- Waterproofing: Waterproofing will be required on the exterior of all manholes. The bitumen shall consist of two coats of asphalt, coat-tar pitch, or a coating meeting American Society for Testing and Materials (ASTM) D-41. Asphalt shall conform to the requirements of ASTM D 449. Coal-tar pitch shall conform to the requirements of ASTM D-450. Coating shall be 31 mils thickness.
- NOTE: The grading and elevations shown on the grading plans are for construction purposes only. Finished grades and slopes will vary from those shown on the plans depending upon the location, size and type of house built on the lot. However, care should be taken to insure that finished grading conforms to drainage area maps.
- Per F.I.R.M. #29183C0240 E; August 2, 1996, site is located outside the 100-year floodplain.
- Developer must supply City construction inspectors with soil reports prior to or during site soil testing.
- The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or the City of O'Fallon and/or MoDOT. The contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The Owner and/or the City of O'Fallon and/or MoDOT may at their option direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silts or mud on new or existing pavement or in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/or MoDOT.

- Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City standards.
- This project is served by:
  - A. Missouri American Water Company
  - B. St. Charles Gas Company
  - C. Verizon Telephone Company
  - D. City of O'Fallon Sewer
  - E. AmerenUE Electric Company
  - F. O'Fallon Fire Protection District
- All utilities shall be located underground.
- NOTE: Sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAC) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information on the plans, the ADAAC guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.

## LEGEND

18	Lot or Building Number		Sanitary Structure	R.C.P.	Reinforced Concrete Pipe
-x-	Existing Fence Line		Storm Structure	C.M.P.	Corrugated Metal Pipe
	Existing Tree Line		Test Hole	C.I.P.	Cast Iron Pipe
	Street Sign		Power Pole	P.V.C.	Polyvinyl Chloride
	Existing Contour		Light Standard	V.C.P.	Vitrified Clay Pipe
	Proposed Contour		Double Water Meter Setting	C.O.	Clean Out
	Grouted Rip-Rap		Single Water Meter Setting	V.T.	Vent Trap
	End of Lateral	C.I.	Curb Inlet	T.B.R.	To Be Removed
	Asphalt Pavement	S.C.I.	Skewed Curb Inlet	T.B.R. & R.	To Be Removed & Relocated
	Concrete Pavement	D.C.I.	Double Curb Inlet	T.B.P.	To Be Protected
	Sanitary Sewer (Proposed)	G.I.	Grate Inlet	T.B.A.	To Be Abandoned
	Sanitary Sewer (Existing)	A.I.	Area Inlet	B.C.	Base Of Curb
	Storm Sewer (Proposed)	D.A.I.	Double Area Inlet	T.C.	Top Of Curb
	Storm Sewer (Existing)	C.C.	Concrete Curb	T.W.	Top Of Wall
	Water Line & Size	F.E.	Flared End Section	B.W.	Base Of Wall
	Existing water line	E.P.	End Pipe	(TYP)	Typical
	Tee & Valve	E.D.	Energy Dissipator	U.N.O.	Unless Noted Otherwise
	Hydrant	M.H.	Manhole	U.I.P.	Use In Place
	Cap	C.P.	Concrete Pipe		

# PICKETT RAY & SILVER

Civil Engineers  
Planners  
Land Surveyors

333 Mid Rivers Mall Dr.  
St. Peters, MO 63376  
397-1211 FAX 397-1104

12-3-0204  
APPROVED

CITY FILE NUMBER: 802

**PICKETT RAY & SILVER**  
CIVIL ENGINEERS  
PLANNERS  
LAND SURVEYORS  
333 Mid Rivers Mall Drive  
St. Peters, MO 63376  
Phone (636) 397-1211  
Fax (636) 397-1104

1070 BRYAN ROAD  
COVER SHEET  
O'FALLON, MISSOURI  
Prepared For:  
Ms. Louise Haynes

REVISIONS NO.	DATE	REVISION PER CITY'S COMMENTS	REVISION PER CITY'S COMMENTS
1	11.11.02		
2	11.26.02		

RECEIVED  
DEC 05 2002  
ENGINEERING DEPARTMENT

**ENGINEERS AUTHENTICATION**  
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.  
PICKETT, RAY & SILVER, INC.  
HAROLD J. SILVER  
REGISTERED PROFESSIONAL ENGINEER  
NO. 17751  
EXPIRES 12/31/04

DRAWN	J.M.W.	DATE	10.29.02
CHECKED	D.W.B.	DATE	10.29.02
PROJECT #	02147.LOHA.OCC	FIELD BOOK	
TASK #	1	FIELD BOOK	

1070 BRYAN ROAD  
COVER SHEET  
SHEET 1 OF 4  
Copyright 2002 by Pickett, Ray & Silver Inc.

Const. Inspector