# Missouri Department of Economic Development



# **CERTIFIED SITES PROGRAM**







## **City of Union**

Economic Development Department 500 E. Locust Street Union, MO 63084

Contact: Joseph A. Graves
0: (636) 583-3600
C: (314) 808-3395
josephgraves@unionmoed.com
www.unionmoed.com

#### 1. Ownership Information

#### 1.1. Contact:

Union Development Corporation 500 E. Locust Street Union, Missouri 63084 Phone: (636) 583-3600

The Union Development Corporation, a non-profit, volunteer corporation, was formed in 1955 to aid the City of Union in the recruitment of industrial development and to assist with economic development issues.

The Board of Directors consists of thirteen members, six members appointed by the City of Union and seven appointed by the Union Development Corporation.

<u>Appendix 1.1</u> Lists Current Board Members.

Joseph A. Graves, Executive Director of Economic Development for the City of Union, Missouri serves as the primary point of contact for all business recruitment and retention.

Contact information: Joseph A. Graves City of Union

500 E. Locust Street Union, MO 63084 Office: 636-583-3600 Cell: 314-808-3395

Cell: 314-808-3395 Fax: 636-583-4509

Email: jgraves@unionmissouri.org

#### 1.2. Price

The asking price is \$30,000 per acre, however, the price is negotiable based on number of jobs created, amount of money invested in the community, etc. Appendix 1-2.

1.3. Evidence of clear title as provided by Hansen Title & Abstract Company is included as <a href="Appendix 1-3">Appendix 1-3</a>. Please note the Certificate of Title was prepared for all remaining lots for sale in the Union Corporate Center. The proposed certified site is identified as Lot 1 of Union Corporate Center Phase IX, a subdivision in the City of Union, being part of Northwest qr. In Section 6, Township 42 North, Range 1 East of the 5th P.M., as per plat of record in Document No. 0811568 in the office of the Recorder of Deeds. Statements relative to the subject lot have been highlighted in <a href="Appendix 1-3">Appendix 1-3</a>.

#### 1.4. Easements & Contracts

- 1.4.1. There are no existing option contracts on the proposed certified site, Lot 1 of Union Corporate Center Phase IX. Schedule B on <a href="Appendix 1-3">Appendix 1-3</a> references options on lots located in Union Corporate Center but not included in the proposed certified site.
- 1.4.2.Sign and Utility Easements are included on Schedule B of the Certificate of Title, under <u>Appendix 1-3</u>. There are no additional easements affecting the proposed certified site, Lot 1 of Phase IX.

- 1.5. Site is located within the City Limits of Union, Missouri. Appendix 1-5.
- 1.6. No Voluntary Real Property Disclosure Form is Available.

#### 2. Property Information

- 2.1.1. Location Information
  - 2.1.1.1 Name of Site: Lot 1 of Phase 9 Union Corporate Center
  - 2.1.1.2 Address of site: Progress Parkway & Corporate Drive, Union, Missouri 63084 (Latitude: 38°25'18.87"N Longitude: 90°57'36.01"W)
  - 2.1.1.3 Section: 062.1.1.4 Township: 42N
  - 2.1.1.5 Range: 01E
  - 2.1.1.6 Plat Map Franklin County Assessor's Office, 2010 = See Appendix 2.1.1.6
- 2.1.2. Proposed Missouri Certified Site is 30 acres (1,306,800 square feet). Franklin County Assessor Record for Parcel #21-3-06.1-0-030-304000 is included in <a href="https://example.com/appendix 2.1.2">Appendix 2.1.2</a>.
  - The 30 acres is adjacent to other platted acreage which would allow more than 60 acres to be contiguously developed.
- 2.1.3. Aerial Photo included as Appendix 2.1.3
  - Source: Eye in the Sky Aerial Photography
  - Date: June 29, 2006
  - Additional Aerial Photo provided by Franklin County Assessor's Office in 2010. See <u>Appendix 2.1.3.1</u>.
- 2.1.4. Topography Map included as Appendix 2.1.4

Source: MyTopo.comDate: 8/28/2009

2.1.5. Parcel Identification Number is: 21-3-061-0-030-304000

Tax Rates are as follows:

City of Union: \$0.6559 per \$100 of assessed valuation

(\$0.5286 General Fund and \$0.1273 for the Park Fund)

Assessed valuation is determined by the Franklin County Assessor using property appraisal value multiplied by 19% for residential, 12% for Agricultural and 32% for Commercial/Industrial Property.

Franklin County: \$5.0744 per \$100 of assessed valuation

State	.0300	County	.1173	Road	.1923
Library	.0753	R-XI School	3.70	Fire	.2691
Ambulance	.1654	College	.4329	Dev Svcs	.0916

Commercial surtax is \$0.48

Sales Tax Rate: 8.475%

- 2.2. Sale/Lease Information
  - 2.2.1. Price is \$30,000 per acre, negotiable based on number of jobs created/investment, etc.
  - 2.2.2. \$900,000 (Negotiable based on final terms)
  - 2.2.3. No Realtor or Broker has the property listed.
  - 2.2.4. Option /Listing/Leasing Not Applicable.
  - 2.2.5. Right of First Refusal Not Applicable.
  - 2.2.6. Declaration of Restrictions for Union Corporate Center included as <u>Appendix 2.2.6A</u> and Owners By-Laws In Appendix <u>2.2.6B</u>
- 2.3. Zoning Description
  - 2.3.1. The site is located in an I-1 (General Industrial) Zoning District.
  - 2.3.2. Zoning Map and Regulations are attached in <u>Appendix 2.3.2</u>.
    - 2.3.2.1 Declaration of Restrictions for Union Corporate Center are included as Appendix 2.2.6A.
  - 2.3.3. There are no special overlay districts relative to this site.

#### 3. Environmental and Cultural Information

- 3.1. Phase 1 Environmental Assessment (ASTM)
  - 3.1.1. Terranext, LLC 11904 Grandview Road Grandview, Missouri 64030

Telephone: 913-894-4000

Fax: 913-894-5983

- 3.1.2. A copy of the Phase I Environmental Assessment Report Summary completed is included as <a href="Appendix 3.1.2">Appendix 3.1.2</a>
- 3.2. Phase II Environmental Assessment (ASTM) Not applicable to this property.
- 3.3. Regional Air Quality
  - 3.3.1. The site is located in a moderate non-attainment area. See Appendix 3.3.1.
  - 3.3.2. Prevailing Wind Direction is West Northwest. See <u>Appendix 3.3.2</u>, a portion of the Climatic Wind Data for the United States from the National Climatic Data Center website at <u>www.ncdc.noaa.gov</u> and 3.3.2 University of Missouri Extension Wind Rose for the St. Louis Airport. Prevailing wind studies are not available for Union, MO.
- 3.4. Wetland or Waters of the U.S. Boundaries
  - 3.4.1.No wetlands or waters of the state are included in the proposed certified site. A wetlands map of the area is included as <a href="Appendix 3.4.1">Appendix 3.4.1</a>.
  - 3.4.2. Wetlands Determination In contact with NRCS/USDA. Will be receiving documentation in the near future and will forward before the application review date.
  - 3.4.3.Documentation from U.S. Army Corp of Engineers pending completion of Wetlands Determination by NRCS/USDA.

#### 3.5. Floodplain Boundaries

- 3.5.1. The City of Union is listed in the Federal Emergency Management Agency Community Status Book Report, CID#290137#, as obtained 11/3/2010 from www.fema.gov/cis/MO.pdf. See Appendix 3.5.1.
- 3.5.2. FEMA Flood Insurance Rate Map is included in Appendix 3.5.2.

#### 3.6. Threatened or Endangered Species Review

3.6.1. The US Fish and Wildlife, Missouri Department of Conservation, Missouri Federal Assistance Clearinghouse, Missouri State Parks, National Parks Service Land and Water Conservation Fund clearances have all been obtained and included as <a href="Appendix 3.6.1">Appendix 3.6.1</a>.

#### 3.7. Archeological and Cultural Resources

3.7.1. The proposed certified site was submitted to the State Historic Preservation Office (SHPO) as part of the application for a Community Development Block Grant (CDBG) in May of 2008. The Cultural Resource Assessment from SHPO indicating "no historic properties affected" by the current project is included in <a href="Appendix 3.7.1">Appendix 3.7.1</a>. This project encompassed the same 30 acre site, Lot 1 of Phase 9 of the Union Corporate Center. The CDBG was awarded but later forfeited as the project was canceled.

#### 3.8. Soil Conditions

3.8.1. Exploration of Subsurface Conditions and Foundation Recommendations prepared by SCI Engineering, Inc. is included as <u>Appendix 3.8.1</u>.

#### 3.9. Seismic Activity

3.9.1. The Mercalli intensity classification for our area is V for an earthquake of 6.7. It is VI for an earthquake of 7.6 on the Richter scale and VII for an 8.6 earthquake. A map is included as Appendix 3.9.1.

#### 4. Access Information

#### 4.1. Site Access

- 4.1.1. Access Summary Items
  - 4.1.1.1. Progress Parkway is 60 feet wide.
  - 4.1.1.2. Progress Parkway is served via US Highway 50, which is 5 lanes from S Hwy 47 to 50 feet east of intersection of US Highway 50 and Progress Parkway. US Highway 50 continues as 2 lanes from this point east to Interstate 44.
  - 4.1.1.3. Progress Parkway is partially surfaced with asphalt. Within the industrial park, Progress Parkway is concrete-surfaced.
  - 4.1.1.4. At this time the intersection of Progress Parkway and US Highway 50 is not controlled by a stoplight. However, a stoplight controlled intersection is available via Denmark Road, at US Highway 50 and Prairie Dell Road.
  - 4.1.1.5. Secondary access to site by Prairie Dell Road/College Road (20 foot wide asphalt urban collector) via Highway 47 from the south. Highway 47 also provides Interstate 44 access approximately 4 miles south.
  - 4.1.1.6. Traffic impact study not applicable.
  - 4.1.1.7. No scheduled improvements.

#### 4.1.2. Review and Permitting Contacts:

Missouri Department of Transportation (MoDOT) Judy Wagner, Area Engineer 3595 Plass Rd. Festus, MO 63028 (636) 931-3508 judy.wagner@modot.mo.gov

City of Union Jonathan Zimmerman, City Engineer 500 E. Locust Street Union, MO 63084 (636) 583-1805 engdept@ci.union.mo.us

#### 4.2. Rail Access – Not Applicable

#### 4.3. Airport Access

4.3.1.Lambert St. Louis International Airport, owned and operated by the City of St. Louis is approximately 50 miles from Union, Missouri. The airport is a national hub with two terminals, five concourses, and 85 gates serving 20 airlines.

4.3.2.Other Local Municipal Airports include:

Distance to Site:	8 miles	10 miles
Ownership:	Publicly-owned	Publicly-owned
Owner/Operator:	City of St. Clair	City of Washington
	Phone 636-629-0333	Phone 636-390-1000
	Airport Ph: 636-629-5353	Washington Aviation Inc.
		Phone 636-433-5454
Runway Length:	3,198 feet	5,000 feet
Weight Bearing Capacity:	Single Wheel 4,000 lbs	Single Wheel 30,000 lbs
Lighted:	Yes	Yes
Fuel Type Sold	None	Jet A, 100 Low Lead AVV
		Gas

#### 4.4. Parcel Boundary Survey

4.4.1. Survey included as Appendix 4.4.1

4.4.2. Cochran

530A East Independence

Union, MO 63084

Phone: (636) 584-0540

Email: mail@cochraneng.com

#### 4.5. Fire Insurance Rating

4.5.1. The site is served by the Union Fire Protection District. Union Fire Protection District

P.O. Box 463

Union, MO 63084 Phone: 636-583-2515 Fax: 636-583-6433 Website: unionfd.org Email: ufpd1@sbcglobal.net Chief: Russell Hamilton

- 4.5.2. Fire Insurance Rating (ISO) for site is Five (5).
- 4.5.3. Union Fire Protection District Station No. 3 at 1690 Denmark road is approximately ½ mile north of the site.

#### 4.6. Utilities

4.6.1. Utility Map indicating water, sewer and gas included as Appendix 4.6.1.

4.6.2. Electric Service is provided by AmerenUE.

Contact: Ken Schmidt 500 East Independence Union, MO 63084 (636) 583-7154

Website: <a href="www.ameren.com">www.ameren.com</a>
Email: <a href="mailto:klschmidt@ameren.com">klschmidt@ameren.com</a>

Electric facilities are available on-site, 12.470 kV voltage lines available. See provided

map in Appendix 4.6.2

- 4.6.3. Natural Gas is available. See Map in Appendix 4.6.1.
  - 4.6.3.1 Missouri Natural Gas Company

Contact: John Tobben

Email: jtobben@lacledegas.com

#6 Progress Parkway Union, MO 63084 Phone: (636) 584-8440

Website: www.lacledegas.com

- 4.6.3.2 Line size is 6" plastic intermediate pressure line with a capacity of 90,000
  - mbh.
- 4.6.3.3 Normal operating pressure is 25 psi.
- 4.6.3.4 Capacity is 90,000 mbh.
- 4.6.3.5 Excess Capacity of gas system unknown.
- 4.6.4. Water is provided by City of Union. See map in Appendix 4.6.1.
  - 4.6.4.1 City of Union

500 E. Locust Street Union, MO 63084 Phone: (636) 583-3600

Contact Name: Jeff Voss, Water/Wastewater Superintendent

4.6.4.2 A 500,000 gallon non-elevated potable water on-site storage tank exists within Union Corporate Center. Capacity of the line is 1.3 mgd.

- 4.6.4.3 Excess capacity of the water system factoring in peak utilization (mgd) is .364 or 364,000 gallons per day.
- 4.6.4.4 Line size is 12" with static pressure of 95-100 psi, residual pressure of 70-80 psi.
- 4.6.4.5 A copy of the latest Consumer Confidence Report is included in <u>Appendix</u> 4.6.4.5.

#### 4.6.5.Phone/Fiber provided by AT&T.

4.6.5.1 AT&T

507 E. Main Street

Union, MO 63084

- 4.6.5.2 Fiber Optic is available.
- 4.6.5.3 POP Provider is AT&T, 507 E. Main Street, Union, MO 63084, located approximately 2.5 miles from the site.
- 4.6.5.4 T1 and DSL are available at the site.
- 4.6.5.5 Line(s) size at site and capacity unknown.

#### 4.6.6.Solid Waste

4.6.6.1 The City of Union contracts with IESI – Missouri. IESI offers scheduled services and variable container services as well as temporary and variable roll off services for industrial clients. Hauling, recycling and landfill services provided.

IESI – Missouri

12581 State Highway H Richwoods, MO 63071 Phone: 573-678-2183 Website: <a href="www.iesi.com">www.iesi.com</a> Email: <a href="dmccoy@iesi.com">dmccoy@iesi.com</a>

Contact: Dave McCoy, Site Manager

4.6.6.2 IESI landfill is at Timber Ridge Landfill in Richwoods, MO, privately owned by:

**IESI MO Corporation** 

2301 Eagle Parkway, Suite 200

Ft. Worth, TX 76177 817-632-4000

- 4.6.6.3 Timber Ridge Landfill Permitted Area is 271 acres, with 80 acres of disposal area and an estimated life of 25+ years.
- 4.6.6.4 Timber Ridge Landfill is privately owned by IESI MO Corporation.
- 4.6.6.5 According to Missouri Department of Natural Resources listing, Timber Ridge Landfill accepts all special wastes.

#### 4.6.7.Sanitary Sewer

4.6.7.1 The City of Union is the wastewater provider.

City of Union, 500 E. Locust Street, Union, MO 63084, Phone: 636-583-3600

4.6.7.2 Current capacity of the sewer plant at this location is 300,000 gallons per day, however an expansion is underway, which will increase the capacity to 800,000 gallons per day.

- 4.6.7.3 Based on estimated capacity after the expansion, and a peak utilization of the sewer system of 350,000, the excess capacity would be 450,000 gpd.
- 4.6.7.4 Size of the line serving the site is 8". PSI is not applicable to a gravity sewer.
- 4.6.7.5 Most current wastewater quality or compliance report for the wastewater utility(s) serving the site is included in <u>Appendix 4.6.7.5</u>
- 4.6.7.6 The City of Union requires users of the City Owned Treatment Works to comply with requirements regarding pretreatment of solid waste as set forth in Article IV. Section 710 of the City of Union Code of Ordinances. See Appendix 4.6.7.6.
- 4.6.7.7 Wastewater Discharge Permit Application is included as Appendix 4.6.7.7.

#### 4.6.8. Storm Sewer

4.6.8.1 The Union Corporate Center is serviced by two detention basins. Storm sewer is provided by an environmentally friendly open ditch system.

#### 5.1. Post Office

5.1.1.Post Office Level 20

1276 N. Highway 47 Union, MO 63084-9998

Phone: 636-583-2442

#### 5.2. Freight Service

5.2.1. Following is a partial list of freight services in the area.

#### **ABF Freight System**

1066 E Springfield Rd Sullivan, MO 63080 573-468-5000

#### **All-Star Transportation Inc**

1547 Thornton St Pacific, MO 63069 636-271-6100

#### Climate Express Inc.

PO Box 1188 / Hwy 47 South Washington, MO 63090 888-305-0450

#### D & H Trucking Co Inc

5 Southlink Dr, Washington, MO 63090 (636) 239-5433

#### **FedEx Freight East**

9 Bolte Ln, St. Clair, MO 63077 636-629-6393

#### **Main Line**

151 Hwy AB St. Clair, MO 63077 636-629-3479

#### **Pmex Freight Services**

319 N Olive St Pacific MO 63069 636-271-8300

#### **United Parcel Service (UPS)**

1207 Old Smelter Road Union, MO 63084 636-583-8583

#### **Woody Bogler Trucking Company**

6048 Highway 50 / P.O. Box 274 Rosebud, MO 63091 573-764-3700 / 800-899-4120

#### Yellow Freight System Inc.

St. Louis, MO 800-325-9075

#### 5.3. Emergency Medical Response

#### 5.3.1.Hospital

- 5.3.1.1. There are several Trauma Level 1 hospitals within a 50 mile radius. They include Barnes Jewish Hospital South, Children's Mercy Hospital, SSM Cardinal Glennon Children's Hospital, St. John's Mercy Medical Center, St. Louis Children's Hospital and St. Louis University Hospital. See <a href="#Appendix5.3.1">Appendix 5.3.1</a> for complete address information.
- 5.3.1.2. Locally, the area is served by St. John's Mercy Hospital, a Trauma Level III hospital. St. John's Mercy Hospital is located approximately 8 miles north of Union via US Highway 47.

St. John's Mercy Hopsital 901 E. Fifth Street Washington, MO 63090 Phone: 636-239-8000

Website: www.stjohnsmercy.org/sjmh/

Licensed Beds: 187

St. John's Mercy Hospital is an acute care hospital offering comprehensive medical, surgical, obstetric and pediatric services. As the only Level III Trauma Center between St. Louis and Jefferson City, St. John's Mercy Hospital offers an experienced medical staff that is specially trained in trauma care. More than 800 co-workers and 233 physicians serve the Hospital.

#### 5.3.2.Ambulance

5.3.2.1. The Union Ambulance District serves the community with two stations inside city limits.

(House #1) 211 South Church Street 1757, Phone: 636-583-4947 (House #2) Old Hwy 50 East, Phone: 636-583-2532

- 5.3.3. Air Ambulance service is provided by St. Johns Mercy Hospital in Washington, MO. In addition Air Evac Lifeteam serves the area from a base located in St. Clair, MO, approximately 8 miles south of the site.
- 5.3.4. Emergency 911 service is available throughout Franklin County, Missouri.

#### 5.4. Planning Agency

5.4.1. The most recent completed Comprehensive Plan, Union 2010, was completed in 1999. The City of Union is currently in the process of developing a new comprehensive plan which should be completed in 2010 and encompass 10 years, through 2020. It should be noted that the site, Union Corporate Center, was created prior to 1999 and thoroughly supported by the City of Union.

#### 5.5. Building Department

5.5.1. City of Union Building Department

500 E. Locust Street, 2nd Floor

Union, MO 63084 Phone: 636-583-1805 Fax: 636-583-4091

City Engineer: Jonathan Zimmermann Building Inspector: Kevin Scheer

#### 5.6. Police Protection

5.6.1. The City of Union Police Department is located approximately 3 miles from the site, however officers patrol the area routinely.

5.6.1.1. City of Union Police Department

119 S. Church Union, MO 63084

Business line: 636-583-3700

5.6.2. Officers: 21

Estimated Population: 9,684 Officers Per Capita: 461

#### 5.7. Local Support

5.7.1. A Letter of support from the Mayor is included in Appendix 5.7.1.

#### 5.8. Missouri Location One

5.8.1. Missouri Location One Brochures included for Site (<u>Appendix 5.8.1a</u>) and Community (<u>Appendix 5.8.1b</u>).

#### 5.9. Miscellaneous

- 5.9.1. The City of Union considers property tax abatements for industrial development business investments that create new jobs and income in addition to promoting growth and stabilization.
- 5.9.2. Current businesses located within the Union Corporate Center are included in Appendix 5.9.2.

## APPENDICES

1.1	Owner Information
1.2	Letter from Union Development Corporation stating sale price.
1.3	Evidence of Clear Title
1.5	Location Map (city limits noted)
2.1.1.6	Plat Map
2.1.2	Franklin County Assessor's Record
2.1.3	Aerial Photo
2.1.3.1	Franklin County Assessor Parcel Map with Aerials
2.1.4	Topography Map
2.2.6A	Declaration of Restrictions for Union Corporate Center
2.2.6B	Union Corporate Center Owners Association By-Laws
2.3.2	Zoning Map and Regulations
3.1.2	Phase 1 Environmental Assessment Summary
3.3.1	Regional Air Quality Non-attainment areas
3.3.2	Climatic Wind Data and Wind Rose
3.4.1	Wetlands Map
3.5.1	FEMA Program Status
3.5.2	Flood Insurance Rate Map
3.6.1	Threatened or Endangered Species Review
3.7.1	Archeological and Cultural Resources Clearance
3.8.1	Soil Report
3.9.1	Earthquake Intensities Map
4.4.1	Survey
4.6.1	Utility Map (Gas, Sewer, Water)
4.6.2	Electric Services Map
4.6.4.5	Consumer Confidence Report (Water Quality)
4.6.7.5	Wastewater Quality or Compliance Report
4.6.7.6	Pretreatment of Solid Waste Ordinance
4.6.7.7	Wastewater Discharge Permit Application
5.3.1	Hospitals offering Level 1 Trauma Service
5.7.1	Letter of Support from the Mayor supporting the marketing and development of the property.
5.8.1A	Location One Brochure for Site
5.8.1B	Location One Brochure for Community
5.9.2	Current Businesses Located within Union Corporate Center

#### UNION DEVELOPMENT CORPORATION

(All Addresses are Union, Missouri 63084)

Last Updated October 26, 2010

#### **Board Members:**

#### **Dave Bailey**

904 Clearview 583-2405 FAX 584-0203 Cell 636-236-1464 <u>baileyde@sbcglobal.net</u> (City appointee, term ends 5/2015)

#### **Robert Borgmann**

Dolan Realtors 210 West Hwy 50 583-5900 FAX 583-6900 CELL 314-220-0784 rwb@dolanrealtors.com (UDC appointee, term ends 6/2013)

#### **Mike Elliott**

United Bank of Union PO Box 500, Main & Jefferson 583-2555 FAX 583-4405 CELL 314-540-0180 mselliott@unitedbankofunion.com (UDC appointee, term ends 6/2012)

#### Sallie Hancox

502 Bourbeuse Rd 583-5710 salliehancox@yahoo.com (UDC appointee, term ends 6/2011)

#### **Dennis Harrison**

Legends Bank
PO Box 288
583-7828 FAX 583-6795
CELL 314-402-7334 Home 583-2159
dharrison@legendsbk.com
(City appointee, term ends 5/2015)

#### Alvera Heeger

Patients First Health Care LLC 901 Patients First Dr Washington, MO 63090 390-1408 FAX 239-5166 Home 583-2564 CELL 314-606-9362 aheeger@patientsfirsthc.com (UDC appointee, term ends 6/2012)

#### **Keith Oltmann**

Oltmann Funeral Home 103 N. Church Street CELL 314-960-2795 583-2525 FAX 583-3404 digger@yhti.net (UDC appointee, term ends 6/2011)

#### **Ray Pracht**

County Seat Motors
49 Edwards Circle
Work 583-2223 or 6561 FAX 583-5011
CELL 636-584-3055
raymondpracht1203@hotmail.com
(City appointee, term ends 5/2011)

#### **Ken Schmidt**

AmerenUE
500 E. Independence
583-7150 FAX 583-7105
klschmidt@ameren.com
(UDC appointee, term ends 6/2013)

#### **Larry Smith**

#13 Valley Drive 583-5459 dlsmithsv@charterinternet.com (City appointee, term ends 5/2013)

#### **James Strubberg**

Strubberg & Associates
20 S. Church Street
583-2506 FAX 583-8242
CELL 314-570-6943
jim@strubbergaccounting.com
(UDC appointee, term ends 6/2013)

#### Glenn VanLeer

213 Wally Ave. 583-3619 (City appointee, term ends 5/2011)

#### **Don Viehland**

18 Valley Drive 583-3140 CELL 636-575-1331 viehland123@sbcglobal.net (City appointee, term ends 5/2013)

#### **OFFICERS and Executive Committee**

President – Bob Borgmann Don Viehland Vice President – Dennis Harrison Mike Elliott Secretary/Treasurer – Dave Bailey

#### **UDC City Liaisons**

Mike Livengood, Mayor
Paul Arand, Aldermanic Liaison
Joseph Graves, Director of Economic Development
Russell Rost, City Administrator
Jonathan Zimmermann, City Engineer
Tim Melenbrink, Legal Counsel
Wanda Parsons, Economic Development Admin Assistant



October 28, 2010

Missouri Department of Economic Development Certified Site Program/Application PO Box 118 Jefferson City, MO 65101

RE: Union Corporate Center Certified Site

To Whom It May Concern:

The proposed sales price for the 30 acres, identified as Lot 1 of Phase 9 in the Union Corporate Center industrial park located in Union, Missouri is \$30,000 per acre. This price is negotiable based on number of jobs created, amount of money invested in the community, final acreage, improvements required and final contract and incentive package development.

Sincerely.

Robert W. Borgmann, President) Union Development Corporation HANSEN, STIERBERGER, DOWNARD, MELENBRINK & SCHROEDER Attorneys-at-Law 311 East Main Street Union, Missouri 63084 (Franklin County) (MO 1-800-728-0864) (636-583-2516) FAX 636-583-4779

#### CERTIFICATE OF TITLE

#### Schedule A

Title Number W13327 Extension No. W6006 Outlot No.

to the following described real estate situated in the County of Franklin and the State of Missouri, to-wit:

Lot Forty-two (42) of Union Corporate Center, Phase I, a subdivision in the City of Union, as per plat of record in Plat Book P, page 535 in the office of the Recorder of Deeds, EXCEPTING THEREFROM, A parcel of land in the Northwest 1/4 of Section 6, Township 42 North, Range 1 East of the 5th P.M. in the City of Union, and described as follows: Beginning at a point located North 86 degrees 43' 59" West 209.10 feet and North 0 degrees 28' 26" East 300.21 feet from a stone at the Center Corner of said Section 6, thence continue North 0 degrees 28' 26" East 825.08 feet to a point on the North line of a tract of land conveyed to Helling in Book 413, Page 470 of the Franklin County Records, thence with said North line, North 89 degrees 3' 02" West 19.15 feet to a 1" iron pipe, thence South 0 degrees 27' 18" West 824.69 feet, thence South 88 degrees 26' 21" East 18.88 feet to the point of beginning, and containing 0.360 acres more or less.

Lot Forty-three (43) of Resubdivision of Lots 43 and 44 of Union Corporate Center Phase I, a subdivision in the City of Union, as per plat of record in Plat Book P, page 655 in the office of the Recorder of Deeds.

Lot Eighteen (18) of Resubdivision of Lots 17 and 18 of Union Corporate Center Phase I, a subdivision in the City of Union, as per plat of record in Plat Book P, page 1510 in the office of the Recorder of Deeds.

Lot Thirty-four (34) of Union Corporate Center Phase V, a subdivision in the City of Union, being part of the Northwest qr. in Section 6, Township 42 North, Range 1 East of the 5th P.M., as per plat of record in Document No. 0602400 in the office of the Recorder of Deeds.

Lot One (1) of Union Corporate Center Phase VIII, a subdivision in the City of Union, being part of the Northwest qr. of Section 6, Township 42 North, Range 1 East of the 5th P.M., as per plat of record in Document No.0727235 in the office of the Recorder of Deeds.

Lots One (1), Two (2), Four (4), Five (5), Six (6) and Seven (7) of Union Corporate Center Phase VII, a subdivision in the City of Union, as per plat of record in Document No. 0804993 in the office of the Recorder of Deeds.

Lots One B (1B) and One C (1C) of Union Corporate Center Phase 10, a subdivision in the City of Union, being part of Northwest qr. in Section 6, Township 42 North, Range 1 East of the 5th P.M., as per plat of record in Document No. 0807652 in the office of the Recorder of Deeds.

Lots One (1), Two (2) and Three (3) of Union Corporate Center Phase IX, a subdivision in the City of Union, being part of Northwest qr. in Section 6, Township 42 North, Range 1 East of the 5th P.M., as per plat of record in Document No. 0811568 in the office of the Recorder of Deeds.

The West part of the Northeast qr. in Section Six (6), Township Forty-two (42) North, Range One (1) East of the 5th P.M., described as follows: Beginning at a grader blade in the Northwest corner of said qr. section, thence South 86° 50' East on the Township line 2,941.7 feet to an iron pipe, thence South 0° 28' 25" West 3,922.48 feet to an iron and in the South line of said qr. section, thence North 88° 26' West an said qr. section line 1,277.06 feet to a spike in the centerline of the Prairie Dell County Road, thence with the centerline of

#### SCHEDULE A - continued

Title Number: W13327

said road on a curve to the left, having a radius of 1,158 feet, a chord bearing and distance of North 46° 34' 30" West 176.43 feet to a spike, North 50° 56' West 1,248.7 feet to a spike, North 51° 42' West 380.09 feet to a spike, and thence on a curve to the left, having a radius of 555.46 feet, a chord bearing and distance of North 67° 22' West 285.69 feet to a spike, thence North 0° 39' East on the West .line of said qr. section 2,796.35 feet to the point of beginning, and according to plat of survey made by Norbert Wunderlich, Registered Land Surveyor, during the month of Jute, 1993, containing 242.59 acres, more or less, EXCEPTING THEREFROM the following parcels:

- 1) South Loop Industrial Park, a subdivision in the City of Union, as per plat thereof in Plat Book P, page 443 in the office of the Recorder of Deeds,
- 2) Lot Twenty-six (26) of Union Corporate Center Phase II, a subdivision in the City of Union, as per plat thereof in Plat Book P, page 547 in the office of the Recorder of Deeds
- 3) Lot Sixteen (16) of Resubdivision of Lots 15 and 16 of Union Corporate Center Phase I, a subdivision in the City of Union, as per plat thereof in Plat Book P, page 1440 in the office of the Recorder of Deeds
- 4) Lot Eighteen (18) of Resubdivision of Lots 17 and 18 of Union Corporate Center Phase I, a subdivision in the City of Union, as per plat of record in Plat Book P, page 1510 in the office of the Recorder of Deeds.
- 5) Union Corporate Center Phase IV, a subdivision in the City of Union, as per plat of record in Plat Book P, page 1638 in the office of the Recorder of Deeds.
- 6) Union Corporate Center Phase V, a subdivision in the City of Union, as per plat of record in Document No. 0602400 in the office of the Recorder of Deeds.
- 7) Lot Twenty-five (25) of Resubdivision of Lots 24 and 25 of Union Corporate Center Phase II, a subdivision in the City of Union, as per plat of record in Document No. 0618505 in the office of the Recorder of Deeds.
- 8) Union Corporate Center Phase VIII, a subdivision in the City of Union, as per plat of record in Document No. 0727235 in the office of the Recorder of Deeds.
- 9) Union Corporate Center Phase VII, a subdivision in the City of Union, as per plat of record in Document No. 0804993 in the office of the Recorder of Deeds.
- 10) Union Corporate Center Phase 10, a subdivision in the City of Union, as per plat of record in Document No. 0807652 in the office of the Recorder of Deeds.
- 11) Union Corporate Center Phase IX, a subdivision in the City of Union, as per plat of record in Document No. 0811568 in the office of the Recorder of Deeds.
- 12) Union Corporate Center Phase VI, a subdivision in the City of Union, as per plat of record in Document No. 0720661 in the office of the Recorder of Deeds.

Title Number: W13327

#### **SCHEDULE B**

The real estate described in Schedule A hereof is, according to the records of the County of **Franklin**, subject to the following easements, restrictions, conditions, reservations exceptions, encumbrances, liens and defects, to-wit:

NOTE: The property is located within the boundaries of Public Water Supply District No. 3. If the within property is furnished water by the district then same may be subject to lien under Section 247.110 for water furnished. Furnish proof that all bills are paid to current date.

EASEMENT(S) granted Union Electric Company of record in Book 118, page 624.

Right of way of Prairie Dell County Road embraced therein. (Affects Lots 1B and 1C of Plat in Document No. 0807652, Lot 7 of Plat in Document No. 0804993 and Lot 43 of Plat Book P, page 655)

RESTRICTIONS governing the within property of record in Book 1082, page 629.

Encroachment of fence lines on Lot 7 of Plat in Document No. 0804993, Lot 42 of Plat in Book P, page 535.

Right of way of 50 foot easement through Lot 43 for the benefit of Lot 44A and 44B.

EASEMENT(S) granted Southwestern Bell Telephone Company of record in Book 1297, page 190. (Affects Lot 1C of Plat in Document No. 0807652)

#### BUILDING set back lines and easements for utilities shown on subdivision plats.

Easement granted City of Union of record in Book 1271, page 964. (Affects Lot 42 of Plat Book P, page 535 and Lot 43 of Plat Book P, page 655.

Easement granted City of Union of record in Book 1271, page 968. (Affects Lots 1 and 2 of Plat in Document No. 0727235 and Lot 25 of Plat in Document No. 0618505.

Easement granted City of Union of record in Book 1271, page 972. (Affects Lot 13, 14A, 14B and 15 in Plat Book P, page 1638.

Easement granted City of Union of record in Book 1275 page 1109. (Affects Lots 1A, 1B and 1C in Plat in Document No. 0807652)

Memorandum of Option of record in Document No. 0907727 between Union Development Corporation and Lawrence P. Keeley, Jr., Trustee of the Keeley Land Trust No. 1 Under Agreement Dated December 15, 1981.

Memorandum of Option of record in Document No. 0907728 between Union Development Corporation and Lawrence P. Keeley, Jr., Trustee of the Keeley Land Trust No. 1 Under Agreement Dated December 15, 1981.

Options are for Lots in Phase 7 -- not included in Proposed Certified Site.

#### SCHEDULE B - continued

Title Number: W13327

JUDGMENTS: NONE MECHANICS' LIENS: NONE ATTACHMENTS: NONE FEDERAL TAX LIENS: NONE

**DEED OF TRUST** of record in **Book 756**, page 984, dated July 15, 1993, filed July 16, 1993, executed by Union Development Corporation, a Missouri Corporation to James E. Klepper, Trustee for Sally M. Frick Revocable Living Trust U/A dated May 14, 1992 and Dennis O. Frick, Trustee of the Dennis O. Frick Revocable Living Trust U/A dated May 14, 1992, securing one Note for the principal sum of \$1,000,000.00. (By instrument of record in Book 1163, page 823, the within Deed of Trust has been assigned to Dennis O. Frick, Trustee of the Dennis O. Frick Revocable Living Trust U/A November 16, 1998 and Sarah M. Frick, Trustee of the Sarah M. Frick Revocable Living Trust U/A November 16, 1998, each an undivided one-half (1/2) interest as equal tenants in common). (See Modification Agreement of record in Book 1498, page 1012)

REQUEST FOR NOTICE OF SALE of record in Document No. 2003-27391, filed by United Bank of Union, concerning Deed of Trust of record in Book 756, page 984.

**DEED OF TRUST** recorded in Franklin County, Missouri in **Document No.: 0818583**, dated September 29, 2008, filed October 7, 2008, executed by Union Development Corporation to Robert E. Hansen, Trustee for United Bank of Union, securing one Note for the principal sum of \$100,000.00. (Note: This Deed of Trust provides for future advances under Section 443.055 R.S.Mo.)

**DEED OF TRUST** recorded in Franklin County, Missouri in **Document No.: 0923474**, dated November 5, 2009, filed December 4, 2009, executed by Union Development Corporation to Robert E. Hansen, Trustee for United Bank of Union, securing one Note for the principal sum of \$550,000.00. (Note: This Deed of Trust provides for future advances under Section 443.055 R.S.Mo.)

General Taxes for the year(s) 2008 and prior are paid

County Tax No.: 21-3-06-1-0-099-004-000; 21-3-06-1-0-030-302-000; 21-3-06-1-0-030-303-000;

21-3-06-1-0-030-304-000; 21-3-06-1-0-029-300-000; 21-3-06-1-0-029-301-000; 21-3-06-1-0-028-004-140; 21-3-06-1-0-028-004-390; 21-3-06-1-0-028-004-380; 21-3-06-1-0-028-004-350; 21-3-06-1-0-028-004-170; 21-3-06-1-0-028-004-160; 21-3-06-1-0-026-004-370; 21-3-06-1-0-023-004-720; 21-3-06-1-0-016-004-120; 21-3-06-1-0-009-004-700; 21-3-06-1-0-006-004-110

Franklin County Assessed Valuation for 2009: \$None

County Taxes for 2009: \$None

City of Union Taxes for the year 2009: None

City Tax Rate is: \$.6389

2010 Taxes will be due and payable by December 31st, 2010.

Title Number: W13327

#### **SCHEDULE C**

I have examined the public records of Franklin County, Missouri, as furnished by the Hansen Franklin County Land Title and Abstract Co., a Missouri Corporation, relative to the title to the real estate described in Schedule A hereof, and based upon said examination, it is my opinion that the **fee simple** title to said real estate is at the date hereof, vested in:

Union Development Corporation, a Mo. Corp.

Subject to those matters and defects set forth in Schedule B of this Certificate and on the inside of the cover of this Certificate.

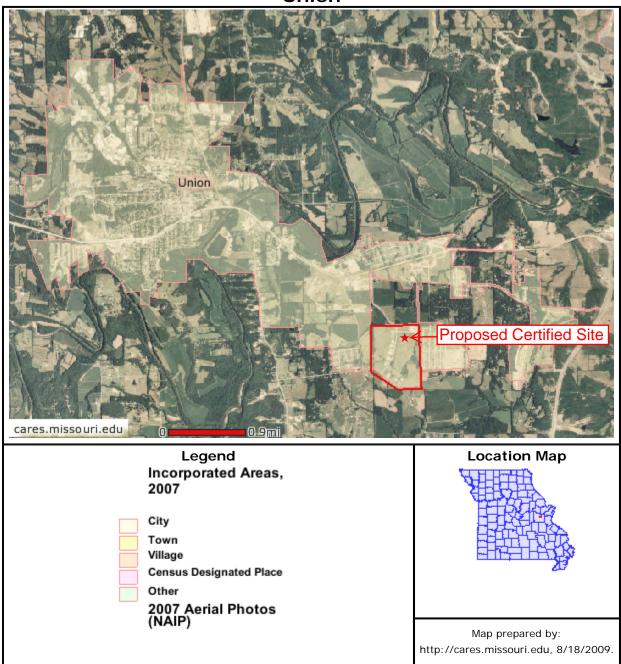
Dated: September 3, 2010 at 4:30 p.m.

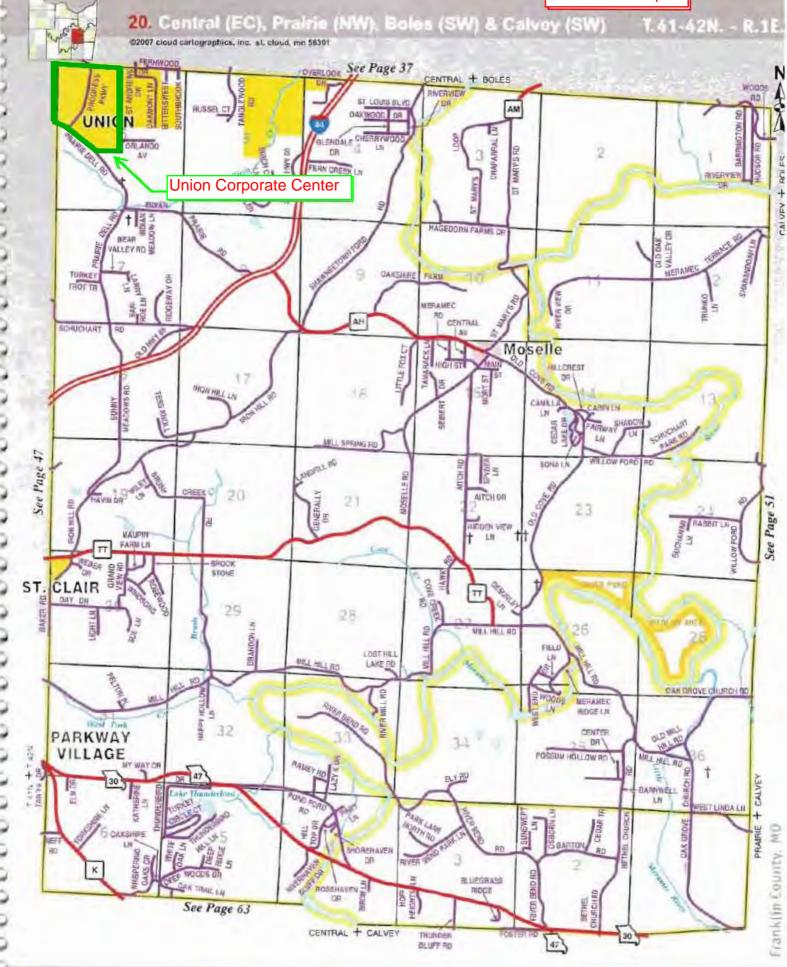
HANSEN, STIERBERGER, DOWNARD, MELENBRINK & SCHROEDER

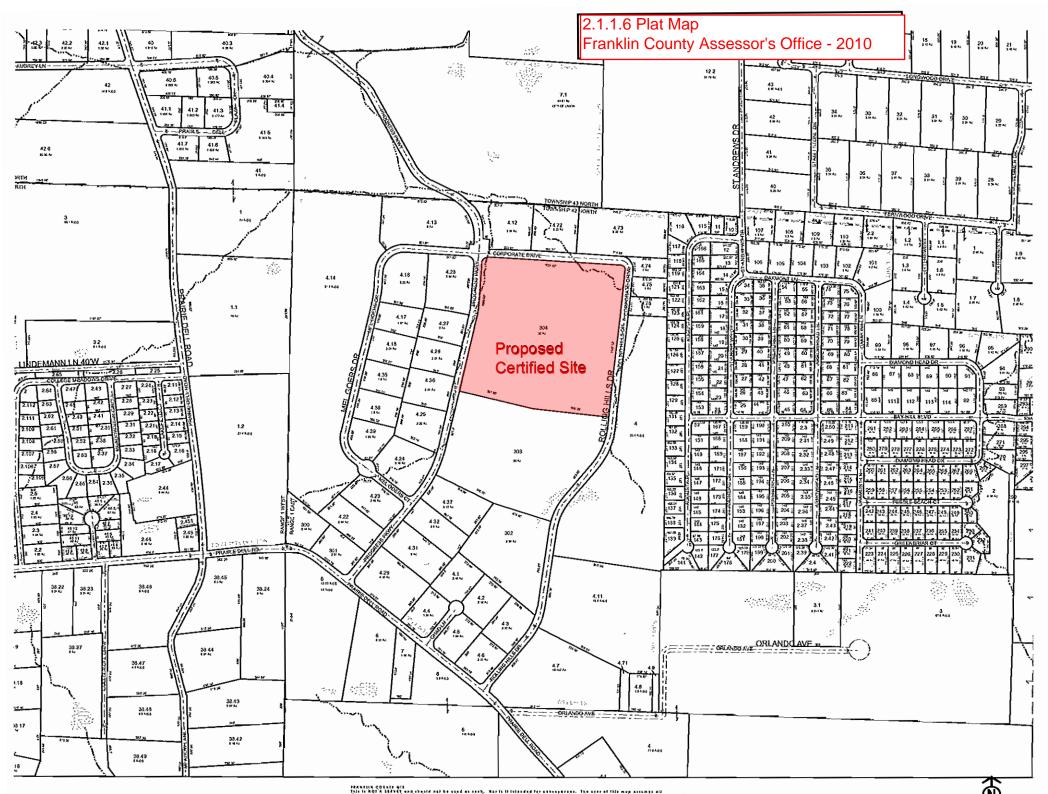
BY:

This Certificate is valid only when Schedules A, B, C and the cover are attached hereto.

1.5 Location Map







Search Screen

PIN: 21-3-06.1-0-030-304.000 ENS:

Owners: UNION DEV CORP Subd: UNION CORP CENTER P4

Acres: 30.0000

DBA: UNION DEV CORP

Situs Address: Mailing Address:

24 PROGRESS PKWY UNION DEV CORP UNION MO 500 E LOCUST

UNION MO 63084-0000

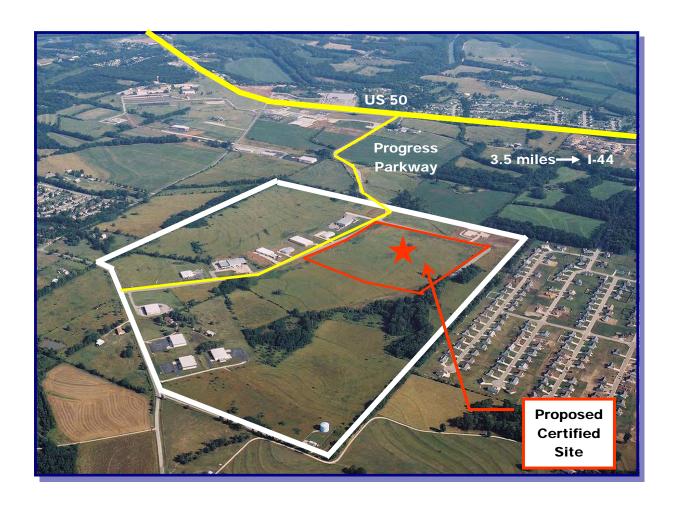
Legal Description:SectionTownshipRange06421E

LOT 1 UNION CORPORATION CENTER PHASE IX PT NW,N OF PRAIRIE DELL RD

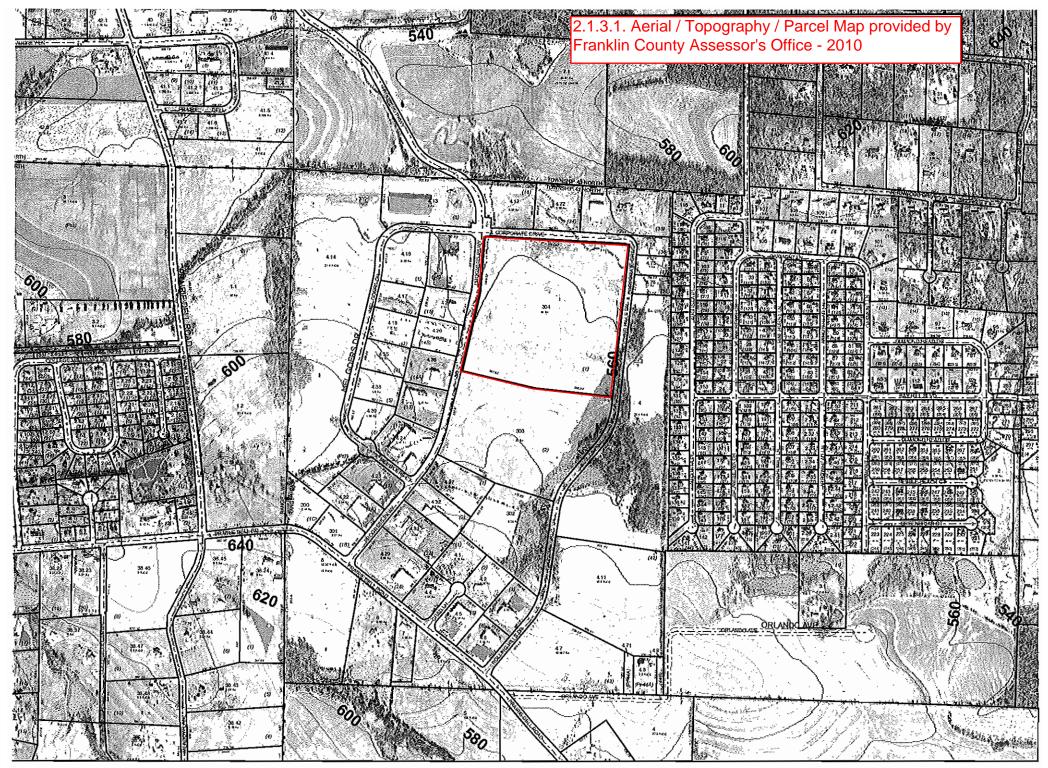
	Property Market Value				Property Assessed Value			
	Land	Building	Total Value		Land	Building	Total Value	
Agicultural:	\$0	\$0	\$0	Agricultural:	\$0	\$0	\$0	
Residential:	\$0	\$0	\$0	Residential:	\$0	\$0	\$0	
Commercial:	\$0	\$0	\$0	Commercial:	\$0	\$0	\$0	
Exempt:	\$1,800,000	\$0	\$1,800,000	Exempt:	\$1,800,000	\$0	\$1,800,000	
		Total Value:	\$1,800,000		Total Value:		\$1,800,000	

Values are 2010 Certifed Values

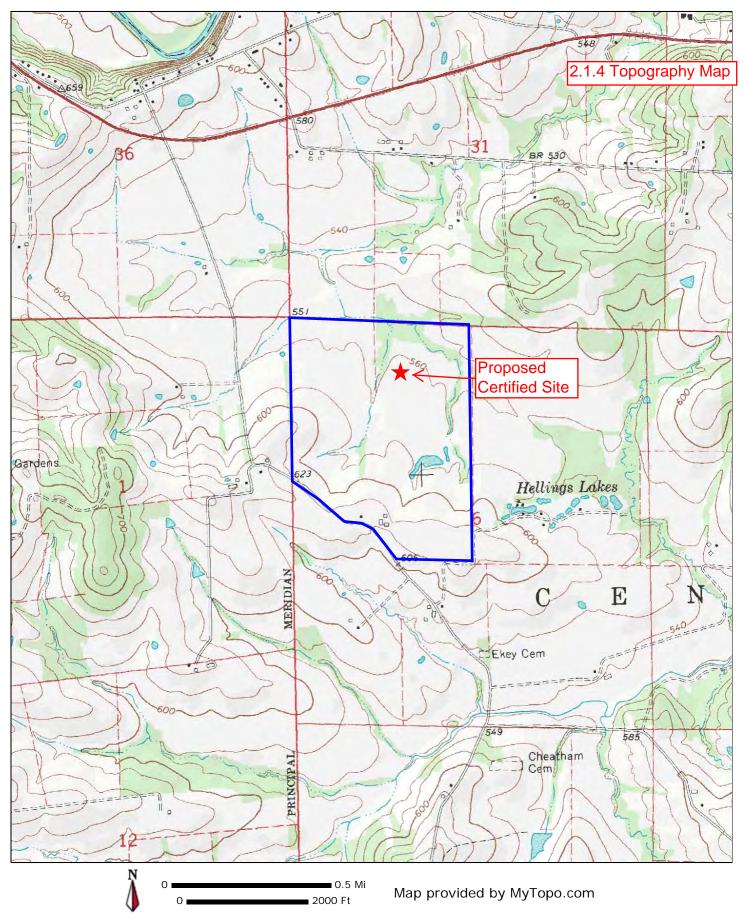
## Missouri Department of Economic Development Certified Site Program Union Corporate Center Union, Missouri



Source: Eye in the Sky Aerial Photography, June 29, 2006



MyTopo Map Print Page 1 of 1



Franklin County Recorder of Deeds
Sharon L. Birkman
Recorded
98 MAY - 8 PM 2:50

## DECLARATION OF RESTRICTIONS OF UNION CORPORATE CENTER

2.2.6A Declaration of Restrictions for Union Corporate Center

The Union Development Corporation, a Missouri not-for-profit corporation, hereinafter called "Developer," is the owner in fee simple of certain real property located in Union, Missouri, known as Union Corporate Center. For the purpose of enhancing and protecting the value, attractiveness and desirability of said property, the Developer hereby declares that all the real property hereinafter described and each part thereof, shall be held, sold and conveyed subject to the following easements, covenants, conditions and restrictions, which shall constitute covenants running with the land and shall be binding on all parties having any right, title or interest in the above described property or any part thereof, their heirs, successors and assigns, and shall inure to the benefit of each owner thereof.

#### I. Development Objectives and Approval.

- A. These protective covenants are executed by the Union Development Corporation which owns the following real estate situated in Franklin County, the State of Missouri (see attached EXHIBIT A). This real estate is identified as the Union Corporate Center.
- B. These protective covenants shall and do provide that no improvements, as herein defined, shall be erected, or placed on any building site in the Union Corporate Center until the building or other improvement plants, specifications, and plot showing the location of such improvements on the particular building site have been submitted to and approved in writing by the Union Development Corporation. In addition, the Union Development Corporation, its successor or assigns shall not be liable in damages to any one submitting plans to the Union Development Corporation or owners of land covered by this instrument by reason of mistake in judgment, negligence or nonfeasance of itself, its agents or employees, arising out of or in connection with the approval or disapproval or failure to approve any such plans. Anyone submitting plans to the Union Development Corporation agrees that they shall bring no action or suit to recover damages against the Union Development Corporation arising out of the approval or disapproval of plans so submitted. In the event the Union Development Corporation fails to approve or disapprove, in writing, such design and location within thirty (30) days after said plans and specifications have been submitted to it, such design and location shall be deemed to have been approved.
- C. Whenever the written approval of the Union Development Corporation is required in connection with any improvements to be installed, erected, or altered or as otherwise required by the provisions of these covenants, no such activity shall be commenced until approval therefore has been granted in writing by the Union Development Corporation except as set forth above.
- D. The Developer, by this instrument, desires to preserve the Union Corporate Center as an industrial park to provide a controlled and protected environment for the orderly growth and development of manufacturing, processing, commercial office space, warehouse enterprises and other authorized activities.

#### II. Use & Review Procedures.

- A. All activity conducted within the Union Corporate Center shall be in compliance with the then prevailing requirements of the City of Union, Missouri, including the requirements stated in its Zoning Ordinance.
- B. The Developer shall have the express power to combine the area subject to the restrictions with any other industrial subdivision or subdivisions and any such subdivision consisting of the Union Corporate Center and such other industrial subdivisions shall be subject to these restrictions.
- C. Subject to the terms of this instrument, the buildings and premises of the Union Corporate Center may be used for such industry as permitted by the City of Union Code of Ordinances and Zoning Regulations to specifically include carbon enrichment facilities and may also be used as commercial office space and may also be used for retail sales to the public so long as such retail sales to the public is a secondary use and is not the primary use of any such building or premises. The following business uses shall not be permitted in the Union Corporate Center:

Junk, wrecking, used material or salvage operations
Animal slaughter and dressing
Fertilizer or processing of organic wastes
Cement or lime manufacturing
Petroleum or ore refining
Asphalt plants
Grain milling and storage
Business devoted primarily to retail trade
Residential uses of any type
Distillation of bones
Fat rendering
Smelting of iron, tin, zinc, or any other ore or ores.

No noxious or offensive trade or activity shall be carried on, nor shall anything be done therein which may be or become an annoyance or nuisance to the said Union Corporate Center. Unsightliness and the excessive emission of odors, dust, fumes, smoke and noise are hereby prohibited.

#### III. Development Design Standards.

A. All developments within the Union Corporate Center shall comply with the integration of site layouts on the individual lots. Said development should complement the physical conditions found on individual sites.

- B. All exterior walls shall be constructed of masonry, brick, concrete block or other slab or fire resistant panelized construction material approved in writing by the Union Development Corporation. No exterior walls (including rear walls) shall be permitted with exposed galvanized steel sheeting except upon approval in writing by the Union Development Corporation. Construction shall be designed to minimize fire hazard and be of a nature that will be insurable by a reputable fire insurance company at standard rates.
- C. Buildings or structures erected on the premises must comply with all requirements as set forth in the Code of Ordinances for the City of Union, including without limitation all building codes in effect at the time of construction or as may be varied by appropriate authorities under State Law or City Ordinance.
- D. No construction or building above ground shall be located nearer to the front rear or side property line than the minimum provided for by the City of Union Code of Ordinances and Zoning Regulations as currently exist and which may from time to time be amended. In the event such Regulations are amended, any structure must be built in conformity with the Regulations in effect at the time the building permit is issued.
- E. For each manufacturing, jobbing warehouse, wholesaling, or other permitted use subject to these covenants, there shall be provided sufficient off street motor vehicle parking so as to comply with the Ordinances of the City of Union. All parking areas and drives shall be paved with an impervious surface (asphalt or concrete). Landscaped and parking areas shall be properly maintained thereafter by the owner in a sightly and well-kept condition.
- F. Where fill is necessary to attain the approved finish grade of any lot in the Union Corporate Center, it shall be free of waste materials and shall not contain noxious materials that will give off any odors of any kind.
- G. No fence, masonry wall, or mass planting shall be permitted to extend beyond the front side building lines established herein except upon written approval of the Union Development Corporation.

#### IV. Outside Storage.

The storage of bulk commodities shall be confined at locations and with screening as approved in writing by the Union Development Corporation and as permitted by the Ordinances of the City of Union.

#### V. Fences.

A. No fence, masonry wall or mass planting shall be permitted to extend beyond the front side building lines established herein except upon written approval by the Union Development Corporation.

B. A fence, wall, hedge, landscaping, earth born natural buffer or any combination shall be provided to obscure certain uses or portions of a specific use which by the scale or design represent the potential negative impact on adjacent properties. The requirement for such shall be established by Developer at such time as the original plans are submitted for approval.

#### VI. Signs.

No billboards or advertising signs, other than those identifying the name, business, and products of the person, firm, or establishment occupying the premises, shall be permitted. All permitted signs shall meet the City's sign ordinance as set forth in Article XVI of the City of Union Zoning Code.

#### VII. Tanks.

Fuel oil storage tanks, as part of the heating equipment of any establishment, shall be permitted only if located either at the rear of the building if above ground, or underground in full compliance with rules and regulations of any governmental agency or agencies having jurisdiction over such matter, and at depth and in a location as approved by the Union Development Corporation in writing. Bulk storage of all liquids, including gasoline or petroleum products, on the outside of a building, shall be permitted only as approved by the insurance underwriter and subject to compliance with all rules and regulations of any governmental agency or agencies having jurisdiction over such matters.

#### VIII. Refuse and Sewage.

No waste material or refuse shall be dumped upon or permitted to remain upon any part of the premises outside of buildings constructed thereon. Disposal of refuse and sewage shall only be permitted in accordance with plans approved by the Union Development Corporation and the City of Union in compliance with local ordinance, state and federal law.

#### IX. Storm Drainage.

Storm drainage and facilities therefore shall be constructed in compliance with the applicable City of Union Ordinance.

#### X. Right to Repurchase.

If, after the expiration of one (1) year from the date of sale of any tract or lot within the entire parcel subject to these Restrictions, any record owner shall not have initiated construction by obtaining a building permit from the proper issuing authority, the Developer may, at its option, require the record owner to reconvey the building site to the Developer, free and clear of all liens, charges, encumbrances, tenancies and other title exceptions except those in existence at the time the then owner acquired title to the subject tract or lot. Upon such reconveyance, the Developer shall refund to the

record owner the original purchase price of the tract or lot. If construction of an approved building is commenced within one (1) year after the date of purchase, the then record owner shall have thirty-six (36) months from the date of issuance of the building permit to complete construction thereof. In the event that the then Owner does not complete the construction within said thirty-six (36) month period, the Developer may, at its sole option, extend the time period in which to complete construction or it may require the then owner to reconvey the subject tract or lot to Developer. In determining whether or not to extend the construction period, the Developer shall take into consideration the size and complexity of the structure or structures being erected; the diligence with which the then owner has prosecuted the approved construction; whether or not delays in construction were caused by problems in obtaining permits from other regulatory agencies; and other factors beyond the control of the then owner. If Developer elects not to extend the construction period, the Developer shall repay to the then record owner the original purchase price plus the reasonable costs of site preparation incurred by the then owner.

#### XI. Invalidation.

Invalidation of any one of these covenants or any part thereof by judgments or court order shall in no way affect any of the other provisions which shall remain in full force and effect. Nothing to the contrary withstanding, any requirement imposed herein which is less restrictive than the applicable City of Union Ordinance in effect at the time of construction shall be superseded by such ordinance.

#### XII. Amendment, Terminations and Extension.

For so long as Developer owns 100% of Union Corporation Center, the Developer shall have the right to amend, alter or modify these restrictions without the approval of any other person or entity. During such period of time wherein Developer owns fifty (50) percent or more of the acreage comprising Union Corporate Center, the Developer shall have the right to amend these covenants and restrictions with the written approval of the owners of a majority of the acreage not owned by Developer. At such time as Developer ceases to own at least fifty (50) percent of the acreage within Union Corporate Center, exclusive of streets, then these covenants and restrictions may only be amended by vote of the owners of not less than two-thirds of the acreage contained within Union Corporate Center. Voting on any such amendment shall be in the same manner as is set forth hereinafter pertaining to the election of Directors except that such amendments may also be voted on at special meetings so long as written notice is given to each property owner at least fifteen (15) days prior to the scheduled meeting date.

For so long as Developer owns at least fifty (50) percent of the acreage within the subdivision, the Developer reserves the right to from time to time delineate, plat, grant or reserve within the subdivision such lots, public streets, roads, sidewalks, ways and appurtenances thereto, and such easements for drainage and public utilities as it may deem necessary or desirable for the development of the Park (and from time to time change the location of the same) and to dedicate all such rights of

way to public use and to grant the same to the City of Union, County of Franklin or the State of Missouri.

#### XIII. Property Owners' Association.

At such time as Developer owns less than fifty (50) percent of the acreage within Union Corporate Center, exclusive of streets, a Property Owners' Association shall be established. Every person or entity who is a record fee simple owner of acreage within Union Corporate Center shall be a member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any lot or part of a lot. Each owner, including the Developer, shall be entitled to one (1) vote for each acre owned. When more than one person holds an interest in any acre, all such persons shall be members. The vote for an acre owned by more than one (1) person shall be exercised as the owners thereof determine, but in no event shall more than (1) vote be cast with respect to any acre. The affairs of the Association shall be managed by a board of five (5) directors. Within sixty (60) days after the Developer herein ceases to own at least fifty (50) percent of the total acreage of the development, said Developer shall mail a notice to all owners of record calling a meeting for the purpose of electing the Board of Directors of the Property Owners' Association. At the first meeting, the members shall elect one (1) Director for a term of one (1) year, two Directors for a term of two (2) years each and two (2) Directors for a term of three (3) years each. At each annual meeting thereafter, the Directors shall be elected as appropriate for terms of three (3) years each. The Directors shall be responsible for mailing out notice of each annual meeting after the first meeting to all owners of record at least thirty (30) days prior to the scheduled date of the meeting. Such notice shall be mailed to each owner of record at their last address as listed with the Association. All nominations for election to the Board of Directors shall be made by the members at large from the floor at the annual meeting. The election to the Board of Directors shall be by secret written ballot.

The person or persons receiving the largest number of votes shall be elected. Cumulative voting shall not be permitted.

#### XIV. Enforcement.

These covenants are made for the mutual benefit of all owners and the Developer and the conditions thereof may be enforced by any action or actions authorized by law brought by the Developer or the Property Owner's Association or any owner or record.

UNION DEVELOPMENT CORPORATION

BY: (Signature Appears)
President, Michael S. Elliott

ATTEST:

(Signature Appears)

Secretary, Robert W. Borgmann

STATE OF MISSOURI	)	66.
COUNTY OF FRANKLIN	-	SS:

On this 7<sup>th</sup> day of May, 1998, before me personally appeared Michael S. Elliott, personally known to me, who, being by me duly sworn, did say that he is the President of the Union Development Corporation and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation, by authority of its Board of Directors, and acknowledged said instrument to be the free act and deed of said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year last above written.

(Signature Appears) Mane K. Wright Notary Public

"NOTARY SEAL"
Mane K. Wright, Notary Public
Franklin County, State of Missouri
My Commission Expires 12/16/2000

# BOOK 1082 PAGE 636 EXHIBIT A

The West part of the Northwest qr. in Section Six (6), Township Forty-two (42) North, Range One (1) East of the 5<sup>th</sup> P.M., more fully des-cribed as follows: Beginning at the Northwest corner thereof, run thence East on the Township line 44.28 chains to a point, thence South to the East and West center section line, thence West on said center section line 44.05 chains to the 5<sup>th</sup> Principal Meridian line, thence North on said meridian line 60.36 chains to the place of beginning, containing 263.98 acres, according to survey made by Chas. L. Moore on May 4, 1906; EXCEPTING THEREFROM 6 acres conveyed to Gunn by deed of record in Book 292, page 883; AND FURTHER EXCEPTING THEREFROM 5.81 acres conveyed to List by deed of record in Book 304, page 833; AND FURTHER EXCEPTING THEREFROM 12.22 acres conveyed to Sanderlin by deed of record in Book 331, page 890.

Includes Plat Book P Page 535 and Plat Book P Page 547

STATE OF MISSOURI, ) ss, County of Franklin,

I, Sharon L. Birkman, Recorder of Deeds, within and for said County and State, do hereby certify that the following instrument of writing was filed for record on the 8<sup>th</sup> day of May, 1998, at 2:50 o'clock P.M., and duly recorded in Book 1082, Page 629 on said date.

IN TESTIMONY WHEREOF, I hereunto set my hand and affixed my official seal, at my office in Union, the date aforesaid.

SHARON L. BIRKMAN, Recorder of Deeds By (Signature Appears) Carol Price, Deputy

#### UNION CORPORATE CENTER INDUSTRIAL PARK

#### OWNERS ASSOCIATION BY-LAWS

WHEREAS, undersigned, Grantor, Union Development Corporation, was the Developer of the following described real estate:

The West part of the Northwest qr. in Section Six (6), Township Forty-two (42) North, Range One (1) East of the 5th P.M., more fully described as follows: Beginning at the Northwest corner thereof, run thence East on the Township line 44.28 chains to a point, thence South to the East and West center section line, thence West on said center section line 44.05 chains to the 5th Principal Meridian line, thence North on said meridian lire 60.36 chains to the place of beginning, containing 263.90 acres, according to survey made by Chas. L. Moore on May 4, 1906; EXCEPTING THEREFROM 6 acres conveyed to Gunn by deed of record in Book 292, page 883; AND FURTHER EXCEPTING THEREFROM 5.81 acres conveyed to List by deed of record In Book 304, page 833; AND FURTHER EXCEPTING THEREFROM 12.22 acres conveyed to Sanderlin by deed of record in Book 331, page 890.

Includes Plat Book P Page 535 and Plat Book P Page 547

NOW THEREFORE, pursuant to the restrictions recorded at Book 1082, page 629 in the office of the Recorder of Deeds, the undersigned does hereby adopt and create for its own use and benefit and for the use and benefit of the present and future owners of the Lots in said subdivisions their successors, heirs and assigns, the following Owners Association By-laws:

#### MISSION STATEMENT

The Union Corporate Center Industrial Park Owners Association ("Association") is a non-profit organization comprised of participating individuals and/or entities that own real property ("Owners") in the industrial park known as Union Corporate Center (the "Park"). The Association's purpose is to maintain and improve the common areas within the Park and to encourage Park residents to operate properties consistent with maintaining the appearance and value of the Park environment, The common areas are identified in paragraph C of these By-Laws. Beginning January 1,2009, the Association shall also review any plans for the construction, renovation or expansion of existing buildings and facilities within the Park to ensure compliance with the recorded Protective Covenants applicable to the Park. A Board of Directors shall have all the necessary powers and duties for the administration of the affairs of the Association, including establishing budgets and financial plans, assessing the Owners and establishing the means and methods for collecting assessments and charges.

#### A) MEMBERS.

- 1. MEMBERSHIP. All Owners of land in the Park shall be members of the Association and shall be obligated to pay all assessments properly levied by the Association. All Members shall be bound by the provisions of these By-Laws. In the event an Owner sells or otherwise transfers title to any land within the Park, the transferee shall be obligated to become a Member of the Association and be bound by these By-Laws as set forth in the Protective Covenants.
- 2. MEETINGS OF MEMBERS AND QUORUM. Unless otherwise decided by the Board, the Members shall convene one time each year for an annual meeting at a time and location to be decided by the Board. In addition, the Members may convene for special meetings. Special meetings shall be held at the request of a majority of the Board of Directors or upon the written petition of Members who cumulatively own 40% or more of the land in the Park, based on acres, or upon written petition of 40% or more of the total number of Members, irrespective of the owned acreage. The attendance in person, by proxy or by absentee ballot of the holders of 20% of the acreage owned by Members in the Park shall constitute a quorum for all Member meetings.
- 3. PARTICIPATION IN MEETINGS. One or more Members may participate in meetings of the membership by means of conference telephone or similar communication equipment by which all persons participating can hear each other. Meetings of the Members shall be attended by the Owner, if an individual, or if a legal entity, by an officer, partner, member (if an LLC), or duly authorized representative of the Member.
- 4. NOTICE. All meetings of Members must be preceded by a written notice sent via first class mail at least thirty (30) calendar days in advance stating the time, place and date of the meeting and the purpose thereof. Such notice shall be mailed to each owner of record at their last address as listed with the Association.
- 5. VOTING. On all matters voted upon or presented to the Members for their consideration, each Member shall be entitled to cast that number of votes equal to the number of acres owned by the Owner in the Park, rounded to the nearest whole number of acres. No fractional voting shall be permitted. The majority of the votes cast shall be controlling on any issue. Votes may be cast by the Member, if an individual, or, if a legal entity, by an officer, partner, member (if an LCC), or by a duly authorized representative of the Member.

#### B) BOARD OF DIRECTORS

- 1. ESTABLISHMENT. The Association shall be governed by a Board of Directors consisting of not more than five (5) members who shall be elected as their terms expire by the Members of the Association at the Annual Meeting.
- 2. QUALIFICATIONS. To qualify as a Director, a person must be an officer, partner or a duly authorized representative of any Member owning more than one (1) acre of land in the Park.
- 3. COMPENSATION. No Director shall receive any compensation from the Association for acting as such, but may be reimbursed for any expenses incurred in the performance of his or her duties.
- 4. POWERS AND DUTIES. The Board of Directors shall have all the powers and duties necessary for the administration of the affairs of the Association. The Board shall have the power to adopt Rules and Regulations deemed necessary for the operation of the Association, provided such

Rules and Regulations shall not be in conflict with these By-Laws. The Board's authority shall also include, but not be limited to, the following:

- (a) To keep or cause to be kept, books and records with detailed accounts of all receipts and expenditures affecting the Association. Such books shall be available for examination during normal business hours by any Owner or duly authorized agent upon reasonable notice.
- (b) To hire agents, employees, managers and independent contractors it deems to be necessary for the purpose of managing the Association and maintaining the common areas of the Park. All management agreements must be in writing.
  - (c) To hire independent legal counsel to assist in its affairs.
- (d) To carry out the obligations and powers of the Association as set forth in Sections C and D below.
- 5. TERM OF OFFICE. At the first meeting of the members, the members shall elect One (1) Director for a term of one (1) year, two Directors for a term of two (2) years each and two (2) Directors for a term of three (3) years each. At each annual meeting thereafter, the Directors shall be elected as appropriate for terms of three (3) years. The terms of the Directors shall be staggered so that, to the extent possible, not more than two (2) directors at time shall stand for re-election. All Directors shall serve until their successors are duly elected.
- 6. ELECTION OF DIRECTORS. Except as provided for elsewhere in these By-Laws, Director positions which become open by reason of the normal expiration of a Director's term shall be filled by an election to be conducted in the following manner: All nominations for election to the Board of Directors shall be made by the members at large from the floor at the annual meeting. The election to the Board of Directors shall be by secret written ballot. In any election, the available vacancies on the Board of Directors shall be filled by the nominees receiving the highest number of votes. Cumulative voting shall not be permitted.
- 7. VACANCIES. Whenever any Director shall be unable to act, resign, shall cease to be qualified under Paragraph B(2) hereof or whenever a vacancy exists due to an insufficient number of nominees pursuant to B(6) above, such Director's position shall automatically be vacated and the remaining Directors, within thirty (30) days after such vacancy is created, shall convene a special meeting of the Board of Directors, and they shall elect, by majority vote, a successor Director for such vacant position for the remainder of the unexpired term.
- 8. MEETINGS OF THE BOARD OF DIRECTORS, QUORUM AND OFFICERS. A majority of Directors shall constitute a quorum. Actions of the Board of Directors shall be by majority vote of those Directors in attendance at any meeting at which there is a quorum present with each Director having one vote. The Principal Officers of the Association shall be the President, the Vice President, the Secretary and the Treasurer, all of whom shall be elected by the Board. The Board may appoint such other officers as it deems necessary. The President and Vice President must be members of the Board. Any other officers may, but need not be members of the Board of the Association. Any officer other than the President may hold more than one office. The officers of the Association shall be elected annually by the Board at the organizational meeting of each new Board (to be held following the election at the Annual Meeting of the Association) or until their successors have been elected and qualified and shall continue to hold such office at the discretion of the Board. The Board shall promulgate operating procedures for the conduct of its affairs. The Board of Directors shall hold at least one annual meeting each year. Written notice of the date, time and location of such annual meeting shall be mailed (or emailed) to each Director

at least ten (10) days in advance, The Board may also hold additional regularly scheduled or special meetings, provided ten (10) days notice is given. Special meetings of the Board of Directors may be called at any time by the President, or shall be called by the President upon request by a majority of Directors. One or more Members of the Board may participate in meetings by means of conference telephone or similar communication equipment by which all persons participating can hear each other.

- C) DUTIES AND POWERS OF THE ASSOCIATION. The Association shall hold title to and pay real estate and other taxes on those areas of the Park which are established for the common benefit of all the Owners and which are deeded to the Association by Union Development Corporation. The Association shall properly maintain the common areas and the improvements thereon, whether or not title thereto is held by the Association. As presently constituted, the common areas ('Common Areas'') are as follows:
  - (i) All water detention areas
  - (ii) Signage and landscaping on Progress Drive.

## D) LEVYING OF ASSESSMENTS.

- 1. AUTHORITY. The Association shall have the right to levy and collect general and special assessments from the Members for the purpose of carrying out the obligations, duties and powers herein set forth, including any legal and other costs incurred. All assessments shall be on a calendar year basis. All Members hereby agree to pay the assessments, provided they are properly adopted by the Board.
  - 2. FISCAL YEAR. The fiscal year of the Association shall be the calendar year.
- 3. PROCEDURES. All assessments shall be made in the following manner and shall be subject to the following procedures and limitations:
- (a) On or about the month of September of each year, the Board of Directors shall adopt a budget for the ensuing calendar year. At that time, the Board shall also designate a date, time and place for a general Membership meeting to present the budget. In the absence of said meeting, a copy of the Budget should be sent to all Owners along with an invoice for their pro-rata share of the expenses of the Association. (See (b) below.) In the event a new Budget is not adopted by the Board, the Budget of the prior year shall remain in effect until such time that the new annual or an adjusted Budget is adopted.
- (b) The Board of Directors shall assess each Owner a pro rata share of the costs to maintain the Common Areas and operate the Association. Such share shall be equal to a fraction, the numerator of which shall be the total acreage owned by that Owner and the denominator of which shall be the total number of acres in all land in Union Corporate Center owned by the Members, as of the date the budget is adopted.
- (c) In addition, the Board of Directors may levy such special assessments in the manner herein set forth, as it deems necessary to be in the best interest of the Association
- 4. NOTICE OF ASSESSMENT. Notice of each assessment shall be given by sending a written statement by postage prepaid mail addressed to the Owner. An assessment shall become due and payable within thirty (30) working days after notice has been given. In the event an Owner fails to pay the assessment within thirty (30) days after the notice of assessment has been given, the Association shall have a lien against the real estate owned by the Owner in union Corporate Center for the

amount of such unpaid assessment. Such lien may be foreclosed by the Association in the same manner as provided by law for the foreclosure and sale of real estate mortgages. In the event of such foreclosure, the Association shall be entitled to recover the court costs and reasonable attorney fees of the foreclosure. The right of the Association to foreclose the lien shall be in addition to any other remedy which may be available at law or equity to the Association for the collection of the amounts due.

- 5. USE OF FUNDS. All assessment funds received by the Association shall be used to provide for, maintain and improve the Common Areas and to fulfill all other obligations of the Association hereunder.
- 6. SURPLUSES. The Association shall not be obligated to spend in any calendar year all the sums collected in such year by way of assessments or otherwise, and may carry forward as surplus any balances remaining, provided the total amount of such surplus shall not exceed \$20,000.00. The Board of Directors shall not be obligated to apply any such surpluses to the reduction of the amount of the general or special assessments in the succeeding year, but may carry forward from year to year such surplus as the Board of Directors in its absolute discretion may determine to be desirable for the effectuation of the purposes of these provisions. If said surplus exceeds \$20,000.00, then, after taking into account any unpaid bills, pending capital improvements, replacement or similar expense, the Board of Directors, in its sole discretion, may apply those amounts in excess of \$20,000.00 on a pro rata basis to the assessments due for the succeeding year or distribute said excess over \$20,000.00 to the Owners on an equitable basis.
- E) ASSOCIATION AS OWNER OF LAND. The Association shall have the right to accept and convey title to real property located within the Park, or property which is contiguous, adjoining or adjacent to the Park in order to provide for, maintain, operate and improve the quality of the Common Areas, Union Development Corporation shall have the right to convey to the Association the Common Areas described in paragraph C above.
  - F) AMENDMENT. These By-Laws may be amended or repealed in whole part by the majority vote of the Association.

#### G) INDEMNIFICATION.

- l, PERSONAL LIABILITY OF DIRECTORS. A Director of the Association shall not be personally liable for monetary damages for any action taken, or any failure to take any action, as a Director except to the extent that by law a Director's liability for monetary damages may not be limited.
- 2. INDEMNIFICATION. The Association shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, including actions by or in the right of the Association, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a Director, officer or agent of the Association or at the request of the Association as a Director, officer, employee, agent. fiduciary or other representative of another corporation, partnership, joint venture trust, employee benefit plan or other enterprise, against expenses (including attorney' fees), judgments, fines, excise taxes and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding unless the act or failure to act giving rise to the claim for indemnification is determined by a court to have constituted willful misconduct or recklessness.

- 3. ADVANCEMENT OF EXPENSES. Expenses incurred by a Director, officer, agent or employee of the Association in defending a civil or criminal action, suitor proceeding described in Section 2 above shall be paid by the Association in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such person providing that the Director, officer, agent or employee of the Association shall repay such amount if it shall ultimately be determined that the person is not entitled to be indemnified by the Association,
- 4. OTHER RIGHTS. The indemnification and advancement of expenses provided by or pursuant to this Article shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the Association's insurance, vote of members or Directors or otherwise,
- 5. INSURANCE. The Association shall have the power to purchase and maintain insurance on behalf of the Association as well as any person who is or was a Director, officer, employee or agent of the Association, or is or was serving at the request of the Association as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against him/her and incurred by him/her in any such capacity arising out of his/her status as such, whether or not the Association would have the power to indemnify him/her against such liability under the provisions of these By-Laws.
- 6. SECURITY FUND; INDEMNITYAGREEMENTS. The Board of Directors of the Association (notwithstanding their interest in the transaction) may create and fund a trust fund or find of any nature and may enter into agreements with its Directors, officers, employees and agents for the purpose of securing or insuring in any manner its obligation to indemnify or advance expenses provided for in this Article.
- 7. MODIFICATION. The duties of the Association to indemnify and to advance expenses to a Director of the Association, officer, agent or employee of the Association provided in this Article shall be in the nature of a contract between the Association and each such Director, officer or employee, and no amendment or repeal of any provision of this Article, and no amendment or termination of any trust or other fund created pursuant to Section 6 above, shall alter, to the detriment of such Director, officer, agent or employee, the right of such person to the advance of expenses or indemnification related to a claim based on an actor failure to act which took place prior to such amendment, repeal or termination.
- H) ENFORCEMENT. These By-Laws provide for the governing of the Association, and every Owner shall be bound by its provisions. Any violation of these By-Laws by a Member shall entitle the Association to enjoin, abate or remedy the violation by appropriate legal proceedings, either at law or in equity.

#### I) MISCELLANEOUS.

- 1. RULES OF PROCEDURE. The rules contained in the current edition of Robert's Rules of Order Newly Revised, as modified by rules and regulations of the Board of Directors, shall govern the Association in all cases to which they are applicable and in which they are not inconsistent with these By-Laws.
- 2. WAIVER OF NOTICE. Whenever notice is required to be given under the provisions of the applicable statutes or these By-Laws, a waiver thereof in wilting signed by the persons entitled to said notice, whether before or after the time stated herein, shall be deemed equivalent thereto. Attendance at any meeting by a Director or member or other person shall be conclusively deemed a

waiver of notice of that meeting, except when the Director or members or other persons attend the meeting for the sole and expressed purpose of objecting to the absence of proper notice of the meeting.

3. DISSOLUTION OF ASSETS, Upon the dissolution or other termination of the Association, no part of its property or any of the proceeds thereof shall be distributed to or inure to the benefit of any Owner, Member, Director, Officer or Employee of the Association, any Director, Officer or Employee of any such Owner or Member of any other private person, entity or enterprise for profit. All such property and proceeds, subject to the payment of all valid debts and obligations of the Association, shall be distributed to Union Development Corporation, a non-profit economic development corporation, no part of the earnings of which inures to the benefit of any private person, shareholder or entity. In the event Union Development Corporation is not in existence, all such assets and proceeds shall be distributed entirely to the City of Union, Missouri.

TI	NION	DEVEL	OPMENT	CORPOR	ATION
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BY: Robert W. Borgmann, President

(Corporate Seal)

ATTEST:

David Bailey, Secretary

STATE OF MISSOURI, County of Franklin, ss.:

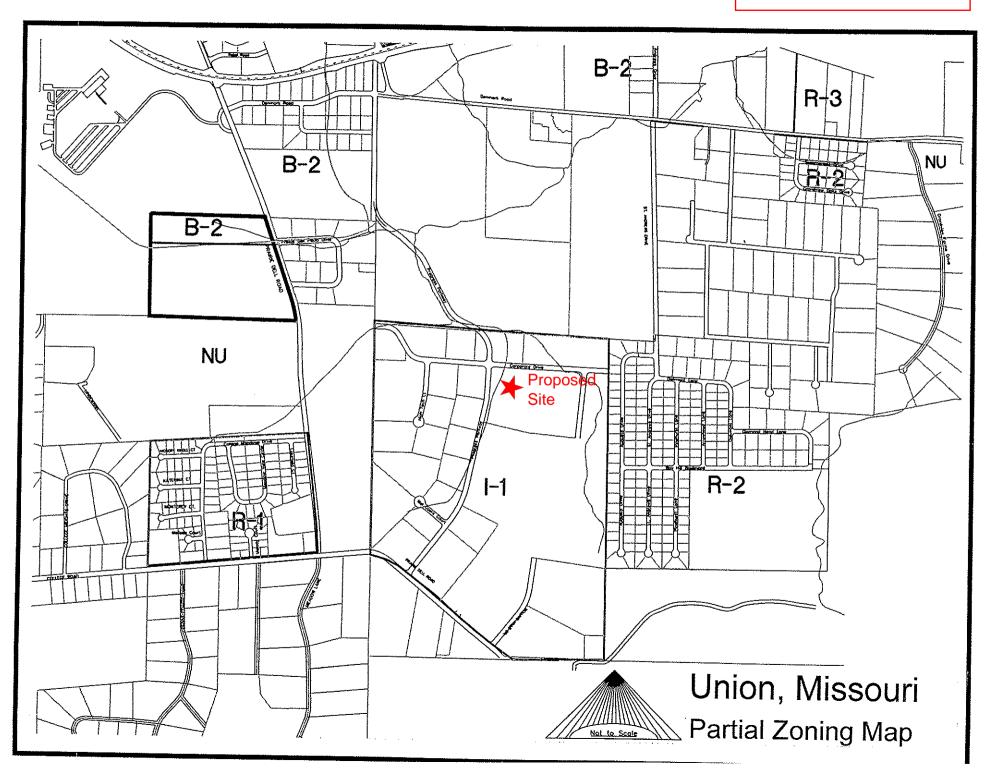
On Dot. 8, 2009, before me appeared Robert W. Borgmann, to me personally known, who being by me duly sworn, did say that he is the President of UNION DEVELOPMENT CORPORATION, a Missouri Corporation, and that said instrument was signed on behalf of said corporation, by authority of its Board of Directors, and said Robert W. Borgmann acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the County and State aforesaid, the day and year last above written. I am commissioned in Franklin County, Missouri.

Notary Public

My term expires: 10 - 22 - 2011

Address: 500 E. Locust, Onion, ono 6308+



# ARTICLE XI. "I-1" GENERAL INDUSTRIAL DISTRICT

#### SECTION 405.420: GENERAL PURPOSE AND DESCRIPTION

This district is intended to provide for the conduct of light manufacturing, assembly and fabrication and for warehousing, distribution, wholesaling and service operations which create a minimum amount of nuisance outside the plant; are conducted entirely within enclosed buildings, do not use the open area around such buildings for storage of raw materials or manufactured products or for any other industrial purpose other than transporting goods between buildings; provide for enclosed or screened loading and unloading berths; and which are not noxious or offensive by reason of the emission of smoke, dust, fumes, gas odors, noises, or vibrations beyond the confines of the building. This district shall be located to provide substantial frontage along circumferential collector roads with ready access to the arterial network to minimize conflicts between truck and local passenger automobile traffic and along railroad access corridors where possible. Sufficient depth of area should be provided to facilitate buffering of any adjacent residential uses.

# **SECTION 405.425: PERMITTED USES**

The permitted uses in the "I-1" General Industrial District shall be as set out in Appendix A of this Title.

#### **SECTION 405.427: CONDITIONAL USES**

The conditional uses in the "I-1" General Industrial District shall be as set out in Appendix of this Title.

#### SECTION 405.430: CONDITIONAL LAND USE AND DEVELOPMENT PERMITS

The following Planned Industrial Development and land uses may be permitted under conditions and requirements specified in Article XVII, Conditional Uses, of this Chapter.

- 1. General purpose and description. The purpose of Planned Industrial Development is to provide for modern industrial facilities of integrated design in appropriate locations to serve the community. The planned developments submitted may vary from an airport, industrial park, truck stop, etc., depending upon proposed planned development. All applications for Planned Industrial Developments shall be governed by the requirements and procedures set forth in Sections 405.675 through 405.720 of Article XVII pertaining to Conditional Uses. In order to qualify as a planned industrial developer, the property proposal area must be established on a tract of land in single ownership or management control.
- 2. Open storage hereby defined to include the unsheltered placement upon the land of items

such as, but not limited to, construction equipment, construction materials, machinery, vehicles and scrap metal; provided however, that nothing herein shall be construed to permit the storage upon the land of unlicensed vehicles or vehicle parts, or any other materials or collection of salvage materials, as that term is defined in Article XVI, Supplemental Regulations, and Article XVII, Conditional Use Regulations of this Chapter.

3. Bed and breakfast establishments.

#### SECTION 405.435: ACCESSORY LAND USES AND DEVELOPMENTS

The following Planned Industrial Development and land uses may be permitted under conditions and requirements specified in Article XVII, Conditional Uses, of this Chapter.

- 1. Accessory uses or buildings customarily incidental to the above uses.
- 2. Refuse disposal. The storage and collection of refuse shall be so managed as to create no health hazard, rodent harboring, insect breeding areas, accident hazards, or air pollution. All refuse shall be stored in fly-tight, watertight, rodent-proof containers which shall be provided in sufficient number and capacity to accommodate all refuse. Satisfactory containers shall be provided at permanent locations, in areas appropriately and visually screened and accessible to solid waste collection vehicles.

# **SECTION 405.440: AREA REQUIREMENTS**

Every building hereafter erected shall be on a lot of not less than fifteen thousand (15,000) square feet and a width at the established building line of one hundred (100) feet.

# **SECTION 405.450: YARD REQUIREMENTS**

- A. Front Yard. All buildings and structures shall have a front yard of at least fifty (50) feet. Buildings and structures placed on corner lots shall observe the front yard requirement on one street. Which yard shall be determined by the Zoning Enforcement Official. The yard which also abuts a street but is not designated as the front yard shall be considered a side yard and shall be subject to the requirements as hereinafter set forth. In making the determination the Zoning Enforcement Official shall consider the impact such determination will have on traffic as well as the impact on health, safety and welfare of the City as a whole.
- B. *Side Yard*. All buildings and structures shall have total side yards of at least twenty-five (25) feet.
- C. Rear Yard. All buildings and structures shall have a rear yard of at least thirty (30) feet.
- D. Yards Adjacent To Residential Districts. All buildings and structures on lots adjacent or abutting residential districts shall be located as to provide side yards or rear yards of at least fifty (50) feet and shall include therein a buffer as described in this Section.

- E. *Railroad Siding Frontage*. No yards shall be required for those portions of lots which front on railroad sidings.
- F. *Buffers And Screening*. A typical opaque planting screen, in accordance with Appendix B of this Title, shall be planted wherever the industrial use abuts a residential district. (Ord. No. 3078 §1, 2-13-06)

# **SECTION 405.455: SUPPLEMENTAL REGULATIONS**

Supplemental regulations shall be as permitted in Article XVI of this Chapter.

# **SECTION 405.460: SIGN REGULATIONS**

Signs shall be as permitted in Article XVIII of this Chapter.

# SECTION 405.465: OFF-STREET PARKING AND LOADING REQUIREMENTS

Off-street parking and loading facilities shall be provided as required in Article XIX of this Chapter.

# ARTICLE II. DEFINITIONS

## SECTION 405.050: GENERAL

For purposes of this Chapter, the following terms shall have the meanings respectively ascribed to them in this Article. Generally, the word "lot" includes the word "plot" and the phrases "used" or "used for" include the meaning "designed for" or "intended for". Terms not herein defined but defined in the Building Code shall be construed as defined herein. Where terms are not defined, they shall have their ordinarily accepted meanings or such as the context may imply.

ABANDON: To discontinue a use for more than one hundred eighty (180) consecutive days.

ABANDONED SIGN, OFF-PREMISES: A sign which advertises goods, products, services or facilities which are no longer available to the public or which directs persons to a former location where such goods, products, services or facilities are no longer available.

ABANDONED SIGN, ON-PREMISES: A sign which no longer advertises a bona fide business, lessor, owner, product or activity conducted or product available on the premises where such sign is displayed.

ABANDONMENT: An action to give up one's rights or interest in property.

ACCESSORY BUILDING OR STRUCTURE: A detached subordinate building or structure, the use of which is customarily incidental to the principal use, located on the same lot with the principal building or use.

ACCESSORY USE: A use customarily incidental to the principal use of a building site or to a building and located upon the same building site with the principal use.

ADULT DAY CARE CENTER: A facility for the care of adults. Adult day care facilities shall meet all requirements and specifications of the Department of Health and other State or local agencies having jurisdiction over such facilities.

AGRICULTURAL AND FARM BUILDINGS AND STRUCTURES: Any building or structure necessary or incidental to the normal conduct of a farm, including but not limited to, the operator residence; residence of hired personnel; barns, buildings and sheds for housing livestock, poultry and farm machinery; buildings for the storage or shelter of grain, hay and other crops; silos, mills and water storage tanks.

AGRICULTURAL OR FARMING: Planting, cultivating, harvesting and storing grains, hay, plants or trees commonly grown in Franklin County, and raising and feeding livestock or

poultry. Feeding, fattening or finishing livestock or poultry for hire as a business venture (feed lots) shall be classed as commercial activity and not permitted. A minimum of five (5) acres of land shall constitute agriculture or farming for the purposes of these regulations.

AIRPORTS: All areas used for landing and storing of aircraft.

*ALLEY:* A public secondary means of access of abutting property, not intended for general traffic circulation.

ALTERATIONS, BUILDING OR STRUCTURAL: Any addition, removal, extension or change in the location of any exterior wall, structural part or exit facilities of a principal or accessory building or structure; or any moving of a building from one site to another.

ANIMAL CLINICS AND HOSPITALS: An establishment where animals are admitted principally for examination and treatment by a doctor of veterinary medicine, with boarding facilities limited to that necessary for the treatment of the sick animal and not including open kennels or runs.

ANIMATED SIGN: Any sign which includes action or motion. For purposes of this Chapter, this term does not include flashing, changing or indexing, all of which are separately defined.

APARTMENT: A room or suite of rooms within a building, provided with separate cooking facilities and intended as a single dwelling unit.

*APPEAL:* A request for a review of the Zoning Enforcement Official's interpretation of any provision of this Title or a request for a variance.

*APPURTENANCE:* A device or structure attached to the exterior or roof of a building and including service or mechanical equipment, but not advertising or display devices or devices used in conjunction with or to support such equipment.

*ARCADE:* Any building or premises whose principal business use contains more than five (5) coin-operated amusement devices available for public use.

AREA: The amount of land surfaces in a lot, plot or parcel. (See also: BUILDABLE AREA, LOT AREA)

AREA IDENTIFICATION SIGN: A sign, freestanding or affixed to a wall or fence, which identifies a neighborhood, a residential subdivision, a multiple residential complex, or a commercial or industrial complex.

AREA REQUIREMENTS: The yard, lot area, lot width, lot coverage and space requirements as set forth in a specific district.

AUDITORIUM: A room, hall or building made a part of a church, theater, school, recreation or other building assigned to the gathering of people as an audience to hear lectures, plays

and other presentations.

*BASEMENT:* That portion of a building having more than one-half (½) of its height below grade.

BED AND BREAKFAST ESTABLISHMENTS: An accessory use of a private, owner occupied residence with not more than five (5) guest bedrooms. This definition shall apply to any description of a bed and breakfast operation to include but not limited to bed and breakfast inn, bed and breakfast home, or bed and breakfast residences.

**BENCHMARK:** A permanent point of reference from which various measurements may be made.

BILLBOARD: (See: SIGN, BILLBOARD)

*BLOCK:* A parcel of land, intended to be used for urban purposes, which is entirely surrounded by public streets, highways, railroad rights-of-way, public walks, parks or green strips, rural land or drainage channels or a combination thereof.

BOARD OF ADJUSTMENT: The City's official Board of Adjustment.

BOARDING AND ROOMING HOUSE: An apartment house providing its tenants services ordinarily furnished by hotels, but not primarily available to the public, or a hotel primarily intended to provide dwelling facilities for non-transient persons.

BUILDABLE AREA: The space remaining on a zoned lot after the minimum open space requirements of this Title have been met.

BUILDING: Any structure, including a roof supported by walls, designed or intended for the support, enclosure, shelter or protection of persons, animals, chattels or property.

BUILDING AREA: That area measured from exterior wall to exterior wall and comprising the gross square footage.

BUILDING HEIGHT: The vertical distance measured from the average elevation at the finished lot grade at each face of the building to the highest point of the coping of a flat roof, or to the deck line of a mansard roof, or to the average height of the highest gable of a pitch or hip roof.

BUILDING LINE OR SETBACK LINE: A building line limit fixed by setback requirements at a specific distance from the front, rear and side boundaries of a lot, beyond which a structure cannot lawfully extend.

BUILDING, PRINCIPAL: A building housing the principal, as distinguished from accessory or secondary, use or uses on a lot.

*CAMPGROUND (CAMPSITE):* An area of land whereupon camping trailers, campers and similar vacation vehicles are housed on a temporary basis and used exclusively by such camping vehicles.

CHANGING OR INDEXING SIGNS: Signs which provide information to the general public such as time and temperature.

*CHURCH:* A building, together with its accessory buildings and uses, where persons regularly assemble for religious worship, and which building, together with its accessory buildings and uses, is maintained and controlled by a religious body organized to sustain public worship.

*CLINIC, HEALTH:* An establishment for the care, diagnosis and treatment of sick, ailing, infirm and injured persons, by a group of licensed health practitioners, but not providing board, room or overnight accommodations on the premises, not including animal hospitals or clinics.

CLUB: A non-profit association of persons who are bona fide members organized for some common purposes and paying regular dues; not including a group organized solely or primarily to render a service customarily a commercial enterprise; or a private, public or semi-public building or premises and appurtenant recreational facilities used by persons for recreational and eating purposes but not dwelling purposes for other than managerial or transient lodging.

COMMISSION: The Planning and Zoning Commission of the City of Union.

CONDITIONAL USE: A use which is permitted in a particular zoning district upon satisfaction of certain conditions set forth by the applicable Governing Body.

CONDOMINIUM: The legal arrangement for individual ownership of each dwelling unit in an apartment building or residential development while common areas are owned, controlled and maintained through an organization consisting of all the individual owners. (See also: DWELLING, ONE-FAMILY ATTACHED)

CONSTRUCTION, START OF: The first placement of permanent construction of a structure on a site, such as pouring slabs or footings. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include installing streets or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include installing accessory buildings on the property. For a structure without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile home parks, the "start of construction" means the start date for the construction of facilities for servicing the site, including street installation, site grading, pouring concrete pads, and installation of utilities.

CORNER LOT: (See: LOT, CORNER)

CUL-DE-SAC: A short street having one (1) end open to traffic and being terminated at the other end by a vehicular turnaround.

DAY CARE HOME OR DAY NURSERY "CHILD": A house or other place conducted or maintained by any person who advertises or holds himself/herself out as providing care for more than four (4) children, between the hours of 6:00 A.M. to 7:00 P.M. for compensation or otherwise, except those operated by a school system or in connection with a business establishment as a convenience for its customers for any part of a twenty-four (24) hour day for compensation. It shall be unlawful for any person to establish, maintain or operate a day care home or day care nursery for children, without having a written license therefor granted by the State of Missouri, Division of Family Services.

DAY CARE HOME "ADULT": A family home, occupied as a permanent residence by the day care provider, in which care is given for three (3) or more persons who by reason of aging or disability require services furnished by a facility that provides shelter and protective oversight for periods of less than twenty-four (24) hours but more than two (2) hours per day. Day care home adult shall not include a hospice residential and care facility for terminally ill on the premises of a hospital or nursing home and operated in conjunction therewith for more than a twenty-four (24) hour day. Adult day care homes are permitted to offer services for temporary relief of family members or others who have assumed direct care responsibilities by offering services that allow care givers to leave the home. These services shall include but not be limited to adult day care, in-home companions and respite care. It shall be unlawful for any person to establish, maintain or operate an adult day care home, without having a written license therefor granted by the State of Missouri.

DENSITY: Land occupancy area requirements/limitations. (See also: AREA REQUIREMENTS)

*DEVELOPMENT:* Any manmade change to improved or unimproved real estate, including but not limited to, buildings or other structures or mining, dredging, filling, grading, paving, excavating or drilling operations.

*DORMITORY:* A building in which group sleeping accommodations are provided for persons not members of the same family in one (1) room or in a series of closely associated rooms; usually associated with an educational institution.

*DRUG REHABILITATION CENTER:* An establishment wherein residential care and/or out-patient services are provided to restore a person who is addicted to drugs and/or alcohol to customary activity through education and therapy.

DUPLEX: (See: DWELLING, TWO-FAMILY)

*DWELLING:* Any building, or portion thereof, used exclusively for human habitation, except hotels, motels, or house trailers.

*DWELLING, MULTIPLE-FAMILY:* A building or group of buildings located on one (1) lot containing three (3) or more dwelling units. The term "multiple-family dwelling" includes the terms "apartment", "apartment house", "garden apartment" and "townhouse apartment".

DWELLING, ONE-FAMILY: A single building located on one (1) lot containing one (1) dwelling unit.

*DWELLING, ONE-FAMILY ATTACHED:* A building, or group of buildings located on one (1) lot containing attached dwelling units designated for separate ownership. The term "one-family attached dwelling" includes the terms "condominium" and "cooperative".

*DWELLING, TWO-FAMILY:* A single building located on one (1) lot containing two (2) independent dwelling units. The term "two-family dwelling" includes the term "duplex".

*DWELLING UNIT:* A building or portion thereof designed for or used exclusively as the living quarters for one (1) family and containing permanent sanitary, electrical, and kitchen facilities.

*EASEMENT:* A property right such as that of access created by grant, agreement, reservation, or other conveyance which one has in the land of another.

*ERECTED:* This term shall mean attached, altered, built, constructed, reconstructed, enlarged or moved, and shall include the painting of wall signs, but does not include copy changes on any sign.

*FAMILY:* One (1) or more persons related by blood, marriage, or adoption, and not more than one (1) additional unrelated person, occupying a premises as a separate housekeeping unit.

FLOOR AREA, GROSS: The total number of square feet of floor area in a building determined by horizontal measurements between the exterior faces of walls including basement, garages and accessory buildings.

FOSTER CARE HOME: Any private residence licensed by the Division of Family Services or Department of Mental Health to provide foster care to one (1) or more but less than seven (7) children who are unrelated to either foster parent by blood, marriage or adoption.

FRATERNAL CIVIC AND SOCIAL ORGANIZATIONS: A building or portion of a building intended to be used as a center of informal association for a selective membership not open to the general public.

FRONTAGE: The linear distance along which a parcel of land abuts a public or private

street.

GARAGE, PRIVATE: An attached or detached building designed or used for storage of one (1) or more privately owned motor-driven vehicles owned and used by the occupants of the building to which it is accessory and including carports or other similar structures, not to exceed fifty percent (50%) of the square footage of the principal building in size.

*GARAGE*, *PUBLIC*: A building or portion thereof other than a private or storage garage, designed or used for equipping, servicing, repairing, hiring, selling, or storing motor-driven vehicles.

GARAGE, STORAGE OR PARKING: A building or portion thereof designed or used exclusively for term storage by prearrangement of motor-driven vehicles, as distinguished from daily storage furnished transients and within which motor fuels and oils may be sold, but no motor-driven vehicles are equipped, repaired, hired or sold.

GASOLINE SERVICE STATION: A building, premises or portion thereof having pumps and storage tanks and used for the retail sale of gasoline, oil or other fuel, automotive parts, supplies or accessories for motor vehicles and which may include, as an incidental use only, facilities for polishing, greasing, washing or otherwise cleaning or light servicing motor vehicles, but not including liquefied petroleum gas distribution, junk and/or motor vehicle wrecking facilities.

## **GRADE**:

- 1. For buildings having walls adjoining one (1) street only, the sidewalk elevation at the center of the wall adjoining the street.
- 2. For buildings having walls adjoining more than one (1) street, the average sidewalk elevation at the centers of all walls adjoining the streets.
- 3. For buildings having no wall adjoining the street, the average level of the finished ground surface adjacent to the building's exterior walls.
- 4. Any wall approximately parallel to and not more than five (5) feet from a street line shall be considered adjoining the street. Where no sidewalk exists, the grade shall be established by the City Engineer.

GROUP HOME: Home in which eight (8) or fewer unrelated mentally or physically handicapped persons reside, plus no more than two (2) additional persons acting as houseparents or guardians who need not be related to each other or to any of the mentally or physically handicapped persons residing therein, provided that the exterior appearance of such home and property be in reasonable conformance with the general neighborhood standards prevailing in the immediate area, and further provided, that there may be no more than one (1) such home within one thousand five hundred (1,500) feet of another group

home.

HEALTH CARE PROFESSIONAL: A person licensed by the State to provide health care and recognized medical and health treatment and services to patients. The term shall include physicians, surgeons, dentists, nurses, chiropractors, therapists and other persons licensed by the State Board of Registration for the healing arts or such other similar State agency.

*HEIGHT:* The distance above grade at the perimeter of the structure being measured.

HOME OCCUPATION: A domestic commercial or non-residential activity carried on by members of a family residing on the premises, but excluding convalescent or nursing homes, massage or other establishments offering services to the general public, and providing that there are no signs except as permitted in Article XVIII, Signage Regulations, nor any display that will indicate from the exterior of the building that it is being utilized, in whole or in part, for any purpose other than that of a dwelling; providing, also, that there is no stock in trade or commodity sold upon the premises and no person is employed other than a member of the family residing on the premises.

*HOSPITAL:* An institution providing medical and surgical care for humans only, for both inand out-patients, including medical service, training, and research facilities.

*HOTEL:* A building containing individual guest rooms or suites of rooms, providing lodging with or without meals to the transient public for compensation, with ingress to and egress from all rooms through an inside lobby or office supervised by a person in charge at all hours, as distinguished from a boarding or rooming house or apartment herein separately defined.

JUNK YARD: A parcel of land on which waste material or inoperative vehicles and other machinery is collected, stored, salvaged or sold.

*KENNEL:* Any place where more than three (3) cats and/or dogs over the age of six (6) months are kept.

*LAUNDROMAT:* A business that provides home-type washing, drying, and/or ironing machines and/or dry-cleaning machines for hire to be used by customers on the premises.

*LAUNDRY, COMMERCIAL/INDUSTRIAL*: A business providing washing, drying and ironing services operated by the employees on the premises.

LIVESTOCK: Domestic animals bred or kept on a farm for use or commercial profit.

LOADING SPACE: A space within the main building or on the same lot therewith, properly graded for drainage, providing off-street space used for the loading and unloading of vehicles, except passenger vehicles, in connection with the use of the property on which such space is located. Each such designated space shall comply with the dimensional requirements

set forth in Article XIX, Off-Street Parking and Loading Space Requirements.

LOT: A portion of land (whether of a platted subdivision or otherwise) defined by metes, bounds or boundary lines in a recorded deed or on a recorded plat, occupied or intended to be occupied by a building or use and its accessories, together with such yards as are required under the provisions of this Title, having not less than the minimum area, width and depth required by this Title for a lot in the district in which such land is situated, and having its principal frontage on a street or on such other means of access as permitted in accordance with the provisions of this Title. The minimum area of a lot as defined herein must be an integral unit of land under unified ownership in fee or in continuancy, or under legal control tantamount to such ownership, which ownership or control must continue for the existence of the building or buildings permitted to be situated on the lot.

LOT AREA: The total square footage or acreage within the property lines of a lot, excluding public streets and alleys, subject to the district requirements herein.

LOT, CORNER: A platted parcel of land having frontage on two (2) intersecting streets where the angle of intersection does not exceed one hundred thirty-five degrees (135°).

LOT COVERAGE: The area of a zoned lot occupied by the principal building or buildings and accessory buildings.

LOT LINES: The lines bounding a lot as defined herein.

LOT LINES, FRONT: The boundary between a lot and the street it fronts.

LOT LINES, REAR: The boundary line opposite and most distant from the front street line, except in the case of uncertainty the Zoning Enforcement Official shall determine the rear line on irregular lots.

LOT LINES, SIDE: Any lot line other than a front or rear lot line ia a side lot line.

LOT, NON-CONFORMING: A single lot, tract or parcel of land shown on a recorded or unrecorded map, plat, drawing or survey in existence and failing to meet the requirements for area, width or depth for any use permitted within the district in which it is located.

LOT OF RECORD: A lot or parcel of land, the deed to which has been recorded in the office of the Recorder of Deeds of Franklin County.

LOT, THROUGH: A lot having frontage on two (2) parallel or approximately parallel streets and which is not a corner lot.

LOT WIDTH: The dimension of a lot, measured between side lot lines on the building line.

*MANUFACTURED HOME:* A factory-built structure or structures which, in the traveling mode, is eight (8) body feet or more in width or forty (40) body feet or more in length, or,

when erected on site, contains three hundred twenty (320) or more square feet, equipped with the necessary service connections and made so as to be readily movable as a unit or units on its or their own running gear and designed to be used as a dwelling unit or units with or without a permanent foundation. The phrase "without a permanent foundation" indicates that the support system is constructed with the intent that the manufactured home placed thereon may be moved from time to time at the convenience of the owner.

MOBILE HOME: Any structure which was originally designed to be used for human occupation of either a temporary or permanent nature and was originally built as a portable structure on wheels and whether or not same is delivered in one (1) or more parts. Removing the wheels from such structure shall not be sufficient to remove such structure from the definition of a mobile home. This definition shall incorporate and cover such terms as dependent trailer coach and independent trailer coach as were used in Article VII--Planned Mobile Home Park District.

MOBILE HOME PARK: An area designed or intended to be used as a site for occupied house-trailers. An area within the City of Union which is designed for the placement and hookup of mobile homes and which has complied with all other regulations and requirements imposed by the City of Union under Article VII--Planned Mobile Home Park District and the regulations of the BOCA Basic Building Code and ordinances, currently in force, concerning the subject of this Chapter.

MODULAR UNIT: A transportable building unit designed to be used by itself or to be incorporated with similar units at a point-of-use into a modular structure to be used for residential, commercial, educational or industrial purposes. This definition shall not apply to structures under six hundred fifty (650) square feet used temporarily and exclusively for construction site office purposes.

MOTEL/MOTOR HOTEL/MOTOR COURT: One (1) or more buildings containing attached, semi-attached or detached sleeping or living units to accommodate transient guests for compensation and not customarily including individual cooking or kitchen facilities, said units having convenient access to off-street parking spaces for the exclusive use of the guests or occupants; not to include tourist homes.

MOTOR VEHICLE AND TRAILER SALES AREA: An open off-street area used for the display and sale of new or used automobiles, pickup trucks, vans, vacation vehicles and trailers, where no repair work is done except of a minor and incidental nature to only those vehicles and trailers being sold.

*NON-CONFORMING LAND USE OR STRUCTURE:* A land use or structure which existed lawfully on the date that this Chapter, or when any amendment thereto became effective, and which fails to conform to one (1) or more of the applicable regulations in this Chapter, or amendment thereto, except minimum lot area, yard and setback requirements.

*NON-CONFORMING SIGN:* Any advertising structure or sign which was lawfully erected and maintained prior to such time as it came within the purview of this Chapter and any amendments thereto, and which fails to conform to all applicable regulations and restrictions of this Chapter, or a non-conforming sign for which a special permit has been issued.

*NURSERY SCHOOL:* A prekindergarten school for children, primarily between the ages of three (3) and five (5).

*NURSING HOME:* A home for the aged, chronically ill or incurable persons in which three (3) or more persons not of the immediate family are received, kept and provided with food, shelter and care, for compensation, but not including hospitals, clinics or similar institutions devoted primarily to the diagnosis, treatment or care of the sick or injured.

*OFFICE:* A building or portion of a building wherein services are performed involving predominantly administrative, professional, or clerical operations.

*OPEN SPACE, PUBLIC:* Land dedicated or reserved for acquisition for general use by the public, including parks, forest and wildlife preserves, recreation areas, school sites, community or public building sites, waterways, streets and other lands.

OPEN STORAGE: Storage of material or goods on the ground outside of a building.

*OPEN UNOCCUPIED SPACE:* That area of private property upon which these regulations prohibit the location of any building or structure.

*PARCEL (TRACT) OF LAND:* A separately designated area of land delineated by identifiable legally recorded boundary lines.

*PARKING AREA:* An area of land used or intended for off-street parking facilities for motor vehicles.

*PARKING SPACE:* A durably dust proofed, properly graded for drainage, usable space, enclosed in a main building or in an accessory building, or unenclosed, reserved for the temporary storage of one (1) vehicle and connected to a street, alley, or other designated roadway by a surfaced aisle or driveway. Each such designated space shall comply with the dimensional requirements set forth in Article XIX--Off-Street Parking and Loading Space Regulations.

*PAVED:* Surfaced with asphaltic or concrete pavement material of a thickness sufficient to withstand the highest-use loading.

*PERMANENT FOUNDATION:* A below grade formation, or a substructure formation below the tier of beams nearest to grade, consisting of materials such as concrete, mortared concrete block or mortared brick, used to transmit the loads of a structure to firm substrata, which formation shall include, but not necessarily be limited to, cellars, basements, crawl spaces,

floating concrete mats with frost walls, piers, and/or pilings extending into the ground below the frost line or to solid rock.

*PERMITTED USE:* A land use which is permitted by right in a district subject only to the requirements of these regulations.

*PERSON:* Includes a firm, association, organization, partnership, trust, company or corporation as well as an individual.

PLANNING AND ZONING COMMISSION: The City's official Planning and Zoning entity.

*PLAT:* A subdivision of land legally approved and recorded.

PREMISES: A parcel together with all buildings and structures thereon.

*PRINCIPAL USE:* The main purpose for which a lot or the principal building thereon is designed, arranged or intended and for which it is or may be used, occupied or maintained in accordance with the provisions of these regulations.

PROPERTY LINE: The legally recorded boundary of a lot, tract, or other parcel of land.

RESIDENTIAL COMPUTER SERVICE BUSINESS: A business operated from a residence which involves exclusively the operation of computers, telephones, modems or other electronic means, through international, national, regional or local connections for the purpose of providing services and sales to customers and users through such connections provided that absolutely no stock in trade, merchandise or materials to be conveyed to customers is maintained on the premises, so long as the operation of the business does not result in a noticeable increase in traffic to the residence, provided that the operation of the business is not discernable from the outside of the residence and so long as no person is employed in the operation of the business other than a member of the family residing on the premises.

*RESTAURANT, DRIVE-IN:* A restaurant where foods and beverages are customarily served or dispensed for consumption outside the enclosed structure.

*RESTAURANT:* A building or portion thereof used or designed for on-premises food and beverage service for compensation, not including drive-in restaurants.

*RIGHT-OF-WAY:* The area of a vehicular way or other strip of land reserved for public use whether established by prescription, easement, dedication, gift, purchase, eminent domain or other legal means. (See also: *STREET*)

*ROAD:* Any street, highway, avenue, marginal access street, bridge, viaduct or segment thereof. (See also: *STREET*)

ROOM: An unsubdivided portion of a dwelling unit interior, excluding bathrooms, kitchens,

closets, hallways and service porches.

SCHOOLS, OTHER: Any school not having the right of eminent domain as defined by the State of Missouri.

SCHOOLS, PUBLIC: Any school having the right of eminent domain as defined by the State of Missouri.

SELF-SERVICE STORAGE FACILITY: A building or group of buildings in a controlled-access compound that contains equal or varying sizes of individual, compartmentalized, and controlled access stalls or lockers for the dead storage of customer's wares, goods, household items or furnishings. Outdoor storage, sale, washing, repair or maintenance of boats, trailers, vehicles of all types or other equipment shall not be permitted or allowed.

*SETBACK:* The distance in linear feet measured on a horizontal plane from any lot line to a building or structure on the lot.

SHALL: Is always mandatory.

SIGN: Any structure, part thereof, or device attached thereto, or painted or represented thereon, or any material or object illuminated or otherwise, displaying or including any numeral, letter, word, model, banner, emblem, insignia device, trademark or other representation used as, or in the nature of, an announcement, advertisement, direction or designation of any person, firm, group, organization, place, commodity, product, service, business, profession, enterprise or industry, located upon any land, building or window. The flag, emblem or other insignia of a nation, governmental unit, or educational, charitable or religious group shall not be included within the meaning of this definition.

SIGN, ADVERTISING: A sign directing attention to a business, commodity, service or entertainment.

SIGN AREA: The total surface area of the entire sign, including all parts and appurtenances thereof (except principal supports, the total cross-sectional area of which does not exceed one (1) square foot and on which there is no display of advertising material or any lighting). In the case of any sign having display surfaces which are not continuous (e.g., separated letter displays or separated display surfaces), sign area shall include a theoretical display surface equal to the area of the smallest enclosure into which the combined non-continuous display surfaces can be fitted, including intermediate structural supports.

SIGN, BILLBOARD: Any advertising display structure with its facing outline in excess of twenty (20) square feet not related to a permitted principal use of the premises.

SIGN, BULLETIN BOARD: A sign used to notify the public of an event or other occurrence of public interest, such as a church service, political rally, civic meeting or similar event.

SIGN, BUSINESS: A sign directing attention to a business, profession, display or entertainment conducted upon a lot or to a commodity or service stores, sold or displayed on a lot. Only one (1) side of any double facing business sign shall be considered in the total sign area permitted for any business building or lot, provided the same theoretical message appears on both faces of the sign and further provided the sign shall be perpendicular to the traveled way toward which the sign is oriented with variations of less than five degrees (5°) permitted.

SIGN CLEARANCE: The vertical distance from the established finished grade of the ground or sidewalk to the lower edge of a sign.

SIGN, COMBINATION: Any sign incorporating any combination of the features of the signs defined herein.

SIGN, CONSTRUCTION: A sign advertising the development or improvement of a property by a building contractor or other person furnishing services, materials or labor to said premises, intended for a limited period of display and erected on the same lot with the work being done.

SIGN, DIRECTIONAL: A sign containing only the name and location of and/or direction to a business, community, service or other activity and located other than on the premises where such business, service or other activity is conducted.

SIGN, FACE: Any sign attached to the face of a building or structure in such a manner as to be approximately parallel to the plane of such building or structure face and not extending farther than one (1) foot from such face.

SIGN, FLAT: Any sign, painted on or attached to, and erected parallel to the face of a window, wall of a building, or a boundary wall or fence, and supported solely by the structure to which it is affixed, and not extending more than twenty-four (24) inches vertically from the face of the structure to which it is attached.

SIGN, FREESTANDING: A detached sign supported by one (1) or more uprights, poles or braces in or upon the ground and not attached to a building or other structure.

SIGN HEIGHT: The vertical distance measured from the highest point of the street curb level, the established or mean street grade in case the curb has not been constructed or the average finished ground level adjoining the sign if it sets back from the street line, to the level of the highest point of the sign.

SIGN, IDENTIFICATION: An on-premises sign serving only to tell the name or use of any public/semi-public building or recreation space, club, lodge, church or institution or only to tell the name and/or address of an apartment house or hotel or to identify a parking lot, not including a sign identifying a commercial or industrial use or a commodity or service offered

on the premises.

SIGN, ILLUMINATED: Any signage display using electrical or other illumination devices including luminous tubing, either attached or detached.

SIGN, INCIDENTAL USE: A non-illuminated professional or announcement sign, not exceeding one-half (½) square foot in area and attached wholly to a building, including those pertaining only to the rent, lease or sale of property upon which displayed.

*SIGN, MARQUEE:* A display sign attached to or suspended from a marquee, canopy or other covered structure projecting from and supported by the building and extending beyond the building wall or building line.

SIGN, NAME PLATE: A sign servicing solely to designate the name of a person or persons residing in a dwelling.

SIGN, POLE: A sign supported wholly by a pole or poles; neither of which is a part of or attached to a building.

SIGN, PORTABLE: A sign that is not permanently affixed to a building, other unmovable structure, or the ground.

SIGN, PRINCIPAL USE: A sign on the same premises with a principal use, announcing only the name of such principal use and/or the principal product sold or the principal service rendered by such principal use.

SIGN, PROJECTING: All signs, other than face signs, suspended or supported by any building or wall and extending outward therefrom.

SIGN, REAL ESTATE: A temporary sign indicating the availability for sale, rent or lease of the specific lot and/or building upon which the sign is erected or displayed.

*SIGN*, *ROOF*: A sign erected upon or above a roof or parapet wall of a building or structure but not projecting over public property.

*SIGN, SEPARATE USE:* Any sign, including a standard poster panel sign or fabricated sign (billboard) directing attention to a business commodity, service, entertainment or other activity, conducted, sold or offered elsewhere than on the premises where said sign is located.

*SIGN*, *SUBDIVISION*: A temporary sign advertising the general development, sale and/or subdivision of land and displayed or erected upon the subject property, as distinguished from a real estate sign, and to be replaced at a specified time by a permanent sign identifying said development or subdivision.

SIGN, TEMPORARY: A sign intended for use for only a limited period of time not to exceed

seventy-two (72) hours except for construction signs. See definition of "Changing or Indexing Signs".

SIGN, WALL: Any sign painted on, attached to or erected against the wall of a building or structure, with the exposed sign face parallel to the plane of said wall and extending not more than twelve (12) inches from the face of the wall.

*SITE PLAN:* A plan showing uses and structures proposed for a selected parcel, including lot lines, streets, building sites, reserved open spaces, buildings, major landscape features--both natural and manmade and proposed utilities locations.

*SOLID WASTE:* Garbage, refuse and other discarded materials including, but not limited to, solid and semisolid waste materials resulting from industrial, commercial, agricultural, governmental and domestic activities, but does not include hazardous waste as defined in Sections 260.360 to 260.432, RSMo., recovered materials, overburden, rock, tailings, matte, slag or other waste material resulting from mining, milling or smelting.

STORAGE, OPEN: For purposes of this Chapter open storage shall include open, uncovered and exterior storage of material, supplies or other goods which shall include both finished products and any waste by-product therefrom. Storage of firewood for consumption on the premises where stored or building materials stored on the premises where a building permit has been issued during the time such permit is in effect shall not be included in the meaning hereof.

STORY: That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above.

STREET: A paved public or private way which affords principal means of access to abutting properties from the front. The term includes all facilities which normally occur within the right-of-way; it shall also include such other designations of a street such as a highway, thoroughfare, parkway, throughway, road, pike, avenue, boulevard, lane, place, drive, court or as otherwise designated but excluding an alley or way for pedestrian use only.

STREET LINE: A line which separates a lot, parcel or tract of land and a contiguous street.

STREET, COLLECTOR: A minor street which collects traffic from other minor streets and serves as the most direct route to a major street or community facility.

STREET, CUL-DE-SAC: A minor street having one (1) end open to vehicular traffic and having one (1) closed end terminated by a turnaround.

STREET, FRONTAGE OR SERVICE: A minor street auxiliary to and located on the side of a major street for service to abutting properties and adjacent areas and for control of access.

STREET, MAJOR: An arterial street which is designated on the Major Street Plan or

Comprehensive Plan.

STREET, MINOR: Any street not classified as a major street on the Major Street Plan or Comprehensive Plan.

STRUCTURAL ALTERATION: (See ALTERATIONS, STRUCTURAL)

STRUCTURE: Anything constructed or erected which requires permanent or temporary location on the ground or is attached to anything having a permanent or temporary location on the ground but not including unlicensed trailers without axles, wheels or landing gear, poles, lines, cables, and other transmission or distribution facilities of public utilities.

SUBDIVIDE: See Subdivision Of Land, Chapter 410 of this Title.

*SUBDIVIDER:* Any person, firm, partnership, association, corporation, estate, or other group or combination acting as a unit, dividing or proposing to divide land in a manner that constitutes a subdivision as defined in Chapter 410 of this Title, Subdivision of Land.

SUBDIVISION: See Subdivision of Land, Chapter 410 of this Title.

SWIMMING POOL: Those that are constructed in the ground, on the ground, or in a building in such a manner that the pool cannot be readily disassembled for storage.

TEMPORARY BUILDING OR USE: A use or building established for a delineated time span in connection with a specific purpose such as a construction project or real estate development, not to include facilities for sleeping or cooking.

*TERMINAL:* A depot building or area specifically designated for the storage or transfer of persons or material, or temporary storage and service of operable vehicles used in the transport of persons, goods or materials.

THEATER, OUTDOOR DRIVE-IN: An open lot or part thereof with its appurtenant facilities devoted primarily to the showing of motion pictures or theatrical productions on a paid admission basis to patrons seated in automobiles or on outdoor seats.

THEATER: A building or part of a building devoted primarily to the showing of motion pictures or theatrical productions on a paid admission basis.

TRAILER: A structure standing on wheels, towed or hauled by another vehicle or self-propelled and used for short-term human occupancy (see mobile home), carrying materials, loads, or objects or as a temporary office.

TRAILER, CONSTRUCTION: A vehicle, other than a motor vehicle, designed or intended for temporary office space and/or storage, but not dwelling purposes, whether or not such vehicle is attached to or resting on the ground or something having a location on the ground, and is parked on the building site where construction work is occurring and requires a permit

prior to its placement.

TRANSPORTATION INSTALLATIONS, MAJOR: Industrial-type transportation facilities to include airports, bus terminals, flight strips and heliports, railroad terminals and yards and truck terminals.

TRUCK STOP: A building, buildings, lot or lots or portions thereof, which are used, arranged, designed, or intended to be used for the retail sale of gasoline, diesel or other motor vehicle fuel. In conjunction with the sale of motor vehicle fuels, the property lot or lots may be used for short-term parking of trucks, tractor-trailers or components thereof; restaurants; motels; or any combination thereof. For purposes of this definition, short-term parking shall mean leaving any item or component thereof as set forth herein on such premises for a period of time not to exceed twenty-four (24) hours.

*TRUCK TERMINAL:* A building, buildings, lot or lots or portions thereof which are used for the dispatching, loading, unloading, parking and storage of commercial motor vehicles to include trucks, tractor-trailers, trailers or any component thereof.

*USE*: The use of property is the purpose or activity for which the land, or building thereon, is designed, arranged, or intended or for which it is occupied or maintained.

*VARIANCE:* A modification or variation of the provisions of these regulations as applied to a specific piece of property.

VETERINARY CLINIC (ANIMAL HOSPITAL): A facility for the practice of veterinary medicine.

*YARD:* An open area between the structure setback lines of a lot as established by the regulations of a particular zoning district, and the property lines of the same lot.

*YARD*, *FRONT:* A space extending across the entire front of a lot between the structure setback lines as required by the regulations of a particular zoning district and the roadway right-of-way lines. Where corner lots exist, the yard area between both street right-of-way lines and the building line shall constitute a front yard.

*YARD*, *REAR*: A space opposite the front yard, extending across the entire rear of a lot between the structure setback line as required by the regulations of a particular zoning district and the rear lot line.

*YARD*, *SIDE*: A space extending between the structure setback line as required by the regulations of a particular zoning district and the side lot lines measured between the front yard and the rear yard.

ZONING: A unified set of regulations and maps establishing use groups by district designations and controlling the placement, height, bulk, coverage and performance and

other standards for use of land and structures within each district.

ZONING AMENDMENT: A change or revision of the ordinance or map.

*ZONING APPEAL:* An official request for reconsideration filed with the Board of Adjustment after an application to the Zoning Enforcement Official for a zoning permit has been denied for non-compliance with the requirements of the Chapter.

**ZONING DISTRICT:** A section of the City for which uniform regulations governing the use, height, area, and use of buildings and land, and open spaces about building, are herein described.

ZONING MAP: The City's Official Zoning Map and all amendments thereto located in the office of the City Clerk.

# APPENDIX A LISTING OF CONDITIONAL OR PERMITTED USES -TABLE

# APPENDIX A. LISTING OF PERMITTED AND CONDITIONAL USES\*

The terminology used in Appendix "A" is based on the four-digit level of coding and classification of land use contained in the Standard Land Use Coding Manual prepared by the Urban Renewal Administration, Housing and Home Finance Agency and Bureau of Public Roads Department of Commerce, January, 1965. The classification system has been modified to include new uses that have developed since 1965 and the numerical coding system has been modified accordingly. The coding and classification system has also been modified in certain instances to clarify terminology.

The Standard Land Use Coding Manual (SLU) contains additional descriptive information that could be helpful in the interpretation of a particular use and should be used as a reference document to support these regulations.

The Standard Industrial Classification Manual (SIC) may also be helpful in the interpretation of industrial uses. Although this document is coded differently than the SLU Manual, it contains more detailed descriptions.

Both SLU and SIC Coding Manuals are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

\* For conditions and procedures to be adhered to for uses listed as conditional in this Appendix see Article XVII of Chapter 405 of this Title.

# APPENDIX A LISTING OF CONDITIONAL OR PERMITTED USES -- TABLE

LAND USE CATEGORY	ZONI	NG DIS	FRICT	CONDIT	ΓΙΟΝΑL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
A									
Abrasive and miscellaneous non-metallic mineral products manufacturing								С	
Abstracting services					P	P			
Accounting and bookkeeping services					P	P	С		
Accounting, computing and office machines manufacturing								P	
Accounting, computing, office machineretail					P	P			
Advertising displays and signs manufacturing					С	С		P	
Advertising services, general					P	P		P	
Agricultural chemicals and fertilizers manufacturing								С	
Agricultural chemicals and fertilizers wholesale						С		С	
Agricultural fertilizers, hazardous retail								С	
Agricultural fertilizers, nonhazardous retail						P		P	
Agricultural or farming									P
Air-conditioning, heating and plumbing contracting, sales and services						P		P	
Air-conditioning, refrigerated						С		P	

	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Aircraft and accessories retail						С		P	
Aircraft and parts manufacturing								P	
Aircraft storage and equipment maintenance								P	
Airports								С	C
Airport freight terminals								C	
Airport passenger terminals								C	
Alcoholic beverages, beer and winewholesale						P		P	
Alteration, pressing and garment repair services					P	P			
Ambulance services					P	P		С	
Ammunition manufacturing and complete assembly of guided missiles and space vehicles								С	
Ammunition, small arms manufacturing								С	
Amphitheaters						P			P
Amusement, athletic and sporting goods and toys manufacturing								P	
Amusement establishment					P	P			
Amusement parks						P			
Animal boarding facilities and kennels						C		P	
Animal hospital services						P		P	
Antiquesretail					P	P	С		
Apiary farms and processing									P
Apparel and accessories manufacturing								P	
Apparel and accessories retail					P	P	С		
Apparel and accessories wholesale						C		P	
Apparel beltsmanufacturing								P	
Apparel findings and related products manufacturing								P	
Appliances (household) manufacturing								P	
Appliances (household) retail					P	P			
Appliances (Electrical), televisions, phonographs, tape players, radio sets wholesale						С		P	
Appliance repair service					P	P		P	
Aquariums, commercial						P			

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Arcades					P	P	С			
Archery range, indoor						P				
Archery range, outdoor						C				
Architectural, engineering and planning professional services					P	P	P			
Arenas and fieldhouses						P				
Armature rewinding services								P		
Armed forces reserve center								P		
Art galleries or studios					P	P	С			
Artistspainters, sculptors, composers and authors					P	P	P			
Asphalt construction, paving services								P		
Asphalt felts and coatings manufacturing								С		
Asphalt plants								С		
Athletic, amusement and sporting goods and toys manufacturing								P		
Athletic field or playfield						P				
Auditing, accounting and bookkeeping services					P	Р	С			
Auditoriums						P				
Auto accessory stores					P	P				
Automatic temperature controls manufacturing								P		
Automobile and other motor vehicle and equipment manufacturing								P		
Automobile and other motor vehicle repair services, body shops, rebuilding and painting						С		P		
Automobile and other motor vehicles retail (See Used car/truck retail)						P				
Automobile and other motor vehicles wholesale						С		С		
Automobile and truck rental services						P		P		
Automobile equipment wholesale						P		P		
Automobile parking commercial lots					P	P				
Automobile parts and supplies retail					P	P				
Automobile towing services storage limited to 24 hours						P		P		
Automobile wash services			Ţ			P		P	_	

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Bags except textile bags manufacturing								С		
Bed and breakfast establishments	C	С	C		P	P	C			
Bakery shops					P	P		P		
Bakeries manufacturing retail								P		
Bakery products manufacturing								P		
Banks, financial institutions					P	P	C			
Barber services					P	P	C			
Battery and tire service stations						P		P		
Beauty services					P	P	C			
Beer, wine and alcoholic beverageswholesale						P		P		
Bicycles, motorcycles, parts manufacturing								P		
Bicycles repair, sales and rental					P	P				
Biological products manufacturing								C		
Blacksmith and welding services								С		
Blankbooks, loose leaf binders and devices manufacturing								P		
Blast furnaces, steel works and the rolling of ferrous metals								С		
Blueprinting and photography services					P	P				
Boarding and rooming houses						P				
Boat rentals						P				
Boat showrooms						P				
Bookbinding and miscellaneous related work manufacturing								P		
Bookkeeping, auditing and accounting services					P	P	С			
Books, magazines and newspapers distributing wholesale						P		P		
Books publishing and printing						C		P		
Books retail					P	P	С			
Boot and shoe cut stock and findings manufacturing								P		
Bottled gas retail					P	P				
Bottling works								P		
Bowling alleys					P	P				
Boxes and paperboard containers								P	-	

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Brandy, brandy spirits and wine manufacturing								P		
Brick and structural clay tile manufacturing								P		
Brooms and brushes manufacturing								P		
Building construction general contracting services						P		P		
Building materials retail						P				
Building materials and lumber wholesale								P		
Building paper and building board manufacturing								P		
Bulk petroleum stations and terminals wholesale								С		
Bus garaging and equipment maintenance						С		P		
Bus passenger terminals					P	P				
Business and management consulting services					P	P	С			
Business offices not elsewhere listed					P	P	С			
Business forms manufacturing								P		
Butter manufacturing								P		
С										
Cabinet making establishments						C		P		
Cable TV maintenance yard						C		P		
Cameras and photographic supplies retail					P	P	С			
Camping facilities									C	
Campgrounds group									C	
Candy and other confectionery products manufacturing								P		
Candy retail					P	P	C			
Canning and preserving of fruits, vegetables and seafoodsmanufacturing								P		
Canvas products manufacturing								P		
Carbon blackmanufacturing								С		
Cardboard, paperboard and diecut paper manufacturing								P		
Carpenter shops						С		P		
Carpet and rug cleaning, installation						P				

LAND USE CATEGORY	ZONI	ING DIS	TRICT	CONDIT	TIONAL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Carpet and rug manufacturing								P	
Catering establishment					P	P			
Cement (hydraulic) manufacturing								С	
Cemeteries						С			C
Ceramic wall and floor tile manufacturing								P	
Cereal preparations manufacturing								P	
Cheese (natural and processed) manufacturing								Р	
Chemicals and fertilizers mining								С	
Chemicals, industrial wholesale								С	
Chemicals, industrial organic and inorganic manufacturing								С	
Chewing gum manufacturing								P	
China, glassware and metalware retail					P	P	C		
Chiropractors, optometrists, and other similar health services					P	P	C		
Chocolate and cocoa products manufacturing								P	
Churches, synagogues and temples	P	P	P	P					P
Cigarettes and cigars manufacturing								P	
Cigarettes and cigarsretail					P	P	C		
Civic, social and fraternal associations					P	P	C		
Clay, ceramic and refractory minerals mining								С	
Clay refractories manufacturing								С	
Cleaning, polishing and sanitation preparations except soap and detergents manufacturing								С	
Clock, watch and jewelry repair services					P	P	C		
Clocks, watches, clockwork operated devices and parts manufacturing								Р	
Clothing factories								P	
Coffee roasting and coffee products manufacturing								Р	
Commercial and industrial machinery, equipment and supplies wholesale						С		P	
Commercial vegetable, flower and gardening						С			P
Commodity and security brokers,					P	P			

LAND USE CATEGORY	ZONI	NG DIS	FRICT	CONDIT	TIONAL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Communication equipment manufacturing								P	
Composting plants								С	
Computer service business residential	P	P	P	P					P
Computing, accounting, and office machines manufacturing								P	
Computing, accounting, office machine retail					P	P			
Concrete brick and block manufacturing								С	
Concrete products manufacturing								P	
Concrete plants								C	
Concrete construction and paving services						С		P	
Confectionery products and candy manufacturing								P	
Confectionery, nut and candy retail					P	P	C		
Confectionery wholesale						P		P	
Construction and lumber materials wholesale								P	
Construction, mining, and materials handling machinery and equipment manufacturing								P	
Construction equipment retail						С		P	
Convalescent, nursing and rest home services						P			
Convents	С	С	P	С					
Correctional institutions								C	
Cosmetics, perfumes and other toiletries manufacturing								С	
Costume jewelry, novelties, buttons, and miscellaneous notions manufacturing								P	
Cotton, manmade fibers, silk and wool weaving and manufacturing								P	
Cottonseed oil milling								C	
Cotton wholesale								P	
Country club	C	С	C			C			P
Crating and packing services						P		P	
Credit reporting, adjustment and collection services					P	P	С		
Credit unions and agricultural,					P	P			

LAND USE CATEGORY	ZONI	ING DIS	FRICT	CONDIT	TIONAL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Crematorium					C				C
Curtains and draperies manufacturing								P	
Curtains, draperies and upholstery retail					P	P			
Cutlery, hand tools and general hardware manufacturing								P	
Cut stone and stone products manufacturing								С	
D									
Dance halls					P	P			
Day care home adult	С	С	С		P	P			C
Day care home child	С	С	С		P	P			C
Dental equipment and supplies manufacturing								P	
Dental laboratory services					P	P			
Dental office					P	P	С		
Department stores					P	P			
Detective and protective services					P	P			
Diaper services					P	P		P	
Direct mail advertising services					P	P		P	
Direct selling organizations retail					P	P			
Discount and variety stores retail					P	P			
Disinfecting and exterminating services					P	P			
Distilling, rectifying and blending liquors								P	
Distribution commercial, 10,000 sq. ft. and under						С		P	
Dormitories			С			C			
Draperies, and curtains manufacturing								P	
Draperies, curtains and upholstery retail					P	P			
Drawing, rolling and extrusion of nonferrous metals manufacturing								С	
Dressmaking, millinery and tailoring					P	P			
Drug rehabilitation center						P			
Drug stores					P	P	С		
Drugs, drug proprietaries and druggist								P	

LAND USE CATEGORY	ZONI	ING DIS	FRICT	CONDIT	TIONAL	OR PERI	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Dry cleaning and pressing establishment					P	P	С		
Dry cleaning plants								P	
Dry goods haberdashery and wearing apparel					P	P			
Dry goods and notions wholesale								P	
Dude ranches									C
Duplicating, mailing and stenographic services					P	P		P	
Dwelling, in nonresidential structure					P				
Dwelling, mobile home on permanent foundation				P					
Dwelling, multi-family, garden apartments			P		P	P			
Dwelling, single-family	P	P	P		P	P			P
Dwelling, single-family attached, condominiums			P		P	P			
Dwelling, two-family and duplexes to include condominium ownership		С	Р		P	P			
Dyeing plants								P	
Е									
Earthenware, table and kitchen articles manufacturing								P	
Educational and scientific research services					P	P			
Eggs and poultry retail					P	P	С		
Electrical apparatus and equipment, wiring supplies, and construction materials wholesale						P		P	
Electrical contractor services					P	P			
Electrical appliance stores and repair					P	P			
Electrical appliances, phonographs, televisions, tape players and radio sets wholesale								P	
Electrical industrial apparatus manufacturing								P	
Electrical supplies retail					P	P			
Electrical transmission and distribution equipment manufacturing								P	
Electric generation plants								С	С
Electric utility maintenance yard			Ţ					P	_

LAND USE CATEGORY	ZONI	ING DIS	FRICT	CONDIT	TIONAL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Electric lighting and wiring equipment manufacturing								P	
Electrometallurgical products and processing manufacturing								P	
Electronic appliance stores and repair					P	P			
Electronic components and accessories manufacturing								P	
Electronic parts and equipment wholesale								P	
Employment services					P	P			
Engineering, planning and architectural professional services					P	P	C		
Engineering, laboratory, and scientific and research instruments and associated equipment manufacturing								P	
Engines and turbines manufacturing								P	
Envelope manufacturing								P	
Equipment and supplies for service establishments wholesale								P	
Equipment rental and leasing services						P		P	
Exhibition halls						P		P	
Explosives manufacturing								С	
Exterminating and disinfecting services					P	P			
Extraction of raw materials, rock crushing excavation and storage								С	
Extracts and flavoring syrups manufacturing								P	
Extrusion, drawing, and rolling of nonferrous metals manufacturing								P	
F									
Fabricated structural metal products manufacturing								P	
Fabricated wire products manufacturing								Р	
Fairgrounds						С			
Farm machinery and equipment retail						P		P	
Farm machinery and equipment manufacturing								P	
Farm machinery and equipment wholesale						P		P	 

LAND USE CATEGORY	ZONI	ING DIS	FRICT	CONDIT	ΓΙΟΝΑL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Farm supplies retail					C	P		P	
Farms, commercial forestry									P
Farms, grain crops									C
Farms, hay and alfalfa									C
Farms, fiber crops									C
Farms, fruits, nuts or vegetable									С
Farms, nursery stock						C			P
Feed or grain storage commercial or cooperative						С		P	
Feed and seed retail					P	P			
Felt goods manufacturing								P	
Fertilizers, agricultural hazardous retail						С		С	
Fertilizers, agricultural nonhazardous retail						P		P	
Fertilizers and chemicals mining								C	
Filling stations emergency towing and repair						P			
Fire protection and related activities					P	P		С	
Fish and seafoods retail					P	P			
Fish and seafoods wholesale						P		P	
Fish farms									C
Fish hatcheries									С
Fishing and hunting									P
Flat glass manufacturing								P	
Floor coverings retail					P	P			
Florists retail					P	P	C		
Flour and other grain mill products manufacturing								P	
Flour blending and preparing manufacturing								P	
Food and beverage service					P	P			
Food canning and packing establishments								P	
Food lockers, frozen	]				P	P			
Forests and orchards									P
Foundries, iron and steel manufacturing								С	
Foundries, nonferrous metals								С	

LAND USE CATEGORY	ZONI	NG DIST	rrict	CONDIT	IONAL	OR PERI	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Fraternal organizations and clubs					P	P	C		
Fraternity and sorority houses		C	C		P				
Freight forwarding services								P	
Frozen desserts and ice cream manufacturing								P	
Frozen desserts and ice cream retail					P	P	С		
Fruits and vegetables (fresh) wholesale								P	
Fruit stores and stands					P	P			
Fuel, except fuel oil and bottled gas retail					P	P			
Fuel oil retail						С	С	P	
Funeral homes and mortuaries					P	P			
Fur dressing and dyeing manufacturing								С	
Fur goods manufacturing								C	
Furniture and home furnishings wholesale								P	
Furniture (household) manufacturing								P	
Furniture (office) manufacturing								P	
Furniture retail					P	P	C		
Fur repair and storage services					P	P			
Furriers retail					P	P			
Furs (raw), hides and skins wholesale								С	
G									
Garden supplies and seed stores					P	P			
Garment repair, alteration and pressing services					P	P			
Gasoline service stations retail					P	P			
Gas pressure control stations								C	
Gas production plants								С	
Gas storage and distribution points								С	
Gas utility maintenance yard								С	
Gelatin and glue manufacturing								С	
General stores retail					P	P			
Gift shops					P	P	C		

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE										
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU		
Glass containers manufacturing								P			
Glass, flat manufacturing								P			
Glass, paint and wallpaper retail					P	P					
Go-cart tracks						C					
Golf courses						С			P		
Golf driving ranges						C			P		
Gravel and sand quarrying								С			
Grain wholesale								P			
Grains, feeds and hayretail						P					
Greases and lubricating oils manufacturing								С			
Green houses						P			P		
Greeting card manufacturing								P			
Grist milling services								P			
Groceries retail					P	P					
Groceries wholesale						P		P			
Group homes	С	С	С	С					C		
Gum and wood chemicals manufacturing								С			
Guns, howitzers, mortars and related equipment manufacturing								С			
Guns, small arms manufacturing								P			
Gymnasiums					C	P					
Gypsum products manufacturing								C			
Н											
Hardware retail					P	P					
Hardware wholesale						P		P			
Hardwood dimension and flooring manufacturing								P			
Hats, caps, and millinery manufacturing						С		P			
Health resorts						P			C		
Health and exercise spas					C	P			C		
Hearing aids, optical goods, orthopedic appliances and other similar devicesretail					Р	P					
Heating, air-conditioning and plumbing contracting services						P		P			
Heating and plumbing equipment and					P	P					

LAND USE CATEGORY	ZON	ING DIST	TRICT	CONDIT	TIONAL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	N
Heating, apparatus (except electrical and plumbing fixtures) manufacturing								P	
Heliport pads						С		С	C
Hides, skins and raw furs wholesale								P	
Hobby stores					P	P	С		
Holding and investment services					P	P	С		
Home occupations, customary	C	C	С						
Hospitals, clinics	С	C	C			P			
Hotels, including dining and meeting					P	P			
House furnishings, textile (except curtains and draperies) manufacturing								С	
Household appliances manufacturing								P	
Household appliance stores and repair shops					P	P			
Hunting and fishing									P
I									
Ice cream and frozen desserts manufacturing								P	
Ice cream retail					P	P	С		
Ice plants								P	
Ice retail					P	P			
Ice skating rinks, indoor						P			
Impound yards (storage over 24 hours)								P	
Industrial laundry and linen supply services								P	
Industrial leather belting and packing manufacturing								P	
Industrial and commercial machinery, equipment and supplies wholesale						P		P	
Industrial machinery and equipment manufacturing								P	
Industrial waste disposal								С	
Instruments for mechanical measuring and controlling except automatic temperature controls manufacturing								P	
Insurance agents and brokers services					P	P	C		
Insurance carriers					P	P			
Interior decorating shops, upholstery,					P	P			

LAND USE CATEGORY	ZONI	ING DIS	TRICT	CONDIT	TIONAL	OR PERI	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Investment and holding services					P	P			
J									
Janitorial services					P	P		P	
Jewelry and precious metals manufacturing						С		P	
Jewelry stores and watch repair					P	P	C		
K									
Kennels						P		P	
Kennels boarding						С		P	
Kennels breeding								С	
Knit goods manufacturing								P	
L									
Labor unions and similar labor organizations					P	P			
Lace goods manufacturing								P	
Lamp shades manufacturing								P	
Landscape contracting services						P		P	
Landscape nursery and garden supplies retail						P			
Launderette and laundromat self-service					P	P	С		
Laundering and dry cleaning pickup service						P		P	
Laundering and dry cleaning, self-service					P	P			
Lawn care services						P		P	
Leather goods and luggage stores					P	P			
Leather gloves and mittens manufacturing								P	
Leather tanning and finishing manufacturing								С	
Legal services					P	P	C		
Libraries	P	P	P		P	P			P
Lime products manufacturing								C	
Linen supply and industrial laundry services								P	
Linoleum, asphalted -felt-base, and other hard surface floor cover manufacturing								С	
Liquid petroleum gas wholesale								P	

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE										
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU		
Lockers, shelving, partitions and office and store fixtures manufacturing								P			
Locksmith services					P	P					
Logging operation and sawmills									C		
Lubricating oils and presses manufacturing								С			
Luggage manufacturing								P			
Lumber and building materials wholesale								P			
Lumber yards retail						P					
M											
Machine shops								P	<u> </u>		
Magazines and newspapers retail					P	P	C		İ		
Magazines, books, and newspapers distributing wholesale						P		P	l		
Mail order houses retail								P	İ		
Mailing, duplicating and stenographic services					P	P		P	ľ		
Malt liquors manufacturing								P			
Malt manufacturing								C			
Management and business consulting services					P	P					
Masonry, stonework, tile setting and plastering services						P		P	ľ		
Massage services					P	P			i		
Matches manufacturing								C			
Mausoleums						C			C		
Meat and meat packing products wholesale						P		P	I		
Meat packing manufacturing								C	Ī		
Meat markets					P	P	С				
Medical and surgical instruments and apparatus manufacturing								P	_		
Medical clinics					P	P					
Medical laboratory services					P	P		P			
Medical office					P	P	С				
Medicinal chemicals manufacturing								P			
Messenger service					P	P					

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE										
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU		
Metal coating, engraving and allied services manufacturing								P			
Metal mining services								С			
Metal ore mining								С			
Metal products, fabricated structural manufacturing								С			
Metals and minerals, except petroleum products and scrap wholesale								P			
Metals, nonferrous, rolling, drawing, and extrusion manufacturing								С			
Metal stamping manufacturing								P			
Metalworking machinery and equipment manufacturing								P			
Military administration or command centers						P		P			
Military communication centers						P		P			
Military defense installations						P		P			
Military training bases									C		
Millwork manufacturing								P			
Milk distribution stations								P			
Miniature golf course						P					
Mobile home parks, planned				P							
Mobile homes manufacturing								P			
Mobile homes on permanent foundation				P							
Mobile home sales								P			
Monasteries	C	C	P	С							
Monuments retail					P	P					
Mortician's goods manufacturing								P			
Motels and hotels					C	P					
Motion picture distribution services						P		P			
Motion picture production studios						P		P			
Motorcycles, repair, sales and rental						P					
Motor freight garaging and equipment maintenance								P			
Motor freight terminals						С		P			
Museums					P	P					
Musical instruments and supplies retail					Р	Р					
Musical instruments and parts						С		P			

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE										
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU		
N											
Newspapers and magazines retail					P	P	С				
Newspapers production and printing operations					P	P		P			
News syndicate services					P	P					
Newsstands					P	P	С				
Noodles, macaroni, spaghetti and vermicelli manufacturing								P			
Notions, dry goods wholesale								P			
Novelties, gifts and souvenirs retail					P	P					
Nursing home			C		P	P			C		
Nuts, bolts, screws, rivets, and washers, and screw machine products manufacturing								P			
0											
Officebusiness and professional					P	P		P			
Office and store fixtures, partitions, shelves and lockers manufacturing								P			
Office, computing and accounting machines manufacturing								P			
Office, computing, and accounting machines retail					P	P					
Office equipment and typewritersales and service					P	P					
Office furniture manufacturing								P			
Oilcloth, plastic fabric and vinyl products manufacturing								С			
Ophthalmic goods manufacturing								P			
Optical goods, hearing aids, orthopedic appliances and other similar devicesretail					P	P					
Optical goods factories								P			
Optometrists, chiropractors and other similar health services					P	P					
Ornamental iron works manufacturing								Р			
Orthopedic, prosthetic and surgical appliances and supplies manufacturing								Р			
Outdoor advertising services								P			
P											

	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Padding and upholstery filling manufacturing								P	
Paint and wallpaper retail					P	P			
Painting and paper hanging services					P	P			
Paints, varnishes, lacquers, enamels, and allied products manufacturing								С	
Paperboard containers and boxes manufacturing								P	
Paper coating and glazing manufacturing								С	
Paper, except building paper manufacturing								С	
Parking garages					P	P			
Parks, public	P	P	P	P	P	P	P	P	P
Pattern shop					P	P		P	
Paving mixtures manufacturing								С	
Pencil factories								P	
Pens, pencils and other office and artist's materials manufacturing								P	
Perfumes, cosmetics and other toiletries manufacturing								С	
Periodicals, publishing and printing						P		P	
Personal service shops					P	P			
Pet shops						P			
Petroleum bulk stations and terminals wholesale								С	
Petroleum pressure control stations								C	
Pets and pet grooming retail					P	P			
Pharmaceutical preparations manufacturing								P	
Photocopying shops					P	P	C	P	
Photoengraving					P	P		P	
Photofinishing services					P	P		P	
Photographic equipment and supplies manufacturing								P	
Photographic studios and services	С	C	C	C	P	P			
Photographic supplies and cameras retail					P	P			
Physicians' services					P	P	C		
Plant nurseries						P			P

LAND USE CATEGORY	ZONI	NG DIS	TRICT	CONDIT	TIONAL	OR PERI	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Planning, architectural and engineering professional services					P	P			
Plastering, masonry, stone work and tile setting services						P		P	
Plastic, fabric, vinyl products and oilcloth manufacturing								С	
Plastics materials and synthetic resins, synthetic rubber, synthetic and other manmade fibers (except glass) manufacturing								С	
Plastic products manufacturing								C	
Playfields and athletic fields						P			
Pleating, decorative and novelty stitching and tubing for the trademanufacturing								P	
Plumbing, air-conditioning contracting services					P	P			
Plumbing and heating equipment and supplies retail					P	P			
Plumbing and heating equipment and supplies wholesale						P		P	
Plumbing fixtures and heating apparatus (except electrical) manufacturing								P	
Plumbing showrooms					P	P			
Plywood and veneer manufacturing								C	
Porcelain electrical supplies manufacturing								Р	
Postal offices					P	P			
Pottery manufacturing								P	
Poultry and eggs retail					P	P			
Poultry and poultry products wholesale								Р	
Poultry and small game dressing and packing								С	
Prefabricating wooden buildings and structural members manufacturing								P	
Preserving and canning of fruits, vegetables and seafoods manufacturing								P	
Pressed and molded pulp goods manufacturing								С	
Primary smelting and refining of nonferrous metals manufacturing								C	

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Printing shops					P	P		P		
Printing, publishing, and engraving plants								Р		
Prisons								С		
Private clubs and lodges					P	P	C		С	
Processing waste and recovering fibers and flock manufacturing								С		
Professional equipment and supplies wholesale								P		
Professional offices not elsewhere listed					P	P				
Public utility collection offices					P	P				
Public utility substations	С	С	С	С	С	С		С	C	
Pulp manufacturing								С		
Q										
Quarries, excavation and rock removal operations								С		
Quarrying, stone								C		
R										
Race tracks									C	
Race tracks and courses vehicle								С		
Radioactive materials processing and storage manufacturing								С		
Radioactive waste materials disposal								С		
Radio broadcasting studios						С				
Radio, television and communication transmitting receiving or relay towers and facilities						С		С	С	
Radios, televisions, phonographs, recorders and tape players repair services					P	P				
Radios, televisions, phonographs, recorders and tape players retail					P	P				
Railroad equipment and maintenance yard								С		
Railroad equipment manufacturing								С		
Railroad freight terminals								P		
Railroad passenger terminals						P		P		
Raincoats and other waterproof outer garments manufacturing								P		
Real estate agents, brokers and					P	P				

LAND USE CATEGORY	ZUNI	ING DIS	ZONING DISTRICT CONDITIONAL OR PERMITTED US						
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	N
Reclaiming rubber								C	
Recreational camps									C
Recreational land uses not for profit									C
Recreation centers						P			
Recycling centers								P	
Refining and smelting (primary) of nonferrous metals								С	
Refining and smelting (secondary) of nonferrous metals and alloys								С	
Refrigerated warehousing (except food lockers)						Р		P	
Refuse incineration								С	
Religious camps and retreats									С
Research and development organizations								P	
Resorts (general)						P			C
Rest, nursing and convalescent home services					P	P			
Restaurants, shops consumption on-premises only					P	P	С		
Restaurants, drive-in, drive-through, car service						P			
Retail trade not elsewhere listed					C	P			
Retirement home			С			С			
Reupholstery and furniture repair services						С		P	
Rice milling								P	
Riding stables									C
Rifle ranges									C
Road maintenance yards								P	
Roadside stands temporary and seasonal						P			
Robes and dressing gowns manufacturing								P	
Roller skating rinksindoor						P			
Rolling, drawing and extrusion of nonferrous metals manufacturing								С	
Rolling of ferrous metals, blast furnaces and steel works								С	
Roofing and sheet metal contracting services						P		P	_

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Rooming and boarding houses						P				
Rubber footwear manufacturing								С		
Rubber products, fabricated manufacturing								С		
Rug and carpet cleaning and repair services						P				
Rug and carpet manufacturing								С		
S										
Sanatorium						P				
Sand and gravel quarrying								C		
Sanitary landfill								C		
Sanitary paper products manufacturing								С		
Sausages and other prepared meal products manufacturing								P		
Savings and loan associations					P	P	C			
Sawmills and logging operation									C	
Schools, other	С	C	С	С	С	С	C	С	C	
Schools, public	P	P	P	P	P	P	P	P	P	
Scientific and education research services					P	P				
Scrap and waste materials, nonmetallic wholesale								P		
Screw machine products and bolts, nuts, screws, rivets, and washers manufacturing								P		
Secondary smelting and refining of nonferrous metals manufacturing								С		
Second hand merchandise retail					С	P				
Security and commodity brokers, dealers, exchanges and services					P	P				
Seed treating								P		
Service industry machines manufacturing								P		
Sexual novelty retail								С		
Shades and venetian blinds manufacturing								P		
Sheet metal services						P		P		
Shelving, partitions, lockers and office and store fixtures manufacturing								P		
Shoe repair					P	P				

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Shoes retail					P	P				
Shoes wholesale						P		P		
Shortening, table oils, margarine, and other edible fats and oils manufacturing								С		
Signs and advertising displays manufacturing						P		P		
Silverware and plated ware manufacturing								P		
Skating rink						P				
Skeet shooting ranges									C	
Skins, hides and raw furs wholesale								C		
Small engine repair						P		P		
Smelting and refining (primary) of nonferrous metals								С		
Smelting and refining (secondary) of nonferrous metals								С		
Soaps and detergents (except specialty cleaners) manufacturing								С		
Social, civic and fraternal associations					P	P	C			
Social correctional, treatment and counseling services						С				
Solid waste transfer stations								C		
Sorority and fraternity houses		C	С		P					
Souvenirs, gifts and novelties retail					P	P	С			
Soybean oil milling								С		
Sporting, toys, amusement and athletic goods manufacturing								P		
Sporting goodsretail					P	P				
Sports complexes						С			C	
Stadiums						C			C	
Stationeryretail					P	P				
Steel pipe and tubes manufacturing								P		
Steel wire drawing, steel nails and spikes manufacturing								P		
Steel works, blast furnaces and the rolling of ferrous metals								С		
Stenographic, duplicating, and mailing services					P	P		P		
Stone products and cut stone manufacturing								С	_	

LAND USE CATEGORY	ZONI	NG DIS	TRICT	CONDIT	TIONAL	OR PER	MITTED	USE	
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU
Stone work, masonry, tile setting and plastering services						P		P	
Storage and warehousing of nonhazardous products						P		P	
Storage and warehousing of hazardous products								С	
Storage facilityself service						P		P	
Store and office fixture, lockers, partitions and shelving manufacturing								P	
Stores art, book, school supply and stationery					P	P			
Substance abuse facility						C			
Sugar refining manufacturing								C	
Surgical and medical instruments and apparatus manufacturing								P	
Swimming clubs						P			С
Synthetic resins, synthetic rubber, elastic materials, synthetic and other manmade fibers (except glass) manufacturing								С	
T									
Tailor shops					P	P	С		
Tanks (military) and tank components manufacturing								С	
Taverns and lounges					P	P			
Taxicab dispatch					P	P			
Telegraph service station					P	P			
Telephone business office					P	P			
Telephone exchange stations						P		P	
Telephone maintenance yard								P	
Telephone relay towers (microwave)								С	
Television broadcasting studios						C			
Television, radios, phonographs, recorders and tape playersmanufacturing								P	
Television, radios, phonographs, recorders and tape players repair service					P	P			
Television, radios, phonographs, recorders and tape players retail					Р	P			
Tennis clubs						P			C

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE									
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU	
Testing, research, and development services					P	P				
Theaters, legitimate					P	P				
Theaters, motion pictures, indoor					P	P				
Theaters, motion picture, outdoor						C			C	
Threads and yarns manufacturing								P		
Tile setting, masonry, plastering and stone work services						P		P		
Tire cord and fabric manufacturing								С		
Tires and inner tubes manufacturing								С		
Tires and inner tubes wholesale						P		P		
Title abstracting services					P	P				
Tobacco stores					P	P	С			
Tobacco and snuff manufacturing								С		
Tobacco leaf wholesale								P		
Tobacco stemming and removing								P		
Toys, amusement, sporting and athletic goods manufacturing								P		
Transportation equipment and supplies (except motor vehicles) wholesale						P		P		
Trap and skeet shooting ranges									С	
Travel arranging services					P	P				
Truck terminals								P		
Truck wash services						C		P		
Turbines and engines manufacturing								P		
U Upholstery, draperies and curtains retail					P	P				
Upholstery filling and padding manufacturing								P		
Used car/truck retail						P				
V										
Variety stores					P	P	С			
Vegetables and fruit retail					P	P				
Vegetables and fruit wholesale						P		P		
Vegetable oil milling (except cottonseed and soybean)								С		
Veneer and plywood manufacturing		Ţ	Ī					С	_	

LAND USE CATEGORY	ZONING DISTRICT CONDITIONAL OR PERMITTED USE										
	R-1	R-2	R-3	R-4	B-1	B-2	B-3	I-1	NU		
Venetian blinds and shades manufacturing						P		P			
Veterinary clinics					C	P			C		
Video tapes, equipment sales and rental					P	P	С				
Vinyl products, plastic fabric and oilclothmanufacturing								С			
Vitreous china plumbing fixtures, china, earthware fillings and bathroom accessories manufacturing								С			
Vitreous china, table and kitchen articles manufacturing								С			
W											
Wallpapermanufacturing								С			
Wallpaper and paintretail					P	P					
Water treatment, plants								С			
Water utility maintenance yard								P			
Water well drilling services						P		P			
Welding shops						C		P			
Welfare and charitable services					P	P					
Wet corn milling								C			
Window cleaning services					P	P					
Wine, beer, and alcoholic beverages wholesale						P		Р			
Wine, brandy and brandy spirits manufacturing						С		P			
Wire products (fabricated) manufacturing								P			
Wooden containers manufacturing								P			
Wool preserving manufacturing								С			
Wool and mohairwholesale								P			
Worm farms									С		
Y											
Yarns and threads manufacturing								P			
Z											
Zoos						С			С		

 $(Ord.\ No.\ 2709\ \S1,\ 1-14-02;\ Ord.\ No.\ 2711\ \S\S1--2,\ 1-14-02;\ Ord.\ No.\ 2747\ \S1,\ 6-10-02;\ Ord.\ No.\ 2841\ \S2,\ 7-14-03;\ Ord.\ No.\ 2928\ \S1,\ 9-20-04;\ Ord.\ No.\ 3068\ \S1,\ 1-9-06)$ 



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# PHASE I ENVIRONMENTAL SITE ASSESSMENT

Union Corporate Center Progress Drive Union, Missouri 63084

Terranext Project No. 17102605

# **Prepared For:**

Missouri Department of Natural Resources Brownfields/Voluntary Cleanup Program PO Box 176 Jefferson City, Missouri 65101

Prepared By:

Terranext, LLC 11904 Grandview Road Grandview, Missouri 64030

January 28, 2010

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MO Dept. of Natural Resources

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#### **EXECUTIVE SUMMARY**

Terranext, LLC (Terranext) prepared this Phase I Environmental Site
Assessment (ESA) report to summarize the Phase I ESA activities performed at
the Subject Property located at Progress Drive, Franklin County, Union, Missouri.
A summary of the findings for this Phase I ESA is as follows:

- Historical recognized environmental conditions (RECs) were presented in an October 1997 Environmental assessment report. These RECs are associated with a private residence that is not part of the current lots that comprise the Subject Property.
- An environmentally sensitive (wetlands) area exists north of the Subject Property.
- The Union Corporate Center contains approximately 13 light industrial businesses including construction, tool and die, machinery and manufacturing companies. The existing businesses in the Union Corporate Center may store and transport quantities of hazardous material; however, no violations have been recorded. A list of the current business and owners are presented in Appendix 2.

It is Terranext's professional opinion that these findings do not pose an environmental concern to the lots that comprise the Subject Property; however it is unclear at this time whether the RECs associated with the private residence presented in the October 1997 Environmental Assessment Report have affected the soil and groundwater.

The results of this Phase I ESA indicate the currently undeveloped lots comprising the Subject Property have historically been undeveloped farmland and grazing land. No activities associated with present and historical activities appear to have produced RECs on the Subject Property.

## 1.0 INTRODUCTION

# 1.1 Purpose

The purpose of a Phase I ESA is to research and compile readily available information and data related to existing and historical land use at the Subject Property and surrounding property so the uncertainties associated with environmental impacts to the Subject Property can be minimized and/or identified prior to redevelopment.

## 1.2 Scope of Services

Ms. Jennifer Lamons, Missouri Department of Natural Resources (MDNR) Project Manager, authorized Terranext to perform this Phase I ESA which included the following scope of work:

#### Phase I

- A field reconnaissance to photograph and document existing conditions on the Subject Property and properties adjacent to the Subject Property for evidence of potential impacts;
- Interviews with individuals knowledgeable of the Subject Property and/or surrounding properties;
- Review of available Subject Property ownership records;
- Review of specific environmental regulatory databases and other listings;
- Review of available historical Sanborn Maps<sup>®</sup>, historic aerial photographs,
   city street directories, and/or other historical records;
- Review of published literature concerning site area geology, soils, and hydrology.
- Completion of the Phase I ESA in compliance with the American Society for Testing and Materials (ASTM) E 1527-05 Standard and Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) regulation.

The Phase I ESA did not include the following non-scope considerations (not intended to be an all-inclusive list):

- Asbestos-containing building materials (ACBM) Survey;
- Lead-based paint (LBP) Survey;
- o Mold Survey;
- o Air quality (indoor or outdoor), including radon;
- Cultural, historic, and/or ecological resources;
- o Endangered species;
- Drinking water quality;
- Biological agents;
- Regulatory compliance; and
- Testing or sampling of any media on the Subject Property or surrounding properties, including (but not limited to) soil, ground water, surface water, air, and building materials.

# 1.1 Significant Assumptions

Terranext utilized Environmental Data Resources (EDR) to obtain a listing of available federal and state database records, aerial photographs, and Sanborn<sup>®</sup> fire insurance maps of the Subject Property. Although Terranext researched these documents to the extent available, additional documents may exist that Terranext did not review.

Results of the Phase I ESA are based upon information obtained by Terranext during the field reconnaissance, interviews, historical research, and database search results. The information obtained is assumed to be from reliable sources; however, Terranext was not retained to verify publicly-available information. Therefore, Terranext assumes no responsibility or liability for errors in the public data utilized, statements from sources outside Terranext, or developments resulting from situations outside the scope of this project. In addition, Terranext

assumes no responsibility for conditions not readily apparent or identifiable at the site during the field reconnaissance.

# 1.2 Limitations and Exceptions

The Phase I ESA was not intended to represent an exhaustive research of all potential hazards which may exist at the Subject Property or adjacent properties. All conclusions are based on available and readily obtainable information, and are not to be considered scientific certainties but opinion-based on professional judgment of the significance of the data gathered during the course of the ESA.

Specifically, Terranext does not and cannot represent that the Subject Property contains no hazardous or toxic materials or other latent conditions beyond those observed by Terranext during its site assessment. In addition, this report does not purport to be representative of future site conditions or events. Situations or activities which occur after this assessment that result in environmental impairment are not relevant to this assessment.

## 1.3 Special Terms and Conditions

The terms and conditions of this report are governed by the Missouri Environmental Assessment Contract No. C306086002. No additional terms and conditions were developed for completion of this Phase I ESA.

#### 1.4 User Reliance

This report has been prepared for the exclusive use and reliance of the MDNR and the City of Union, its lenders, and other authorized agents. Use or reliance by any other party without the written authorization of the above parties is prohibited.

## 2.0 SUBJECT PROPERTY

# 2.1 Description of Subject Property

#### 2.1.1 Location

The Subject Property is actually undeveloped lots in the Union Corporate Center Industrial Park north of Prairie Dell Road in Union, Franklin County, Missouri (Figure 1).

# 2.1.2 Subject Property and Vicinity Characteristics

The Subject Property is undeveloped lots that total approximately 156 acres in size and is located in a light industrial district (Union Corporate Center). The light industrial district was previously farmland and development began in 2000. Since initial development in 2000, approximately thirteen commercial and light industrial businesses have been constructed. A list of the current businesses and owners are presented in Appendix 2. Currently additional roads are being constructed in the district (Figure 2).

# 2.2 Current Use of the Subject Property

The Subject Property currently is undeveloped. Photographs of the Subject Property are included in Appendix 9.

# 2.3 Structures and Improvements on Subject Property

Currently there are no structures on the undeveloped lots comprising the Subject Property.

# 2.4 Current Use of Adjoining Properties

The current uses of the properties adjacent to the Subject Property and the new industrial park are as follows:

# Phase I ESA Progress Drive, Union, MO

# January 2010

North: Undeveloped land and Highway 50 further to the north.

South: Prairie Dell Road and farmland further to the south.

East: Undeveloped land and a residential subdivision further to the

northeast.

West Farmland and residential area further to the west.

#### 3.0 USER-PROVIDED INFORMATION

#### 3.1 Title Records

A property title search was not conducted. The Subject Property was sold to the City of Union by Dennis Frick in 1993.

# 3.2 Environmental Liens or Activity and Use Limitations (AULs)

No environmental liens or AULs have been found associated for the Subject Property.

# 3.3 Historical Environmental Reports or Permits

The City of Union provided Terranext with a previous Phase I ESA conducted in October 1997 by NPN Environmental Engineers, Inc. Terranext reviewed this report and will reference it in the following sections. The report is presented in Appendix 2 and conclusions indicate recognized environmental conditions. However, these conditions were associated with a portion of the Subject Property that has since been sold to a private owner and therefore not part of the current Subject Property. It is unclear if the RECs presented in the report have affected the soil and groundwater at the private residence.

# 3.4 Property Value Estimation

Property value estimation was provided by the owner.

#### 4.0 RECORDS REVIEW

#### 4.1 Standard Environmental Record Sources

Terranext reviewed federal and state environmental regulatory records to determine the environmental regulatory status of facilities identified within specific distances of the Subject Property. The databases reviewed and search distances for each database are designated by the ASTM Standard Practice E 1527-05. Terranext utilized EDR to obtain a listing of available federal and state records. A copy of the EDR report is included in Appendix 3. Databases searched and the search distances for each database are as follows:

Database	Description	Search Radius (miles)
Federal Databases		(minos)
NPL	National Priority List	1.0
Delisted NPL	NPL Deletions	0.5
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	0.5
CERC-NFRAP	CERCLIS - No Further Remedial Action Planned	0.5
CORRACTS	Corrective Action Report	1.0
RCRIS-TSD	Resource Conservation and Recovery Information System  - Treatment, Storage, and Disposal Facilities	0.5
RCRA-LGG/SQG	Resource Conservation and Recovery Act – Large/Small Quantity Generator	0.25
Institutional/	Restrictions placed on ground water, construction, and/or	TP
Engineering Controls	property use.	
ERNS	Emergency Response Notification System	TP
State/Tribal Databa	ses	. 5
SHWS	State Hazardous Waste Sites (Promulgated Sites) – State/Tribal equivalent to NPL and/or CERCLIS	1.0
SWF/LF	Solid Waste Facilities/Landfill	0.5
LUST/LAST	Leaking Underground/Aboveground Storage Tank Sites	0.5
UST/AST	Registered Underground/Aboveground Storage Sites	0.25
Institutional/ Engineering	Restrictions placed on ground water, construction, and/or property use.	TP
Controls	property doe.	
VCP	Voluntary Cleanup Program	0.5
Brownfields	Targeted Brownfield Assessment sites	0.5
NOTES: TP - Target Propert		

The Subject site was not listed in the EDR Radius Map Report. Only one facility was listed in the report as is presented below.

 Dimensional Magnets, Inc., located at the intersection of College and Prairie Dell Road was listed in the RCRA-NonGen and FINDS databases.
 This site is not considered an environmental concern.

Thirty-five facilities were identified as "orphan sites" due to poor or inadequate address information. No sites listed appear to be adjacent to the Subject Property and these orphan sites do not appear to impact the Subject Property at this time.

# 4.2 Additional Environmental Record Sources

No additional environmental records were obtained for this Phase I.

# 4.3 Physical Setting Sources

Terranext reviewed numerous sources to obtain geological and hydrogeological physical setting sources, as documented in the following sections.

# 4.3.1 Geology

Surface features were determined by review of the United States Geological Survey (USGS) 7.5-minute series quadrangle map for Union, Missouri and confirmed during the field reconnaissance (Figure 1, Section 12.0). The topography of the Subject Property is generally slopes towards the north. The elevation of the Subject Properties is ranges from 560 feet to 630 feet above sea level. Surface geology consists of silt and silty clay loam which demonstrate slow infiltration rates.

According to the Missouri Water Atlas, the state of Missouri is located in the Interior Highlands physiographic province of the United States and Franklin

County is situated in the Ozark region of Central Missouri. Based on the 1979 Geologic Map of Missouri, the geology of Franklin County consists of unconsolidated fluvial and alluvial deposits overlaying Ordovician bedrock including the Cotter-Jefferson City Dolomite and Gasconade Formation. The assumed regional ground water flow direction in the shallow unconsolidated deposits is to the north toward the creek adjacent to the north of the Subject Property and eventually north towards the Bourbuese River.

# 4.3.2 Hydrogeology

Ground water flow in the Subject Property area is assumed north towards the Bourbuese River.

The EDR report includes a summary of registered water wells within 1 mile of the Subject Property. Two water supply wells are registered in the Missouri State database, including a well and storage tower adjacent to the southeast of the Subject Property. The other state registered water supply well is located within 1 mile to the west of the Subject Property. Franklin County Public Water Supply District (PWSD) #3 has seven wells registered in the Federal database within 1 mile of the Subject Property. The City of Union receives its public water supply from these public water supply wells completed in a bedrock aquifer. The registered water supply wells in the EDR report are not considered an environmental concern.

According to the field reconnaissance, a creek was observed to the north of the Subject Property and the Bourbuese River is located approximately ½ mile to the north. The Subject Property does not appear to be located in the designated floodplain associated with the Bourbuese River. Sensitive environments were not identified at the Subject Properties during the Phase I field reconnaissance; however national wetland inventory land and a retention pond is located adjacent to the north of the Subject Property.

The FEMA floodplain map of Union, Missouri does not encompass the Subject Property. The 1997 ESA report noted the 100 year floodplain located north of the Subject Property.

## 4.4 Historical Use of Subject Property

Based on a review of the October 1997 Environmental Assessment report, historical aerial photographs and an interview with the Director of Economic Development for the City of Union, Joseph Graves, the Subject Property was historically undeveloped farmland. The Subject Property was sold to the City of Union by Dennis Frick in 1993 and some light industrial construction started in 2000.

## 4.4.1 Aerial Photographs

Terranext obtained six aerial photographs from EDR (1953, 1984, 1990, 1995, 2005 and 2006). Copies of the aerial photographs are included in Appendix 4.

The 1953, 1984, 1990 and 1995 aerial photographs show the Subject Property to be primarily farmland. A private residence is shown north of Prairie Dell Road and appears to be the location where 1997 ESA report found the recognized environmental conditions. This portion has since been sold to a private entity and is not part of the current Subject Property.

The 2005 aerial photograph shows the recent development of the Union Corporate Center industrial park in addition to the private residence noted in earlier aerial photographs. Nine recent building are shown, as well as, the newly constructed Progress Drive and Corporate Drive. The City water well and storage tower is also apparent.

The 2006 aerial photograph shows more development of the Union Corporate Center industrial park in addition to the private residence noted in earlier aerial

photographs. An additional 3 buildings have been constructed since the 2005 flight year.

## 4.4.2 Sanborn® Fire Insurance Maps

Terranext attempted to obtain historic Sanborn® Fire Insurance Maps from EDR. The Subject Site was unmapped in the Sanborn Library.

## 4.5 Historical Use of Adjoining Properties

Historical use of the adjoining properties appears to have not significantly changed.

No former gas stations were noted on adjacent properties. Farmland and residences are located to the west, south, and north. Currently there is light industrial land use in the Union Corporate Center area where the various lots of the Subject Property are located. A residential subdivision is located northeast of the Subject Property.

#### 5.0 FIELD RECONNAISSANCE

## 5.1 Methodology and Limiting Conditions

Terranext has completed this Phase I ESA in compliance with the (American Society for Testing and Materials) ASTM E 1527-05 Standard and Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) regulation. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report.

Terranext performed a field reconnaissance of the Subject Property on December 17, 2009. The purpose of the field reconnaissance was to observe and document evidence of recognized environmental conditions on the Subject Property and land use of adjacent properties, as stated in Section 1.0. Photographs were taken during the field reconnaissance, copies of which are included in Appendix 6. A copy of the field notes is included in Appendix 7.

# 5.2 General Setting

The Subject Property is comprised of undeveloped lots in a light industrial park north of Prairie Dell Road (Figure 1). The undeveloped lots are primarily comprised of grassland which historically was used for farming and cattle grazing.

#### 5.3 Interior/Exterior Observations

#### 5.3.1 Hazardous Substances and Petroleum Products

No visible hazardous substances or petroleum products were observed on the surface at the Subject Property during the field reconnaissance.

#### 5.3.2 Unmarked Hazardous Substance Containers

No unmarked hazardous substance containers were observed on the surface at the Subject Property during the field reconnaissance.

#### 5.3.3 Storage Tanks

No storage tanks were observed on the surface at the Subject Property during the field reconnaissance.

#### 5.3.4 Odors

No strong, pungent, or noxious odors were detected on the Subject Property during the field reconnaissance.

## 5.3.5 Pools of Liquid

No pools of liquid were observed on the Subject Property during the field reconnaissance.

#### 5.3.6 Drums

No drums were observed on the Subject Property during the field reconnaissance.

#### 5.3.7 Indication of PCBs

No indications of PCBs were observed on the Subject Property; however the 1997 ESA report indicated a pole mounted transformer located at the private residence. According to the report, no leaking associated with this transformer had occurred.

#### 5.3.8 Pits, Ponds, and Lagoons

Drainage ditches were observed on the Subject Property; however they were dry during the field reconnaissance.

#### 5.3.9 Stained Soil or Pavement

No evidence of stained soil or pavement due to environmental impacts was observed on-site during the field reconnaissance.

#### 5.3.10 Stressed Vegetation

No evidence of stressed vegetation due to environmental impacts was observed on-site during the field reconnaissance.

#### 5.3.11 Solid Waste

Significant solid waste material was not observed on the Subject Property during field reconnaissance.

#### 5.3.12 Waste Water

No evidence of waste water was observed on the Subject Property during the field reconnaissance.

#### 5.3.13 Wells

No wells were observed on the Subject Property; however a public water supply well and storage tower was observed adjacent to the southeast of the Subject Property.

#### 5.3.14 Septic Systems

No evidence of a septic system was observed on the Subject Property during the field reconnaissance.

#### 5.4 Interior Observations

No buildings exist on the undeveloped lots that comprise the Subject Property.

#### 6.0 INTERVIEWS

#### 6.1 Interview with Owners

The City of Union Director of Economic Development, Mr. Joseph Graves completed an environmental questionnaire regarding the Subject Property. Based on the questionnaire, no known environmental issues are associated with the Subject Property. The only known environmental concerns were found in the October 2007 Environmental Assessment report and concern the private residence located within Union Corporate Center complex. This private residence is scheduled for demolition. The questionnaire is presented in Appendix 2. Mr. Graves also stated that he knew of no environmental concerns since the October 1997 Environmental report and light industrial construction began in 2000. Future uses of the lots that comprise the Subject Property include new light industrial businesses.

#### 6.2 Interview with Site Managers

No current site managers are present at the Subject Property.

#### 6.3 Interview with Occupants

No current occupants are present at the Subject Property.

#### 6.4 Interviews with Others

Terranext interviewed the City of Union Fire Department and to their knowledge they have not responded to any hazardous material spills or accidents at the Union Corporate Center.

Terranext attempted to contact the owners of the existing businesses in the Union Corporate Center. The successful interviews are presented below.

Terranext interviewed personnel at Frueh Services, Inc., a current business in the Union Corporate Center, and to their knowledge no hazardous material spills or hazardous waste dumping has occurred at their property or within the Union Corporate Center.

Terranext interviewed Ms. Donna Long of Missouri Gas and Energy, a current business in the Union Corporate Center, and to her knowledge no hazardous material spills, hazardous waste dumping or environmental incidents have occurred at their property or nearby.

Terranext interviewed Mr. Ricky Rushing of Turn Key Tool & Die, a current business in the Union Corporate Center, and to his knowledge no hazardous material spills or environmental incidents have occurred at their property or nearby.

#### 7.0 FINDINGS AND OPINION

Terranext, LLC (Terranext) prepared this Phase I Environmental Site
Assessment (ESA) report to summarize the Phase I ESA activities performed at
the Subject Property located along Progress Drive, Franklin County, Union,
Missouri. A summary of the findings for this Phase I ESA is as follows:

- Historical recognized environmental conditions (RECs) were presented in an October 1997 Environmental assessment report. These RECs are associated with a private residence that is not part of the current lots that comprise the Subject Property.
- An environmentally sensitive (wetlands) area exists north of the Subject Property.
- The Union Corporate Center contains approximately 13 light industrial businesses including construction, tool and die, machinery and manufacturing companies. The existing businesses in the Union Corporate Center may store and transport quantities of hazardous material; however, no violations have been recorded. A list of the current business and owners are presented in Appendix 2.

It is Terranext's professional opinion that these findings do not pose an environmental concern to the lots that comprise the Subject Property; however it is unclear at this time whether the RECs associated with the private residence presented in the October 1997 Environmental Assessment Report have affected the soil and groundwater.

#### 8.0 CONCLUSIONS

Terranext has completed this Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-05 and EPA AAI regulation for the North Building located along Progress Drive, Franklin County, Union, Missouri. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report.

The results of this Phase I ESA indicate the currently undeveloped lots comprising the Subject Property have historically been undeveloped farmland and grazing land. No activities associated with present and historical activities appear to have produced RECs on the Subject Property.

Due to the findings of this Phase I assessment including the undeveloped nature of the lots comprising the Subject Property and the relatively recent historical age of development within Union Corporate Center, Terranext recommends no additional investigation at this time.

#### 9.0 DEVIATIONS AND/OR DATA GAPS

Terranext was unable to obtain historic information of the Subject Site back to 1940. However Terranext was able to obtain historical information back to 1953 and does not believe this data gap is critical to the conclusions of this Phase I ESA report as it appears the Subject Property was vacant farmland until the development occurred in the 2000.

#### 10.0 REFERENCES

**Brownfield Assessment Application** 

Geologic Map of Missouri, 1979.

EDR Radius Map with GeoCheck<sup>®</sup>, Union Corporate Center, Progress Drive, Union, MO 63084, December 11, 2009.

EDR Aerial Photo Decade Package, Union Corporate Center, Progress Drive, Union, MO 63084, December 11, 2009.

EDR Certified Sanborn® Map Report, Union Corporate Center, Progress Drive, Union, MO 63084, December 11, 2009.

City of Union Web site

Phase I Environmental Site Assessment, Site 2 – Prairie Dell Road Property, Union Missouri 63084, October 1997.

#### 11.0 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

I, Christopher Kinn, declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the Subject Property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signed:

C215:

Christopher Kinn, RG

**Director, Midwest Operations** 



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#### 3.3.1 Nonattainment Areas

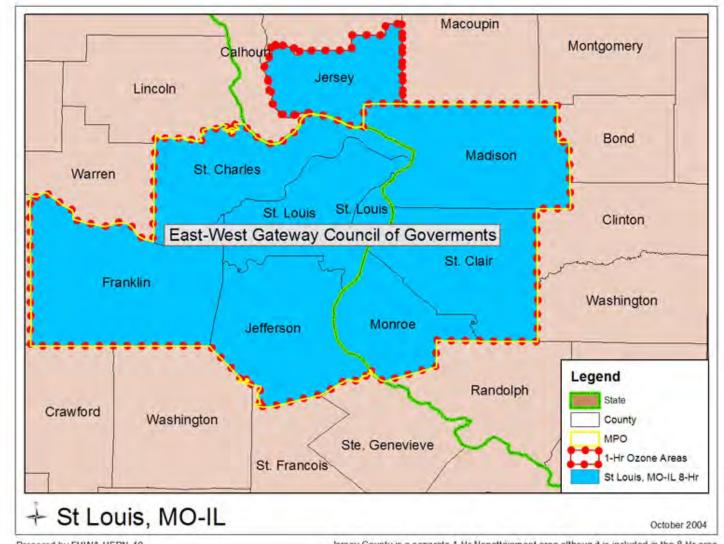
**Air Toxics CMAQ** Conformity

#### Str. Louis, MO-IL 8-hour Ozone Nonattainment Area Map

- Amadorcalverasco,
- CA
- Chico, <u>CA</u>

#### Feedback

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Prepared by FHWA-HEPN-40

Jersey County is a separate 1-Hr Nonattainment area althoug it is included in the 8-Hr area

In is map shows the boundaries of the designated St Louis, MO-IL 8-hour ozone nonattainment area. It includes the boundaries of associated 1-hour ozone nonattainment and/or maintenance areas, as well as any associated MPOs. The map is intended to depict the extent of 8-hour ozone nonattainment in this area, and Now the boundaries of the 8-hour area, 1-hour area, and the MPO planning area relate to each other."

St. Louis, MO-IL 8-hour Ozone Nonattainment Area <u>IN</u>

- Jacksonco,
- ILLINOIS
- Laporte, <u>IN</u>
- Jersey Co Madison Co
- Muncie,
- Monroe Co

http://www.fhwa.dot.gov/environment/air\_quality/conformity/reference/maps/ozone\_1997/moil\_stlouis.cfm 11/01/2010

```
St. Louis, MO-IL 8-hour Ozone Nonattainment Area Map - Ozone 1997 - MAPS - Reference - Conformity ... Page 2 of 4
                           ■ St Clair Co
    Elkhart,
    <u>IN</u>
                  MISSOURI
  • Terrehaute,
                          ■ Franklin Co
    <u>IN</u>
                          ■ Jefferson Co
    Louisville,
    KYIN
                          ■ St Charles Co
    Rouge,
                          ■ St Louis
    <u>LA</u>

    Worcester,

                          ■ St Louis Co
    St Louis, MO-IL 1-hour Ozone Maintenance Area Springfieldwmass.
                  ∘ ILLINOIS
    MA
    Baltimore,
                          Madison Co
    MD
                          ■ Monroe Co
    MD
                          ■ St Clair Co
    Washingtoncoeac. 

MISSOURI
    Hancockknoxlincolnwaldocos 

Franklin Co
    ME
                          ■ Jefferson Co
  • Portland,
                          ■ St Charles Co
    ME
    Alleganco,
                         St Louis
                          ■ St Louis Co
    Bentonharbor,
    MI Jersey Co, IL 1-hour Ozone Maintenance Area
    Benzieco,
                 ILLINOIS
    MI
                           Jersey Co
    Cassco,
            East-West Gateway Council of Governments
    ■ Madison Co
  • Flint,
    MI
                          ■ Monroe Co
    Grandrapids.
                           ■ St Clair Co
    MI

    MISSOURI

    Huronco,
    MI
                          ■ Franklin Co
    Battlecreek,
                          ■ Jefferson Co
    MI
    Eastlansing,
                          ■ St Charles Co
                          St Louis
    Masonco,
                          ■ St Louis Co
  • Muskegon,
    MI
  • Stlouis,
    MOIL
    Rockhill,
    NCSC
    Fayetteville,
    NC
    Highpoint,
    Haywoodswaincos,
    <u>NC</u>
    Lenoir,
    NC

    Hill,

    NC
    Mount,
    NC
    Bostonmanchesterportsmouth,
    NH

    <u>Lasvegas</u>,

    NV
    Longisland,
    NYNJCT

    <u>Troy</u>,

    NY
  • Buffalo
     Niagarafalls,
    <u>NY</u>
    Essex,
    Jamestown,
```

**Air Toxics CMAQ** Conformity

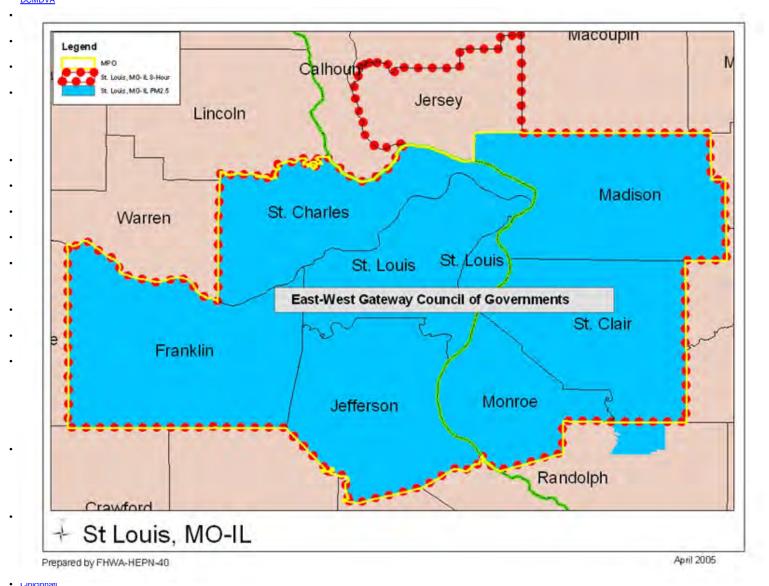
 $\underline{\mathsf{FHWA}} \to \underline{\mathsf{Environment}} \to \underline{\mathsf{Air}\ \mathsf{Quality}} \to \underline{\mathsf{Conformity}} \to \underline{\mathsf{Reference}} \to \underline{\mathsf{Maps}} \to \underline{\mathsf{PM25}\ \mathsf{1997}}$ 

#### Strictions, MO-IL PM2.5 Nonattainment Area Map

- Joaquin, CA
- Washington, DCMDVA

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Feedback



This map shows the boundaries of the designated St. Louis, MO-IL PM2.5 nonattainment area. It includes the boundaries of associated 8-hour ozone nonattainment ateasons well as any associated MPOs. The map is intended to depict the extent of PM2.5 nonattainment in this area, and how the boundaries of the PM2.5 area, 8-Mountainea, and the MPO planning area relate to each other."

Steubenville

St. Louis, MO-IL PM2.5 Nonattainment Area

Weirton. **OHWV** 

- ILLINOIS
- Canton
- Madison Co
- Massillon, OH ■ Monroe Co
  - Randolph Co (P)

St. Louis, MO-IL PM2.5 Nonattainment Area Map - Pm25 1997 - MAPS - Reference - Conformity - Air Q... Page 2 of 2 ■ St Clair Co Cleveland MISSOURI Akron ■ Franklin Co Lorain, ■ Jefferson Co OH Columbus, ■ St Charles Co OH St Louis <u>Dayton</u> ■ St Louis Co Springfield.
OH St. Louis, MO-IL 8-hour Ozone Nonattainment Area OH **Philadelphia** • ILLINOIS ■ Jersey Co ■ Madison Co Atlanticcity, **PANJMDDE** ■ Monroe Co • Harrisburg ■ St Clair Co Lebanon MISSOURI Carlisle, ■ Franklin Co PA ■ Jefferson Co Johnstown, ■ St Charles Co <u>PA</u> Lancaster, ■ St Louis <u>PA</u> ■ St Louis Co Liberty East-West Gateway Council of Governments Clairton, • ILLINOIS PA • Pittsburgh ■ Madison Co Beavervalley, ■ Monroe Co ■ St Clair Co Reading, MISSOURI PA York, ■ Franklin Co <u>PA</u> ■ Jefferson Co Chattanooga, **TNGA** St Charles Co Knoxville, ■ St Louis <u>TN</u> ■ St Louis Co <u>Huntington</u> Ashland, **WVKYOH** Martinsburg WVMD • Parkersburg **WVOH** Wheeling, **WVOH** 

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Charleston, WV

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#### NATIONAL CLIMATIC DATA CENTER 151 PATTON AVENUE ROOM 120 ASHEVILLE, NC 28801-5001 (NCDC)

**PHONE**: (828) 271-4800 **INTERNET**: orders@ncdc.noaa.gov **FACSIMILE**: (828) 271-4876 **WEB site**: http://www.ncdc.noaa.gov

#### November 1998

#### **CLIMATIC WIND DATA FOR THE UNITED STATES**

The climatic wind data contained in this summary was extracted from the NCDC's Local Climatological Data publication, Navy & Air Force climatic briefs, and other sources. Locations are not all inclusive and wind data may be available for sites not listed in this summary. The total period of this summary is 1930-1996. The period of record (POR) for which wind data is summarized varies for individual sites and may begin and end at any time during the 1930-1996 period. All available wind data is provided regardless of POR or source. Updated data for many sites can be obtained from post 1996 Local Climatological Data annual publications.

In the table, prevailing wind directions (DIR) are given in compass points; mean wind speeds (SPD) and peak gust (PGU) are in miles per hour (mph). When peak gust (PGU) wind velocities are not available, fastest-mile or 5-second winds may be substituted. This will be indicated by a \$ for fastest-mile and # for 5-second winds preceding PGU (ie: \$PGU = fastest-mile winds). Wind types may be combined

to reflect the highest reported wind. When appropriate wind data is not available, an N/A will appear in lieu of data. Conversion tables of miles per hour to knots and compass points to degrees are provided at the end of this wind table.

#### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ALABAMA	J	AN	FEB 1	MAR .	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	
Birmingham	DIR SPD \$PGU	N 8 49	N 9 59	N 9 65	N 9 56		N 7 65	N 6 56	N 6 57	N 6 50	N 7 50	S 6 43	S 7 52	S 8 41	N 7 65
Huntsville	DIR SPD #PGU	ESE 9 43	ESE 10 43	ES 10 40	E N 9 48		N 8 45	N 7 56	ESE 6 64	ESE 6 45	ESE 7 46	S 7 55	S 8 43	S 9 48	ESE 8 64
Mobile	DIR SPD #PGU	N 10 45	N 11 61	N 11 55	N 10 46		SE 9 62	SE 6 60	SE 7 64	SE 7 53	S 8 60	S 8 59	S 9 48	S 10 43	S 9 64
Montgomery	DIR SPD PGU	NW 8 43	NW 8 66	NW 8 54	NW 7 60		NW 6 60	NW 6 60	S 6 55	S 5 59	S 6 41	S 6 73	S 7 56	S 7 48	WNW 7 73
Ozark/ Ft Rucker	DIR SPD PGU	NW 6 46	N 6 64	S 7 74	6 61		S 5 71	W 3 60	W 3 58	E 3 60	ENE 3 82	E 5 48	NNW 5 52	NW 6 44	E 5 82
<u>ALASKA</u>															
Anchorage	DIR SPD PGU	N 6 64	N 7 61	N 7 75	S 7 44		SSE 8 43	SSE 8 46	SSE 7 40	SSE 7 44	SSE 7 48	N 7 55	N 7 55	N 6 55	N 7 75
Barrow	DIR SPD PGU	ENE 12 58	ENE 11 74	EN 11 56	E EN 12 47		ENE 12 41	E 12 43	E 12 55	E 12 47	ENE 13 66	ENE 13 54	ENE 12 53	ENE 12 61	ENE 12 74
Cold Bay	DIR SPD PGU	SSE 18 85	SE 18 83	SE 17 76	NN 17 85		SSE 16 72	SSE 16 69	SSE 16 58	SSE 16 81	SSE 17 95	NNW 17 87	NNW 18 75	SSE 18 85	SSE 17 95

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
St. Cloud	DIR	NW	NW	NW	NW	S	S	S	S	S	NW	NW	NW	NW
	SPD	8	8	9	10	9	8	7	7	7	9	9	8	8
	PGU	58	48	46	78	51	74	55	53	45	54	53	53	78
MISSISSIPPI														
Biloxi/ Keesler AF	DIR B SPD PGU	N 7 69	N 7 62	SSE 7 58	SSE 7 70	SSE 6 68	SSW 6 67	SSW 5 64	N 5 128	NNE 5 98	NNE 5 59	N 6 54	N 7 53	N 6 128
Jackson	DIR	N	N	N	N	NNW	NNW	NNW	NNW	S	S	S	S	NNW
	SPD	8	8	9	8	7	6	6	5	6	6	7	8	7
	#PGU	40	34	40	54	33	47	41	40	36	34	33	46	54
Meridian	DIR	S	S	S	S	S	S	S	S	N	N	S	S	S
	SPD	7	8	8	7	6	5	5	5	5	5	7	7	6
	#PGU	53	55	64	66	47	64	66	56	38	45	54	68	68
Tupelo	DIR	N	N	N	N	S	S	S	S	S	S	S	S	S
	SPD	7	8	8	8	7	6	6	5	6	6	7	7	7
	#PGU	53	39	39	36	43	40	54	34	43	45	38	31	54
MISSOURI														
Columbia	DIR	WNW	WNW	WNW	S	S	S	S	S	S	S	S	WNW	S
	SPD	11	11	12	12	9	9	8	8	9	10	11	11	10
	PGU	53	63	66	69	58	95	64	62	54	59	51	55	95
Kansas City	DIR	SSW	SSW	S	S	S	S	S	S	S	S	S	S	S
	SPD	11	11	12	12	10	10	9	9	10	11	11	11	11
	PGU	58	56	63	62	59	67	75	54	63	60	52	55	75
St. Louis	DIR SPD PGU	WNW 11 53	WNW 11 66	WNW 12 66	WNW 11 71	(S) (9) (62)	9 60	S 8 72	(S) (7) (53)	S 8 49	SSE 9 58	WNW 10 64	WNW 10 55	WNW 10 72
Springfield	DIR	SSE	SSE	SSE	SSE	SSE	S	S	SSE	SSE	SSE	SSE	SSE	SSE
	SPD	12	12	13	12	10	10	9	9	9	10	11	11	11
	PGU	48	52	52	53	49	61	72	59	49	48	53	48	72
<u>MONTANA</u>														
Billings	DIR	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	SPD	13	12	11	11	11	10	9	9	10	11	12	13	11
	PGU	59	62	62	59	60	54	71	69	61	64	58	70	71
Glasgow	DIR	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE
	SPD	10	10	11	12	12	11	10	11	11	11	10	10	11
	#PGU	37	51	53	67	48	53	55	55	44	46	49	62	67
Great Falls	DIR	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW
	SPD	15	14	13	13	11	11	10	10	11	13	15	15	13
	#PGU	53	48	52	57	39	51	49	47	36	49	54	59	59
Havre	DIR	SW	SW	SW	SW	E	SW	SW	W	E	SW	SW	SW	SW
	SPD	10	10	10	11	10	10	9	9	9	10	10	10	10
	\$PGU	47	58	52	59	54	63	71	59	52	52	54	48	71
Helena	DIR	W	ENE	W	W	W	ENE	W	ENE	W	ENE	W	W	ENE
	SPD	7	7	8	9	9	9	8	7	7	7	7	7	8
	#PGU	48	45	45	40	51	57	53	51	47	54	47	57	57
Kalispell	DIR	S	S	S	S	S	S	S	S	S	S	S	S	S
	SPD	4	5	6	7	7	7	6	6	6	5	5	5	6
	#PGU	39	36	36	40	34	38	32	44	32	40	36	57	57

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
Cheyenne	DIR	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW
	SPD	15	15	15	14	13	11	10	10	11	12	14	15	13
	PGU	77	70	75	64	71	84	79	61	62	71	76	74	84
Lander	DIR	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
	SPD	5	5	7	8	8	8	7	7	7	6	6	6	7
	PGU	86	69	63	83	67	63	66	67	64	53	59	66	86
Sheridan	DIR	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
	SPD	8	8	9	10	9	8	7	7	8	8	8	8	8
	PGU	71	69	68	69	63	54	59	58	67	64	73	69	73

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

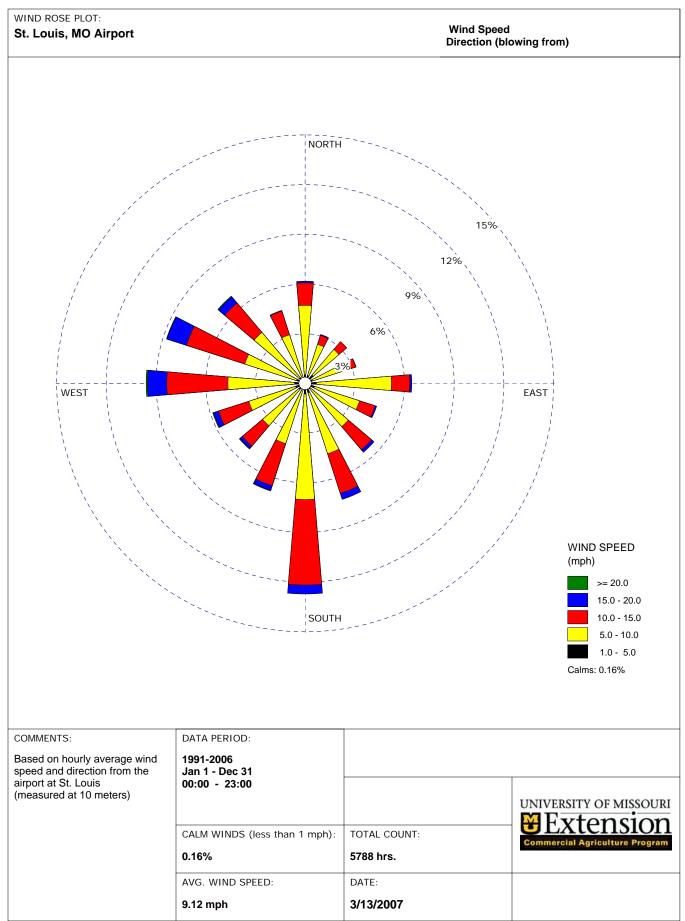
#### **CONVERSION TABLE OF MILES PER HOUR (MPH) TO KNOTS (KTS)**

MPH_	0	1	2	3	4	5	6	7	8	9	
MPH	KTS	S KTS	S KT	S	KTS	KTS	KTS	KTS	KTS	KTS	KTS
0	0	1	2	3	3	4	5	6	7	8	
10	9	10	10	11	12	13	14	15	16	17	
20	17	18	19	20	21	22	23	23	24	25	
30	26	27	28	29	30	30	31	32	33	34	
40	35	36	36	37	38	39	40	41	42	43	
50	43	44	45	46	47	48	49	50	50	51	
60	52	53	54	55	56	56	57	58	59	60	
70	61	62	63	63	64	65	66	67	68	60	
80	70	70	71	72	73	74	75	76	76	77	
90	78	79	80	81	82	83	83	84	85	86	
	(eg: 25 mph = 22 kts)										

#### **CONVERSION TABLE OF COMPASS POINTS (16) TO WHOLE DEGREES**

<b>N</b> = 35-01	E = 08-10	S = 17-19  W = 26-28
<b>NNE</b> = $02-03$	<b>ESE</b> = 11-12	<b>SSW</b> = 20-21 <b>WNW</b> = 29-30
NE = 04-05	<b>SE</b> = 13-14	<b>SW</b> = $22-23$ <b>NW</b> = $31-32$
<b>ENE</b> - 06-07	<b>SSF</b> - 15-16	WSW - 24-25 NNW - 33-34

THE NATIONAL CLIMATIC DATA CENTER "A NATIONAL RESOURCE FOR CLIMATE INFORMATION"





#### U.S. Fish and Wildlife Service

## **National Wetlands Inventory**

# 300 m 1000 ft

# **Union Corporate Center**

Nov 1, 2010

#### Wetlands

Freshwater Emergent

Freshwater Forested/Shrub

Estuarine and Marine Deepwater

Estuarine and Marine

Freshwater Pond

Lake

Riverine

Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

#### **User Remarks:**

**Missouri Certified Site Application** 

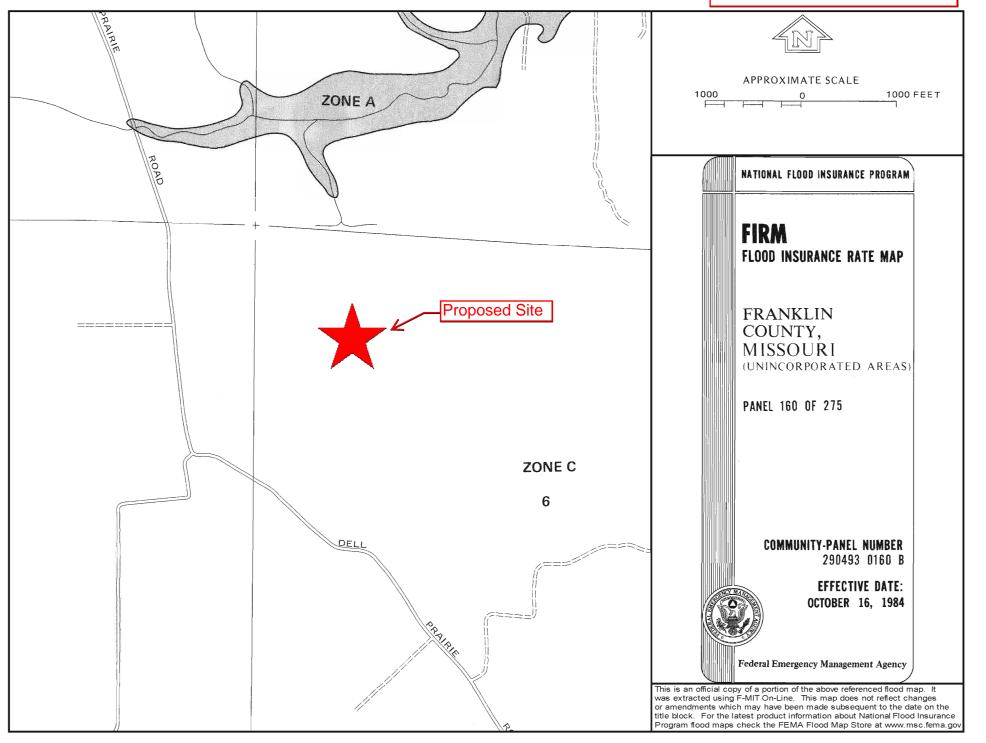
## Federal Emergency Management Agency Community Status Book Report MISSOURI

## Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
290510#	TRIMBLE, CITY OF	CLINTON COUNTY	02/07/75	04/01/82	04/01/82	04/01/82	No
290641#	TROY, CITY OF	LINCOLN COUNTY	10/29/76	05/05/81	09/29/10	05/05/81	No
290511#	TRUESDALE, CITY OF	WARREN COUNTY	11/12/76	11/04/09	11/04/09(M)	12/29/00	No
290228#	TUSCUMBIA, VILLAGE OF	MILLER COUNTY	10/25/74	03/01/87	05/18/09(M)	03/01/87	No
290512#	UNION STAR, CITY OF	DEKALB COUNTY	02/21/75	08/19/85	11/19/03(M)	08/19/85	No
290137#	UNION, CITY OF	FRANKLIN COUNTY	03/08/74	03/02/83	03/02/83	03/02/83	No
290301#	UNIONVILLE, CITY OF	PUTNAM COUNTY	08/13/76	11/27/79	11/27/79(M)	11/27/79	No
290390#	UNIVERSITY CITY, CITY OF	ST. LOUIS COUNTY	09/14/73	06/01/78	08/23/00	06/01/78	No
290514#	URBANA, CITY OF	DALLAS COUNTY	06/27/75	04/19/10	04/19/10(M)	01/15/08(E)	No
290893#	UTICA, VILLAGE OF	LIVINGSTON COUNTY		09/02/88	09/02/88(M)	06/14/02	No
290391#	VALLEY PARK, CITY OF	ST. LOUIS COUNTY	12/17/73	06/15/82	08/23/00	06/15/82	No
290472	VAN BUREN, CITY OF	CARTER COUNTY	01/23/74	09/01/86	09/01/86(L)	09/01/86	No
290020#	VANDALIA, CITY OF	AUDRAIN COUNTY	05/17/74	02/04/88	04/05/10	02/04/88	No
290879#	VANDIVER, VILLAGE OF	AUDRAIN COUNTY		04/05/10	(NSFHA)	09/10/84	No
290516	VANDUSER, VILLAGE OF	SCOTT COUNTY	04/25/75	09/04/85	09/04/85(M)	09/04/85	No
290643#	VELDA CITY, CITY OF	ST. LOUIS COUNTY	08/06/76		(NSFHA)	08/04/83	No
290857#	VELDA VILLAGE HILLS, VILLAGE OF		09/14/73	05/01/90	08/23/00	05/01/90	No
290841#	VERNON COUNTY*	VERNON COUNTY	12/15/83	07/01/87	07/01/87(L)	07/01/87	No
290645	VERONA, CITY OF	LAWRENCE COUNTY	10/15/76		10/15/76	05/10/07(E)	No
290247#	VERSAILLES, CITY OF	MORGAN COUNTY	04/05/74	09/18/85	05/04/09(M)	09/18/85	No
290647	VIENNA, CITY OF	MARIES COUNTY	02/07/75		(NSFHA)	11/01/79	No
290392#	VINITA PARK, CITY OF	ST. LOUIS COUNTY	04/05/74	08/02/95	(NSFHA)	09/10/84	No
290631	WALKER, CITY OF	VERNON COUNTY	04/18/75		(NSFHA)	09/10/84	No
290946#	WALNUT GROVE, CITY OF	GREENE COUNTY		12/17/10	(NSFHA)	02/07/02	No
	USE THE GREENE CO. (CID 290782) FIRM PANEL 5B.				,		
290632	WARDELL, CITY OF	PEMISCOT COUNTY	04/18/75	06/30/76	06/30/76(M)	06/30/76	No
290633#	WARDSVILLE, CITY OF	COLE COUNTY	07/11/75	12/02/05	12/02/05	12/02/05	No
290443#	WARREN COUNTY*	WARREN COUNTY	09/01/83	04/03/85	11/04/09	04/03/85	No
290194#	WARRENSBURG, CITY OF	JOHNSON COUNTY	12/17/73	09/18/85	07/16/90	09/18/85	No
290648#	WARRENTON, CITY OF	WARREN COUNTY	02/07/75	05/16/83	11/04/09	05/16/83	No
290030#	WARSAW,CITY OF	BENTON COUNTY	03/29/74	08/04/87	06/02/09	08/04/87	No
290393#	WARSON WOODS, CITY OF	ST. LOUIS COUNTY	01/09/74	08/02/95	(NSFHA)	11/01/79	No
290846#	WASHINGTON COUNTY *	WASHINGTON COUNTY		12/19/06	12/19/06	05/24/10	No
290138#	WASHINGTON, CITY OF	FRANKLIN COUNTY	01/09/74	11/03/82	11/03/82	11/03/82	No
290014	WATSON, VILLAGE OF	ATCHISON COUNTY	11/29/74	09/01/90	09/01/90(L)	09/01/87	No
290084	WAYLAND, CITY OF	CLARK COUNTY	10/18/74	09/04/86	09/04/86(M)	09/04/86	No
290449#	WAYNE COUNTY*	WAYNE COUNTY	02/15/84	02/01/87	09/30/04	02/01/87	No
290300#	WAYNESVILLE, CITY OF	PULASKI COUNTY		02/01/74	05/03/10	10/06/76	No
290634	WEAUBLEAU, CITY OF	HICKORY COUNTY	01/31/75		(NSFHA)	09/10/84	No
290187#	WEBB CITY, CITY OF	JASPER COUNTY	01/16/74	06/01/82	05/02/07	06/01/82	No
290848#	WEBSTER COUNTY*	WEBSTER COUNTY		07/17/02	09/17/10	04/14/03	No
290394#	WEBSTER GROVES, CITY OF	ST. LOUIS COUNTY	03/15/74	09/29/78	08/23/00	09/29/78	No
290901#	WELDON SPRING, CITY OF	ST. CHARLES COUNTY		12/15/92	03/17/03	07/02/93	No
290395#	WELLSTON, CITY OF	ST. LOUIS COUNTY	12/17/73	05/19/81	08/23/00	05/19/81	No
290652#	WELLSVILLE, CITY OF	MONTGOMERY COUNTY	07/30/76	05/18/09	05/18/09(M)	09/02/10	No
290483A	WENTWORTH, TOWN OF	NEWTON COUNTY	01/10/75	11/26/10	11/26/10(>)	10/15/10(E)	No
290320#	WENTZVILLE, CITY OF	ST. CHARLES COUNTY	12/05/75	12/15/92	03/17/03	07/28/78	No
290924#	WEST ALTON, TOWN OF	ST. CHARLES COUNTY		09/15/78	03/17/03	07/09/97	No
290166#	WEST PLAINS, CITY OF	HOWELL COUNTY	02/15/74	05/19/81	12/03/93	05/19/81	No
290298#	WESTON, CITY OF	PLATTE COUNTY	03/22/74	06/15/79	06/15/79	06/15/79	No
290272#	WESTPHALIA, CITY OF	OSAGE COUNTY	10/18/74	09/02/05	09/02/05	09/10/84	No
		Page 13 of 18				1	1/03/2010

Page 13 of 18 11/03/2010

#### 3.5.2 Flood Insurance Rate Map





## Natural Heritage Review On-line LEVEL 1 REPORT

3.6.1 Threatened or Endangered Species Review

Print this page and use/attach as documentation that your project has consulted with the Missouri Department of Conservation and the U.S. Fish and

Wildlife Service about species of conservation concern. No further consultation about this project is necessary.

August 10, 2010

Your login and project information below:

User ID:

1204 Joseph

First Name:

Last Name Graves

Email Address: jgraves@unionmissouri.org

Business:

City of Union, Missouri

Project:

Land Development

Your query information below:

User Response Township Range Section Direction Latitude Longitude Point Line UTM UTM North East Rectangle

TimeStamp

1204

0

point line 0

8/10/2010 e677542.635779689,678456.301663516,678456.30166351 11:35:48

AM

Land Development

Land development - Commercial, residential, industrial, civic, military

Developing land will likely change the plants and animals that live on it or in the vicinity. That change is primarily an issue for the property owner and neighbors, but becomes a conservation issue if it impacts species or habitats of conservation concern. Permits may be required from local, state or federal regulatory agencies. The Conservation Department through its Private Land Services Division may be able to assist project planners in identifying problems, opportunities or ways to minimize adverse impacts.

Fish and wildlife concerns are minimal if (a) the site includes no protected species or restricted habitat identified in this report, (b) construction is managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Permit" conditions.

Revegetation of disturbed areas is recommended to minimize erosion, as is restoration with native plant species compatible with the local landscape and wildlife needs. Annual ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza.

#### Cautions related to species/habitats of concern or project type. Please reflect these concerns and recommendations in your plans:

- Even if records of species/habitats of concern do not exist, there is a possibility that your project will encounter a species of concern that is not on record. In Missouri, 93% of the land is in private ownership, and most of that has never been checked for endangered species. Animals move over varying ranges, and in time both animal and plant populations can move.
- · If your project encounters and potentially affects a federally-listed species, immediately report it to the U.S. Fish and Wildlife Service or Missouri Department of Conservation.

No further consultation with the U.S. Fish and Wildlife Service or the Missouri Department of Conservation is necessary. Print this document to establish compliance with requirements to consult with U.S. Fish and Wildlife Service and the Missouri Department of Conservation about this project.

If you need additional information, please contact:

MDC Natural Heritage Review Policy Coordination Unit P.O. Box 180 Jefferson City, MO 65102-0180 (Phone 573-522-4115 ext. 3250) www.mdc.mo.gov

U.S. Fish and Wildlife Service Ecological Services 101 Park Deville Drive , Suite A Columbia, Missouri 65203-0007 (Phone 573-234-2132)

A HERITAGE REVIEW provides information about species and habitats of concern that could be affected by the project. Heritage records note things that were positively identified at some date and time, marked at a location that may be more or less precise. Animals move quickly but plant communities can move also. To say , there is a record, does not mean the species/habitat is still there. To say that, there is no record, does not mean the project may not encounter something.

Because of this, reports include information about records near but not necessarily on the project site. Three different kinds of information are provided.

- FEDERAL Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.
- STATE Concerns are species/habitats known to exist near enough to the project site to warrant concern and protected under the Wildlife Code of Missouri (RSMo 3 CSR 10) ., State Endangered Status, is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR10-4.111., State Rank, is numeric rank of relative ranty, protected under general provisions of the Wildlife Code but not endangered.
- . Concerns & management recommendations, are things for which one might prudently look. There is no specific heritage record, but our knowledge of the surrounding landscape suggests consideration. 93% of Missouri 's land is in private ownership, so most sites have never been carefully inspected by conservation professionals

This report is not a site clearance letter. Rather, it provides an indication of whether or not public lands and sensitive resources are known to be (or are likely to be) located close to the proposed project. Incorporating information from our Heritage Database into project plans is an important step that can help reduce unnecessary impacts to Missouri's sensitive natural resources. However, the Heritage Database is only one reference that should be used to evaluate potential adverse impacts. Other types of information, such as wetland and soils maps and on-site inspections or surveys, should be considered. Reviewing current landscape and habitat information and species biological characteristics would additionally ensure that species of conservation concern are appropriately identified and addressed.

Additional information on rare, endangered and watched species may be found at <a href="http://www.mdc.mo.gov/nathis/endangered/">http://www.mdc.mo.gov/nathis/endangered/</a>. Detailed information about species mentioned may be accessed at <a href="http://mdc4.mdc.mo.gov/applications/mofwis/mofwis\_search1.aspx">http://mdc4.mdc.mo.gov/applications/mofwis/mofwis\_search1.aspx</a>. If you would like printed copies of best management practices cited as internet URLs, please contact us.

3.7.1 Archeological and Cultural Resources

## **Boonslick Regional Planning Commission**

## **Fax Cover Sheet**

То:	Joey Graves	Fa	x Number:	(636) 583-4509			
From:	Steve Brune	Da	Date: Page:		September 20, 2010  1 of 7 pages		
Re:	SHPO letter	Pa					
□Urgent	□For Review	□Please Comment	t □Please Re	ply	□Please Recycle		
this transmis		notify us immediately.			uested. If you receive y in receiving this		

#### Comments:

Here are copies of what was sent to the SHPO and their response. Hope this helps...

From the desk of...

Steve Brune, Assistant Director

Boonslick Regional Planning Commission

P O Box 429 | 111 Steinhagen

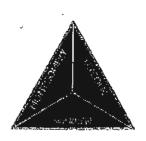
Warrenton, MO 63383

(636) 456-3473 | Fax: (636) 456-2329

#### CULTURAL RESOURCE ASSESSMENT **Section 106 Review**

CONTACT PERSON/ADDRESS		C:					
Steve Brune Boonslick RPC P.O. Box 429 Warrenton, Missouri 63383		Jo Ann Dent, DED Paul Mohr, HUD					
PROJECT: City of Union Economic Development-Stre	et & Utility Line Extension Indus	trial Park Progress Parkway					
City of Officer Economic Development-Site	bet & Othicy Line Extension, ridus	ulai Fein, Flogiess / alkway					
FEDERAL AGENCY		COUNTY:					
CDBG		FRANKLIN					
The State Historic Preservation Offic project. Based on this review, we have		tion submitted on the above referenced rmination:					
After review of initial submission, the project area has a low potential for the occurrence of cultural resources. A cultural resource survey, therefore, is not warranted.							
	Adequate documentation has been provided (36 CFR Section 800.11). There will be "no historic properties affected" by the current project.						
An adequate cultural reso	ource survey of the project area the proposed undertaking there w	has been previously conducted. It has vill be "no historic properties affected".					
activities. PLEASE BE ADVISED THE CHANGED, A BORROW AREA IS ENCOUNTERED DURING CONSTRU	HAT, IF THE CURRENT PROS INCLUDED IN THE PROS CTION, APPROPRIATE INFO COMMENT. Please retain this ric Preservation Act, as amend	e has no objection to the initiation of project DJECT AREA OR SCOPE OF WORK ARE JECT, OR CULTURAL MATERIALS ARE RMATION MUST BE PROVIDED TO THIS is documentation as evidence of compliance ed.  May 13, 2008 Date					

P.O. Box 176, Jefferson City, Missouri 65102



## BOONSLICK REGIONAL PLANNING COMMISSION

Serving Lincoln, Montgomery and Warren County

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111 Steinhagen P.O. Box 429 Warrenton, MO 63383 Ph: (636) 456-3473 Fax: (636) 456-2329 www.boonslick.org April 30, 2008

Missouri Department of Natural Resources State Historic Preservation Office Attn: Section 106 Review P O Box 176 Jefferson City, MO 65102

Re: City of Union Economic Development Project

Dear Sir:

Enclosed are the Section 106 Project Information Form and supporting documents for the above referenced project. The building, street and utility extensions are located in the Union Corporate Center Business Park.

Please let me know if you need any further.

Sincerely yours,

Steve Brune Assistant Director



MISSOURI DEPARTMENT OF NATURAL RESOURCES STATE HISTORIC PRESERVATION OFFICE SECTION 106 PROJECT INFORMATION FORM

Submission of a completed Project Information Form with adequate information and attachments constitutes a request for review pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended). We reserve the right to request more information. Please refer

to the CHECKLIST on Page 2 to ensure that all basic information relevant to the project has been included. For further information, refer to our Web site at: http://www.dnr.state.mo.us/shpo and follow the links to Section 106 Review. NOTE: Section 106 regulations provide for a 30-day response time by the Missouri State Historic Preservation Office from the date of receipt. City of Union Economic Development FEDERAL AGENCY PROVIDING FUNDS, LICENSE, CR PERMIT HUD / CDBG APPLICAN TELEPHONE City of Union CONTACT PERSON Steve Brune (636) 456-3473 ADDRESS FOR RESPONSE Boonslick RPC P 0 Box 429 Warrenton, MO 63383 LOCATION OF PROJECT Franklin COUNTY: Progress Parkway CITY: Union GIVE LEGAL DESCRIPTION OF PROJECT AREA (TOWNSHIP, RANGE, SECTION, % SECTION, ETC.) Moselle \*USGS TOPOGRAPHIC MAP QUADRANGLE NAME\_ \_\_ TOWNSHIP:\_\_ RANGE: SECTION: \*SEE MAP REQUIREMENTS ON PAGE 2 PROJECT DESCRIPTION Describe the overall project in detail. If it involves excavation, indicate how wide, how deep, etc. If the project involves demolition of existing buildings, make that clear. If the project involves rehabilitation, describe the proposed work in detail. Use additional pages if nocessary. The project will extend the street in the industrial park and will install water and sewer lines to the new facility.

MO 780-1027 (09-02)

ARCHAEDLOGY CERTURNOWING ACTIVITIES F
Has the ground involved been graded, built on, borrowed, or otherwise disturbed?  Please describe in detail: (Use additional pages, if necessary.) Photographs are helpful.
The site is located in the Union Corporate Business Park. The site was once
farmed and a road has been built on three sides.
Will the project require fill material? Yes X No
Indicate proposed borrow ereas (source of fill material) on topographic map.
Are you aware of archaeological sites on or adjacent to project area? Yes X No
- if yes, identify them on the topographic map.
STRUCTURES (WELDINGS, Deficition, Additions in direction from the analytic institute)
To the best of your knowledge, is the structure located in any of the following?
An Area Previously Surveyed for Historic Properties A National Register District A Local Historic District
If yes, please provide the name of the survey or district:
<ul> <li>Please provide photographs of all structures, see photography requirements.</li> </ul>
NOTE: All photographs should be labeled and keyed to one map of the project area.
<ul> <li>Please provide a brief history of the building(s), including construction dates and building uses. (Use additional pages, if necessary.)</li> </ul>
,
And Home built brond in the state of the sta
Map Requirements: Attach a copy of the relevant portion (8½ x 11) of the current USGS 7.5 min. topographic map and, if necessary, a large
scale project map. Please do not send an individual map with each structure or site. White an original map is preferable, a good copy is
acceptable. USGS 7.5 min. topographic maps may be ordered from Geological Survey and Resource Assessment Division, Department of Natural Resources, 111 Fairground, Rolla, MO 65402, Telephone: (573) 388-2125, or printed from the website http://www.topozone.com.
Photography Requirements: Clear black & white or color photographs on photographic paper (minimum 3" x 5") are acceptable. Polariods,
photocopies, emailed, or faxed photographs are not acceptable. Good quality photographs are important for expaditious project review. Photographs of neighboring or nearby buildings are also helpful. All photographs should be labeled and keyed to one map of the project area.
CHECKLIST DIG Tourist de the following information ( ):
Topographic map 7.5 min. (per project, not structure)  X Other supporting documents (if necessary to explain the
X Topographic map 7.5 min. (per project, not structure)  X Other supporting documents (if necessary to explain the project)
Far pays cocceptuation, substitutions, etc. Though work
Thorough description (all projects)  For new construction, rehabilitations, etc., attach work write-ups, plans, drawings, etc.
X Is topographic map identified by quadrangle and year?
Photographs (all structures)  X Is topographic map (dantified by quadrangle and year?
Return this Form and Attachments to:
MISSOURI DEPARTMENT OF NATURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
Attn: Section 108 Review P.O. BOX 176
JEFFERSON CITY, MISSOURI 65102-0176
·







### SCI ENGINEERING, INC.

1602 JEFFCO BOULEVARD ARNOLD, MISSOURI 63010 636•296•6111 FAX 636•296•6667

# Exploration of Subsurface Conditions and Foundation Recommendations

UNION, MISSOURI

December 1999

WASHINGTON ENGINEERING & ARCHITECTURE Civil Engineer/Surveyor

SCI No. 990316.10



SCI ENGINEERING, INC.

1602 JEFFCO BOULEVARD ARNOLD, MISSOURI 63010 636•296•6111 FAX 636•296•6667

CONSULTANTS IN DEVELOPMENT, DESIGN, AND CONSTRUCTION

GEOTECHNICAL ENVIRONMENTAL

ARCHAEOLOGY WETLANDS

**CONSTRUCTION SERVICES** 

December 17, 1999

Mr. Michael Lause Spartan Showcase, Inc. Post Office Box 470 Union, Missouri 63084

RE: Spartan Showcase

Union Corporate Center

Union, Missouri SCI No. 990316.10

Dear Mr. Lause:

Enclosed is our report, "Exploration of Subsurface Conditions and Foundation Recommendations - SPARTAN SHOWCASE - UNION, MISSOURI," dated December 1999.

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please call.

Respectfully,

SCI ENGINEERING, INC.

Stephen Pretsch, P.E. Senior Project Engineer

SBP/DFB/kab

Enclosures

3 additional copies submitted.

c: Mr. Gary Terschluse; Washington Engineering & Architecture

ENPROJECT FILESVOTHER SCI OFFICE PROJECTS P990316 10-SPARTAN SHOWCASE\Subsurface-rp1.doc

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#### **FIGURES**

Figure 1A - Location Map

Figure 1B - Site Plan

Figure 2 - Boring Log Legend & Boring Logs

Figure 3 - Drain Detail

#### APPENDIX



1602 JEFFCO BOULEVARD ARNOLD, MISSOURI 63010 636•296•6111 FAX 636•296•6667

#### Exploration of Subsurface Conditions and Foundation Recommendations

#### SPARTAN SHOWCASE UNION, MISSOURI

#### 1.0 INTRODUCTION

At the request of Mr. Michael Lause with Spartan Showcase, Inc., we conducted a subsurface exploration for an office/warehouse facility. The purpose of our exploration was to characterize and evaluate the subsurface conditions, provide recommendations for foundations, and address other geotechnical aspects of the proposed project. Our services were provided in general accordance with our proposal dated November 5, 1999.

SCI Engineering, Inc. (SCI) previously explored the site and presented our findings in a report titled, "Limited Exploration of Subsurface Conditions and Preliminary Foundation Recommendations – SPARTAN SHOWCASE – UNION CORPORATE CENTER – UNION, MISSOURI" dated May 1999. The results of the 14 borings performed in this preliminary exploration were evaluated in preparing this report and can be provided upon request.

#### 2.0 PROJECT AND SITE DESCRIPTION

Union Corporate Center is located southeast of the intersection of the proposed Progress Drive and Sapphire Street in the Union Corporate Center located in Union, Missouri. The project site consists of Lot 19, which covers approximately 20 acres. A Location Map is presented as Figure 1A. The topography of the site consists of a hillside that generally slopes to the north. It is framed on the east by a draw that drains to the northwest and on the west by a tributary draw that drains to the north. Site relief is approximately 14 feet, exclusive of the creek beds. A large detention basin has been constructed in the adjacent Lots 18 and 34 directly north of the site. The lot is mostly grass-covered with a few stands of trees along the draws.

Spartan Showcase plans to construct an approximately 200,000 square-foot manufacturing and warehouse facility on the site. Preliminary development plans prepared by Washington Engineering &

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Architecture indicate that the building will be located in the north-central part of the site with loading docks to the north. Automobile parking will be located to the south and west of the proposed building. A future addition is planned to the east of the proposed building; however, our exploration was limited to the current phase of construction. Based on a proposed finished floor elevation of 562, up to 3 feet of cut and 5½ feet of fill will be required to achieve final grades within the building footprint. The proposed construction is depicted on the Site Plan, Figure 1B.

#### 3.0 FIELD EXPLORATION

The field exploration for this phase of exploration consisted of drilling an additional 14 borings, designated B15 through B28, at the approximate locations shown on the Site Plan. The original 14 boring locations are also shown on the Site Plan and these boring logs can be made available upon request. The latest borings were drilled on November 18, 1999. Continuous-flight augers powered by a CME-550 drill rig were used to advance the borings to predetermined depths ranging from 10 to 20 feet. Boring locations and elevations were established in the field by Cochran Engineering & Surveying, Inc.

Standard penetration tests were performed at 2½- and 5-foot intervals throughout the soil overburden. The standard penetration test provides a guide to soil strength and a disturbed sample for laboratory testing. Relatively undisturbed samples were recovered by hydraulically pushing 3-inch diameter, thin-walled tube samplers at four selected locations in lieu of the standard penetration test. Bulk samples were collected at selected locations for laboratory testing. The nature and thickness of the soils encountered and the results of the field sampling and testing of the more recent exploration are shown on the Borings Logs, Figures 2-1 through 2-14.

#### 4.0 LABORATORY TESTING

The samples were examined and described in our laboratory by a soil technician using manual-visual methods. Moisture contents were determined for each cohesive sample. Density determinations were performed on all four thin-walled tube samples. Unconfined compression tests were performed on two of the tube samples. Swell pressure tests were performed on the remaining two relatively undisturbed samples. Modified Proctor moisture-density tests were performed on two selected bulk samples. California Bearing Ratio (CBR) tests were then performed on remolded samples of the bulk materials. Atterberg limits tests were performed on selected samples to establish plasticity characteristics.

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The results of the moisture contents, unconfined compression tests, density determinations, and Atterberg limits tests are shown on the Boring Logs. The results of the CBR and swell tests are presented in applicable sections within this report. The modified Proctor curves are presented in the appendix of this report.

#### 5.0 SUBSURFACE CONDITIONS

Presented herein is the general description of the soils encountered in this exploration. Detailed information regarding the soil types and interpretive soil stratigraphy is presented on the Boring Logs. A Boring Log Legend is included as Figure 2 to aid in the interpretation of the Boring Logs.

The soil profile at the site generally consisted of a 2- to 3-foot thick layer of high plastic clay underlain by a 2- to 3-foot thick layer of low to medium plastic, silty clay. This low plastic layer was then underlain by high plastic clays that extended to the termination depths of the borings. Trace amounts of sands and gravels were contained within the deeper soils. The SPT N values indicated that the soils were medium stiff to very stiff in consistency.

Groundwater was not encountered at the time of drilling and is not anticipated to influence the construction phase of the project. It should be noted that suitable groundwater level measurements may not be possible in the relatively impervious soils found at this site, even after several days of observation. In addition, groundwater is subject to seasonal and climatic variations and may be present at different depths at a future date.

#### 6.0 DESIGN RECOMMENDATIONS

Shallow foundations are appropriate for support of the proposed building. Of concern, however, are the high plastic clays present at the anticipated floor slab and foundation elevations. High plastic clays have the potential for volume change with changes in the soil's moisture content. This volume change is normally evidenced by the heaving and cracking of concrete floor slabs and, in severe cases, by the movement and cracking of footings and foundation walls. Remedial recommendations for the treatment of high plastic clays are presented later within this report.

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The following sections detail recommendations for the foundation design. These design recommendations assume that preconstruction grading has been performed in general accordance with the recommendations provided in the "Site Development Recommendations and Construction Considerations" section that follows.

#### 6.1 Shallow Foundations

Shallow foundations can be designed for net allowable bearing pressures of 3,000 and 2,500 pounds per square foot (psf) for isolated column footings and continuous wall footings, respectively. Continuous wall footings should be at least 24 inches wide and isolated column footings should have a minimum dimension of 30 inches. Foundations should bear in natural soil or structural fill compacted as described in the "Construction Considerations" section of this report. Total foundation settlement should be less than 1-inch; maximum differential settlement between adjacent foundations should be about half that value. Exterior footings and foundations in unheated portions of the building should be provided with at least 30 inches of soil cover for frost protection. Interior footings in heated portions can be located at nominal depths below the finish floor.

#### 6.2 Floor Slab Considerations

The following recommendations are not intended to supersede the structural engineer's design for the floor slab. The floor slab should be supported on a layer of crushed stone. This will help to distribute concentrated loads and equalize moisture conditions beneath the slab. The subgrade reaction modulus should not exceed 150 pounds per cubic inch for the floor slab bearing on natural soils or properly compacted soil fill.

The floor slab should not be structurally connected to the foundation walls and column pads. Isolation joints should be used at any place where the slab meets a wall or an independent column support. We also suggest that joints be placed in the floor slab on no more than 15-foot intervals and located in such a manner that each floor slab section is rectangular in shape. Such joints permit slight movements of the independent elements and help prevent random cracking that might otherwise be caused by restraint of shrinkage, slight rotations, heave, or settlement.

It is desirable to place a 6-mil-thick polyethylene moisture barrier beneath the floor slab to prevent the transfer of capillary moisture to the slab. Without careful attention to curing of the concrete slab,

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however, the polyethylene sheet can cause excessive shrinkage cracking and "curling." We suggest the applicable recommendations provided in the American Concrete Institute (ACI) Standards be followed for curing the concrete floor slab.

#### 6.3 Seismic Design Considerations

The BOCA National Building Code requires the proposed building to be designed to withstand seismic forces. A site coefficient is therefore required for the calculation of minimum earthquake design forces. The coefficient is a function of the soil type, consistency, and bedrock depth. The soils encountered at the project site fit the BOCA soil-profile type  $S_1$ , due to the relatively stiff consistency of the site soils and the anticipated depth to rock. Therefore, the site coefficient (S) is 1.0.

#### 6.4 High Plastic Clay Remediation

A 2- to 3-foot surface layer of high plastic clay was encountered in most of the borings drilled within the proposed building footprint. A 2- to 3-foot layer of low to medium plastic, silty clay was encountered beneath the high plastic soils, underlain by high plastic clays. SCI performed swell tests on a sample of the surface high plastic soils in B24 and a sample of the medium plastic soils encountered in B25. The results of the swell tests indicated a percent vertical rise of 5.2 percent within the high plastic clay soils and a percent vertical rise of 0.9 percent in the medium plastic silty clays. Based on these results, we recommend that the high plastic clays be remediated to a depth of 3 feet below floor slab elevations and 2 feet below foundations. The medium plastic silty clays encountered in the floorslab subgrade need not be removed and replaced, but should instead be stabilized to a depth of 12 to 18 inches as described below.

The remediation of the clays may include removing and replacing this material with either low plastic soils or granular material to the recommended depths. Alternately, the clays can be stabilized by the addition of lime in combination with a removal and replacement operation. If lime stabilization is performed, we recommend stabilizing to the recommended depths by thoroughly mixing in "Code L" (a by-product of hydrated lime) at a rate of 7 percent, or approximately 8 pounds of "Code L" per cubic foot of soil. Pulverizing and tilling equipment ("gators") should be used to incorporate the lime since unsatisfactory mixing can occur with conventional earth-moving equipment and discs. The horizontal limits of high plastic clay treatment should extend at least 3 feet beyond the outside edge of the footings. This will help facilitate uniform compaction of the replacement fill materials.

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The suggested methods of treatment are based on the results of the swell tests and generally accepted standards in the local engineering community. Swell pressures and volume change potential greater than can be mediated by the suggested methods may exist. Consequently, the owner should recognize that there is an inherent risk that floor slab and foundation damage may occur, even after remedial treatment of the subgrade soil.

### 6.5 Dock Foundation Walls

The foundation wall in the dock area should be designed to resist lateral earth pressures exerted by the backfill. The wall should be designed to also resist an additional uniform lateral load of one-half of the floor or surface loads. An equivalent fluid unit weight of 45 pounds per cubic foot (pcf) is recommended for calculation of the lateral pressures of a granular backfill. Granular backfill should extend from the wall a minimum lateral distance of one-half the wall height. If cohesive soil backfill is used, an equivalent fluid unit weight of 60 pcf should be used in the design. These values assume positive foundation drainage is provided to prevent the build-up of hydrostatic pressures. Wall backfill material recommendations and compaction criteria are presented later in this report.

The maximum toe pressure should not exceed 2,500 psf for the loading dock foundation walls. The walls can be designed for a coefficient of friction between the base of the wall and the subgrade soil of 0.3. A passive soil resistance modeled by an equivalent fluid unit weight of 250 pounds per cubic foot may be used for natural soil against the face of the exterior base or a key below the base of the retaining wall. The upper 2 feet of soil backfilled against the exterior face of the foundation wall should not be assumed to provide any lateral resistance.

We recommend that the dock walls be provided with a foundation drainage system. A typical dock wall drain detail is shown in Figure 3. Granular drainage material around the pipe should consist of 1-inch clean, "GP"-classified crushed rock as determined by ASTM D 2487 with less than 5 percent passing a No. 200 sieve. The synthetic filter fabric indicated on Figure 3 should be a 6-ounce per square yard, non-woven material. A minimum 4-inch-diameter perforated drainpipe is suggested.

### 6.6 Site Drainage and Grading

Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of the building and beneath the floor slab. All grades should be sloped away from the building, and roof

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and surface drainage should be collected and discharged such that water is not permitted to infiltrate the backfill of the building. We recommend that all final slopes have a maximum inclination of 1 vertical to 3 horizontal.

## 7.0 SITE DEVELOPMENT RECOMMENDATIONS AND CONSTRUCTION CONSIDERATIONS

### 7.1 Site Preparation

Prior to site grading, the site should be stripped of surface vegetation. The strippings and any soft surface materials should be removed from the developed portion of the site or should be stockpiled for later placement in landscaped areas. Over excavation and/or lime stabilization of medium and high plastic clays in the building area should be performed at this time. After stripping and remediation of high plastic clay soils, the subgrade in areas to receive fill should be scarified and compacted to a minimum dry density of 90 percent of the maximum dry density as determined by the modified Proctor compaction test.

### 7.2 Fill Materials and Compaction

The low plastic soils encountered on the site are suitable for use as compacted fill. We recommend that all fill placed in the building area have a liquid limit less than 45. Acceptable non-organic fill soils include materials designated CL, ML, CL-ML, SP, SW, GP, and GW by ASTM D 2487. High plastic soils should not be used as structural fill within 3 feet of proposed floor slab elevations or 2 feet below footings unless they are lime-treated.

All structural fill should be placed in 8-inch loose tifts and mechanically compacted to a minimum dry density of at least 90 percent of the maximum dry density as determined by the modified Proctor compaction test. If non-cohesive or granular structural fill materials (SP, SW, GP, and GW) do not exhibit a well-defined moisture-density relationship, such materials should be placed in 12-inch maximum loose lifts and mechanically compacted by a smooth-drummed vibratory roller to a minimum relative density of at least 70 percent as determined by the relative density tests. Field density tests must be performed on each lift of fill to verify that proper compaction is achieved.

Many of the near-surface soil samples collected contained relatively low moisture contents. We would anticipate, if the current dry weather conditions continue, water would need to be added to the fill soils

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in order to obtain proper compaction of the material.

### 7.3 Foundation Excavations

Each footing should bear in firm, undisturbed, natural soils or structural fill. SCI should observe all footing and floor slab excavations for problem areas (soft zones or medium to high plastic clays) prior to placing concrete.

Excessive disturbance of the siltier soils in footing excavations should be avoided. The potential for such disturbance will increase during wetter portions of the year. Footing excavations that have been excessively disturbed should be overdeepened to firm, undisturbed soil. Excessively disturbed soils beneath the floor slab should be removed and replaced with additional granular material.

The base of all excavations should be clean, relatively dry, and free of loose soil or uncompacted fill. The excavations should be protected from extreme temperatures, precipitation, and construction disturbances. To reduce the possibility of desiccation or saturation of the foundation soils, we recommend that the concrete be placed as soon as possible after the excavation is made.

### 7.4 Excavation Bracing Requirements

In the Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, Part 1926, Subpart P." This document was issued to provide for the safety of workers entering trenches or excavations. It is mandated by this federal regulation that all excavations, whether utility trenches, basements, or footings, be constructed in accordance with the OSHA guidelines.

### 7.5 Erosion Control

The low plastic soils encountered on-site soils are relatively silty and considered moderately susceptible to erosion. Erosion control measures should be taken to prevent eroded materials from being carried onto adjacent properties. In addition, the Missouri Department of Natural Resources (MDNR) may require, pursuant to the Federal Water Pollution Control Act and for compliance with the Missouri Clean Water Law, that a General State Operating Permit to Discharge be issued for the project. This permit would require sampling and testing stormwater discharge from the project site on an interval

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likely not to exceed three months until complete development is reached. Erosion control measures such as staked straw bales, silt fences, or rock dikes must be properly erected and continuously maintained to reduce the settleable solids in the discharged stormwater to an acceptable level as mandated by the permit.

### 8.0 PAVEMENT SUBGRADE CONSIDERATIONS

Pavement design recommendations are beyond the scope of work for this report. However, certain aspects should be considered in the design and construction of the paved areas. We suggest that the soil subgrade be compacted to a dry density of at least 90 percent of the material's modified Proctor maximum dry density. The crushed rock base should be compacted to at least 92 percent of the same criterion. California Bearing Ratio (CBR) tests were performed on remolded samples obtained in B15 and B26 at depths ranging between 1 to 3 feet. The samples were remolded to approximately 90 percent of the material's modified Proctor maximum dry density. CBR values greater than 8 were calculated for the samples obtained in B15 and B26. However, our experience testing similar soils in the general vicinity of the site has typically revealed a remolded CBR value in the range of 4 to 5. We therefore recommend that a CBR value of 5 be used in any pavement design or analysis that is performed.

Prior to placing the base course, the subgrade should be proof-rolled to determine if any localized soft areas have developed. Such soft zones, where encountered, should be selectively undercut and backfilled with properly compacted cohesive soil fill meeting the criteria recommended in the previous section of this report. A geotechnical stabilization fabric such as Mirafi 600X may be used to help stabilize particularly soft areas. The subgrade should be sloped to provide drainage. Finally, the asphaltic concrete surface course should be checked during placement to verify proper thickness and density.

### 9.0 CONSTRUCTION MONITORING PROGRAM

The following section details recommendations for a construction monitoring program. This summary of services is recommended to provide quality assurance in assessing design assumptions and to document earth-related construction procedures for compliance with plans, specifications, and good engineering practice. SCI should:

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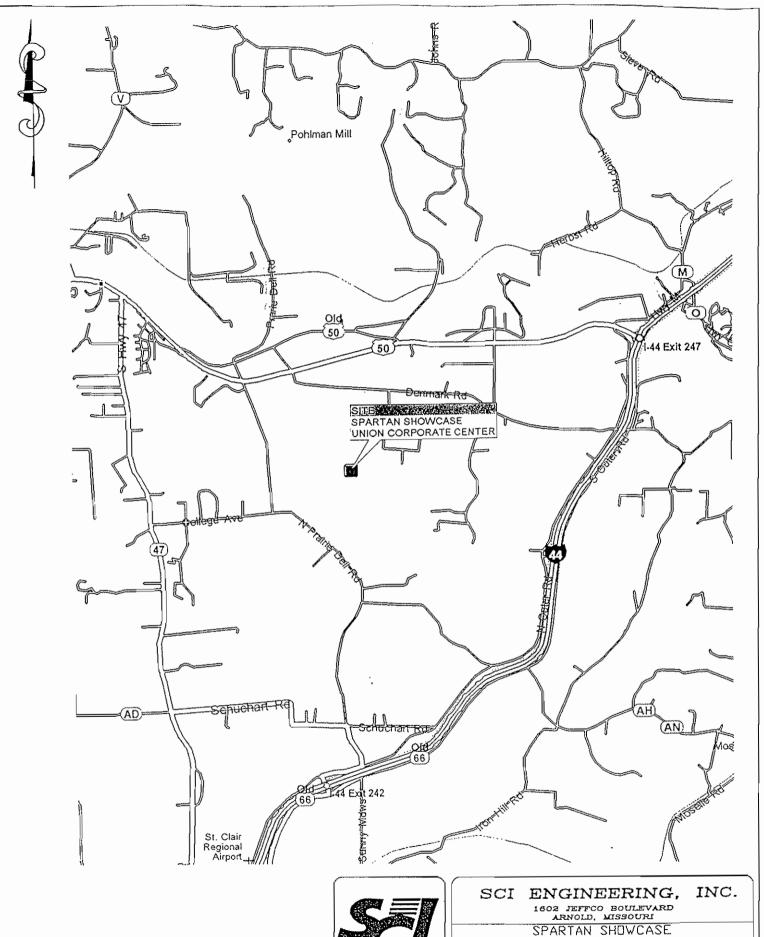
- 1) Review project plans and construction specifications to assess the interpretation of this report.
- 2) Observe site preparation prior to construction.
- 3) Verify the suitability of potential fill materials.
- 4) Monitor placement of structural fill.
- 5) Observe footing excavations.
- 6) Observe all excavations to assess the impact of medium to high plastic clay soils and to recommend the extent of remedial measures required.
- 7) Observe pavement subgrade preparation and provide observation and testing services for the base course and pavement section.

### 10.0 LIMITATIONS

The recommendations provided herein are based on the information obtained at 28 specific drilling locations within the project area and regionally accepted practice. SCI should be contacted if conditions encountered are not consistent with those described.

In addition, we should be provided with a set of final development plans, as soon as they are available for review, to determine the applicability of our recommendations. Construction specifications also merit our review to assess the interpretation of this report. Failure to provide these documents for review may nullify some or all of the recommendations provided herein.

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REFERENCE MICROSOFT EXPEDIA STREETS 2000

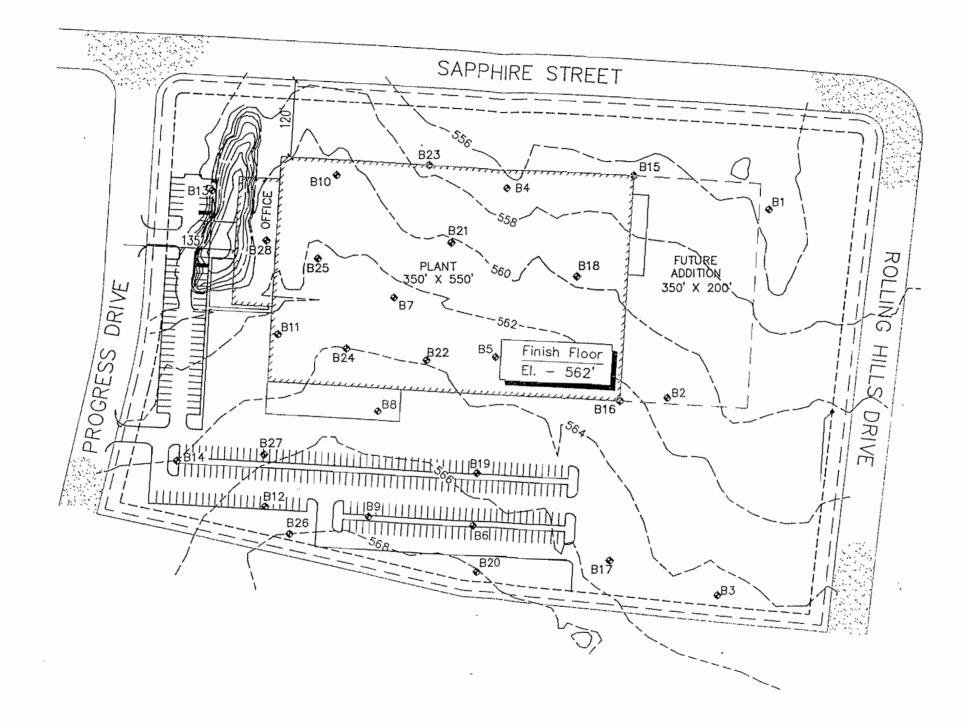


SPARTAN SHOWCASE
UNION CORPORATE CENTER
UNION, MISSOURI

LOCATION MAP

DECEMBER 1999 SCI NO. 990316.10





**LEGEND** 



INDICATES APPROXIMATE SOIL BORING LOCATION

NOTE: BASED ON PLAN PREPARED BY WASHINGTON ENGINEERING & ARCHITECTURE, P.C. DATED MAY 24, 1999.



## SCI ENGINEERING, INC.

1602 JEFFCO BOULEVARD ARNOLD, MISSOURI

SPARTAN SHOWCASE UNION CORPORATE CENTER UNION, MISSOURI

SITE PLAN

DECEMBER 1999

SCI NO. 990316.10

### SCI ENGINEERING, INC.



1602 JEFFCO BOULEVARD ARNOLD, MISSOURI 63010 636•296•6111 FAX 636•296•6667

### BORING LOG LEGEND AND NOMENCLATURE

Items shown in Boring Logs refer to the following:
(Where shown in parenthesis, sampling and testing were performed in gen

(Where shown in parenthesis, sampling and testing were performed in general accordance with applicable ASTM standard methods or practices.)

	1.	Depth	-	Depth below ground surface (fee	et).
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2. Sample - Types designated by letters.

SS - Split-spoon sample, disturbed, obtained by driving 2-inch O.D. split-spoon sampler (ASTM D 1586).

 Diamond core bit sample, nominal two-inch diameter rock sample (ASTM D 2113).

 Thin-walled tube sample, undisturbed, obtained by penetration of a 3-inch diameter tube (ASTM D 1587).

 Continuous sample tube system, undisturbed, obtained by split barrel sampler in conjunction with auger advancement.

 Shear vane, field test to determine strength of cohesive soil by pushing or driving a 2-inch diameter vane then shearing by torquing soil in existing and remolded states (ASTM D 2573).

AS - Disturbed samples obtained from auger cuttings.

Recovery - Recovery is expressed as a ratio of the length recovered to the total length pushed, driven, or cored (inches), e.g. - 9/12.

Numbers indicate blows per six inches of sampler penetration when driven by a
140-pound hammer falling freely 30 inches (ASTM D 1586). When number of blows
reaches 50 without six inches of sampler penetration, the result is shown as a ratio of
50 to the actual penetration, e.g. - 50/2 inches.

Vane Shear

 Strength - Shear strength of soil expressed as the peak strength (existing state)/residual strength (remolded state).

3. **Description** - Description according to the Unified Soil Classification: Description indicates soil constituents and other classification characteristics (ASTM D 2488). A solid line indicates approximate location of stratigraphic change between soil types and the transition may be gradual.

### 4. Laboratory Test Results

- Natural moisture content in percent (ASTM D 2216).
- Dry density of sample tested in pounds per cubic foot (pcf).
- Unconfined compressive strength (ASTM D 2166) in kips per square foot (ksf).
- Liquid limit (ASTM D 4318) in percent.
- Plastic limit (ASTM D 4318) in percent.
- 5. Remarks/Other Data See notation at bottom of log for description of data entries.

RQD Rock Quality Designation; the ratio between the total length of core segments greater than 4 inches in length and the total length of core drilled (expressed as percentage).



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6					Gray and brown, high plastic CLAY	СН							-6
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FIGURE 2-4



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ости (гт.)	NUMBER	TYPE	RECOYERY CINZIND	RER 6 IN.			DESCR:	IPTION			UNIFIED SOIL CLASSIFICATION	SEE REMARK NO.		DENSITY (PGF)	LNCONFINED COMPRESSIVE STRENGTH (K9F)	נופנום נואוד מוחפון	PLASTIC LIMIT	DEPTH (FT.)
0					Brow	n, high p	plastic CI	LAY			СН							0
2	1	SS		4 5 5	Brow CLA	n and gr: Y with tr	ay, low prace sand	plastic S	SILTY		CL		22			42	17	2 
-				5														-
6	3	ss		3 4 4	Gray,	high pla	astic CLA	ΑY			СН		24					-6 ~
8										Ì								-8
-	4	SS		3 3 5									22					-    -10
10-					Borin	g termin	ated at 10	0.0 ft.										
-																		_
12-					l:													-12
14																		- -14
-																		
16																		16
7																		
18-			l															18
~					li													-
20-																		20    -
ийтек	LEV	L:				FEHERIS	5:	_						L		L	1	
<u>X</u>			MH.	R NOTED M M M FFTER CR														
	_ FT _		_	AFTER CR												tian	RE 2-5	5



	ROJECT SPARTAN SHOWCASE BORING NO. B-20 DICTION Union, Missouri SHEET 1 OF 1												
				ig, Inc.			_		· · · · · · · · · · · · · · · · · · ·	****	316.1		
TELECT				567	69 DRILLING METHOD 4" CFA	1	_	E DRIL			18/99		
		2	AMPLE				_		RY TEST			T	
08TH (FT.)	NUMBER	TYPE	RECOVERY (IN/IN)	RER 5 IN. )	DESCRIPTION	UNIFIED SOIL CHEBITICATION			LINCONFINED COMPRESSIVE STRENGTH (KPF)	רומחום רואוב	PLASTIC LIMIT	DETH (FT.)	
0					Brown, Iow plastic SILTY CLAY	CL	T					0	
2 <del></del>	1	SS		4 5 8	D Land CH TW	CL	12					-2	
4	2	SS		4 4 5	Brown and gray, low plastic SILTY CLAY with trace sand		20					4 	
6 <b></b> -	3	ss		3 4 4			21			38	16	-6 -	
8 –	4	SS		3 4 4	Brown and gray, high plastic CLAY with trace gravel	СН	21					<del></del> 8	
10				4	Boring terminated at 10.0 ft.							- 10 -	
12												-12	
14												- 14 -	
16-												-16 -	
18												18 	
20												-20	
Х	NO C	RECTION	CALLI _ HES	R HOTED I HTG HTTER ERI HTTER ERI	ELL INS					tian	₹ 2-6		



					BOKING LOG								
<del>rr</del> oject	SPA	RTA	N SH	OWCASI	<u> </u>			BOR	ING NO	•	В	-21	
LOCATIO								5HE		1	_		
RELLER					41.05	~ .				Q		316.1	
SURFACE	ELE			559	27 DRILLING METHOD 4" CF	- A				LED		18/99	
_		2	AMPLE				8	£ 5	BORATO	רבים א			
DEPTH (FT.)	NUMBER	TYPE	RECOVERY (IN/IN)	TOUS (FOR 6 IN.)	DESCRIPTION	TST STATE	CLASSIFICATION	ROISTIRE	DENSITY (POF)	INCONFINED COMPRESSIVE STRENGTH (KSF	רומחום רושוד	PLASTIC LIMIT	DEPTH (FT.)
0					Brown, high plastic CLAY		CH	-	1				0
2-	1	SS		3 5 6	Proving and gray, low plactic SH TV		CL	20			90	31	- -2
4	2	ST	11  24		Brown and gray, low plastic SILTY CLAY with trace sand			20	108	4.2			4 4
6	3	SS		2 3 5	Brown and gray, high plastic CLAY with trace sand		CH	22					6 -
8					Gray and brown, high plastic CLAY	(	CH						8
10-	4	SS		2 4 5				23					-10
12-					Gray and brown, high plastic CLAY with trace gravel		CH						-12
14 —	5	ss		3 6 7				22					14
16					Boring terminated at 15.0 ft.								16
18													- 18
20 -													-20
HATER	LEVE	Li			REPURKS:				1				
_X	X NO GROUND WATER MOTED AT  THE SECURITIES FT HES FETER CRILLING												
	_ FT _		HRS	FTER CR	ILL ING						FIGU	RE 2-	7

1	 <b>T</b>	
€	7	

	SP/			<u>OWCAS</u>	3	, <del></del>		BOR:	іне но		В	-22	
FOCUL I											QF _		1
DRILLEI SURFACI				g, Inc. 562	89 DRILLING METHOD 4" CFA				JEGT N E DRIL	Q		316.1 18/99	
			AMPLE				T			RY TEST			<u></u>
DEPTH (FT.)	NUMBER	1495	RECOVERY (IN/IN)	HER 6 IN.	DESCRIPTION	UNIFIED SOIL CLASEIFICATION	SEE REMARK NO.			INCONFINED COMPRESSIVE STRENGTH (KSF)	LIGUID LIMIT	RASTIC LIMIT	OEPTH (FT.)
0	-				Brown, high plastic CLAY	СН				···			0
2 —	1	SS		3 4 4				25					-2
4	2	SS		3 4 5	Brown and gray, low plastic SILTY CLAY	CL		20			44	17	-4 -
6	3	SS		2 3 3	Brown and gray, high plastic CLAY with trace gravel	СН		28					-6 -
8	4	SS		3 4				21					-8 ~
10-	4	33		5									10 
12-				4	Gray, high plastic CLAY	СН							- 12
14	5	SS		4 5 7	•			22					14
16 - 18													- 16 - 18
20	6	SS		4 6 7				23					-20
,					Boring terminated at 20.0 ft.								-
интея	E LEW	<u> </u>			REALINE:	L	J	L			_,,		I
_X			THE THE	R HOTED MG AFTER CR									1

FIGURE 2-8

HRS AFTER CRILLING



PROJECT	SPA	RTA	N SH	OWCASI	E	·			DOR:	ING NO	•	В	-23	
LOCAT I	n <u>Un</u>	ion, i	Missou	ıri					SHEE	<u> </u>	1	OF _		1
DRILLER					. 00	41 OF A					Q		316.1	
STIKLLECE	ELE			556	.99 DRILLING NETHOD	4" CFA	· · · · · · · · · · · · · · · · · · ·				LED		18/99	) 
OEPTH (FT.)	NUMBER	TYPE	RECOYERY THE CIN/IN?	FER 5 IN.)	DESCRIPTION		UMIFIED SOIL CLABESFIGATION	SEE REMARK NO.			LINCONFINED CONFRESHINE STRENGTH (KSF)	רופחום רואוז ש	PLASTIC LIMIT IN	OEPTH (FT.)
0					Brown, high plastic CLAY		СН				01			0
2-	1	SS		4 4 4			CL/CH		16			77	27	-2
4	2	ss		6 8 8	Brown and gray, medium plastic SILTY CLAY with trace sand		0.0.01		14					4 
6 –	3	SS		3 3	Gray, high plastic CLAY		СН		25					<del>-</del> -6
8				3										-8
10-	4	SS		3 4 6					21					- -10
12-														12 
14 —	5	SS		4 5 8	Boring terminated at 15.0 ft.	_			22					14 
16-					Borning terminated at 13.0 ft.									16 
18-														- 18
20 -														-20 -
интек	LEVE	Li			REHIRIKS:									
_X	FT_	HÏĒE	FRITE HES	FFTER CR	RILL ING									
	FΥ		HEG	RETER CR	?IL_ It∳G │							FTAL	pr 2-1	)

	_	_
-		

HRS AFTER CRILLING

FT

### BORING LOG

FROMER SPARKTAN SHOWCASE   SPARKTAN SHOWCASE   SPARKTAN SHOWCASE   SPARKTAN SHOWCASE   COUNTY FOR HOLD MISSOURI   COUNTY FOR HO						BOKING COG-									
PROPERTY No.   PROPERTY NO.   PROP	PROJECT	SPA	RTA	N SH	OWCASE	<u> </u>				EORI	ие но		В	-24	
School   S															1
Columbia   Columbia														_	
Description   Description	ETIKLUCE	ELE			563.	45 DRILLING NETHOD 4" (	CFA		_						<u> </u>
Standard   Standard			2	AMPLE		-		Æ			ORATO	RY TEST	RESI	LTS	
Brown, high plastic CLAY	OEPTH (FT.)	NUMBER	TYPE	RECOVERY (IN/IN)	HER 6 IN.)	DESCRIPTION		UNIFIED SOIL CLABBIFICATIO	STE REMORK N	NOISTLRE CONTENT (本)	DRY DENEITY (PCF)	INCONFINED COPPRESSIVE STRENGTH (KSF)	רוטתום רואוב	PLASTIC LIMIT	OCFTH (FI.)
2-   1   ST   24   Brown and gray, low plastic SILTY   CL   20   100   9.9	0		***************************************			Brown, high plastic CLAY		CH				, ,,			0
A	2-	1	ST			Brown and gray, low plastic SILTY		CL				9.9	75	36	-2
S   S   S   S   S   S   S   S   S   S	4	2	22			CEAT with trace said							47	20	- 4
3   SS   2   3   4     26     -8     -8     -8     -10     -10     -10     -10     -10     -12     -10     -14     -15     -16     -16     -16     -16     -16     -18     -16     -18     -20     -16     -18     -20     -16     -20     -	-	_				Brown and gray, high plastic CLAY		СН							
10	6	3	SS		3	Zee wa tata gray, mga prome z z z z				26					- b -
10	8-	,								20					-8 -
Gray, high plastic CLAY with trace   Ch	10-	•	33							20					- 10 -
16	12					Gray, high plastic CLAY with trace sand		СН							-12 -
18- 6 SS 5 8 Boring terminated at 20.0 ft.	14-	5	ss		5					20					1- <del>1</del>
Boring terminated at 20.0 ft.  WHER LEVEL:  X HO GROUND MATER HOTED AT  FIT THELE TRILLING	16-														16 
Boring terminated at 20.0 ft.  WHIER LEVEL:  X NO GROUND MATER HOTED AT  THE TRILLING  FENTARES:	18-				5										-18
X NO GROUND HATER HOTED AT IN THE TRILLING	20-	6	SS		5	Boring terminated at 20.0 ft.				21					-20
X NO GROUND HATER HOTED AT IN THE TRILLING	-	1 1 2 2	1.			LECTION OF THE PROPERTY OF THE									
FT HRS AFTER CRILLING		NO G	ROUNE	real L	iñe Iñe	ने ।									

FIGURE 2-10



				OWCASI	<u>-</u>			BOR:	гие но	•	В	-25_	
LOCAT I										1			1
DRILLE					22 DRILLING METHOD 4" C		—			Q			
STIKE#C	L ELE			301	22 DRILLING METHOD 4" C	T				LED		18/99	
OGTH (FT.)	MUMBER	17FE	RECOVERY THE CINZIN	RER 6 IN.	DESCRIPTION	UNIFIED SOIL CLASSIFICATION	SEE REMARK NO.	МŞ.	DENSITY (PGF)	COMPRESSIVE TO STRENGTH (KSF.)	רוטחום רואוז ש	PLASTIC LIMIT E	DEPTH (FT.)
0		<del> </del>			Brown, high plastic CLAY	CH							0
2-	1	ST	20 24		Brown and gray, medium plastic SILTY CLAY	CL/CH		22 14	104		87 49	30 26	-2 -
4	2	ss		6 7 6				14					-4
6 —	3	SS		2 3	Brown and gray, high plastic CLAY	СН		23					-6
8				2	·								8
10-	4	SS		3 5				22					- 10 -
12-					Gray, high plastic CLAY	СН							- 12
14	5	SS		3 4 7				22					14
16					Boring terminated at 15.0 ft.								16 
18													18 
20 -													-20 -
<b>Пате</b>	LEVE	:L:			REPLAKS:				<u> </u>	L			
X	FFT	HILE	MH.	R MOTED A 175 AFTER CRI									
	Fr -			eeren re							CTOU	nr 2-1	1

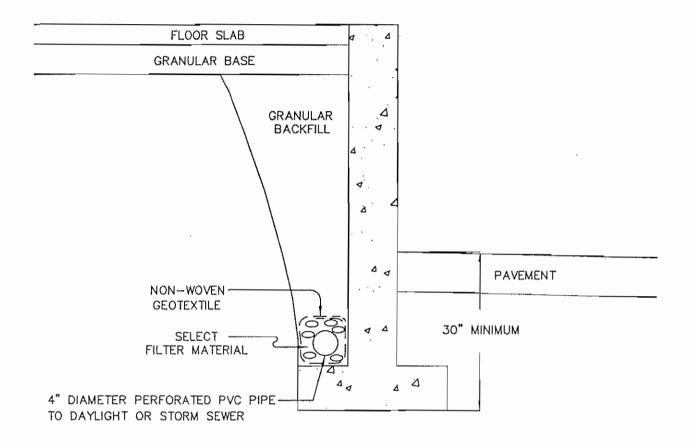


				OWCASE	3	•			BORI	не но	•	В	-26	
Focht 10								_				QF _		1
DRILLER					56	4" CFA		_			Q LED		316.1 18/99	
STIKE	ELL		AMPLE	307.	56 DRILLING METHOD	4 CIA					RY TEST			<u>'</u>
0E9TH (FT.)	NUMBER	TYPE	RECOVERY (IN/IN)	HCMS (FER 6 IN.)	DESCRIPTION		UNIFIED SOIL CLABBIFICATION	SEE REMARK NO.	JRE (%)	DRY DENEITY (PCF)	COMPRESSIVE COMPRESSIVE STRENGTH (KSF)	רומחום רואוד	PLASTIC LIMIT	אניםט
0				_	Brown, high plastic CLAY		СН							0
2-	ĺ	SS		4 7			G.		17					-2
4 –	2	SS		4 4 5	Brown and gray, low plastic SILT CLAY with trace sand and gravel	Y	CL		20			44	17	-4 -
6	3	SS		2 3 4	Brown and gray, high plastic CLA with trace gravel	ΛY	СН		28					-6 -
8				4										-8
10-	4	SS		4 7	Boring terminated at 10.0 ft.				22					10
12-														12
14-														-14
16														16
18-														18
20 -														-20
untek X	H0 (	ละบห ลีหรัโฮ	r∰itti _ Hess	R HOTED I THS FFTER CRI FFTER CRI	ILL IN3							FIRI	BC 2-	12

		I A				G ===								
PROJECT	SPA	RTA	N SH	OWCASI	3				BOR!	гие но	· •	<b>B</b> -	-27	
LOCATIO												QF .		1
DRILLER	Mid	west ]	Drillin	g, Inc.							٥	-	316.1	
ETIKLU CE	ELE	VATIO	н	565.	.50 DRILLING METHOD	<u>4" CFA</u>			DATE	ORIL	LED	11/	18/99	)
		5	SUMPLE				Z.	Ι	LAB	ORATOR	RY TEST	REGL	LTS	
OEPTH (FT.)	NUMBER	TYPE	RECOYERY (IN/IN)	NLOWS (PER 6 IN.)	DESCRIPTION		UNIFIED SOIL CLASSIFICATION	SEE REMORK NO	NOISTIPE CONTENT (%)	DENSITY (PCF)	INCONFINED COPPRESSIVE STRENGTH (KGF)	LIGUID LIMIT	PLASTIC LIMIT	DETH (FT.)
0			<u> </u>		Brown, high plastic CLAY		CH	_			Ot .			0
														L.
2 –	1	ss		5 8					17			70	25	-2
-					Brown and gray low plactic SH TY		CL							<b>-</b>
4	2	SS		4 4 7	Brown and gray, low plastic SILTY CLAY with trace sand				19			4		-4
					Brown and gray, high plastic CLAY		СН							
6	3	SS		2 3					24					<del>-</del> 6
				4										_
8-				3										-8
	4	SS		4 7					21					<u>-</u>
10-					Boring terminated at 10.0 ft.									10
12-														<del>-</del> 12
														_
14-					·									-14
,,														
16														16 
														_ 
18														<del>-</del> 18
20-														- 20
T HATER	1500	1.			FERTRES:			<u>L.</u>						
			O NHIEL	R HOTED A MG	IT									
	F٢		HEG (	AFTER ORD	(LL ING									

FIGURE 2-13

	-	<b>.</b>										-	
				OWCAS:	<u></u>					•		-28	
LOCHT I										1			
DRILLE					- 41 07			FRO	iect h	٥	9903	316.1	0
SURFACE	ELE			5 <u>60</u>	20 DRILLING METHOD 4" CFA	<i>t</i>				LED		18/99	
_		<u> </u>	SAMPLE			z z	Ι.		ORATO	RY TEST	KED		
0EPTH (FT.)	NUMBER	TYPE	RECOVERY (IN/IN)	HCMS (PER 5 IN.)	DESCRIPTION	UNIFIED SOIL CLABSIFICATION	SEE REMARK NO	CONTENT (4)	OENETY PENETY PSC)	LINCONFINED COMPRESSIVE STRENGTH (KSF	רופתום רואוב	PLASTIC LIMIT	DEPTH (FT.)
0					Brown, low plastic SILTY CLAY	CL	Г						0
2	1	SS		3 5 6		СН		19			47	18	-2
4 —	2	SS		2 4 5	Brown and gray, high plastic CLAY with trace sand			20					4 r
6	3	SS		2 3	Gray, high plastic CLAY	СН		26					_6 
8 –				4									-8
10-	4	SS		3 5 7				21					-10
12-					Gray and brown, high plastic CLAY with trace gravel	СН							-12
14-	5	ss		4 6 9	Boring terminated at 15.0 ft.			19					-14
16-													- 16 -
18-													18 
20-													-20
X	NO C	arcute	- HESS WHE	R HOTEO ( MG MG HETER ER: HETER ER:	(IT 114Z	1					FIEL	RE 2-1	14



### NOTES:

- 1. LATERAL EARTH PRESSURES FOR WALL DESIGN ARE PROVIDED IN REPORT.
- 2. BACKFILL MATERIAL AND COMPACTION REQUIREMENTS ARE PROVIDED IN REPORT.
- 3. WEEP HOLES MAY BE USED TO PROVIDE DRAINAGE FOR BACKFILL IF APPROVED BY GEOTECTNICAL ENGINEER. IF WEEP HOLES ARE USED, COHESIVE BACKFILL SHOULD BE USED UP TO LEVEL OF WEEP HOLES.



SCI ENGINEERING, INC.

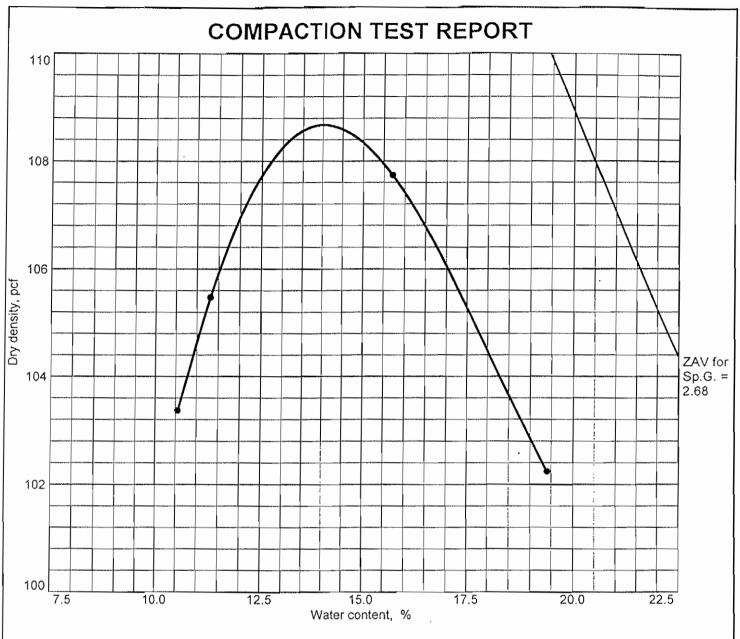
1602 JEFFCO BOULEVARD ARNOLD, MISSOURI

SPARTAN SHOWCASE UNION, MISSOURI

DRAIN DETAIL

DECEMBER 1999 SCI NO. 990316.10

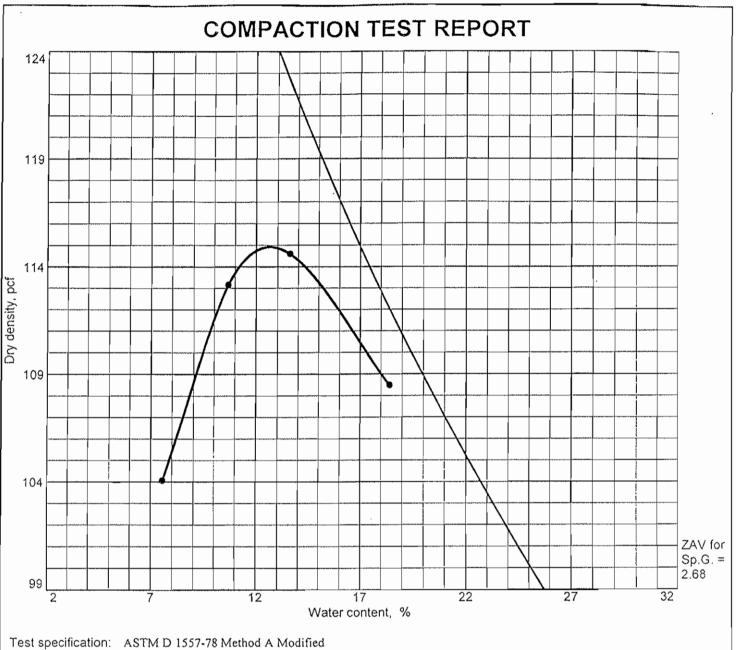
APPENDIX
Control Curves



Test specification: ASTM D 1557-78 Method A Modified

Elev/	Classit	ication	Nat.	S C	1.1	Þi	% >	% <
Depth	USCS	AASHTO	Moist.	Sp.G.	L., L.,	PI	No.4	No.200
1'-3'			1.2	2.68				
1-3			1.3	2.08				

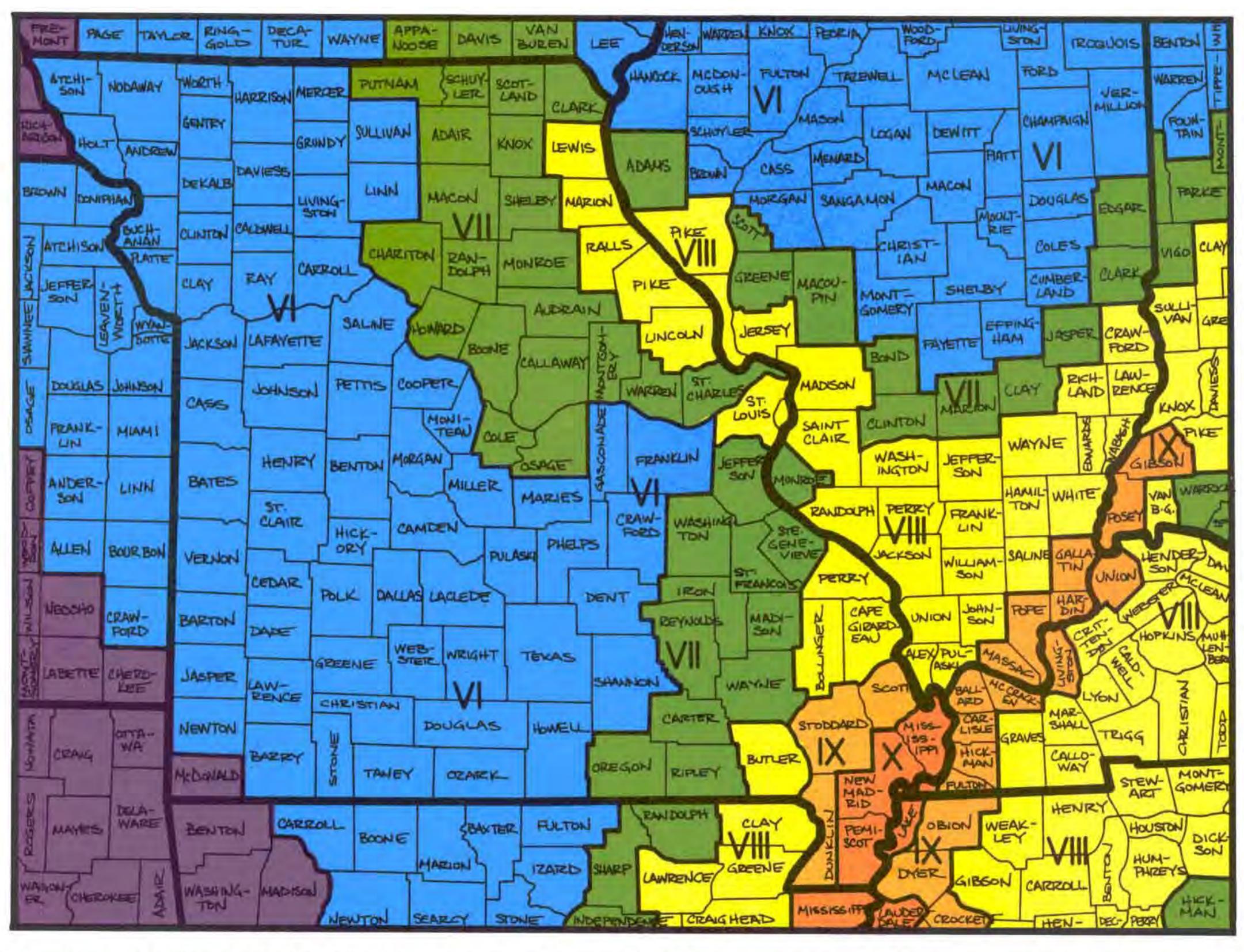
TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 108.7 pcf	Brown high plastic CLAY
Optimum moisture = 14.0 %	
Project No. 990316.10 Client: unc	Remarks:
Project: Spartan Showcase	11-23-99
• Location: B-19	
COMPACTION TEST REPORT	
SCI COMPANIES	Plate i



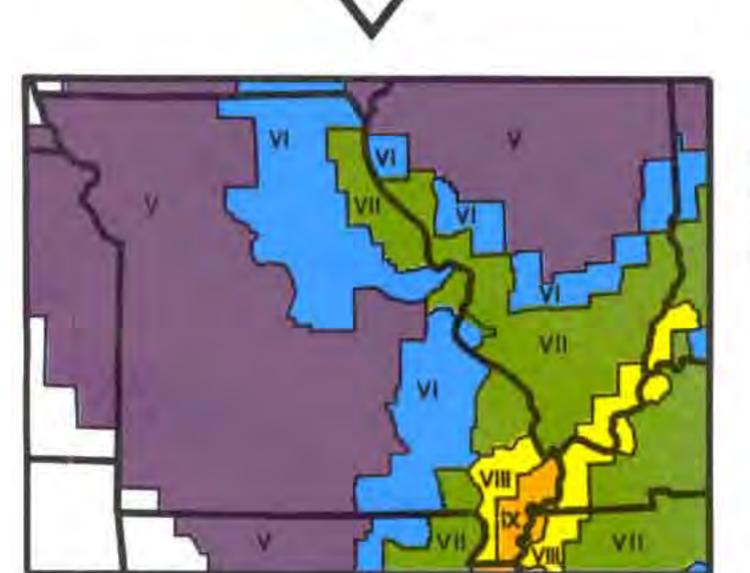
Elev/	Classit	fication	Nat.	Sp.G.	1 1	Pl	% >	% <
Depth	USCS	AASHTO	Moist.	<b>5</b> ρ. <b>6</b> .	LL.	l" i	No.4	No.200
3'-6'	CL			2.68				

3-0	CL			2.00					
	Т		MATERIAL DESCRIPTION						
Maximu	m dry density = 114.9	Bı	rown low pla	stic SILTY C	CLAY				
Optimun	n moisture = 12.6 %								
Project N	o. 990316.10 Client:	unc			Remark	(s:	_		
Project:	Spartan Showcase				11-27-99	9			
• Location	on: B-26		_						
	COMPA								
	SCIC			Plate	2				

# PROJECTED EARTHQUAKE INTENSITIES



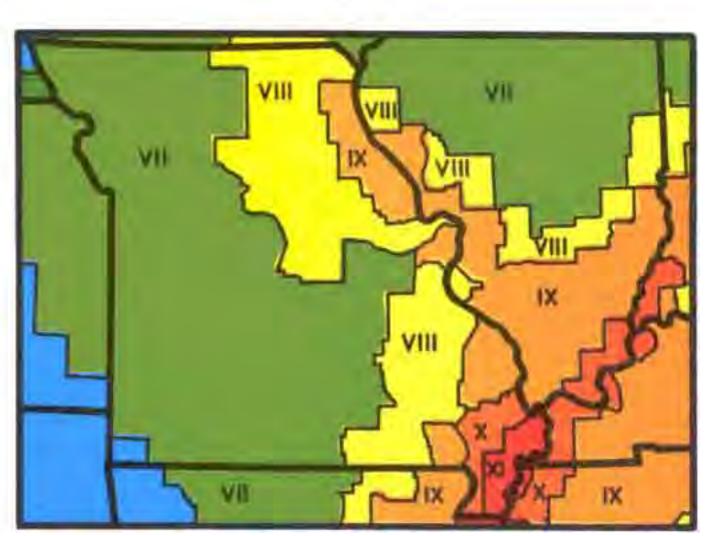
This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude - 7.6 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.



This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude - 6.7 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.

This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude – 8.6 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.





# MODIFIED MERCALLI INTENSITY SCALE

- l People do not feel any Earth movement.
- II A few people might notice movement.
- III Many people indoors feel movement. Hanging objects swing.
- IV Most people indoors feel movement. Dishes, windows, and doors rattle. Walls and frames of structures creak. Liquids in open vessels are slightly disturbed. Parked cars rock.
  - Almost everyone feels movement. Most people are awakened. Doors swing open or closed. Dishes are broken. Pictures on the wall move. Windows crack in some cases. Small objects move or are turned over. Liquids might spill out of open containers.
    - Everyone feels movement. Poorly built buildings are damaged slightly. Considerable quantities of dishes and glassware, and some windows are broken. People have trouble walking. Pictures fall off walls. Objects fall from shelves. Plaster in walls might crack. Some furniture is overturned. Small bells in churches, chapels and schools ring.
    - People have difficulty standing. Considerable damage in poorly built or badly designed buildings, adobe houses, old walls, spires and others. Damage is slight to moderate in well-built buildings.

      Numerous windows are broken. Weak chimneys break at roof lines. Cornices from towers and high buildings fall. Loose bricks fall from buildings. Heavy furniture is overturned and damaged. Some sand and gravel stream banks cave in.
    - Drivers have trouble steering. Poorly built structures suffer severe damage. Ordinary substantial buildings partially collapse. Damage slight in structures especially built to withstand earthquakes. Tree branches break. Houses not bolted down might shift on their foundations. Tall structures such as towers and chimneys might twist and fall. Temporary or permanent changes in springs and wells. Sand and mud is ejected in small amounts.

- Most buildings suffer damage. Houses that are not bolted down move off their foundations. Some underground pipes are broken. The ground cracks conspicuously. Reservoirs suffer severe damage.
- Well-built wooden structures are severely damaged and some destroyed. Most masonry and frame structures are destroyed, including their foundations. Some bridges are destroyed. Dams are seriously damaged. Large landslides occur. Water is thrown on the banks of canals, rivers, and lakes. Railroad tracks are bent slightly. Cracks are opened in cement pavements and asphalt road surfaces.
- Few if any masonry structures remain standing. Large, well-built bridges are destroyed. Wood frame structures are severely damaged, especially near epicenters. Buried pipelines are rendered completely useless. Railroad tracks are badly bent. Water mixed with sand, and mud is ejected in large amounts.
- XII Damage is total, and nearly all works of construction are damaged greatly or destroyed. Objects are thrown into the air. The ground moves in waves or ripples. Large amounts of rock may move. Lakes are dammed, waterfalls formed and rivers are deflected.

Intensity is a numerical index describing the effects of an earthquake on the surface of the Earth, on man, and on structures built by man. The intensities shown in these maps are the highest likely under the most adverse geologic conditions. There will actually be a range in intensities within any small area such as a town or county, with the highest intensity generally occurring at only a few sites. Earthquakes of all three magnitudes represented in these maps occurred during the 1811 - 1812 "New Madrid earthquakes." The isoseismal patterns shown here, however, were simulated based on actual patterns of somewhat smaller but damaging earthquakes that occurred in the New Madrid seismic zone in 1843 and 1895.

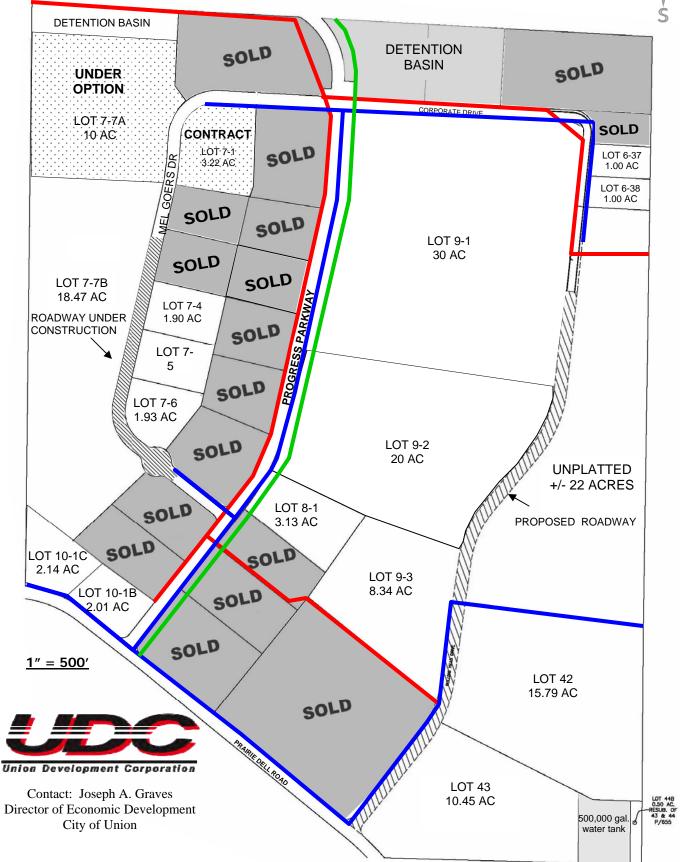
Prepared and distributed by THE MISSOURI STATE EMERGENCY MANAGEMENT AGENCY P.O. BOX 116 JEFFERSON CITY, MO 65102 Telephone: 573-526-9100 GREEN = 6" Gas RED = 8" Sewer BLUE = 12" Water

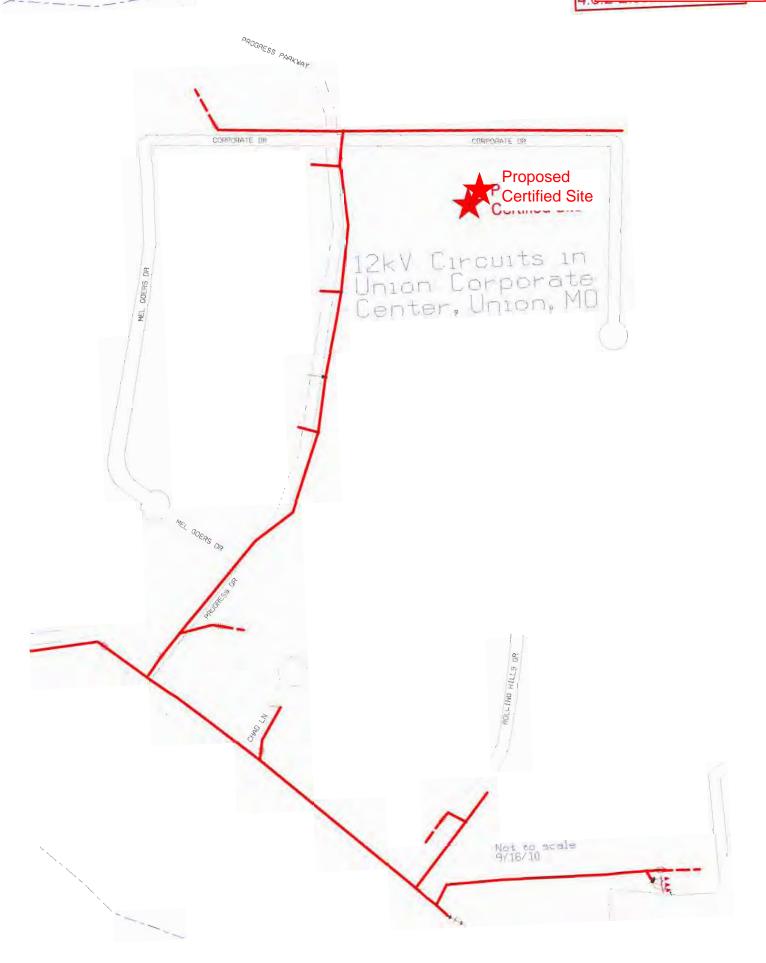
## **UNION CORPORATE CENTER**

## Union, Missouri

Sales Exhibit







## UNION 2009 Annual Water Quality Report

(Consumer Confidence Report)

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

## 2009 Consumer Confidence Report City of Union, Missouri

The City of Union Public Works Department is pleased to announce public availability of the 2009 Consumer Confidence Report. This report is designed to inform our customers about the quality water and services we deliver to you every day.

Copies of this report may be obtained at City Hall, 500 E. Locust, Union, Missouri or by calling 636-583-3600. (Individual consumer notices will not be generated unless requested.)

The 2009 Annual Drinking Water Quality Report in it's entirety, will be published in the Union Missourian on Weekend Edition June 26-27, 2009.

### Attencion!

Este informe contiene información muy importante. Tradúscalo o prequntele a alguien que lo entienda bien. [translated: This report contains very important information. Translate or ask someone who understands this very well.]

### What is the source of my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Our water comes from the following source(s):

Source Name	Туре
WELL # 1 715 CLEARVIEW DR	GROUND WATER
WELL # 2 600 W PARK RD	GROUND WATER
WELL # 3 720 E STATE ST	GROUND WATER
WELL #4 COLLEGE HILLS #12 MONTEREY CT	GROUND WATER
WELL #5 -IND PARK 1551 PRAIRIE DELL RD	GROUND WATER

### **Source Water Assessment:**

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well or surface water intake and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at <a href="http://maproom.missouri.edu/swipmaps/pwssid.htm">http://maproom.missouri.edu/swipmaps/pwssid.htm</a>. To access the maps for your water system you will need the State-assigned identification code, which is printed at the top of this report. The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

### Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum

### MO6010801

# **UNION**2009 Annual Water Quality Report

(Consumer Confidence Report)

production, and can also come from gas stations, urban stormwater runoff, and septic systems.

E. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### Is our water system meeting other rules that govern our operations?

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure it's safety. Our system has been assigned the identification number MO6010801 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report. Any violations of state requirements or standards will be further explained later in this report.

### How might I become actively involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at 636-583-3600 to inquire about scheduled meetings or contact persons.

### Do I need to take any special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ trans-plants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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### Contaminants Report

### **Definitions:**

MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

90th percentile: For lead and Copper testing. 10% of test results are above this level and 90% are below this level.

Level Found: is the average of all test results for a particular contaminant.

Range of Detections: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found.

MRLDG: Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health.

MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water.

RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

### **Abbreviations:**

PPB: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

n/a: not applicable.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

MFL: million fibers per liter, used to measure asbestos concentration.

nd: not detectable at testing limits.

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

### Regulated Contaminants

<b>Regulated Contaminants</b>	<b>Collection Date</b>	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	8/29/2008	0.273	0.163 -	ppm	2	2	Discharge of drilling wastes;
			0.273				Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	8/29/2008	0.8	0.48 -	ppm	4	4	Natural deposits; Water additive
12001422	0,23,2000	0.0	0.8	PP		·	which promotes strong teeth.
NITRATE-NITRITE	1/26/2009	0.68	0.68	ppm	10	10	Runoff from fertilizer use;
							Leaching from septic tanks,
							sewage; Erosion of natural
							deposits

Disinfection By Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Fou	ind in the Calendar	Year of 2009					

Lead and Copper	Date	90 <sup>TH</sup> Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2008 - 2010	0.116	0.00646 - 0.132	ppm	1.3	0	Corrosion of household plumbing systems
LEAD	2008 - 2010	2.12	1.06 - 4.01	ppb	15	0	Corrosion of household plumbing systems

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of August,	MCL: Systems that Collect Less Than	0	Naturally present in the
	6 sample(s) returned as	40 Samples per Month - No more than		environment
	positive	1 positive monthly sample		

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Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	5/29/2007	1.2	0.6 - 1.2	pCi/l	5		Erosion of natural deposits
GROSS ALPHA PARTICLE ACTIVITY	5/29/2007	4.4	1.5 - 4.4	pCi/l			Erosion of natural deposits
RADIUM-226	5/29/2007	1.2	0.6 - 1.2	pCi/l	5	0	

## Violations and Health Effects Information

During the 2009 calendar year, we had the below noted violation(s) of drinking water regulations.

Type	Category	Analyte	Compliance Period
MCL (TCR), MONTHLY	Maximum Contaminant Level	COLIFORM (TCR)	08/01/2009 - 08/31/2009
	Violation		

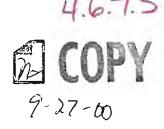
Any Additional Required Health Effects Language or Violation Notices Additional Required Health Effects Language:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. There are no additional required health effects violation notices.

# Optional Monitoring (not required by EPA) Optional Contaminants

Monitoring is not required for optional contaminants.

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ALKALINITY, CACO3	8/29/2008	299	204 - 299	MG/L			
STABILITY							
ALKALINITY, TOTAL	9/15/2005	285	193 - 285	MG/L			
CALCIUM	8/29/2008	60.3	40 - 60.3	MG/L			
CHLORIDE	8/29/2008	5.27	5.27	MG/L	250		
HARDNESS,	8/29/2008	304	207 - 304	MG/L			
CARBONATE							
IRON	8/29/2008	0.0116	0.0116	MG/L	0.3		
MAGNESIUM	8/29/2008	37.2	26 - 37.2	MG/L			
MANGANESE	8/29/2008	0.00236	0.00127 -	MG/L	0.05		
			0.00236				
PH	8/29/2008	7.8	7.6 - 7.8	PH	8.5		
POTASSIUM	8/29/2008	1.29	0.91 - 1.29	MG/L			
SODIUM	8/29/2008	8.98	2.02 - 8.98	MG/L		20	
SULFATE	8/29/2008	20.9	7.9 - 20.9	MG/L	250		
TDS	8/29/2008	319	200 - 319	MG/L	500		
ZINC	8/29/2008	0.0241	0.0135 -	MG/L	5		
			0.0241				



### MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

MONTHLY MONITORING RECORD FOR WASTEWATER TREATMENT FACILITIES

NAME OF FACILITY  Union East STP					7	CITY SEX NEX SEC31 T43N R1E FRANKLIN CO.							COUNTY/REGION UNNAMED TREBUTARY TO BOURBUESE RIVER 07140103-01-03				
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26								74	0	Fill out one copy of report each month and mail in monthly for each treatment facility. Mail one copy of report to the appropriate DNR regional office as noted in your permit	Reports must be signed by whoever performed tests and by all appropriate official. In the weather column, use the following symbols: R-rain, S-snow, C-clear, P.Cpa	Use grab sample for pH, Temp. and D.O. Use grab samples for all operational control test. Use 24 hr. composite (proportional) samples for B.O.D. 5, and Sus. Solids tests unless NP	"Standard Methods" or Treatment plant flow m	e de c	ons, slud
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## PDC Laboratories, Inc.

3278 N. Highway 67 - Florissant, MO 63033 (314) 432-0550 - (800) 333-FAST (3278) - FAX (314) 432-4977



#### Laboratory Results

CITY OF UNION WWTP 500 EAST LOCUST STREET

UNION, MO 63084 Attn: Mr. David Aguilar Date Received: 08/03/10 13:22

Report Date 08/16/10 Customer # : 276613

P.O. Number;

Facility:

Sample No: 10088054-1	<del></del>		Collect Date 08/03/10	10:00	
Client ID: MO-0121312	Site: STL		Locator: 8310		
Parameter	Qualifier	Result	Analysis Date	Analyst	Lab
EPA 1664 REV 2/99					STL
Hexane Ext. Material (HEM) by SPE	<	5 mg/i	08/06/10 13:00	MEP	
EPA 200.8 R5.4					PIA
Sample Preparation			08/12/10 08:45	ECK	
Sample Preparation			08/09/10 06:45	JEM	
EPA 200.8 R5.4					PIA
Cadmium	<	0.00008 mg/l	08/13/10 16:16	WML	
Copper		0.0036 mg/l	08/13/10 16:16	JMW	
Lead		0.00031 mg/l	08/13/10 16:16	JMW	

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PDC Laboratories participates in the following accreditation/certification and proficiency programs at the following locations. Endorsement by the Federal or State Government or their agencies is not implied.

PIA PDC Laboratories - Peoria, IL

NELAC Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100230 State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17553

Drinking Water Certifications: Indiana (C-IL-040); Kansas (E-10338); Missouri (00870); Wisconsin (998294430)

Wastewater Certifications: Arkansas; Iowa (240); Kansas (E-10338); Wisconsin (998294430) Hazardous/Solid Waste Certifications: Arkansas; Kansas (E-10338); Wisconsin(998294430)

UST Certification: Iowa (240)

SPMO PDC Laboratories - Springfield, MO

EPA DMR-QA Program

PDC Laboratories - St. Louis, MO

NELAC Accreditation for Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100253.

Certified by: Sahaa 9. Pandolfo Barbara G. Pandolfo, Project Manager

Page: 1 of 1

## ARTICLE IV. PRETREATMENT OF SOLID WASTE

#### SECTION 710.190: GENERAL PROVISIONS

- A. *Purpose And Policy*. This Article sets forth uniform requirements for users of the City owned treatment works for the City of Union and which enable the City of Union to comply with all applicable State and Federal laws, including the Clean Water Act (33 United States Code 1251 et seq.) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403). The objectives of this Article are:
  - 1. To prevent the introduction of pollutants into the City owned treatment works that will interfere with its operation;
  - 2. To prevent the introduction of pollutants into the City owned treatment works that will pass through the City owned treatment works, inadequately treated, into receiving waters or otherwise be incompatible with the City owned treatment works;
  - 3. To protect both City owned treatment works personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
  - 4. To promote reuse and recycling of industrial wastewater and sludge from the City owned treatment works;
  - 5. To provide for fees for the equitable distribution of the cost of operation, maintenance and improvement of the City owned treatment works; and
  - 6. To enable the City of Union to comply with its National Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements and any other Federal or State laws to which the City owned treatment works is subject.

This Article shall apply to all users of the City owned treatment works. The Article authorizes the issuance of wastewater discharge permits; provides for monitoring, compliance and enforcement activities; establishes administrative review procedures; requires user reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the program herein.

- B. *Administration*. Except as otherwise provided herein, the City Engineer shall administer, implement and enforce the provisions of this Article. Any powers granted to or duties imposed upon the City Engineer may be delegated by the City Engineer to other City of Union personnel.
- C. *Abbrevations*. The following abbreviations, when used in this Article, shall have the designated meanings:

**BOD:** Biochemical Oxygen Demand

CFR: Code of Federal Regulations

COD: Chemical Oxygen Demand

*EPA*: U.S. Environmental Protection Agency

gpd: Gallons per day

*mg/1*: Milligrams per liter

NPDES: National Pollutant Discharge Elimination System

**POTW:** City owned treatment works

RCRA: Resource Conservation and Recovery Act

SIC: Standard Industrial Classification

TSS: Total Suspended Solids

U.S.C.: United States Code

D. *Definitions*. Unless a provision explicitly states otherwise, the following terms and phrases, as used in this Article, shall have the meanings hereinafter designated.

ACT OR "THE ACT": The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.

APPROVAL AUTHORITY: Missouri Department of Natural Resources.

#### AUTHORIZED REPRESENTATIVE OF THE USER:

- 1. If the user is a corporation:
  - a. The president, secretary, treasurer or a vice president of the corporation in charge of a principal business function or any other person who performs similar policy or decision-making functions for the corporation; or
  - b. The manager of one (1) or more manufacturing, production or operation facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000.00)(in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2. If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.
- 3. If the user is a Federal, State or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility or their designee.
- 4. The individuals described in paragraphs (1) through (3) above may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the

company and the written authorization is submitted to the City of Union.

BIOCHEMICAL OXYGEN DEMAND OR BOD: The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at twenty degrees Centigrade (20°C), usually as a concentration (e.g., mg/1).

CATEGORICAL PRETREATMENT STANDARD OR CATEGORICAL STANDARD: Any regulation containing pollutant discharge limits promulgated by EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. 1317) which apply to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405--471.

CITY: The City of Union, Missouri.

CITY ENGINEER: The person designated by the City of Union to supervise the operation of the POTW and who is charged with certain duties and responsibilities by this Article or a duly authorized representative.

CITY OWNED TREATMENT WORKS OR POTW: A treatment works, as defined by Section 212 of the Act (33 U.S.C. 1292), which is owned by the City. This definition includes any devices or systems used in the collection, storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant.

*ENVIRONMENTAL PROTECTION AGENCY OR EPA:* The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director or other duly authorized official of said agency.

*EXISTING SOURCE:* Any source of discharge, the construction or operation of which commenced prior to the publication by EPA of proposed categorical pretreatment standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

GRAB SAMPLE: A sample which is taken from a wastestream without regard to the flow in the wastestream and over a period of time not to exceed fifteen (15) minutes.

*INDIRECT DISCHARGE OR DISCHARGE:* The introduction of pollutants into the POTW from a non-domestic source regulated under Sections 307(b), (c) or (d) of the Act.

*INSTANTANEOUS MAXIMUM ALLOWABLE DISCHARGE LIMIT:* The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composite sample collected, independent of the industrial flow rate and the duration of the sampling event.

*INTERFERENCE:* A discharge which alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and, therefore, is the cause of a violation of the City's NPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provision or permits issued thereunder or any more stringent State or local regulations: Section 405 of the Act; the Soled Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act

(RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research and Sanctuaries Act.

*MEDICAL WASTE:* Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes and dialysis wastes.

#### **NEW SOURCE:**

- 1. Any building, structure, facility or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307© of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that Section, provided that:
  - a. The building, structure, facility or installation is constructed at a site at which no other source is located; or
  - b. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
  - c. The productions or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.
- 2. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs (1) (b) or (c) above but otherwise alters, replaces or adds to existing process or production equipment.
- 3. Construction of a new source as defined under this paragraph has commenced if the owner or operator has:
  - a. Begun, or caused to begin, as part of a continuous on-site construction program:
    - (1) Any placement, assembly or installation of facilities or equipment; or
    - (2) Significant site preparation work including clearing, excavation or removal of existing buildings, structures or facilities which is necessary for the placement, assembly or installation of new source facilities or equipment; or
  - b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss and contract for feasibility, engineering and design studies do not constitute a contractual obligation under this paragraph.

*NON-CONTACT COOLING WATER:* Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product.

*PASS THROUGH:* A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the City's NPDES permit, including an increase in the magnitude or duration of a violation.

*PERSON:* Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity; or their legal representatives, agents or assigns. This definition includes all Federal, State and local governmental entities.

pH: A measure of the acidity or alkalinity of a solution, expressed in standard units.

*POLLUTANT:* Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity or odor).

*PRETREATMENT:* The reduction of the amount of pollutants, the eliminations of pollutants or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.

PRETREATMENT REQUIREMENTS: Any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

PRETREATMENT STANDARDS OR STANDARDS: Prohibited discharge standards, categorical pretreatment standards and local limits.

PROHIBITED DISCHARGE STANDARDS OR PROHIBITED DISCHARGES: Absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 710.200(A).

SEPTIC TANK WASTE: Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers and septic tanks.

SEWAGE: Human excrement and gray water (household showers, dishwashing operations, etc.).

#### SIGNIFICANT INDUSTRIAL USER:

- 1. A user subject to categorical pretreatment standards; or
- 2. A user that:
  - a. Discharges an average of twenty-five thousand (25,000) gpd or more of process

wastewater to the POTW (excluding sanitary, non-contact cooling and boiler blowdown wastewater);

- b. Contributes a process wastestream which makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
- c. Is designed as such by the City on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
- 3. Upon a finding that a user meeting the criteria in paragraph (2) has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the City may at any time, on its own initiative or in response to a petition received from a user and in accordance with procedures in 40 CFR 403.8(f)(6), determine that such user should not be considered a significant industrial user.

*SLUG LOAD OR SLUG:* Any discharge at a flow rate or concentration which could cause a violation of the prohibited discharge standards in Section 710.200(A).

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE: A classification pursuant to the Standard Industrial Classification Manual issued by the United States Office of Management and Budget.

STORMWATER: Any flow occurring during or following any form of natural precipitations and resulting from such precipitation, including snowmelt.

SUSPENDED SOLIDS: The total suspended matter that floats on the surface of or is suspended in water, wastewater or other liquid and which is removable by laboratory filtering.

USER OR INDUSTRIAL USER: A source of indirect discharge.

*WASTEWATER:* Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities and institutions, whether treated or untreated, which are contributed to the POTW.

WASTEWATER TREATMENT PLANT OR TREATMENT PLANT: That portion of the POTW which is designated to provide treatment of municipal sewage and industrial waste. (Ord. No. 3235 §1, 4-16-07)

## SECTION 710.200: GENERAL SEWER USE REQUIREMENTS

## A. Prohibited Discharge Standards.

General prohibitions. No user shall introduce or cause to be introduced into the POTW
any pollutant or wastewater which causes pass through or interference. These general
prohibitions apply to all users of the POTW whether or not they are subject to categorical
pretreatment standards or any other national, State or local pretreatment standards or
requirements.

- 2. *Specific prohibitions*. No user shall introduce or cause to be introduced into the POTW the following pollutants, substances or wastewater:
  - a. Pollutants which create a fire or explosive hazard in the POTW including, but not limited to, waste streams with a closed-cup flashpoint of less than one hundred forty degrees Fahrenheit (140°F) (60°C) using the test methods specified in 40 CFR 261.21;
  - b. Wastewater having a pH less than five (5.0) or more than ten (10.0) or otherwise causing corrosive structural damage to the POTW or equipment;
  - c. Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference with the system;
  - d. Pollutants, including oxygen-demanding pollutants (BOD, etc), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW;
  - e. Wastewater having a temperature which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed one hundred forty degrees Fahrenheit (140°F) (40°C);
  - f. Petroleum oil, non-biodegradable cutting oil or products of mineral oil origin in amounts that will cause interference or pass through;
  - g. Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
  - h. Trucked or hauled pollutants, except at discharge points designated by the City Engineer in accordance with Section 710.210(D);
  - i. Noxious or malodorous liquids, gases, solids or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life or to prevent entry into the sewers for maintenance or repair;
  - j. Wastewater containing any radioactive wastes or isotopes except in compliance with applicable State or Federal regulations;
  - k. Stormwater, surface water, ground water, artisan well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, non-contact cooling water and unpolluted wastewater, unless specifically authorized by the City Engineer;
  - 1. Sludges, screenings or other residues from the pretreatment of industrial wastes;
  - m. Medical wastes, except as specifically authorized by the City Engineer in a wastewater discharge permit;
  - n. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test.

Pollutants, substances or wastewater prohibited by this Section shall not be processed or stored in such a manner that they could be discharged to the POTW.

- B. *National Categorical Pretreatment Standards*. The categorical pretreatment standards found at 40 CFR Chapter I, Subchapter N, Parts 405--471 are hereby incorporated.
  - 1. Where a categorical pretreatment standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, the City Engineer may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c).
  - 2. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the City Engineer shall impose an alternate limit using the combined wastestream formula in 40 CFR 403.6(e).
  - 3. A user may obtain a variance from a categorical pretreatment standard if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by EPA when developing the categorical pretreatment standard.
  - 4. A user may obtain a net gross adjustment to a categorical standard in accordance with 40 CFR 403.15.
- C. *State Pretreatment Standards*. State of Missouri General Pretreatment Regulations shall be followed. Such regulations are located at 10 CSR 20-6.100. Such regulations are incorporated by reference herein.

## D. Local Limits.

1. The following limits are established with respect to the lagoon to protect against pass through interference. No person shall discharge wastewater containing in excess of the following:

.081 mg/l arsenic

2523.97 mg/l BODs

.007 mg/1 cadmium

0.517 mg/l chromium

0.181 mg/l copper

0.214 mg/l lead

0.028 mg/l mercury

1.533 nickel

0.084 mg/l silver

3075.16 mg/l total suspended solids

2.742 mg/l zinc

262.13 mg/l ammonia

0.078 mg/l molyborium

0.464 mg/l methylene chloride

0.834 mg/l bis (2-Ethylohexgl) phthalate

6.344 mg/l iron

100 mg/1 polar and non-polar, oil and grease

2. The following limits are established with respect to the Denmark facility to protect against pass through interference. No person shall discharge wastewater containing in excess of the following:

0.2639 mg/l silver

0.0024 mg/l cadmium

0.5073 mg/l copper

0.0685 mg/lead

6025.66 mg/1 BODs

8254.75 mg/l total suspended solids

130.90 mg/l ammonia

0.0599 mg/l methylene chloride

100.0 mg/l polar and non-polar, oil and grease

The above limits apply at the point where the wastewater is discharged to the POTW. All concentrations for metallic substances are for total metal unless indicated otherwise. The City Engineer may impose mass limitations in addition to, or in place of, the concentration-based limitations above.

- E. *The City Of Union's Right Of Revision*. The City of Union reserves the right to establish, by ordinance or in wastewater discharge permits, more stringent standards or requirements on discharges to the POTW.
- F. *Dilution*. No user shall ever increase the use of process water or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The City Engineer may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements or in other cases when the imposition of mass limitations is appropriate. (Ord. No. 3235 §1, 4-16-07)

#### SECTION 710.210: PRETREATMENT OF WASTEWATER

A. *Pretreatment Facilities*. Users shall provide wastewater treatment as necessary to comply with this Article and shall achieve compliance with all categorical pretreatment standards, local limits and the prohibitions set out in Section 710.200(A) within the time limitations specified by EPA, the State or the City Engineer, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the City Engineer for review and shall be acceptable to the City Engineer before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the City under the provisions of this Article.

#### B. Additional Pretreatment Measures.

- Whenever deemed necessary, the City Engineer may require users to restrict their
  discharge during peak flow periods, designate that certain wastewater be discharged only
  into specific sewers, relocate and/or consolidate points of discharge, separate sewage
  waste streams from industrial waste streams and such other conditions as may be
  necessary to protect the POTW and determine the user's compliance with the
  requirements of this Article.
- 2. The City Engineer may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. A wastewater discharge permit may be issued solely for flow equalization.
- 3. Grease, oil and sand interceptors shall be provided when, in the opinion of the City Engineer, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil or sand; except that such interceptors shall not be required for residential users. All interception units shall be of type and capacity approved by the City Engineer and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned and repaired regularly, as needed, by the user at their expense.
- 4. Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.
- C. Accidental Discharge/Slug Control Plans. At least once every two (2) years, the City Engineer shall evaluate whether each significant industrial user needs an accidental discharge/slug control plan. The City Engineer may require any user to develop, submit for approval and implement such a plan. Alternatively, the City Engineer may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:
  - 1. Description of discharge practices, including non-routine batch discharges;
  - 2. Description of stored chemicals;
  - 3. Procedures for immediately notifying the City Engineer of any accidental or slug discharge, as required by Section 710.240(F); and

4. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.

#### D. Hauled Wastewater.

- 1. Septic tank waste may be introduced into the POTW only at locations designated by the City Engineer and at such times as are established by the City Engineer. Such waste shall not violate Section 710.200 or any other requirements established by the City of Union. The City Engineer may require generators of hauled industrial waste to obtain wastewater discharge permits.
- 2. The City Engineer shall require haulers of industrial waste to obtain wastewater discharge permits. The City Engineer may require generator of hauled industrial waste to obtain wastewater discharge permits. The City Engineer also may prohibit the disposal of hauled industrial waste. The discharge of hauled waste is subject to all other requirements of this Article.
- 3. Industrial waste haulers may discharge loads only at locations designated by the City Engineer. No load may be discharged without prior consent of the City Engineer. The City Engineer may collect samples of each hauled load to ensure compliance with applicable standards. The City Engineer may require the industrial waste hauler to provide a waste analysis of any load prior to discharge.
- 4. Industrial waste haulers must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents and whether any wastes are RCRA hazardous wastes. (Ord. No. 3235 §1, 4-16-07)

## SECTION 710.220: WASTEWATER DISCHARGE PERMIT APPLICATION

- A. Wastewater Analysis. When requested by the City Engineer, a user must submit information on the nature and characteristics of its wastewater within fifteen (15) days of the request. The City Engineer is authorized to prepare a form for this purpose and may periodically require users to update this information.
- B. Wastewater Discharge Permit Requirement.
  - 1. No significant industrial user shall discharge wastewater into the POTW without first obtaining a wastewater discharge permit from the City Engineer, except that a significant industrial user that has filed a timely application pursuant to Subsection (C) of this Section may continue to discharge for the time period specific therein.

- 2. The City Engineer may require other users to obtain wastewater discharge permits as necessary to carry out the purposes of this Article.
- 3. Any violation of the terms and conditions of a wastewater discharge permit shall be deemed a violation of this Article and subjects the wastewater discharge permittee to the sanctions set out in Sections 710.280 through 710.290 of this Article. Obtaining a wastewater discharge permit does not relieve a permittee of its obligation to comply with all Federal and State pretreatment standards or requirements or with any other requirements of Federal, State and local law.
- C. Wastewater Discharge Permitting--Existing Connections. Any user required to obtain a wastewater discharge permit who was discharging wastewater into the POTW prior to the effective date of this Article and who wishes to continue such discharges in the future shall, within thirty (30) days after said date, apply to the City Engineer for a wastewater discharge permit in accordance with Subsection (E) of this Section and shall not cause or allow discharges to the POTW to continue after ninety (90) days of the effective date of this Article except in accordance with a wastewater discharge permit issued by the City Engineer.
- D. Wastewater Discharge Permitting--New Connections. Any user required to obtain a wastewater discharge permit who proposes to begin or recommence discharging into the POTW must obtain such permit prior to the beginning or recommencing of such discharge. An application for this wastewater discharge permit, in accordance with Subsection (E) of this Section, must be filed at least thirty (30) days prior to the date upon which any discharge will begin or recommence.
- E. Wastewater Discharge Permit Application Contents. All users required to obtain a wastewater discharge permit must submit a permit application. The City Engineer may require all users to submit as part of an application the following information:
  - 1. All information required by Section 710.240(A)(2) of this Article;
  - Description of activities, facilities and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility which are or could accidentally or intentionally be discharged to the POTW;
  - 3. Number and type of employees, hours of operation and proposed or actual hours of operation;
  - 4. Each product produced by type, amount, process or processes and rate of production;
  - 5. Type and amount of raw materials processed (average and maximum per day);
  - 6. Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, floor drains and appurtenances by size, location and elevation and all points of discharge;
  - 7. Time and duration of discharges; and
  - 8. Any other information as may be deemed necessary by the City Engineer to evaluate the wastewater discharge permit application.

- Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.
- F. *Application Signatories And Certification*. All wastewater discharge permit applications and user reports must be signed by an authorized representative of the user and contain the following certification statement:
  - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- G. Wastewater Discharge Permit Decision. The City Engineer will evaluate the data furnished by the user and may require additional information. Within thirty (30) days of receipt of a complete wastewater discharge permit application, the City Engineer will determine whether or not to issue a wastewater discharge permit. The City Engineer may deny any application for a wastewater discharge permit. (Ord. No. 3235 §1, 4-16-07)

## SECTION 710.230: WASTEWATER DISCHARGE PERMIT ISSUANCE PROCESS

- A. Wastewater Discharge Permit Duration. A wastewater discharge permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. A wastewater discharge permit may be issued for a period less than five (5) years, at the discretion of the City Engineer. Each wastewater discharge permit will indicate a specific date upon which it will expire.
- B. Wastewater Discharge Permit Contents. A wastewater discharge permit shall include such conditions as are deemed reasonably necessary by the City Engineer to prevent pass through or interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal and protect against damage to the POTW.
  - 1. Wastewater discharge permits must contain:
    - a. A statement that indicates wastewater discharge permit duration, which in no event shall exceed five (5) years;
    - b. A statement that the wastewater discharge permit is non-transferable without prior notification to the City in accordance with Subsection (E) of this Section and provisions for furnishing the new owner or operator with a copy of the existing wastewater discharge permit;
    - c. Effluent limits based on applicable pretreatment standards;

- d. Self monitoring, sampling, reporting, notification and record keeping requirements. These requirements shall include an identification of pollutants to be monitored, sampling location, sampling frequency and sample type based on Federal, State and local law; and
- e. A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable Federal, State or local law.
- 2. Wastewater discharge permits may contain, but need not be limited to, the following conditions:
  - a. Limits on the average and/or maximum rate of discharge, time of discharge and/or requirements for flow regulation and equalization;
  - Requirements for the installation of pretreatment technology, pollution control or construction of appropriate containment devices designed to reduce, eliminate or prevent the introduction of pollutants into the treatment works;
  - Requirements for the development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated or non-routine discharges;
  - d. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW;
  - e. The unit charge or schedule of user charges and fees for the management of the wastewater discharged to the POTW;
  - f. Requirements for installation and maintenance of inspection and sampling facilities and equipment;
  - g. A statement that compliance with the wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable Federal and State pretreatment standards, including those which become effective during the term of the wastewater discharge permit; and
  - h. Other conditions as deemed appropriate by the City Engineer to ensure compliance with this Article and State and Federal laws, rules and regulations.
- C. Wastewater Discharge Permit Appeals. The City Engineer shall provide public notice of the issuance of a wastewater discharge permit. Any person, including the user, may petition the City Engineer to reconsider the terms of a wastewater discharge permit within fifteen (15) days of notice of issuance.
  - 1. Failure to submit a timely petition for review shall be deemed to be a waiver of the administrative appeal.
  - 2. In its petition, the appealing party must indicate the wastewater discharge permit

- provisions objected to, the reasons for this objection and the alternative condition, if any, it seeks to place in the wastewater discharge permit.
- 3. The effectiveness of the wastewater discharge permit shall not be stayed pending the appeal.
- 4. If the City Engineer fails to act within thirty (30) days, a request for reconsideration shall be deemed to be denied. Decisions not to reconsider a wastewater discharge permit, not to issue a wastewater discharge permit or not to modify a wastewater discharge permit shall be considered final administrative actions for purposes of judicial review.
- 5. Aggrieved parties seeking judicial review of the final administrative wastewater discharge permit decision must do so by filing a complaint with the Circuit Court for Franklin County within ninety (90) days.
- D. Wastewater Discharge Permit Modification. The City Engineer may modify a wastewater discharge permit for good cause including, but not limited to, the following reasons:
  - 1. To incorporate any new or revised Federal, State or local pretreatment standards or requirements;
  - 2. To address significant alterations or additions to the user's operation, processes or wastewater volume or character since the time of wastewater discharge permit issuance;
  - 3. A change in the POTW that requires either a temporary of permanent reduction or elimination of the authorized discharge;
  - 4. Information indicating that the permitted discharge poses a threat to the City's POTW, City personnel or the receiving waters;
  - 5. Violation of any terms or conditions of the wastewater discharge permit;
  - 6. Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting;
  - 7. Revision of or a grant of variance from categorical pretreatment standards pursuant to 40 CFR 403.13;
  - 8. To correct typographical or other errors in the wastewater discharge permit; or
  - 9. To reflect a transfer of the facility ownership or operation to a new owner or operator.
- E. Wastewater Discharge Permit Transfer. Wastewater discharge permits may be transferred to a new owner or operator only if the permittee gives at least ninety (90) days' advance notice to the City Engineer and the City Engineer approves the wastewater discharge permit transfer. The notice to the City Engineer must include a written certification by the new owner or operator which:
  - 1. States that the new owner and/or operator has no immediate intent to change the facility's operations and processes;
  - 2. Identifies the specific date on which the transfer is to occur; and

3. Acknowledges full responsibility for complying with the existing wastewater discharge permit.

Failure to provide advance notice of a transfer renders the wastewater discharge permit void as of the date of facility transfer.

- F. Wastewater Discharge Permit Revocation. The City Engineer may revoke a wastewater discharge permit for good cause including, but not limited to, the following reasons:
  - 1. Failure to notify the City Engineer of significant changes to the wastewater prior to the changed discharge;
  - 2. Failure to provide prior notification to the City Engineer of changed conditions pursuant to Section 710.240(E) of this Article.
  - 3. Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
  - 4. Falsifying self-monitoring reports;
  - 5. Tampering with monitoring equipment;
  - 6. Refusing to allow the City Engineer timely access to the facility premises and records;
  - 7. Failure to meet effluent limitations;
  - 8. Failure to pay fines;
  - 9. Failure to pay sewer charges;
  - 10. Failure to meet compliance schedules;
  - 11. Failure to complete a wastewater survey or the wastewater discharge permit application;
  - 12. Failure to provide advance notice of the transfer of business ownership of a permitted facility; or
  - 13. Violation of any pretreatment standard or requirement or any terms of the wastewater discharge permit or this Article.

Wastewater discharge permits shall be voidable upon cessation of operations or transfer of business ownership. All wastewater discharge permits issued to a particular user are void upon the issuance of a new wastewater discharge permit to that user.

- G. Wastewater Discharge Permit Reissuance. A user with an expiring wastewater discharge permit shall apply for wastewater discharge permit reissuance by submitting a complete permit application, in accordance with Section 710.220(E) of this Article, a minimum of ninety (90) days prior to the expiration of the user's existing wastewater discharge permit.
- H. Regulation Of Waste Received From Other Jurisdictions.
  - 1. If another municipality, or user located within another municipality, contributes wastewater to the POTW, the City of Union through the Board of Aldermen shall enter

into an intermunicipal agreement with the contributing municipality.

- 2. Prior to entering into an agreement required by paragraph (1) above, the City Engineer shall request the following information from the contributing municipality:
  - a. A description of the quality and volume of wastewater discharged to the POTW by the contributing municipality;
  - b. An inventory of all users located within the contributing municipality that are discharging to the POTW; and
  - c. Such other information as the City Engineer may deem necessary.
- 3. An intermunicipal agreement, as required by paragraph (1) above, shall contain the following conditions:
  - a. A requirement for the contributing municipality to adopt a sewer use ordinance which is at least as stringent as this Article and local limits which are at least as stringent as those set out in Section 710.200(D) of this Article. The requirement shall specify that such ordinance and limits must be revised as necessary to reflect changes made to the City's ordinance or local limits;
  - b. A requirement for the contributing municipality to submit a revised user inventory on at least an annual basis:
  - c. A provision specifying which pretreatment implementation activities, including wastewater discharge permit issuance, inspection and sampling and enforcement, will be conducted by the contributing municipality; which of these activities will be conducted by the City Engineer; and which of these activities will be conducted jointly by the contributing municipality and the City Engineer;
  - d. A requirement for the contributing municipality to provide the City Engineer with access to all information that the contributing municipality obtains as part of its pretreatment activities;
  - e. Limits on the nature, quality and volume of the contributing municipality's wastewater at the point where it discharges to the POTW;
  - f. Requirements for monitoring the contributing municipality's discharge;
  - g. A provision ensuring the City Engineer access to the facilities of users located within the contributing municipality's jurisdictional boundaries for the purpose of inspection, sampling and any other duties deemed necessary by the City Engineer; and
  - h. A provision specifying remedies available for breach of the terms of the intermunicipal agreement. (Ord. No. 3235 §1, 4-16-07)

## **SECTION 710.240: REPORTING REQUIREMENTS**

A. Baseline Monitoring Reports.

- 1. Within either one hundred eighty (180) days after the effective date of a categorical pretreatment standard or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the POTW shall submit to the City Engineer a report which contains the information listed in paragraph (2) below. At least ninety (90) days prior to commencement of their discharge, new sources and sources that become categorical users subsequent to the promulgation of which contains the information listed in paragraph (2) below. A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.
- 2. Users described above shall submit the information set forth below.
  - a. *Identifying information*. The name and address of the facility, including the name of the operator and owner.
  - b. *Environmental permits*. A list of any environmental control permits held by or for the facility.
  - c. *Description of operations*. A brief description of the nature, average rate of production and standard industrial classifications of the operation(s) carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.
  - d. *Flow measurement*. Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined wastewater formula set out in 40 CFR 403.6(e).
  - e. Measurement of pollutants.
    - (1) The categorical pretreatment standards applicable to each regulated process.
    - (2) The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the standard or by the City Engineer, of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum and long-term average concentrations or mass, where required, shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in Subsection (J) of this Section.
    - (3) Sampling must be performed in accordance with procedures set out in Subsection (K) of this Section.
  - f. *Certification*. A statement reviewed by the user's authorized representative and certified by a qualified professional indicating whether pretreatment standards are being met on a consistent basis and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the pretreatment standards and requirements.
  - g. Compliance schedule. If additional pretreatment and/or O&M will be required to

meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this Section must meet the requirements set out in Subsection (B) of this Section.

- h. *Signature and certification*. All baseline monitoring reports must be signed and certified in accordance with Section 710.220(F) of this Article.
- B. Compliance Schedule Progress Reports. The following conditions shall apply to the compliance schedule required by Subsection (A)(2)(g) of this Section.
  - 1. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction and beginning and conducting routine operations);
  - 2. No increment referred to above shall exceed nine (9) months;
  - 3. The user shall submit a progress report to the City Engineer no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for delay and, if appropriate, the steps being taken by the user to return to the established schedule; and
  - 4. In no event shall more than nine (9) months lapse between such progress reports to the City Engineer.
- C. Reports On Compliance With Categorical Pretreatment Standard Deadline. Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards or in the case of a new source following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the City Engineer a report containing the information described in Subsection (A)(2)(d--f) of this Section. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 710.220(F) of this Article.

## D. Periodic Compliance Reports.

1. All significant industrial users shall, at a frequency determined by the City Engineer but in no case less than twice per year (in June and December), submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the

- reporting period. All periodic compliance reports must be signed and certified in accordance with Section 710.220(F) of this Article.
- 2. All wastewater sample must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.
- 3. If a user subject to the reporting requirement in this Section monitors any pollutant more frequently than required by the City Engineer, using the procedures prescribed in Subsection (K) of this Section, the results of this monitoring shall be included in the report.
- E. Reports Of Changed Conditions. Each user must notify the City Engineer of any planned significant changes to the user's operations or system which might alter the nature, quality or volume of its wastewater at least fifteen (15) days before the change.
  - 1. The City Engineer may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 710.220(E) of this Article.
  - 2. The City Engineer may issue a wastewater discharge permit under Section 710.220(G) of this Article or modify an existing wastewater discharge permit under Section 710.230(D) of this Article in response to changed conditions or anticipated changed conditions.
  - 3. For purposes of this requirement, significant changes include, but are not limited to, flow increases of twenty percent (20%) or greater and the discharge of any previously unreported pollutants.

## F. Reports Of Potential Problems.

- 1. In the case of any discharge, including, but not limited to, accidental discharges, discharges of a non-routine, episodic nature, a non-customary batch discharge or a slug load, that may cause potential problems for the POTW, the user shall immediately telephone and notify the City Engineer of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the user.
- 2. Within five (5) days following such discharge, the user shall, unless waived by the City Engineer, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage or other liability which may be incurred as a result of damage to the POTW, natural resources or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties or other liability which may be imposed pursuant to this Article.
- 3. A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a discharge described in paragraph (1) above. Employers shall ensure that all employees, who may cause such a discharge to

occur, are advised of the emergency notification procedure.

- G. Reports From Unpermitted Users. All users not required to obtain a wastewater discharge permit shall provide appropriate reports to the City Engineer as the City Engineer may require.
- H. *Notice Of Violation/Repeat Sampling And Reporting*. If sampling performed by a user indicates a violation, the user must notify the City Engineer within twenty-four (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the City Engineer within thirty (30) days after becoming aware of the violation. The user is not required to resample if the City Engineer monitors at the user's facility at least once a month or if the City Engineer samples between the user's initial sampling and when the user receives the results of the sampling.
- I. Notification Of The Discharge Of Hazardous Waste.
  - 1. Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA Regional Waste Management Division Director and State hazardous waste authorities, in writing, of any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number and the type of discharge (continuous, batch or other). If the user discharges more than one hundred (100) kilograms of such waste per calendar month to the POTW, the notification also shall contain the following information to the extent such information is known and readily available to the user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred eighty (180) days after the discharge commences. Any notification under this paragraph need to be submitted only once for each hazardous waste discharged. However, notifications of changed conditions must be submitted under Subsection (E) of this Section. The notification requirement in this Section does not apply to pollutants already reported by users subject to categorical pretreatment standards under the self-monitoring requirement of Subsections (A), (C--D) of this Section.
  - 2. Dischargers are exempt from the requirements of paragraph (1) above during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the user discharges more than such quantities of any hazardous waste do not require additional notification.
  - 3. In the case of any new regulations under Section 3001 of RCRA identifying additional characteristic of hazardous waste or listing any additional substance as a hazardous waste, the user must notify the City Engineer, the EPA Regional Waste Management

- Waste Division Director and State hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.
- 4. In the case of any notification made under this Section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.
- 5. This provision does not create a right to discharge any substance not otherwise permitted to be discharges by this Article, a permit issued thereunder or any applicable Federal or State law.
- J. Analytical Requirements. All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by EPA.

## K. Sample Collection.

- 1. Except as indicated in paragraph (2) below, the user must collect wastewater samples using flow proportional composite collection techniques. In the event flow proportional sampling is infeasible, the City Engineer may authorize the use of time proportional sampling or a minimum of four (4) grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.
- 2. Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides and volatile organic compounds must be obtained using grab collection techniques.
- L. *Timing*. Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility served by the United States Postal Service, the date of receipt of the report shall govern.
- M. Record Keeping. Users subject to the reporting requirements of this Article shall retain and make available for inspections and copying all records of information obtained pursuant to any monitoring activities required by this Article and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements. Records shall include the date, exact place, method and time of sampling and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the user or the City of Union or where the user has been specifically notified of a longer retention period by the City Engineer. (Ord. No. 3235 §1, 4-16-07)

#### SECTION 710.250: COMPLIANCE MONITORING

A. Right of Entry--Inspection And Sampling. The City Engineer shall have the right to enter the

premises of any user to determine whether the user is complying with all requirements of this Article and any wastewater discharge permit or order issued hereunder. Users shall allow the City Engineer ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying and the performance of any additional duties.

- 1. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the City Engineer will be permitted to enter without delay for the purposes of performing specific responsibilities.
- 2. The City Engineer shall have the right to set up on the user's property, or required installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.
- 3. The City Engineer may require the user to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the user at its own expense. All devices used to measure wastewater flow and quality shall be calibrated annually to ensure their accuracy.
- 4. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the City Engineer and shall not be replaced. The costs of clearing such access shall be born by the user.
- 5. Unreasonable delays in allowing the City Engineer access to the user's premises shall be a violation of this Article.
- B. Search Warrants. If the City Engineer has been refused access to a building, structure or property or any part thereof and is able to demonstrate probable cause to believe that there may be a violation of this Article or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the City of Union designed to verify compliance with this Article or any permit or order issued hereunder or to protect the overall public health, safety and welfare of the community, then the City Engineer may seek issuance of a search warrant from the Circuit Court of Franklin County. (Ord. No. 3235 §1, 4-16-07)

## **SECTION 710.260: CONFIDENTIAL INFORMATION**

Information and data on a user obtained from reports, surveys, wastewater discharge permit applications, wastewater discharge permits and monitoring programs and from the City Engineer's inspection and sampling activities shall be available to the public without restriction, unless the user specifically requests, and is able to demonstrate to the satisfaction of the City Engineer, that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or

secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other effluent data as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction. (Ord. No. 3235 §1, 4-16-07)

# SECTION 710.270: PUBLICATION OF USERS IN SIGNIFICANT NON-COMPLIANCE

The City Engineer shall publish annually, in the largest daily newspaper published in the municipality where the POTW is located, a list of the users which, during the previous twelve (12) months, were in significant non-compliance with applicable pretreatment standards and requirements. The term significant non-compliance shall mean:

- 1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of wastewater measurements taken during a six (6) month period exceed the daily maximum limit or average limit for the same pollutant parameter by any amount;
- 2. Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent (33%) or more of wastewater measurements taken for each pollutant parameter during a six (6) month period equals or exceeds the product of the daily maximum limit or the average limit multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease and 1.2 for all other pollutants except pH);
- 3. Any other discharge violation that the City Engineer believes has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of POTW personnel or the general public;
- 4. Any discharge of pollutants that has caused imminent endangerment to the public or to the environment or has resulted in the City Engineer's exercise of its emergency authority to halt or prevent such a discharge;
- 5. Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction or attaining final compliance;
- 6. Failure to provide, within thirty (30) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical pretreatment standard deadlines, periodic self-monitoring reports and reports on compliance with compliance schedules;
- 7. Failure to accurately report non-compliance; or
- 8. Any other violation(s) which the City Engineer determines will adversely affect the operation or implementation of the local pretreatment program. (Ord. No. 3235 §1, 4-16-07)

## SECTION 710.280: ADMINISTRATIVE ENFORCEMENT REMEDIES

- A. *Notification Of Violation*. When the City Engineer finds that a user has violated or continues to violate any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the City Engineer may serve upon that user a written notice of violation. Within thirty (30) days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the City Engineer. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violations. Nothing in this Section shall limit the authority of the City Engineer to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation.
- B. *Consent Orders*. The City Engineer may enter into consent orders, assurances of voluntary compliance or other similar documents establishing an agreement with any user responsible for non-compliance. Such documents will include specific action to be taken by the user to correct the non-compliance within a time period specified by the documents. Such documents shall have the same force and effect as the administrative orders issued pursuant to Subsections (D) and (E) of this Section and shall be judicially enforceable.
- C. Show Cause Hearing. The City Engineer may order a user which has violated or continues to violate any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement to appear before the Board of Aldermen and show cause why the proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action and a request that the user show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or be registered or certified mail (return receipt requested) at least fifteen (15) days prior to the hearing. Such notice may be served on any authorized representative of the user. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the user.
- D. Compliance Orders. When the City Engineer finds that a user has violated or continues to violate, any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the City Engineer may issue an order to the user responsible for the discharge directing that the user come into compliance within a specified time. If the user does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices or other related appurtenances are installed and properly operated. Compliance orders also may contain other requirements to address the non-compliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a pretreatment standard or requirement, nor does a compliance order relieve the user of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or prerequisite for, taking any action against the user.

- E. Cease And Desist Orders. When the City Engineer finds that a user has violated or continues to violate any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement or that the user's past violations are likely to recur, the City Engineer may issue an order to the user directing it to cease and desist all such violations and directing the user to:
  - 1. Immediately comply with all requirements; and
  - 2. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.

Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the user.

#### F. Administrative Fines.

- 1. When the Board of Aldermen finds that a user has violated or continues to violate any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the Board of Aldermen may fine such user in an amount not to exceed five hundred dollars (\$500.00). Such fines shall be assessed on a per violation, per day basis. In the case of monthly or other long-term average discharge limits, fines shall be assessed for each day during the period of violation.
- 2. Unpaid charges, fines and penalties shall, after ninety (90) calendar days, be a lien against the user's property.
- 3. Users desiring to dispute such fines must file a written request for the Board of Aldermen to reconsider the fine along with full payment of the fine amount within thirty (30) days of being notified of the fine. Where a request has merit, the Board of Aldermen may convene a hearing on the matter. In the event the user's appeal is successful, the payment, together with any interest accruing thereto, shall be returned to the user. The Board of Aldermen may add costs of preparing administrative enforcement actions, such as notices and orders, to the fine.
- 4. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the user.
- G. *Emergency Suspensions*. The City Engineer may immediately suspend a user's discharge, after informal notice to the user, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The City Engineer may also immediately suspend a user's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the POTW or which presents or may present and endangerment to the environment.
  - 1. Any user notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the City Engineer may take such steps as deemed necessary, including

immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream or endangerment to any individuals. The City Engineer may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of the City Engineer that the period of endangerment has passed, unless the termination proceedings in Subsection (H) of this Section are initiated against the user.

2. A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the City Engineer prior to the date of any show cause or termination hearing under Subsections (C) or (H) of this Section.

Nothing in this Section shall be interpreted as requiring a hearing prior to any emergency suspension under this Section.

- H. *Termination Of Discharge*. In addition to the provisions in Section 710.230(F) of this Article, any user who violates the following condition is subject to discharge termination:
  - 1. Violation of wastewater discharge permit conditions;
  - 2. Failure to accurately report the wastewater constituents and characteristics of its discharge;
  - 3. Failure to report significant changes in operations or wastewater volume, constituents and characteristics prior to discharge;
  - 4. Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring or sampling; or
  - 5. Violation of the pretreatment standards in Section 710.200 of this Article.

Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under Subsection (C) of this Section why the proposed action should not be taken. Exercise of this option by the City Engineer shall not be a bar to, or a prerequisite for, taking any other action against the user. (Ord. No. 3235 §1, 4-16-07)

## SECTION 710.290: JUDICIAL ENFORCEMENT REMEDIES

A. *Injunctive Relief*. When the City Engineer finds that a user has violated or continues to violate any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the City of Union may petition the Circuit Court of Franklin County through the City's Attorney for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit order or other requirement imposed by this Article on activities of the user. The City may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a user.

#### B. Civil Penalties.

- 1. A user who has violated or continues to violate any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement shall be liable to the City for a maximum civil penalty of five hundred dollars (\$500.00) per violation, per day. In the case of a monthly or other long-tern average discharge limit, penalties shall accrue for each day during the period of the violation.
- 2. The City may recover reasonable attorneys' fees, court costs and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the City.
- 3. In determining the amount of civil liability, the court shall take into account all relevant circumstances including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user and any other factor as justice requires.
- 4. Filing a suit for civil penalties shall not be a bar against, or a prerequisite for, taking any other action against a user.

## C. Criminal Prosecution.

- 1. A user who willfully or negligently violates any provision of this Article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement shall, upon conviction, be guilty or a misdemeanor punishable by a fine of not more than five hundred dollars (\$500.00) per violation, per day or imprisonment for not more than ninety (90) days or both.
- 2. A user who willfully or negligently introduces any substance into the POTW which causes personal injury or property damage shall, upon conviction, be guilty of a misdemeanor and be subject to a penalty of at least five hundred dollars (\$500.00) or be subject to imprisonment for not more than ninety (90) days or both. This penalty shall be in addition to any other cause of action for personal injury or property damage available under State law.
- 3. A user who knowingly makes any false statements, representations or certifications in any application, record, report, plan or other documentation filed or required to be maintained pursuant to this Article, wastewater discharge permit or order issued hereunder or who falsifies, tampers with or knowingly render inaccurate any monitoring device or method required under this Article shall, upon conviction, be punished by a fine of not more than five hundred dollars (\$500.00) per violation, per day or imprisonment for not more than ninety (90) days or both.
- D. *Remedies Non-Exclusive*. The remedies provided for in this Article are not exclusive. The City may take any, all or any combination of these actions against a non-compliant user. Enforcement of pretreatment violations will generally be in accordance with the City's enforcement response plan. However, the City Engineer may take other action against any

user when the circumstances warrant. Further, the City Engineer is empowered to take more than one (1) enforcement action against any non-compliant user. (Ord. No. 3235 §1, 4-16-07)

## SECTION 710.300: MISCELLANEOUS PROVISIONS

- A. *Pretreatment Charges And Fees.* The City hereby adopts the following fees and charges for reimbursement of costs of setting up and operating the City's pretreatment program:
  - 1. Fees for wastewater discharge permit applications including the cost of processing such applications: Seventy-five dollars (\$75.00).
  - 2. Fees for monitoring, inspection and surveillance procedures including the cost of collection and analyzing a user's discharge and reviewing monitoring reports submitted by users: One thousand five hundred dollars (\$1,500.00).
  - 3. Fees for reviewing and responding to accidental discharge procedures and construction: Twenty-five dollars (\$25.00) per hour per person for staff who work on the accidental discharge resolution.
  - 4. Fees for filing appeals: Seventy-five dollars (\$75.00) plus any actual costs incurred.
  - 5. The City reserves the right to from time to time establish other fees in support of the program.
- B. Severability. If any provision of this Article is invalidated by any court of competent jurisdiction, the remaining provisions shall not be effected and shall continue in full force and effect. (Ord. No. 3235 §1, 4-16-07)

## CITY OF UNION, MISSOURI WASTEWATER DISCHARGE PERMIT APPLICATION SUBMISSION DUE BY DECEMBER 31, PRESENT YEAR FOR THE RENEWAL OF PERMIT

Note: Please read all attached instructions prior to completing this application.

## SECTION A – GENERAL INFORMATION

<ul> <li>a. Operator Name:</li> <li>b. Is the operator identified in 1.a., the owner of the facility? YES { } NO { }</li> <li>If no, provide the name and address of the operator and submit a copy of the contra and/or other documents indicating the operator's scope of responsibility for the fac</li> </ul>							
and or other documents in	idicating the operator's so	cope of responsibility for the					
	<u> </u>						
Facility Address:							
Street: City:	State:	Zip:					
Business Mailing Address:	:						
Street or P.O. Box #:							
City:	State:	Zip:					
Designated signatory authority of the facility:							
Designated signatory authority	of the facility:						
		ntative]					
[Attach similar information for	each authorized represe						
[Attach similar information for Name:	each authorized represe						
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## SECTION B - BUSINESS ACTIVITY

1. If your facility employs or will be employing processes in any of the industrial categories or business activities listed below (regardless of whether they generate wastewater, waste sludge, or hazardous waste), place a check beside the category of business activity (check all that apply).

	Industrial Categories*
[ ]A1:	uminum Forming
	bestos Manufacturing
	ttery Manufacturing
	n Making
	rbon Black
	al Mining
	il Coating
	pper Forming
	ectric and Electronic Components Manufacturing
	ectroplating
[ ]Fee	edlots
[ ]Fe	rtilizer Manufacturing
[ ]Fo	undries (Metal Molding and Casting)
[ ]Gl	ass Manufacturing
[ ]Gr	ain Mills
[ ]Ind	organic Chemicals
[ ]Irc	on and Steel
[ ]Lea	ather Tanning and Finishing
[ ]M	etal Finishing
	onferrous Metals Forming
	onferrous Metals Manufacturing
	ganic Chemicals Manufacturing
	int and Ink Formulating
	ving and Roofing Manufacturing
	sticides Manufacturing
	troleum Refining
	armaceutical
	astic and Synthetic Materials Manufacturing
	astics and processing Manufacturing
	rcelain Enamel
	lp, Paper, and Fiberboard Manufacturing
	bber
	ap and Detergent Manufacturing
	eam Electric
	gar Processing xtile Mills
	mber Products
[ ] I I	inder rounces

A facility with processes inclusive in these business areas may be covered by Environmental Protection Agency's (EPA) categorical pretreatment standards. These facilities are termed "categorical users".

2. Give a brief descript	2. Give a brief description of all operations at this facility including primary products or (attach additional sheets if necessary):								
	<del></del>		,						
0 1 1 ( 11 0		(TC)	1						
	tandard Industrial Classification (Sinding order of importance.):	(If it	more than one						
,									
c									
<b>C.</b>									
4. PRODUCT VOLUME	<b>:</b>								
PRODUCT (Brand name)	PAST CALENDAR YEAR Amounts Per Day (Daily Units)	ESTIMATE THIS CALENDAR YEAR Amounts Per Day (Daily Units)							
(levels with others	A Mariner	Avvanaga	Maximum						
<u>and no u.1)</u>	<u>Average</u> <u>Maximum</u>	<u>Average</u>	Maximum						
SECTION C - WATER SUPF	PLY								
1. Water Sources: (Ch	neck as many as are applicable)								
Private Well									
Surface Water									
]Municipal Water Utility	(Specify City):								
•			<del></del>						
2. Name on the water	bill:		•						
Name:									
Street:	State:	Zip:							

3. V	Water service account number:							
4. I	List average water usage on premises: [New facilities may estimate]							
Type	,	Average Water Usage (GPD)	Indicate Estimated (E) or Measured (M)					
b. Non- c. Boile; d. Proce e. Sanit; f. Air p g. Cont; h. Plant i. Irriga j. Othe k. TOTA	ess ary ollution control ained in product and equipment wash down ation and lawn watering							
1.	a. For an existing business	<u>:</u>						
	Is the building presently co	onnected to the public sanit	ary sewer system?					
	[ ] Yes: Sanitary sewer ac [ ] No: Have you applied	count number for a sanitary sewer hooku	ap? [] Yes [] No					
	b. For a new business:							
	1.) Will you be occ park)? [ ] Yes [		building (such as in an industrial					
	2.) Have you applied for a building permit if a new facility will be constructed?  [ ] Yes [ ] No							
		nnected to the public sanita	ry sewer system?					
2.			sewer which connects to the City's nformation of another sheet.)					
		Descriptive Location of Sew Connection or Discharge Po						
			<u> </u>					
		Page 4						

## SECTION E – WASTEWATER DISCHARGE INFORMATION

1.	Does (o ] Yes	or will) this facility discharge any wastewater other than from restrooms to the City sewer?  [ ] No								
	If the	e answer to this question is "yes", complete the remainder of the application. If the answer t question is "no", skip to Section I.	o							
		e the following information on wastewater flow rate. acilities may estimate].								
	a.	Hours/Day Discharged (e.g., 8 hours/day):								
		M T W TH F SAT SUN								
	<b>b</b> .	Hours of Discharge (e.g., 9 a.m. to 5 p.m.):	Iours of Discharge (e.g., 9 a.m. to 5 p.m.):							
		M T W TH F SAT SUN	-							
c.P	eak hou	arly flow rate (GPD)								
d.N	<i>A</i> aximu	am daily flow rate (GPD)								
	e.	Annual daily average (GPD)								
3.		ch discharge occurs or will occur, indicate: facilities may estimate]								
	a.	Number of batch dischargesper day								
	b.	Average discharge per batch (GPD)								
	c.	Time of batch discharges at (days of week) (hours of day)								
	d.	Flow rate gallons/minute								
	e.	Percent of total discharge								
	4.	Schematic Flow Diagram – For each major activity in which wastewater is or will be generated, draw a diagram or the flow of <u>materials, products, water, and wastewater</u> from the start of the activity to its completion, showing all unit processes. Indicate which processes use water and which generate waste streams. Include the average daily volume and maximum daily volume of each waste stream [new facilities may estimate]. If estimates are used for flow data this <u>must</u> be indicated. <u>Number each unit process</u> having wastewater discharges to the community sewer. Use these numbers when showing this unit processes in the building layout in Section H. <u>This drawing must be certified by a State Registered Professional Engineer.</u>	1							

Facilitie and she	es that checked activities ould skip to question 6.	s in question 1 of S	Section B are cons	idered Categorical Industrial Users
5.	and type of discharg	ge (batch, continuo com the process sc	ous, or both), for one the corr	ter discharge, maximum discharge, each plant process. Include the esponds to each process. [New
<u>No</u> .	Process Description	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
ANSWE	R QUESTIONS 6 & 7 ONLY	Y IF YOU ARE SUBJE	CT TO CATEGORIO	CAL PRETREATMENT STANDARDS
6.	proposed processes.	Include the refere	nce number from	ge flows for each of your processes or the process schematic that vide estimates for each discharge].
<u>No.</u>	Regulated Process	Average <u>Flow (GPD)</u>	Maximum <u>Flow (GPD)</u>	Type of Discharge (batch, continuous, none)
<u>No.</u>	Unregulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
No.	<u>Dilution</u>	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

7.	For Categorical Users Subject to Total Toxic Organic (TTO) Requirements:	
	Provide the following (TTO) information.	
	<ul> <li>a. Does (or will) this facility use any of the toxic organics that are listed standard of the applicable categorical pretreatment standards publis</li> <li>[ ] Yes [ ] No</li> </ul>	d under the TTO hed by EPA?
	<ul><li>b. Has a baseline monitoring report (BMR) been submitted which containformation?</li><li>[ ] Yes [ ] No</li></ul>	ains TTO
	c. Has a toxic organics management plan (TOMP) been developed?  [ ] Yes [ ] No <u>IF YES, PLEASE ATTACH A COPY.</u>	
8.	Do you have, or plan to have, automatic sampling equipment or continuous wa metering equipment at this facility?	stewater flow
	Current: Flow Metering [ ] Yes [ ] No [ ] N/A Sampling Equipment [ ] Yes [ ] No [ ] N/A	
	Planned: Flow Metering [ ] Yes [ ] No [ ] N/A Sampling Equipment [ ] Yes [ ] No [ ] N/A	
If so desc	, please indicate the present or future location of this equipment on the sewer sche ribe the equipment below: (Attach additional sheets if needed.)	matic and
-		
9.	Are any process changes or expansions planned during the next three years that wastewater volumes or characteristics? Consider production processes as well pollution treatment processes that may affect the discharge.	it could alter as air or water
	[ ] Yes [ ] No, (skip question 10)	
10.	Briefly describe these changes and their effects on the wastewater volume and c (Attach additional sheets if needed.)	characteristics:
11.	Are any materials or water reclamation systems in use or planned?  [ ] Yes [ ] No, (skip question 12)	
12.	Briefly describe recovery process, substance recovered, percent recovered, and t in the spent solution. Submit a flow diagram for each process: (Attach additional	
-		

## SECTION F - CHARACTERISTICS OF DISCHARGE

All current industrial users are required to submit monitoring data on all pollutants that are regulated specific to each process. Use the tables provided in this section to report the analytical results. <u>DO NOT LEAVE BLANKS</u>. For all other (nonregulated) pollutants, indicate whether the pollutant is <u>known</u> to be present (P), <u>suspected</u> to be present (S), or <u>known NOT</u> to be present (O), by placing the appropriate letter in the column for average reported values. Indicate on either the top of each table, or on a separate sheet, if necessary, the sample location and type of analysis used. Be sure methods conform to 40 CFR Part 136; if they do not, indicate what method was used.

New dischargers should use the table to indicate what pollutants will be present or are suspected to be present in proposed waste streams by placing a P (expected to be present), S (may be present), or o (will not be present) under the average reported values.

Pollutant	Detection Level Used	Ma Dail Val	y	Aver of Anal	f	Number of Analyses	Ur	iits
		Conc.	Mass	Conc.	Mass		Conc.	Mass
Acenaphthene								
Acrolein								
Acrylonitrile								
Benzene					-	<del></del>		
Benzidine								
Carbon tetrachloride								
Chlorobenzene								
1,2,4~Trichlorobenzene								
Hexachlorobenzene								
1,2-Dichloroethane								
1,1,1-Trichloroethane								
Hexachloroethane								
1,1~Dichloroethane								
1,1,2~Trichloroethane								
1,1,2,2~Tetrachloroethane								
Chloroethane								
Bis (2-chloroethyl) ether								
17 Bis (chloro methyl) ethe	r							
2-Chloroethyl vinyl ether								
2-Chloronaphthalene								
2,4,6-Trichlorophenol								
Parachlorometa cresol								
Chloroform								
2-Chlorophenol								
1,2-Dichlorobenzene								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
3,3-Dichlorobenzidine								
1,1-Dichloroethylene								

Pollutant	Detection Level Used	D	kimum aily alue	Aver of Anal	,	Number of Analyses	Ur	nits
		Conc.	Mass	Conc.	Mass	Titlety	Conc.	Mass
1,2-Trans-dichloroethylene	e							
2,4~Dichloropheno								
1,2-Dichloropropane								
1,2-Dichloropropylene								
1,3-Dichloropropylene								
2,4-Dimethylphenol								
2,4~Dinitrotoluene								
2,6~Dinitrotoluene								
1,2-Diphenylhydrazine								
Ethylbenzene								
Fluoranthene								
4-Chlorophenyl phenyl ether								
4-Bromophenyl phenyl ether								
Bis(2-chlorisopropyl) ether								
Bis (2-chloroethoxy) methane	=							
Methylene chloride								
Methyl chloride								
Methyl bromide								
Bromoform								
Dichlorobromomethane								
Chlorodibromomethane								<del></del>
Hexachlorobutadiene								
Hexachlorocyclopentadien	e							
Isophorone								
Naphthalene								
Nitrobenzene								
Nitrophenol								
2-Nitrophenol								
4-Nitrophenol								
2,4~Dinitrophenol								
4,6-Dinitro-o-cresol								
N-nitrosodimethylamine								
N-nitrosodiphenylamine								
N-nitrosodi-n-propylamine	e							
Pentachlorophenol	<del></del>							
Phenol								
Bis (2-ethylhexyl) phthalat	te							
Butyl benzyl phthalate						<u> </u>		
Di-n-butyl phthalate								
Di-n-octyl phthalate								
Diethyl phthalate								
Dimethyl phthalate								
Benzo (a) anthracene								
Benzo (a) pyrene								
3,4-benzofluoranthene								
Benzo (k) fluoranthane								
Chrysene								
<del>-</del>								

Pollutant	Detection Level Used	Max Da Val		Ave C Anal	of	Number of Analyses	Un	its
		Conc.	Mass	Conc.	Mass		Conc.	Mass
Acenaphthylene								
Anthracene								
Benzo (ghi) perylene	<del></del>							
Fluorene								
Phenanthrene	<del></del>							
Dibenzo (a,h) anthracene								
Indeno (1,2,3-cd) pyrene								
Pyrene								
Tetrachloroethylene	<del></del>				-			
Toluene								
Trichloroethylene	<del></del>							
	<del></del>							
Vinyl chloride	<del></del>							
Aldrin								
Dieldrin								
Chlordane								
4.4'~DDT								
4,4'~DDE								
4,4'-DDD								
Alpha-endosulfan								
Beta-endosulfan								
Endosulfan sulfate								
Endrin	<del></del>							
	<del></del>							
Endrin aldehyde								
Heptachlor								
Heptachler epoxide								
Alpha-BHC								
Beta-BHC								
Gamma~BHC								
Delta~BHC								
PCB~1242								
PCB-1254								
PCB~1221								
PCB~1232								
PCB-1248								
PCB-1260								
PCB~1016								
Toxaphene								
(TCDD)								
Asbestos								
Acidity								
Alkalinity								
Bacteria								

Pollutant	Detection Level Used	Da	imum ily llue	Aver of Anal		Number of Analyses	Ur	nits
		Conc.	Mass	Conc.	Mass		Conc.	Mass
POD								
BOD <sub>5</sub>								
COD Chloride								
Chlorine							<del></del>	
Flouride	<del></del>							
Hardness			<del></del>					
Magnesium	<del></del>		<del></del>					
NH <sub>3</sub> ~ N								
	<del></del>		<del></del>	<del></del>				
Oil and Grease TSS								
TOC			*					
Kjeldahl N								
Nitrate N				-				
Nitrite N								
Organic N								
Orthophosphate P								
Phosphorous								
Sodium								
Specific Conductivity								
Sulfate (SO <sub>4</sub> )								
Sulfide (S)								
* *								
Sulfite (SO <sub>3</sub> )				<del></del>			<del></del>	
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium	<del></del> _							
Chromium								<u> </u>
Copper								
Cyanide								
Lead								
Mercury	<u> </u>							
Nickel								
Selenium								
Silver								
Thallium					-			
Zinc								

## SECTION G - TREATMENT

1.	Is any form of wastewater treatment (see list below) practiced at this facility?
	[ ] Yes [ ] No
2.	Is any form of wastewater treatment (or changes to an existing wastewater treatment) planned for this facility within the next three years?
	[ ] Yes, describe:
3.	Treatment devices or processes used or proposed for treating wastewater or sludge (check as many as appropriate).
	Air flotation Centrifuge Chemical precipitation Chlorination Cyclone Filtration Flow equalization Grease or oil separation, type: Grease trap Grinding filter
4.	Description
	Describe the pollutant loadings, flow rates, design capacity, physical size, and operating procedures of each treatment facility checked above.

5.	equipn	nent, by	y~product			ting treatn al method,			process act volumes,	and
6.									construction letion dates.	
					_					
7.		•		•		] Yes				
	(If	Yes,)	Title:							
			Full t	ime: time:		(Spec	ify hours) ify hours)			
8.	Do	o you h	ave a mar	ıual on the	correct o	peration of	your trea	tment equ	ipment?	
	[	] Yes	[] N	No.						
9.	Do	o you h	ave a writ	ten mainte	enance sch	nedule for y	your treati	ment equip	oment?	
	[	] Yes	[]	No		·				
SE	CTION	H – FA	C <b>ILITY O</b> F	'ERATION	AL CHARA	CTERISTIC	es .			
1.	Sh	ift Infor	rmation							
	ork Day		Mon.	Tues.	Wed.	Thurs. [ ]	Fri.	Sat.	Sun.	
Sh	ifts per ork day									
Em Per Shi		1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup>								
An	ift start d end nes	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup>								

J F	M	A	M	J	J	A	S	0	N	D
Comment	s:									
									_	
									_	
	vhether th inuous th onal – Cir	rough tl	he year,	or	ear dur	ing whi	ich the	business	s activit	у осси
J F	M	A	M	J	J	Α	S	0	N	D
Comment	s:									
Does ope	ration shu	ıt down	for vaca	ation, n	ıainten	ance, or	other	reasons?	?	
	ration shu							reasons?	,	
								reasons?	,	
[ ] Yes,								reasons?	,	
[ ] Yes,:	indicate r	easons a	and peri	od whe	n shutc	lown oc	ecurs:			nned f
[ ] No	indicate r	easons a	and peri	od whe	n shutc	lown oc	ecurs:			nned fo
[ ] Yes,: [ ] No List types	indicate r	easons a	and peri	od whe	n shutc	lown oc	ecurs:			nned fo
[ ] Yes,	and amo	easons a	and period	od whe	n shutc	of raw	materi	als used	l or plar	
[ ] Yes,	indicate r	unts (m.	ass or vo	od whe	n shutc	of raw	materi	als used	or plar	 led). I1
[ ] Yes,	and amo	unts (m.	ass or vo	od whe	n shutc	of raw	materi	als used	or plar	led). Ir

•	Building Layout – Draw to scale the location of each building on the premises. Show map orientation and location of all water meters, storm drains, numbered unit processes (from schematic flow diagram), public sewers, and each facility sewer line connected to the public sewers. Number each sewer and show existing and proposed sampling locations. This drawing must be certified by a State Registered Professional Engineer.
	A blueprint or drawing of the facilities showing the above items may be attached in lieu of submitting a drawing on this sheet.

## SECTION I – SPILL PREVENTION

1.	Do you have chemical storage containers, bins, or ponds at your facility?
	[ ] Yes [ ] No
2.	Do you have floor drains in your manufacturing or chemical storage area(s)?
	[ ] Yes [ ] No
	If yes, where do they discharge to?
3.	If you have chemical storage containers, bins, or ponds in manufacturing areas, could an accidental spill lead to a discharge to: (Check all that apply)
	<ul> <li>an onsite disposal system</li> <li>public sanitary sewer system (e.g. through a floor drain)</li> <li>storm drain</li> <li>to ground</li> <li>other, specify:</li> </ul>
	[ ] not applicable, no possible discharge to any of the above routes.
4.	Do you have an accidental spill prevention plan (ASPP) to prevent spills of chemicals or slug discharges from entering the Control Authority's collection systems?
	<ul><li>Yes – (Please enclose a copy with the application)</li><li>No</li></ul>
	<ul><li>[ ] N/A, Not applicable since there are no floor drains and/or the facility discharge(s) only domestic wastes.</li></ul>
5.	Please describe below any previous spill events and remedial measures taken to prevent their reoccurrence.

## SECTION J – NON-DISCHARGED WASTES

Waste Generated	Organtity (non yoan)	Diamonal Mothers
waste Generated	Quantity (per year)	Disposal Method
Indicate which waste which are disposed or	s identified above are disposed fon-site.	d of at an off-site treatment facility a
If any of your wastes waste and the facility		zed waste treatment facility, identify
If an outside firm ren address(es) of all was	noves any of the above checke te haulers:	d wastes, state the name(s) and
Name:	Address:	
Name.		
Permit No.	Permit No.	ole):
Have you been issued	l any Federal, State, or local er	nvironmental permits?
[ ] Yes [ ] No		
If yes, please list the ]	permit(s):	
_	<del></del>	
		· · · · · · · · · · · · · · · · · · ·

## SECTION K - AUTHORIZED SIGNATURES

Co	mplian	ce certific	eation:				
1.	Are al	l applicab sistent bas	le Federal, St is?	tate, or local pre	etreatment	standards and requirements being met o	ľ
	[	] Yes	[ ] No	[ ] Not ye	t dischargi	ing	
2.	If NO:	:					
	a.	the facili	ity into comp		st additiona	procedures are being considered to bring al treatment technology or practice being ompliance.	
	b.	planned issues a	along with r permit to the	reasonable com	oletion date ay establis	o compliance. Specify major events tes. Note that if the Control Authority sh a schedule for compliance different	
		<u>M</u>	ilestone Activ	<u>vity</u>		Completion Date	
	_				_		_
				_	_		
	_				_		_
					_	<del></del>	-
					_		
	_				_		_
					_		_
	_				_		-
	_				_		_
					_		_
	_	_					_
	_				_		-
	_						_

#### **AUTHORIZED REPRESENTATIVE STATEMENT:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name(s)		Title
Signature(s)	Date	Phone Number

## MissouriEMS.com

5.3.1 Level 1 Trauma Centers

Tuesday November 9. 2010

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## Missouri Trauma Centers - Level I (10)

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Adult Trauma	Pediatric Trauma	Level I Trauma	Level II Trauma	Level III Trauma
Centers	Centers	Centers	Centers	Centers

Google

Trauma Center Name	Address	City/State/Zip	Phone	E- mail
Barnes Jewish Hospital South	1 Barnes Jewish Plaza - Mail Stop	St. Louis, MO 63110	866-867- 3627	
Children's Mercy Hospital	24th & Gillham Road	Kansas City, MO 64108	816-234- 3000	
SSM Cardinal Glennon Children's Hospital	1465 S. Grand	St. Louis, MO 63104	314-577- 5600	
St. John's Mercy Medical Center	615 S. New Ballas Road, Suite 5	St. Louis, MO 63141	314-251- 6000	
St. John's Regional Health Center	1235 E. Cherokee	Springfield, MO 65804	417-820- 2000	
St. Louis Children's Hospital	One Children's Place	St. Louis, MO 63110	314-454- 6000	
St. Louis University Hospital - Main	2625 Vista at Grand	St. Louis, MO 63110- 0250	314-577- 8000	
St. Luke's Hospital of Kansas City	4401 Wornall Road	Kansas City, MO 64111	800-932- 6220	
Truman Medical Center	2301 Holmes Road	Kansas City, MO 64108	816-404- 1000	
University of Missouri Hospital and Clinics	One Hospital Drive	Columbia, MO 65212	573-882- 4141	

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# City of Union

500 EAST LOCUST STREET UNION, MISSOURI 63084

PHONE: 636-583-3600 FAX: 636-583-4091

November 2, 2010

Missouri Department of Economic Development Certified Sites Program/Application PO Box 118 Jefferson City, MO 65101

Attention: Technical Review Team

The Union Corporate Center is of vital importance to the City of Union and Franklin County in the creation of jobs for our citizens and Missourians; therefore, I support the Union Corporate Center's submittal to the Missouri Certified Sites Program.

Union Corporate Center is zoned I-1 (Light Industrial) and is currently occupied by numerous industries lending it to further economic development. Increased industrial/business development is a key piece of the City's, soon to be completed, Comprehensive Plan. Elected officials and citizens know the importance of continued economic growth for our community.

If you have any questions or concerns, please feel free to contact me at 636-583-3600.

Sincerely,

Mike Livengood, Mayor



## **Union Corporate Center - 30 Acres**

## Address:

Progess Parkway Union , MO 63084 (Franklin County)

## **Property and Area Description:**

Site is the "prime" site in the Union Corporate Center. Site is located approximately 3.5 miles west of Interstate 44 and is accessed by Progress Parkway via U.S. Highway 50. Site is fully served by all major utilities, including high speed internet. Detention needs are serviced by existing detention pond, saving a user thousands.



**Available Acres: 30** 

### **Site Details:**

Available Acres: 30 Adjacent Available Acres: 31
Topography: Gently Rolling Setting: Industrial Park
Zoning: Industrial-Light Within City Limits: Yes

## **Transportation:**

Nearest Interstate: Interstate 44 Distance (miles): 3.5 Nearest 4-Lane Highway: Interstate Distance (miles): 3.5

Nearest Commercial Airport: Lambert Distance (miles): 50

Field

Rail Served:No

#### **Utilities:**

Electric Distribution: AmerenUE

Natural Gas Distribution: Missouri Natural Gas

Water: City of Union Sewer: City of Union

Local Telecommunications Service: AT&T

### **Contact:**

Joseph A. Graves

City of Union - Economic Development Dept

500 East Locust Street Union, MO 63084 Phone: 636-583-3600 Fax: 636-583-4509

E-mail: jgraves@unionmissouri.org Web site: www.unionmoed.com

**Bob Borgmann** 

Union Development Corporation

500 East Locust Street Union, MO 63084 Phone: 636-583-3600 Fax: 636-583-4091

E-mail: udc@ci.union.mo.us Web site: www.unionmoed.com

## Offering:

Sale Price: \$25,000 - \$35,000 per acre.

**NEGOTIABLE** 



# Union, MO Franklin County

## Location:

Union is the County Seat for Franklin County, the largest geographic region in the St. Louis MSA. Also, Union is the fastest growing community in Franklin County experiencing 24% growth from 2001 - 2010.



## Contact

## **Business Climate:**

Union has strong and growing industrial, commercial, and residential sectors combined with a pro-growth attitude at the city and county levels.

Joseph A. Graves City of Union 500 East Locust Street Union, MO 63084 Phone: (636) 583-3600

Fax: (636) 583-4091

E-mail: josephgraves@unionmoed.com Web site: www.unionmoed.com

## **Demographic Information**

Po	nı	ıla	ti	۸r	1
··	νι	Ha		vi	

 1990
 2000
 2005

 Population:
 6,675
 7,757
 9,215

 Labor Market Population:
 80,603
 93,807
 102,800

Data Source: U.S. Census Bureau, City of Union, East-West Gateway Coordinating Council

#### Households

	2000	2005
Total Number of Households:	3,133	3,503
Average Household Size:	2.56	0
Median Household Income:	\$39,596.00	\$0.00

#### **Educational Attainment: Population - Age 25 Plus**

	4889
Associate Degree:	4 %
Bachelor's Degree:	7 %
Graduate or Professional Degree:	4 %

#### **Metro Area Distances**

City	<b>Driving Distance (miles)</b>	Flight Time	Days by Truck	Days by Rail
Atlanta	600	1 hour 30 minutes	1	0
Boston	1,245	2 hours 45 minutes	2	0
Chicago	280	1 hour	1	0
Dallas	640	1 hour 50 minutes	1	0
Denver	860	3 hours 45 minutes	2	0
Des Moines	340	1 hour	1	0
Indianapolis	260	1 hour 10 minutes	1	0
Jefferson City	90	35 minutes	0	0
Kansas City	237	1 hour	1	0
Lake of the Ozarks	120	40 minutes	0	0

## **Labor Force Characteristics**

In fall 2006, a comprehensive "Quality of Labor" Survey was conducted by an independent consulting firm on behalf of the Franklin County Economic Development Group. Nearly 250 larger employers were selected to participate and the survey achieved a 30% response rate. A complete study is available upon request.

## **Leading Employers**

	Product or Service	Employees
East Central College	community college	178
Esselte Pendaflex Corporation	manufactuer and distributor of office filing supplies	450
Franklin County Government	county government	299
Pharma Tech Industries Inc.	manufacturer and packager of pharmaceutical products	95
Rexam Containers	manufacturer of thermo-formed containers	220
Spartan Showcase	manufacturer of store fixtures	120
The Children's Factory	manufacturer of children's play furniture	110
Transaction Technology / Coin Acceptors	manufacturer of circuit boards for vending machines	120
Union R-XI School District	public school district	400
Wal-Mart Supercenter	discount department store	264

#### **General Comments**

According to an independent workforce study conducted in 2006, with the right employment opportunities, Union appears well positioned to attract and retain the talent necessary for growth of new and existing businesses representing local, regional and national markets. Union has the vast workforce talent pool within easy commute and the cost advantages in most cases inherent of a more rural setting.

#### **Local Government**

Type of Government: City of the 4th Class

Comprehensive City Plan:
Yes
Year Plan Completed:
Strategic City Plan:
Yes
Year Plan Completed:
Yes
Year Plan Completed:
Yes
City Zoning Ordinance in Effect:
Yes
County Zoning Ordinance in Effect:
Yes
Percent of Streets Paved:
100.0

#### **Local Government Services**

City of Union Police Department Law Enforcement

City of Union, Engineering Department Building Permits, Code Enforcement

City of Union, Economic Development Department Recruitment of industrial, commercial and residential development

City of Union, Parks Department Planning recreational events and maintenance of City park property

#### **Utilities**

#### Water

Provider Name: City of Union Rated Capacity (mgd): 3,888,000 Average Capacity (mgd): 737,629

Peak Demand (mgd): 1,400,000 Storage Capacity (gallons): 1,800,000

Sewer

Provider Name: City of Union
Rated Capacity (mgd): 1,900,000
Average Daily Demand (mgd): 850,526
Peak Demand (mgd): 2,000,000

**Electric** 

Provider Name: Ameren Missouri
Peak Demand (kW): 9,100,000
Generation Capacity (MW): 16,200
Customers Served (state): 1,200,000
Customers Served (system): 2,440,000

**Natural Gas** 

Provider Name: Missouri Natural Gas
Pipeline Source: Missouri Gas Corporation
Customers Served (state): 55,000
Customers Served (system): 55,000

**Telecommunications** 

Provider Name: AT&T Communications
Service Type: telephone, mobile, long distance, internet, ISDN, T1

DSL: Yes
Fiber Optics: Yes
Switch Services: yes
Customers Served (state): 0
Customers Served (system): 0

## **Transportation**

#### Interstates and Highways

The City of Union, MO is located right off Interstate 44 and the community is served by US Highways 50 and 47 which bi-sect each other at the heart of the community.

### **Motor Freight**

Motor Carriers: 8 Local Terminals: 8

#### Railroads

Rail freight service is available in Union and is provided by Central Midland Railway in the community's Central Business District and in the North Loop Industrial Park.

Piggyback Ramp Available: No
Distance to Nearest Piggyback: 60
Intermodal Services Available: Yes

#### **Airport**

The nearest international airport is Lambert-St. Louis located less than 1 hour away. Franklin County is served by three regional airports: St. Clair, Sullivan, and Washington.

#### **Waterway**

The Missouri River is located about 7 miles north of Union in the neighboring community of Washington.

#### **Public Transportation Network**

#### **General Comments**

Union's location right off Interstate 44 and being served by two regional highways gives it distinct advantages to companies who need quick and accessible transportation.

## **Taxation Structure**

Actual Valuation (2007): \$151,859,780.00 Bond Indebtedness (2006) General Obligation: \$ 0.00 Revenue: \$ 2,270,000.00 County: \$6,845,000.00 School: \$ 45,685,000.00

General Comments:

## **Quality of Life**

Commercial Services	
Number of Hotels and Motels:	1
Number of Rooms Available:	50
Number of Conference Centers:	1
Capacity of Largest Conference Center:	250

#### **Financial Institutions**

Number of Banks:	5
Number of Savings and Loans:	0
Number of Credit Unions:	0

#### **Religious Institutions**

At this time, there are 14 churches from a variety of Christian denominations based in the community.

#### **Housing Market**

Avg. Monthly Rent for 3-Bedroom House:	\$650.00
Avg. Monthly Rent for 2-Bedroom Apartment:	\$500.00
Avg. Cost of Houses Sold in Last 2 Years:	\$150,000.00

### **Education**

#### **Elementary and Secondary Education Overview**

The Union R-11 Public School District is one of the largest districts in all of Franklin County and serves the entire community of Union. The District has three elementary schools, one middle school, one intermediate academy, and one high school. The District has received "Distinction in Performance" Award from the Missouri Department of Elementary and Secondary Education for the last 5 out of 6 years.

For more information about Union R-11, please visit union.k12.mo.us.

#### **Higher Education Overview**

Founded in 1968, East Central College was established in Union to serve the educational needs of people in east central Missouri. East Central College offers a wide range of higher and continuing education courses for people of all ages. East Central college participates in "Customized Training" needs for area industries.

For more information about East Central College, please visit: www.eastcentral.edu

## **Health Facilities and Personnel**

Number of Hospitals:	0
Total Number of Beds:	0
Number of Outpatient Clinics:	3
Number of Medical Doctors:	17
Number of Dentists:	5
Number of Registered Nurses:	11
Number of Practical Nurses:	24

## Union Corporate Center Occupants as of August 4, 2010









# Union Corporate Center Occupants as of August 4, 2010









# Union Corporate Center Occupants as of August 4, 2010









## **Union Corporate Center**

Occupants as of August 4, 2010



#### **UNION CORPORATE** Union, Missou Owners Exhibit DETENTION BASIN Recent Warehouse COM AR UNDER: OPTION LOT TITA 10 AE LOT 7-1 3.22 AO Com-Tech 16 (3.64AC) OPTION-10T7-2 Weber 150KAC Utility Contractors LOT 7-78 18.47 AC 146 (2.01A) 1017-4 190 AC ROAD UNDER CONSTRUCTION (2.25AC) LOT 7-5 1,90 AC LOT 7-6 1.93 AC Frush H (Z-88AC) LOT 8-1 3.13 AC LOT 10-10 Stylemester 2.14 AC LOT 9-3 8-34 AC LOT 10-18 Turn Key 25 (BAC) 2.01 AC Missouri 1" = 500" 26 (4.05AC) NOT INCLUDED IN UNION CORPORATE CENTER SLIP 13.25AC Contact: Joseph A. Graves Director of Economic Development City of Union

Ph: 636.583.3600 • Cell: 314.808.3395 • Email: jgraves@unionmiss

500 East Locust Street, Union, Misso