City of University City, Department of Public Works and Parks
6801 Delmar Blvd. University City, Missouri 63130 314-505-8560, fax 314-862-0694

Addendum #2

January 4, 2019

University City STP – Westgate Application – Including attachments

Project Number: STP-5402(616)

Chris Kalter
Project Manager
City of University City
Public Works Department
314-505-8548
ckalter@ucitymo.org

**FY 2018-2021 TRANSPORTATION IMPROVEMENT PROGRAM**
**SURFACE TRANSPORTATION PROGRAM - SUBALLOCATED FUNDS (STP-S)**
**NEW PROJECT APPLICATION**

Clear Form and Create New Project | Retrieve Existing Project | Update/Save Project

**PROJECT RECORD NUMBER** 590770 | Clear All Fields

***Before starting new applications, select "Clear Form and Create New Project". Applications with no record number cannot be saved. The project number will be needed it if you wish to retrieve/edit/print the application at a later time.***

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*Select one:*

- ☐ Application withdrawn
- ☐ Preliminary complete (ready for comments)- Due January 26, 2017 - Optional
- ☒ Final complete - Due March 2, 2017
  Signatures, Supplemental Information, and Application Fee - Due March 2, 2017

## A. SPONSOR INFORMATION

**Sponsoring Agency**: City of University City

**Chief Elected Official:** Shelley Welsch

**Address:** 6801 Delmar Blvd

**City:** University City **State:** MO **Zip:** 63130

**E-Mail:** mayor@ucitymo.org

**Project Contact:** Chris Kalter **Title:** Project Manager

**Address:** 6801 Delmar Blvd

**City:** University City **State:** MO **Zip** 63130

**Phone**: 314-505-8548 **Fax**:

**E-mail**: ckalter@ucitymo.org

**Application Contact:** Chris Kalter

**E-Mail:** ckalter@ucitymo.org **Phone:** 314-505-8548

## B. PROJECT INFORMATION

**Project Title**: Westgate Ave pavement and sidewalk upgrades

**Project Limits** (i.e., Taylor Ave to Moss St or over Moss Creek - include map):

Westgate Ave from Delmar to Olive Blvds

**Is this project a continuation of, or is it otherwise related to, another project that previously was programmed in the TIP? If so, explain this relationship.**

The City of University has completed an STP-S project to resurface Olive Blvd with which Westgate Ave intersects. This project included bringing pedestrian facilities into compliance with the Americans with Disabilities Act (ADA), and asphalt resurfacing of the roadway. If the City of University City is able to secure funds for this project, the portion of Westgate Ave would be brought into compliance with ADA regulations and the roadway would also be resurfaced.

**Has your agency previously competed for funds for this specific project? If so, when?**

No

**Does your agency own and maintain this facility?** Yes **If no, a letter of support is required from the facility owner.**

**Project Priority Area:** Preservation <01>

**Type of Improvement:** Resurfacing <20>
Pedestrian Facility <67>
Bicycle Facilities <58>

**Type of project:** Roadway Resurfacing <12>

**Project Length (Miles):** 0.46

**Estimated date of completion** (MO/YEAR): 01/2021

**Usage (Average Daily Traffic, Ridership, etc.):**

| | Currently | Proposed |
|---|---|---|
| ADT | 2260.00 | 2260.00 |
| Year | 2012.00 | 2018.00 |

**Vehicle Occupancy Rate (Regional Average=1.25):** Currently 1.25 Proposed 1.25

**Federal Functional Roadway Classification ( per East-West Gateway):** Local/Rural Minor Collector <06>

**BRIDGE PROJECTS ONLY - Complete next four questions**

**Bridge Identification Number (Per state inventory):** n/a

**Bridge Sufficiency Rating (Per state inventory):**

**Is bridge listed on state inventory as deficient?** No

**Will there be any realignment of the connecting roadway (vertical or horizontal) as part of the bridge replacement?** No **If yes, include sketch of proposed bridge replacement and realigned road.**

**Number of through traffic lanes**: Currently [2] Proposed [2]

**Number of turn lanes**: Currently [0] Proposed [0]

**Are two-way left turn lanes proposed as part of this project?** [No] If yes, give details below:

Is the terrain flat or rolling? [Flat]

If the terrain is rolling, describe what measures have been taken to maximize the sight distance where the two-way left turn lanes are proposed:

[ ]

**Speed limit**: Currently [25] Proposed [25]

**Lane width**: Currently [18.0] Proposed [18.0]

**Shoulder width**: Currently [ ] Proposed [ ]

**Bridge width (gutterline to gutterline)**: Currently [ ] Proposed [ ]

**Curb & gutter?**: Currently [Both] Proposed [Both]

**Sidewalks?**: Currently [Both] Proposed [Both]

**Sidewalk Width**: Currently [5.0] Proposed [5.0]

**Parking allowed**: Currently [Yes] Proposed [Yes]

**Will additional right of way, TSCL or easement be acquired?** [Yes]

**If yes,**

- **Estimated additional right of way (in acres) needed:** [0]
- **Estimated permanent easements (in acres) needed:** [0]
- **Estimated temporary easements (in acres) needed:** [0.15]
- **Any residential or commercial displacements anticipated? If yes, give details on how many and if they are residential and/or commercial.**

[ ]

**Right of way acquisition by**: [Consultant]

**Right of way condemnation by**: [N/A]

*Please attach the following items, if available.*

➜ Traffic Flow diagram for more than 2 lane improvement

➜ Scope of engineering services

## UTILITY COORDINATION

**Will coordination with utilities be required?** Yes **If yes, check the appropriate box to select the type of utility. Then give the names of the utility companies. Utilities must be notified of proposed improvements early in the design process.**

| | | |
|---|---|---|
| **Electric** | ✓ | Ameren |
| **Phone** | ✓ | AT&T |
| **Gas** | ✓ | Laclede |
| **Water** | ✓ | Missouri American Water |
| **Cable TV** | ✓ | Spectrum |
| **Storm Sewer** | ✓ | MSD |
| **Sanitary Sewer** | ✓ | MSD |
| **Other** | | |

**Please give detail concerning potential utility conflicts / problems / issues:**

Because the proposed project includes resurfacing, the City will be including in the design plas any existing utility issues addressed before the new surface is placed. This will ensure that no subsurface issues come to the surface after the project is completed. Also because there will be sidewalk removal and replacement, we would like the plans to reflect adequately where existing lines and mains are located within the right-of-way to ensure that no problems are encountered during construction. There will be minor adjustments to manholes, gas valves, water valves, and water meters to the proposed grade.

**Utility coordination completed by:** Consultant

**Designed by:** Consultant

**Inspection by:** Consultant

**RAILROAD COORDINATION**

Is there a railroad crossing within or near (i.e. 500', RR Signal) project limits? No

If yes, please answer the following questions:

Name of railroad crossed:

Number of crossings impacted?

Are crossings active?

What is the crossing type?

- ☐ Timber
- ☐ Rubberized
- ☐ Asphalt
- ☐ Concrete
- ☐ Other (describe)

What is the width of the crossing?

Are there pedestrian or bicycle facilities impacted (within limits or within 500 feet of project limits)?

What will be done to improve pedestrian or bicycle facilities at the crossing?

## AMERICANS WITH DISABILITIES ACT TRANSITION PLAN

All applicants are required to comply with the Americans With Disabilities Act (ADA) of 1990. The ADA requires any public agency with more than 50 employees to make a transition plan setting forth the steps necessary to make its facilities accessible to persons with disabilities. 28 CFR §35.150(d).

More information can be found here: http://www.fhwa.dot.gov/civilrights/programs/ada_sect504qa.cfm#q10

Does your local public agency have more than 50 employees? Yes

If yes, please answer the following questions:

Does your agency have an adopted ADA transition plan?[1] No

If no plan adopted, when is one expected to be adopted?

December 31, 2017

[1] Include the following in the project application submittal (if applicable): Attach pages of ADA transition plan only if it relates to proposed project. Do NOT attach entire plan.

## C. PROJECT JUSTIFICATION/DESCRIPTION (Application will not be reviewed if Section C is not complete)

**Please describe** 1.) the proposed improvement, 2.) the transportation problem the improvement will address, 3.) the effect the improvement will have on the problem, and 4.) any Transportation System Management or Transportation Demand Management strategies (as described in Appendix B included in the workbook).

If the project is proposing to add capacity for single-occupant vehicles by adding lanes or by constructing a new facility, a Congestion Management Study (CMS) report may be required. The CMS requirements are described in Appendix A included in the workbook. If you are unsure if a CMS is needed, please contact Jason Lange at MO: (314) 421-4220 or IL: (618) 274-1750.

Projects must be based upon the ten principles/strategies of Connected 2040, the St. Louis region's Long Range Transportation Plan. **See page 7-9 of the STP-S workbook for more information**.

**Be as specific as possible.** Attach additional sheets as needed.

Proposed Improvement:

* Design of approximately 20 ADA compliant curb ramps within the project area;
* Removal and replacement of damaged sidewalks as necessary;
* Mill and asphalt resurfacing of the driving pavement within the project area;
* Striping of all signed and signalized intersections;
* The implementation of shared lane marking on each side of the road, as well as Share the Road signage at the beginning/end of each street segment;
*Bike Route guidance signing at intersecting side roads;
* Permeable paving system for parking areas along the proposed route. Because parts of the curb along the route are lacking, the paver system will help with storm water management runoff from going into the flowlines from the roadway;
* Installation of a new stop sign and stop bar at the Clemons intersection will help to fix a confusing intersection for motorists.

Transportation Problem:

* The proposed improvement will address all curb ramps that do not currently comply with ADA standards.
* The project will also address all mid-block sidewalk sections that are not in compliance with current standards.
* The current PASER rating is a 5 and the driving lanes are badly deteriorated and spalling is occurring throughout the project area. Preservation now will stop continued deterioration due to loading and frost heave.
* Existing crosswalks and sidewalks are deteriorated.
* Bicycle shared lanes are missing and unclear.

Roadway Solutions:

* The proposed project will address the drive lane conditions by milling and resurfacing the pavement.
* Shared lane marking on the driving pavement will be added to make motorists more aware of the bicyclists using the roadway, and will provide clear direction for the cyclists using Westgate Ave.
* This proposed project will address Bicycle and Pedestrian Improvements by upgrading all curb ramps and making every interesection ADA accessible, as well and improving any ADA compliance issues (i.e. trip hazards) within sidewalk sections throughout the project area.

## BICYCLE AND PEDESTRIAN FACILITIES

In March 2010 the US DOT issued its Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations. The policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.

Bicycle and pedestrian legislation in 23 USC 217(g) states:

> *Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted...Transportation plans and projects shall provide due consideration for safety and contiguous routes for bicyclists and pedestrians.*

Does the project include bicycle and/or pedestrian facilities? Yes

If bicycle and/or pedestrian facilities are not included, WHY NOT? Failure to include bicycle and/ or pedestrian facilities may result in the project not being funded.

If bicycle pedestrian facilities currently exist along the project limits, please answer the following questions:

### EXISTING BICYCLE FACILITY

Does the current bicycle facility meet the guidelines set forth by the *American Association of State Highway and Transportation Officials (AASHTO)* Guide for the Development of Bicycle Facilities (2012, 4th Edition) and/or the *National Association of City Transportation Officials (NACTO)* Urban Bikeway Design Guide (2014, 2nd Edition)?

No

Does the project scope include upgrading the bicycle facility to meet current guidelines? Yes

If no, explain why the project will not meet AASHTO and/or NACTO guidelines .

## BICYCLE AND PEDESTRIAN FACILITIES

Describe the bicycle facilities that currently exist along the project limits. Include widths and length for each type. (for example: shared use path, 10 feet wide, 2 miles long):

Currently, there are no bicycle facilities along this route. This route is a thru route for many people traveling from Delmar Blvd to Olive. It allows for direct access to Delmar or Olive and it allows for access to Ackert Walkway which is a part of the Great Rivers Greenway Centennial Trail.

If pedestrian facilities currently exist along the project limits, please answer the following questions:

### EXISTING PEDESTRIAN FACILITY

Are the pedestrian facilities along the project limits currently ADA compliant? No

Describe the pedestrian facilities that currently exist along the project limits. Include the width and length of the existing sidewalk (for example: Sidewalk on north side of road, 5 feet wide, 0.5 miles long. Crosswalks at 3 signalized intersections with no pushbuttons.):

Sidewalks are on the east and west side of the route, except for the west side of Westgate from Olive to the Firehouse #1. Sidewalks are approximately 5 feet wide on both east and west side of the .46 mile route (0.92 for the sidewalks) Replacement of sidewalks will remain at 5 feet wide, due to space limitations.

The only ADA compliant pedestrian facilities at this time are at the intersection of Westgate and Enright.

The remainder of the route is not currently ADA compliant, because cross slopes and running slopes are too extreme, the detectable warning in most cases is not up to code, there are overhanging obstacles and uneven panels which could cause trip hazards.

What is the Present Serviceability Rating (PSR)?[2] 4

[2] *Include the following in the project application submittal (if applicable): PSR score, map showing evaluation locations, calculations, and pictures at each evaluation location.*

## BICYCLE AND PEDESTRIAN FACILITIES

If bicycle and/or pedestrian facilities are included in the project scope, please answer the remaining questions in the bicycle and pedestrian facilities section:

### PROPOSED BICYCLE AND/OR PEDESTRIAN FACILITIES

Does the proposed project provide a connection that reduces a barrier to use and functionality (i.e., natural or man-made barriers, including interstates, railroads, rivers, etc.)?

No

If yes, identify the barrier(s):

Identify the connectivity of the bicycle/pedestrian facility resulting from the project[3]:
*(check all that apply)*

- ☐ Project fills in a gap between existing bicycle/pedestrian facilities
- ☐ Project extends an existing bicycle/pedestrian facility
- ☑ Project intersects an existing bicycle/pedestrian facility
- ☑ Project is adjacent to an existing bicycle/pedestrian facility
- ☐ Project is a new isolated bicycle/pedestrian segment

Does the project incorporate any of the following traffic calming and/or design improvements? *(check all that apply)*

- ☑ Pedestrian safety
- ☐ Speed control
- ☐ Volume control
- ☐ None

[3] *Include the following in the project application submittal (if applicable): Facility map showing existing bicycle and/or pedestrian facilities and their connections to the proposed project.*

## BICYCLE AND PEDESTRIAN FACILITIES

If the project incorporates any traffic calming or design improvements, describe the improvements (i.e., bulb-outs, median barriers, center islands, roadway markings, improved signage and signals). Also, explain how this improvement will reinforce a safe environment for bicyclists and/or pedestrians:

There are 24 driveways, 7 street intersections, and 1 park entry. Bringing all of these in to ADA compliance will improve the design of this route by:
1. Removing tripping hazards, and increase comfort, appeal, and personal safety.
2. Compliant cross slopes and running slopes will provides access to the disabled by providing traversable entrances via wheelchair, walkers, etc.
3. Updated detectable warnings (truncated domes) will provide a more clear warning to the visually impaired.
4. New crosswalk markings with colored/textured pavement to alert drivers of pedestrian crossing areas.

### PROPOSED BICYCLE FACILITY

Does the proposed project incorporate any of the following bicycle-related improvements?
*(check all that apply)*

- ☐ Separated bike lane/cycle track/protected bike lane
- ☐ Shared-use path/trail
- ☐ Arterial sidepath
- ☐ Bike lane with no buffer
- ☑ Shared-lane markings ("sharrow")
- ☐ Wide outside lane
- ☐ Paved shoulder
- ☑ Share the Road signage
- ☐ Bikes May Use Full Lane signage
- ☐ Wayfinding/bicycle racks or parking/or other end of trip facilities
- ☐ Other
- ☐ None

Describe other bicycle-related improvements:

## BICYCLE AND PEDESTRIAN FACILITIES

Proposed bicycle facility length: .46 miles

Width of proposed bicycle facility: n/a

Proposed bicycle facility surface (i.e. asphalt, concrete, crushed limestone, dirt, etc):

asphalt

If there is an intersection along the project limits, describe any bicycle treatments at that intersection:

There are seven intersections along the project limits. There will be road painting for share the lanes and signage.

How many residential/commercial driveways are along the proposed bicycle segment? 24

How many streets/alleys does the proposed bicycle facility cross? 7

## PROPOSED PEDESTRIAN FACILITY

Does the proposed project incorporate any of the following pedestrian-related improvements? *(check all that apply)*

- [x] Sidewalks
- [ ] Sidewalk/roadway separation
- [x] Curb ramps
- [ ] Pedestrian signal heads and push buttons
- [x] Marked crosswalks
- [x] Midblock crossings
- [ ] Wayfinding/furniture/or other end of trip facilities
- [x] Pedestrian-scale lighting
- [ ] Other
- [ ] None

Describe other pedestrian-related improvements:

Washington University will provide specifications and funding for pedestrian street level lighting along this route. This project is not part of this grant application and will be part of a separate agreement.

Proposed pedestrian facility length: .92 miles

## BICYCLE AND PEDESTRIAN FACILITIES

Width of proposed pedestrian facility: 5' feet

Proposed pedestrian facility surface (i.e. concrete, asphalt):

concrete

If there is an intersection along the project limits, describe any pedestrian treatments at that intersection:

There are seven intersections along the project limits. All pedestrian crossings will be re-marked and ADA accessibility will be increased.

How many residential/commercial driveways are along the proposed pedestrian facility? 24

How many streets/alleys does the proposed pedestrian facility cross? 7

## PLANNING

Is the proposed project identified in an approved or adopted plan, policy, or ordinance?[4] Yes

Name of adopted plan, policy, or ordinance:

Parkview Gardens Neighborhood Sustainable Development Plan

Adoption date of plan, policy, or ordinance:

Summer 2014

Is the proposed project located in St. Charles County, St. Louis County or the City of St. Louis and will it construct a bicycle facility?

Yes

If yes, please answer the following questions:

Does the project provide a connection to or located on the Great Rivers Greenway River Ring?

Yes

Is the project on the Gateway Bike Plan network? – www.stlbikeplan.org Yes

Is the proposed project located in Madison or St. Clair County and will it construct a bicycle facility?

No

If yes, please answer the following question:

Does the project provide a connection to projects in the Metro East Parks and Recreation District Long Range plan? - http://bit.ly/MEPRDPLAN

[4] *Include the following in the project application submittal (if applicable): Documentation from approved or adopted plan, policy, or ordinance – do not included entire plan documents, only include the necessary pages.*

## BICYCLE AND PEDESTRIAN FACILITIES

### SCHOOLS/COMMUNITY RESOURCES

Does the project provide direct access to a school?[5] No

If yes, please identify the school(s) and explain how the project will serve and enhance access to the school(s).

Does the project provide direct access to a community resource?[5] Yes

If yes, please identify the community resource(s) and explain how the project will serve and enhance access to the community resource(s). Community resources include: hospitals, community centers, YMCAs, gyms, parks.

Westgate Ave is a connector street between Olive Blvd to Delmar Blvd. The Delmar Loop is a community resource of stores, resturants, art galleries, and other available amenities. Olive Blvd business district is a four mile stretch with 300 businesses and the industrial sectors provide jobs and services to the local neighborhood. Ackert Park and Ackert Walkway is an important amenity to this area that provides outdoor space for residents.

[5] *Include the following in the project application submittal (if applicable): Add schools within ½ mile of project, and community resources along the project limits to the bicycle/pedestrian facility connections map(see page 10).*

**GREAT STREETS** (This section is intended to be completed only for projects that are utilizing concepts from the Great Streets Initiative)

Road construction does not just apply to moving cars and trucks faster. It's really about accommodating people, which can include such things as: traffic calming, bicycle/pedestrian accommodations, compliance with the Americans with Disabilities Act, landscaping, access management, architectural design standards, and zoning changes to encourage specified land uses and promote economic development. East-West Gateway's Great Streets Initiative helps local sponsors create a complete street. A toolbox has been created that guides sponsors to use the Great Streets template that applies to their place. Place types include: downtown main street, mixed-use district, small town downtown, residential neighborhood, office employment area, civic/educational corridor, neighborhood shops, and commercial/service corridor.

Detailed information can be found at: http://www.ewgateway.org/greatstreets/greatstreets.htm. If you have any questions about Great Streets, contact Paul Hubbman at: MO: (314) 421-4220 or IL: (618) 274-2750.

A Great Streets project is required to address these eight characteristics:

1. Great Streets are great places
2. Great Streets integrate land use and transportation planning
3. Great Streets are economically vibrant
4. Great Streets accommodate all users and all modes
5. Great Streets are environmentally responsible
6. Great Streets rely on current thinking
7. Great Streets are measurable
8. Great Streets develop collaboratively

Please describe below how this project incorporates each of the seven criteria. Attach additional sheets as needed.

Great Streets are great places and Westgate Ave is one of the connector streets in University City. Westgate provides access to the Delmar Loop, Ackert Park and Walkway which are part of the Great Rivers Green Way Centennial trail and Olive Blvd. Olive Blvd is a main artery in the City with a large business district and the Cunningham Business Park. All of which provides residents of the area access to jobs, entertainment, and life needs. Whether you travel by car, foot, or some other wheeled mechanism the residents and community have ample access to transportation. This project will only enhance those opportunities by bringing the entire length of the project in to ADA compliance.

The Parkview Gardens Neighborhood and University City understand that a street is not just a platform for travel. Streets have an impact on our environment as well. This project will incorporate a permeable paver system into a majority of the parking along the route. This system will aid in the management of storm water in this area. The decision to pursue this project and include the permeable paver system stems from the Parkview Gardens Neighborhood Association. Several years ago this organization was one of the planning partners with University City that led to the creation of a sustainable neighborhood plan that was adopted by City Council in 2014. This planning project was partially funded by the US Department of Transportation and the Department of Housing and Urban Development. There was a large group of participants that were involved in this planning process and many of the design elements came from that collaboration.

The City continues to measure and evaluate roads and sidewalks throughout University City on a regular basis. If the City is awarded this project measuring and evaluating the permeable paver system will be crucial for the City's long term roads and storm water plans. The hope is that Westgate Ave will become a model for future road projects throughout University City.

## D. PROJECT COMPOSITION

**Please indicate the approximate percentage of the project that covers each of the elements below:**

| MODAL ELEMENTS | Total Cost |
|---|---|
| Roadway elements | 60.00 % |
| Transit elements | 0.00 % |
| Bicycle and Pedestrian elements | 40.00 % |
| Port and Freight Facility elements | 0.00 % |
| ***TOTAL (100%)*** | 100.00 % |

| ACTIVITY TYPE | Total Cost |
|---|---|
| Replace/Rehabilitation of existing facilities | 100.00 % |
| Expansion/Enhancement - new or expanded facilities and assets (not replacement) | 0.00 % |
| Planning Studies - such as general program evaluation, corridor studies, MTIA or environmental analysis (not preliminary or construction engineering) | 0.00 % |
| ***TOTAL (100%)*** | 100.00 % |

| PROJECT FUNCTIONS | Total Cost |
|---|---|
| Preservation elements | 60.00 % |
| Safety elements | 30.00 % |
| Congestion elements | 0.00 % |
| Access to Opportunity elements | 5.00 % |
| Sustainable Development elements | 0.00 % |
| Goods Movement elements | 5.00 % |
| | |
| ***TOTAL (100%)*** | 100.00 % |

## E. IMPROVEMENT EVALUATION CRITERIA (Application will not be reviewed if Section E is not complete)

**Select a priority condition that is based on the primary focus area of the project. The priority condition should be the same for each focus area on pages 9-14 of this application. Pages 7-10 of the STP-S workbook details what is required supporting information for each condition.**

*PRESERVATION*

**Preservation of the existing infrastructure** will be achieved by managing and maintaining current roadway, bridge, transit and intermodal assets. Check the one priority condition box, using the measures described below, that best represents the project being considered. Attach relevant documentation, calculations, photos or additional information. Points will be assigned only if project will improve deficient condition and documentation of condition is provided with project application.

**Priority Condition** | Road/Bridge | High (5 pts) |

**System Condition** *(describe condition and measure used)*

Every two years, the City inspects all city streets for deficiencies on a scale of 1 (failed condition) to 10 (excellent condition) using the Paser Pavement Surface Evaluation and Rating method. Westgate is rated 5 which represents a significant aging, first signs of need for strengthening and would benefit from milling and filling. This project includes asphalt milling and filling which will improve the deficient conditions of raveled cracks, block cracking, uneven surfaces.

| ***PRESERVATION MEASURES*** | ***High Priority Condition*** | ***Medium Priority Condition*** | ***Lower Priority Condition*** |
|---|---|---|---|
| **Road** | Pavement Condition 2.0-5.6 on PASER Scale AND project will improve deficient condition. | Pavement Condition less than 2.0 or 5.7-7.5 on PASER Scale AND project will improve deficient condition. | Pavement Condition greater than 7.5 on PASER Scale AND project will improve deficient condition. |
| **Bridge** | Bridge Sufficiency Rating less than 40 on Scale of 100 AND project will improve deficient condition. | Bridge Sufficiency Rating of 40-79.9 on Scale of 100 AND project will improve deficient condition. | Bridge Sufficiency Rating greater than 80 on Scale of 100 AND project will improve deficient condition. |
| **Signal** | Project will replace equipment older than 20 years, and equipment is outdated, not repairable | Project will replace equipment 10 to 20 years old and not compatible with coordinated systems | Project will replace equipment in good condition, as per industry standard |
| **Transit** | Project will replace equipment at normal replacement cycle age in FTA Circular 9030 | Project will replace equipment that is non-operational /unreliable/beyond normal replacement cycle age in FTA Circular 9030 | Project will replace equipment earlier than normal replacement cycle age in FTA Circular 9030 |
| **Port/Freight** | Poor condition as per standard AND project will improve deficient condition. | Very poor or fair condition as per standard AND project will improve deficient condition. | Good condition as per standard AND project will improve deficient condition. |
| **Bike/Ped** | Average PSR rating of sidewalk 0-1 (see App F or workbook for how to rate) AND project located within ½ mile of PUI grid 3-5 | Average PSR rating of sidewalk 1-2 (see App F or workbook for how to rate) AND project located within ½ mile of PUI grid 3-5 | Average PSR rating of sidewalk 0-3 (see App F or workbook for how to rate) AND project located in any area |

***NOTE:** *Only projects that propose to replace, rehabilitate, or repair a facility or equipment can receive points in this category. Projects that propose to construct an entirely new facility receive 0 points (N/A). Systematic preventive maintenance activities (i.e., activities that are part of a planned strategy or program) intended to extend the life of the facility are eligible for funding, provided the DOT has approved the systematic strategy or program.*

***PRESERVATION***

**ROAD/BRIDGE**

Is this a road/bridge preservation project? No

If yes, what is the PASER rating or bridge sufficiency rating?[6] 5

Timely application of a pavement treatment can increase the life of the roadway. An effective pavement management system is a systematic process that provides information for use in implementing cost-effective pavement reconstruction, rehabilitation, and preventative maintenance programs. The pavement management plan (PMP) involves the evaluation of pavements on a regular basis which allows jurisdictions to accommodate current and forecasted traffic in a safe, durable, and cost-effective manner.

Is this roadway part of the local public agency's PMP?[6] Yes

If yes, please answer the following questions:

When was the last surface preservation treatment completed on this facility?

Sealcoat/crack sealing 2002yr

What type of treatment?

Mill and Overlay - 2000yr

According to the PMP, when is the next scheduled treatment proposed and the type of improvement needed?[6]

Ultra thin bonded asphalt wearing surface (novachip) 2025yr

[6] *Include the following in the project application submittal (if applicable): PASER calculation score (including map showing locations of pavement evaluations and, photos at each location), bridge sufficiency rating sheet (from DOT), and/or supplementation documentation from PMP showing past and future maintenance plans of proposed road.*

*SAFETY*

Safety and Security in Travel will be achieved by decreasing the risk of personal injury and property damage on, in, and around transportation facilities. Check the one priority condition box, using the measures described below, that best represents the project being considered. To gain points the Crash Summary form must be included in the final application. Points only gained if countermeasure is consistent with the project scope. The Crash Summary form is found on the TIP application web page.

Total number of crashes from 2012-2014: 10

Number of crashes by type: Fatal [ ] Serious Injury [ ] Property Damage Only [10] Minor Injury [ ]

Crash Rate for the proposed project location *(use formula below)*: 8.78

To compute crashes per million vehicle miles use the formula:

Average Number of Crashes **per year** 2012-2014 X 1,000,000 = **Crash Rate**
Average Daily Traffic X 365 X length of project in miles

**Priority Condition** Road | High (5 pts)

**System Condition / Problem Addressed**

Improved road surface and signage along the route will help reduce crashes and improve the safety of the neighborhood.

| ***SAFETY MEASURES*** | ***High Priority Condition*** | ***Medium Priority Condition*** | ***Lower Priority Condition*** |
|---|---|---|---|
| **Road/ Intersection** | Crash rate per million vehicle miles is 6.0 or higher AND project addresses specific safety issues(s) related to crashes on Crash Summary form OR improves problems identified in road safety audit OR addresses fatal/serious injury crash(es) | Crash rate per million vehicle miles is 3.0 to 5.9 AND project addresses specific safety issues(s) related to crashes documented on Crash Summary form. | Accident rate per million vehicle miles is less than 3.0 AND project addresses specific safety issue(s) related to crashes documented on Crash Summary form. |
| **Bridge** | Bridge sufficiency rating less than 20 on scale of 100 AND project will improve deficient condition. | Bridge sufficiency rating 20-49.9 on scale of 100 AND project will improve deficient condition. | Bridge sufficiency rating greater than 50 on scale of 100 AND project will improve deficient condition. |
| **Transit/Other** | Poor condition as per standard AND project addresses specific safety or security issues (e.g., improves security for facility users, addresses bicycle or pedestrian safety concerns, etc.) | Fair condition as per standard AND project addresses specific safety or security issues (e.g., improves security for facility users, addresses bicycle or pedestrian safety concerns, etc.) | Good condition as per standard AND project addresses specific safety or security issues (e.g., improves security for facility users, addresses bicycle or pedestrian safety concerns, etc.) |
| **Bike/Ped** | New bike/ped facility: Sidewalks on both side of road (at least 5' wide) or dedicated multi-use path (at least 10' wide) | New bike/ped facility: Sidewalk on one side of road (at least 5' wide) or on-road bike lane OR new bike/ped facility: Sidewalks on both side of road (4' to 5' wide) or dedicated multi-use path (8'-10' wide) | Improvements to existing facility or shared lane traffic markers |

*SAFETY*

**EXISTING CONDITION**

Describe the existing non-pavement safety components along the project limits (i.e. guardrail, signage, etc):

Along the route there are a lack of existing crosswalk markings, deteriorating stop bars, missing stop signs, and a lack of bicycle-related signage.

**CRASH RATE**

Please complete the following crash rate questions. The **Crash Calculation Form**[7] must be used to calculate the crash rate. The **Crash Summary Form**[7] must be used to log a summary of individual crashes.

What are the total number of crashes from 2010-2014? 20

Total number of crashes by crash type:

Fatal (K on KABCO scale)[7] 0.00

Serious injury (A on KABCO scale)[7] 0.00

Minor injury (B and C on KABCO scale) 0.00

Property damage only (O on KABCO scale) 20.00

Complete the crash rate for the type of project (road segment or intersection):

2010-2014 Crash Rate – Road Segment

What is the total crash rate? 484.91

What is the fatal and serious injury crash rate? 0.00

**OR**

2010-2014 Crash Rate – Intersection

What is the total crash rate?

What is the fatal and serious injury crash rate?

[7] *Include the following in the project application submittal:* ***Crash Calculation Form*** *and* ***Crash Summary Form*** *(insert within application and attach excel files with electronic submittal). If applicable include fatal and serious injury crash reports (entire report – other vehicle crash reports optional).*

*SAFETY*

**COUNTERMEASURES**

What safety countermeasures are being used for the proposed project and what is its Crash Modification Factor (CMF)?[8] - List the countermeasure that best fits the project. For example: Conversion of intersection into low-speed roundabout – CMF 1.099

Increased pavement friction - CMF ID 196 - 0.83

Are the proposed countermeasures listed in the State or County Strategic Highway Safety Plan? No

If yes, list the plan(s):[8]

Was a safety study completed for this project?[8] No

**BICYCLE/PEDESTRIAN**

Are there crashes involving bicylists, and/or pedestrians along the project limits? No

If yes, please answer the following questions:

What is the total number of crashes involving bicylists?[9]

What is the total number of crashes involving pedestrians?[9]

What is the proposed countermeasure and how would the crashes be addressed?

[8] *Include the following in the project application submittal (if applicable): CMF sheet(s) (screen capture) from the CMF Clearinghouse website www.cmfclearinghouse.org, copy of pages from relevant state and/or local safety plan that shows project type, and attach safety study.*

[9] *Include the following in the project application submittal (if applicable): Crash reports that include bicyclists, pedestrians, and other non-drivers.*

## *SAFETY*

Is there an undocumented safety issue? Yes

If yes, please answer the following questions:

What is the undocumented safety issue?

The area is serviced by cobra lights, but these lights do not provide adequate light for the area.

What is the proposed countermeasure and how would the undocumented safety issue be addressed?

Washington University's light project will aid in rectifying this deficiency.

**BENEFIT/COST**

Is the Project Priority Area (on page 2 of application) listed as safety? No

If yes, and there is a documented crash problem, what is the benefit/cost ratio?*[10]

Safety Appendix - Crash Rate Formulas:

Road Segment – Total crash rate:
(Number of total crashes) X 100,000,000 vehicle miles traveled
(Project Length) X (Project Average Daily Traffic) X (Number of Crash Years) X 365

Road Segment – Fatal and serious injury crash rate:
(Number of fatal and serious injury crashes) X 100,000,000 vehicle miles traveled
(Project Length) X (Project Average Daily Traffic) X (Number of Crash Years) X 365

Intersection – Total crash rate:
(Number of Accidents) X 100,000,000 million entering vehicles
(Number of crash years) X (Entering AADT) X 365 days/year

Intersection – Fatal and serious injury crash rate:
(Number of fatal and serious injury crashes) X 100,000,000 million entering vehicles
(Number of crash years) X (Entering AADT) X 365 days/year

[10] *Include the following in the project application submittal (if applicable): Benefit/cost ratio calculation form.*

***SAFETY***

Benefit/Cost ratio:

Benefit/Cost Ratio= Present Value of Benefits (**PVB**)/Present Value of Costs (**PVC**)

**PVB**= Annual Benefit X $[(1+i)^n - 1/i(1+i)^n]$

Annual Benefit = [(Total Number of Fatal Crashes X The Cost of a Fatal Crash*) + (Total Number of Serious Injury Crashes X The Cost of a Serious Injury Crash*) + (Total Number of Minor Injury Crashes X The Cost of a Minor Injury Crash*) + (Total Number of Property Damage Only Crashes X The Cost of a Property Damage Only Crash*)] X(Crash Modification Factor*)]

$[(1+i)^n - 1]/i(1+i)^n$

$i = 3\%$

n= Lifespan of countermeasure in years *

*To find the PVC use the formulas below.*

**PVC**= {Total Cost of Project X $[(1+i)^n - 1]/i(1+i)^n$} + {Maintenance Cost X Lifespan of Countermeasure X $[(1+i)^n - 1]/i(1+i)^n$}

Total Cost of Project = this includes all phases of the project (PE, ROW, and construction).

$[(1+i)^n - 1]/i(1+i)^n$

$i = 3\%$

n= Amount of years from the current year until the construction phase.
i.e., Current year is 2017 and project will have construction in fiscal year 2021. n would equal 5

Maintenance cost = the maintenance cost of the countermeasure
Lifespan of countermeasure= can be found in Appendix F of IDOT's Benefit-Cost Tool User Guide

$[(1+i)^n - 1]/i(1+i)^n$

$i = 3\%$

n= Lifespan of countermeasures in years

*CONGESTION*

**Congestion Management** will be achieved by ensuring that congestion of the region's roadways does not reach levels which compromise economic competitiveness. Check the one priority condition box, using the measures described below, that best represents the project being considered. Attach relevant documentation, calculations, photos or additional information.

Does this project increase capacity for Single-Occupant Vehicles (SOV)? No

**If yes, an evaluation of the impact to SOV capacity* of reasonable demand strategies that fit in the corridor must be completed. This evaluation must follow the framework of the St. Louis Region Congestion Management Process Mitigation Handbook and included with the application. See Section VI (page 12 of workbook) for more information.**

**Priority Condition** Road | Low (1 pt)

**System Condition** *(describe condition and measure used)*

Share the road paint and bike signage.

| ***CONGESTION MEASURES*** | ***High Priority Condition*** | ***Medium Priority Condition*** | ***Lower Priority Condition*** |
|---|---|---|---|
| **Road/Bridge Intersection** | Level of Service E or F AND project includes features to increase vehicle mobility (e.g., ITS features, traffic signal coordination, turn lane, intersection improvements) | Level of Service D AND project includes features to increase vehicle mobility (e.g., ITS features, traffic signal coordination, turn lane, intersection improvements) | Level of Service A, B or C AND project includes features to increase vehicle mobility (e.g., ITS features, traffic signal coordination, turn lane, intersection improvements) |
| **Transit** | Introduction of peak-hour transit service in a new market | Expansion of peak-hour transit service or new transit facility in an existing market | Improved transit facility |
| **Education, Rideshare and/or Bike-Ped** | Program intended to encourage use of other modes or alternatives (e.g., transit, ridesharing, carpooling) | New pedestrian or bicycle facility (non-recreational) | Improved pedestrian or bicycle facility (non-recreational) |

**Note:**
**--Calculate Level of Service (LOS) per method outlined in the *Highway Capacity Manual*, Transportation Research Board, National Research Council, Washington, D.C. 2000.**
**--If the project is a bicycle/pedestrian or transit improvement designed primarily to relieve parallel corridor (roadway) congestion - indicate peak average corresponding roadway LOS.**
**– Projects must comply with the Regional ITS Standards set forth in the document titled *St. Louis Regional ITS Architecture*, July 2015. Projects with ITS elements must complete the ITS Project Consistency Statement. The statement is found on the TIP application web page.**

*A study is required if the project proposes to add one or more lanes for a length of at least 1 mile (or the entire distance between major intersections) on a roadway functionally classified as an arterial or above.

*CONGESTION*

**ROAD**

Does this project include elements that would improve flow of traffic?[11] No

If yes, please answer the following questions:
Does the proposed project include any of the following congestion mitigation improvements?

- ☐ Signal retiming/optimization
- ☐ Bottleneck removal
- ☐ Remote verification
- ☐ Traffic adaptive signal control/advanced signal systems
- ☐ Travel time message signs
- ☐ New road[12]
- ☐ Additional through lane[12]
- ☐ Two way (center) turn lane
  Length of turn lane
- ☐ Roundabout
- ☐ New traffic signal
- ☐ Signal interconnection
- ☐ Other (describe)

[11] *Include the following in the project application submittal (if applicable): LOS calculations, ITS Architecture Consistency Statement if project includes ITS elements*

[12] *Include the following in the project application submittal (if applicable): Congestion Management Study and provide documentation that new facility will relieve congestion from other roads in area (if this project is building a new road or building through lanes to existing road then include map of locations and present ADT of surrounding roads and future ADT of roads when new road is built.*

***CONGESTION***

What is the specific cause of congestion within the project limits? Please give a precise explanation describing why the congestion occurs.

How will the proposed improvement address congestion? Please explain how the proposed improvement will eliminate or reduce congestion within the project limits.

## *ACCESS TO OPPORTUNITY*

**Access to Opportunity** will be achieved by addressing the complex mobility needs of persons living in low-income communities and persons with disabilities. Check the one priority condition box, using the measures described below, that best represents the project being considered. Attach relevant documentation, calculations, photos or additional information such as transit lines or stops on or within 1/2 mile of proposed improvements.

**Priority Condition** High (5 pts)

**Access to Opportunity Measures / Problem Addressed**

This project will bring all sidewalks, curb ramps and drive-way entries into ADA compliance.

Westgate Ave is on Metro's Greenline and it is served by routes 91 and 97 at Delmar and Olive Blvds.

There are transit stops at Olive Blvd, Leland Ave, Vernon Ave, and Ackert Park

| *ACCESS TO OPPORTUNITY MEASURES* <br> *Priority Condition* |
|---|
| (1) Project is located within an environmental justice census tract or block, AND (2) project provides direct access to opportunity for disadvantaged individuals (e.g., paratransit service, ride service for elderly, job access program, new transit stop at major employment or activity center, pedestrian or bicycle facility to enable direct access to transit) ***(5pts)*** |
| Project either provides direct access to opportunity for disadvantaged individuals (e.g., paratransit service, ride service for elderly, job access program, new transit stop at major employment or activity center, pedestrian or bicycle facility to enable direct access to transit) AND includes measures to eliminate accessibility barriers and bring a non-ADA-compliant facility into ADA compliance. ***(3pts)*** |
| Includes measures to eliminate accessibility barriers and bring a non-ADA compliant facility into ADA compliance. ***(1pt)*** |

*A map of environmental justice areas is included in Appendix C of the project workbook.

*ACCESS TO OPPORTUNITY*

**ROAD/TRANSIT**

Does the project intersect a transit route or is it located along a transit route? Yes

If yes, please answer the following questions:

What is the service? (i.e Metro, Madison County Transit)? Metro

What is the route number(s)?[13] 97, 91, and Green line

Does the proposed project incorporate improvements to existing transit stops, stations, park-and-ride lots, or other major transit facilities?

Yes

Describe the improvements and their relationship to the transit route (for example: ADA landing pads and benches installed at transit stops along project length. Shelter installed at Walnut St):

New curb ramps will improve accessibility to transit stops.

**TRANSIT**

Is this a transit vehicle replacement, rehabilitation, or refurbishment project? No

If yes, please answer the following questions:

What type of project is this?

- ☐ Bus replacement
- ☐ Light rail vehicle or bus refurbishment/rehab
- ☐ Paratransit/Call-a-ride
- ☐ Other (describe)

Is the project identified in a Transit Asset Management Plan? No

[13] *Include the following in the project application submittal (if applicable): Map showing location of transit route(s) in relationship to project*

*ACCESS TO OPPORTUNITY*

How will this project improve or maintain the efficiency of the transit system?

Resurfacing the road and including bicycle facilities increases the potential travel of residents by bike to bus. Bringing pedestrian facilities in to compliance with ADA standards provides a safer, more convenient, and pleasant route to the transit stop.

How many vehicles are in the current fleet (for example: 30 – 30' Heavy Duty buses)?

395 Heavy Duty Buses

What is the current annual systemwide ridership? 44 million

What is the proposed annual systemwide ridership? 44 million

Will this project increase frequency along an existing transit route? No

If yes, please answer the following questions:

What is the current frequency along the route?[14]

What is the proposed frequency along the route?[14]

What is the current annual ridership of the route? [14]

Will this project create a new transit route? [14] No

[14] *Include the following in the project application submittal (if applicable): Provide transit route information for proposed expansion or new route.*

## *SUSTAINABLE DEVELOPMENT*

Sustainable Development will be achieved by coordinating transportation, land use, economic development, environmental quality, and community aesthetics. Check the one priority condition box, using the measures described below, that best represents the project being considered. Attach revelant documentation, calculations, photos or additional information.

**Does the project conform with community, subarea, or corridor level needs as identified in an adopted local and/or regional land use plan, development plan, or economic development plan?** Yes

**Cite adopted plan(s) that the project is identified in:**

Parkview Gardens Neighborhood Sustainable Development Plan (2014)

**Priority Condition** Medium (3 pts)

**Sustainable Development Measures** (e.g., measures to integrate Great Streets Initiative design techniques, enhance connectivity across or between modes, promote transportation and development actions that reduce the need for travel, avoid impacts to sensitive environmental or cultural resources, etc. )

Great streets are great places and Westgate Ave is one of the connector streets in University City. Westgate provides access to the Delmar Loop, Ackert Park and walkway which are part of the Great Rivers Green Way Centennial trail and Olive Blvd. Olive Blvd is a main artery in the City with a large business district and the Cunningham Business Park. All of which provides the residents of the area access to jobs, entertainment, and life needs. Whether you travel by car, foot, or some other wheeled mechanism the residents and community have ample access to transportation. This project will only enhance those opportunities by bringing the entire length of the project in to ADA compliance.
This project will incorporate a permeable paver system into a majority of the parking along the route. This system will aid in the management of storm water in this area.

| ***SUSTAINABLE DEVELOPMENT MEASURES*** <br> ***Priority Condition*** |
|---|
| Project (1) conforms to the plan(s) identified above, AND (2) is located within ½ mile of a PUI grid 3 or higher or major activity center, AND (3) improves access to, and supports the redevelopment of an underutilized commercial, industrial, or brownfield area. ***(5pts)*** |
| Project (1) conforms to the plan(s) identified above, AND (2) is located within 1/2 mile of a PUI grid 3 or higher or major activity center, AND (3) improves access to, and supports the continued development of an established commercial or industrial area ***(3pts)*** |
| Project (1) conforms to the plan(s) identified above, AND (2) improves access to, and supports the development of a commercial or industrial area or established residential area ***(1pt)*** |

**PUI = Project Utilization Index is a measure of landuse (i.e. population, employment, and retail) and transit (i.e. MetroLink stations, bus stops, transit centers). See Appendix F for more information.*

## *SUSTAINABLE DEVELOPMENT*[15]

### GREEN INFRASTRUCTURE

Green infrastructure is a design approach to managing stormwater, the urban heat island effect, public health, and air quality. Sustainable stormwater management treats and slows runoff from impervious roadways, sidewalks, and building surfaces.

Does the proposed project include any of the following green infrastructure improvements?
*(check all that apply)*

- ☐ None
- ☐ Bioswales
- ☐ Rain garden
- ☑ Pervious pavement
- ☐ Green bulb-outs
- ☐ Other (describe) _____

If green infrastructure elements are included, describe their relationship to the project:

This project proposes to install a permeable paver system approximately .28 miles along the route for parking. The paver system will aid in storm water management for the area and is a newer technology which the City would like to study to determine if it would be feasible to implement in all road projects that fit the criteria.

[15] *Include the following in the project application submittal (if applicable): Pages of adopted plans that relate to the proposed project(Do NOT attach entire plan)*

## *GOODS MOVEMENT*

Efficient movement of goods will be achieved by improving the movement of freight within and through the region by rail, water, air, and surface transportation modes. Check the one priority condition box, using the measures described below, that best represents the project being considered. Attach relevant documentation, calculations, photos or additional information.

**Commercial truck volume as percentage of ADT:** 2.00

**Priority Condition** Road-Truck | Low (1 pt)

**System Condition**

The roadway isn't necessarily truck-friendly at the moment. A lack of crosswalk markings, uneven pavement, and a raveling roadway surface could be a potential hazard when trucks use this roadway if they have to stop suddenly for a pedestrian or bicyclists. With the new share lane markings and probably more bicyclists on the roads in this area, this possibility would likely be heightened. Resurfacing the roadway will increase the surface friction of vehicles using the roadway, shortening the braking distance required when needing to come to a complete stop.

| ***GOODS MOVEMENT MEASURES*** <br> ***Priority Condition*** |
|---|
| (1) Commercial truck volumes are greater than 15% of ADT on the route/site AND (2) project either provides or improved intermodal connections OR addresses a unique need of commercial trucks or freight rail (e.g., increases load capacity of bridge for trucks or rail, raises overhead clearance for trucks or rail, improves turning radius for trucks). ***(5 pts)*** |
| (1) Commercial truck volumes are 7% - 14.9% of ADT on the route/site AND (2) project either provides or improves a direct connection to a freight or intermodal facility OR addresses a unique need of commercial trucks or freight rail (e.g., increases load capacity of bridge for trucks or rail, raises overhead clearance for trucks or rail, improves turning radius for trucks). ***(3 pts)*** |
| (1) Commercial truck volumes are less than 7% of ADT on the route/site AND (2) project either provides or improves a direct connection to a freight or intermodal facility OR addresses a unique need of commercial trucks or freight rail (e.g., increases load capacity of bridge for trucks or rail, raises overhead clearance for trucks or rail, improves turning radius for trucks). ***(1 pts)*** |

*GOODS MOVEMENT*

**ECONOMIC DEVELOPMENT**

Does this project include access to a redevelopment, business expansion, or planned industrial development? [16]

No

If yes, please answer the following questions:

What industry best describes the business development (select one of the following)?

- ☐ Agriculture
- ☐ Mining, quarrying, oil/gas extraction
- ☐ Utilities
- ☐ Manufacturing
- ☐ Wholesale trade
- ☐ Retail trade
- ☐ Transportation and warehousing
- ☐ Information
- ☐ Finance and insurance
- ☐ Professional, scientific, and technical services
- ☐ Health care and social assistance
- ☐ Real estate, rental, and leasing
- ☐ Educational services
- ☐ Arts, entertainment, and recreation
- ☐ Public administration

Does the proposed project provide a direct transportation linkage to the business development? A direct transportation linkage is defined as an eligible publicly-owned-and-maintained transportation facility from the entrance of the development site to a public road.

No

What is the name of the business development?

[16] *Include the following in the project application submittal (if applicable): Sketch showing location of proposed development, and documentation showing the business development is under contract or to be constructed.*

***GOODS MOVEMENT***

How many full-time direct jobs will the business development create?

When will the business expansion, redevelopment or planned industrial development will be complete (month/year)?

**FREIGHT**

Is the project located within one of the 23 industrial site areas as identified in the 2014 St. Louis Regional Freight Study? Map found at http://bit.ly/2e4LPrS

No

If yes, please answer the following question:

What is the name of the industrial site area (i.e. DY, GM, etc.)?

Is the project adjacent to or directly impacts an intermodal freight facility, major freight generator, logistic center, manufacturing and warehouse industrial facility, or port?[17]

No

If yes, please answer the following questions:

What is the name of the facility?.

How does the project provide improvements to the movement of freight to and from the facility?

[17] *Include the following in the project application submittal (if applicable): Truck ADT. Attach sketch showing location of facility in relationship to project.*

## F. FINANCIAL PLAN

Please complete the following expenditure tables and attach a detailed cost estimate (an example is included in Appendix B).

Fiscal years are federal fiscal years (October 1 through September 30). See page 3 of STP-S Workbook for information regarding what phases of work may use federal funds and the years that federal funds are available. Federal participation for a phase my not exceed 80% in Missouri and 75% in Illinois. Each phase using federal funds must be at the same percentage. To delete a number in the table below, enter '0'. Pressing the delete button or backspace will not save onto EWG servers.

| PROJECT BUDGET | FY 2019 | FY 2020 | FY 2021 | TOTAL |
|---|---|---|---|---|
| PE/Planning/ Environ. Studies | 140000.00 | | | 140000.00 |
| Right-Of-Way | | 11250.00 | | 11250.00 |
| Implementation | | | 1679092.03 | 1679092.03 |
| Construction Engineering | | | 85000.00 | 85000.00 |
| Total | 0.00 | 0.00 | 1764092.03 | 1764092.03 |
| TOTAL | 140000.00 | 11250.00 | 1764092.03 | 1915342.03 |

| SOURCE OF FUNDS | FY 2019 | FY 2020 | FY 2021 | TOTAL |
|---|---|---|---|---|
| STP-S Funds | 112000.00 | 9000.00 | 811273.62 | 932273.62 |
| Other Fed. Funds* *Source:* | | | | 0.00 |
| Other State Funds* *Source:* | | | | 0.00 |
| Local Match Funds* *Source:* University City | 28000.00 | 2250.00 | 202818.41 | 233068.41 |
| Other Funds* *Source:* Washington University | | | 750000.00 | 750000.00 |
| TOTAL | 140000.00 | 11250.00 | 1764092.03 | 1915342.03 |

***Will any other individual, business, local public agency or other third party provide matching funds or be requested to provide matching funds in the future for this project? If yes, include a letter of support for this project from the third party that confirms their commitment to provide match or acknowledges that the sponsor may seek matching funds from the third party in the future. The letter must also document the third party's support of the proposed scope of work of the project as it is listed in the project application.**

**Standard TIP Project Development Schedule Form (many stages can occur concurrently)**

| Activity Description | Start Date (MM/YYYY) | Finish Date* (MM/YYYY) | Time Frame (Months) |
|---|---|---|---|
| Receive Notification Letter | 09/2017 | 9/2017 | 0.0 |
| Execute Agreement (Project sponsor & DOT) | 10/2017 | 10/2018 | 3.0 |
| Engineering Services Contract Submitted & Approved [1] | 10/2018 | 01/2019 | 3.0 |
| Obtain Environmental Clearances (106, CE-2, etc.) | 01/2019 | 04/2019 | 3.0 |
| Public Meeting/Hearing | 05/2019 | 06/2019 | 1.0 |
| Develop and Submit Preliminary Plans | 01/2019 | 04/2019 | 3.0 |
| Preliminary Plans Approved | 05/2019 | 06/2019 | 1.0 |
| Develop and Submit Right-of-Way Plans | 06/2019 | 08/2019 | 2.0 |
| Review and Approval of Right-of-Way Plans | 08/2019 | 09/2019 | 1.0 |
| Submit & Receive Approval for Notice to Proceed for Right-of-Way Acquisition (A-Date) [2] | 10/2019 | 11/2019 | 1.0 |
| Right-of-Way Acquisition | 12/2019 | 05/2020 | 6.0 |
| Utility Coordination | 12/2019 | 05/2020 | 6.0 |
| Develop and Submit PS&E | 06/2020 | 08/2020 | 3.0 |
| District Approval of PS&E/Advertise for Bids [3] | 10/2020 | 12/2020 | 2.0 |
| Submit and Receive Bids for Review and Approval | 12/2020 | 02/2021 | 2.0 |
| Project Implementation/Construction | 03/2021 | 10/2021 | 7.0 |

***Finish date must match fiscal year for each for each milestone listed below:**

1. **Preliminary engineering obligated - PE/Planning/Environ. Studies**
2. **Right of way obligated - Right-Of-Way**
3. **Construction/implementation funds obligated - Implementation/Construction Engineering**

**FY 2018 = 10/2017 - 09/2018**
**FY 2019 = 10/2018 - 09/2019**
**FY 2020 = 10/2019 - 09/2020**
**FY 2021 = 10/2020 - 09/2021**

*Financial Certification of Matching Funds*

**This is to assure sufficient funds are available to pay the non-federal share of project expenditures for the following projects to be funded under the provisions of FAST. Only one certification per sponsoring agency is necessary.**

| **Project Title** | **Non-federal Amount** |
|---|---|
| Westgate Ave pavement and sidewalk upgrades | 263318.41 |

**Sponsoring Agency:** City of University City

**Chief Elected Official (or Chief Executive Officer):**

**Name (Print):** Charles Adams

**Signature:** Charles Adams

**Date:** 3/2/2017

**Chief Financial Officer:**

**Name (Print):** Tina Charumilind

**Signature:** Tina Charumilind

**Date:** 3/2/2017

## *G. Person of Responsible Charge Certification*

The key regulatory provision, 23 CFR 635.105 – *Supervising Agency,* provides that the State Transportation Agency (STA) is responsible for construction of Federal-aid projects, whether it or a local public agency (LPA) performs the work. The regulation provides that the STA and LPA must provide its full-time employee to be in "responsible charge" of the project.

The undersigned employees(s) of the Project Sponsor will act as person of responsible charge. If at any point the employee leaves the LPA, the LPA is responsible for finding a suitable replacement and notifying East-West Gateway. If the person of responsible charge is found to not be a full-time employee of the LPA, it will result in the loss of federal funds for this project. One employee can act as person of responsible charge for all three phases. A signature is required for each phase.

**Person of responsible charge – design phase**

Name: Errol Tate

Title: Senior Project Manager E-mail: etate@ucitymo.org

Signature:

**Person of responsible charge – right of way acquisition phase**

Name: Errol Tate

Title: Senior Project Manager E-mail: etate@ucitymo.org

Signature:

**Person of responsible charge – construction phase**

Name: Errol Tate

Title: Senior Project Manager E-mail: etate@ucitymo.org

Signature:

## H. NOTIFICATION OF TITLE VI REQUIREMENTS

A recipient of any federal funds from the U.S. Department of Transportation ("DOT") must comply with federal statutes, regulations, executive orders, and other pertinent directives that govern nondiscrimination in federally assisted programs. Below is a list of the statutes and regulations that may apply to a recipient's program; however, other federal requirements regarding nondiscrimination may be imposed by DOT.

- Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. §§ 2000d *et seq.*
- All requirements imposed by or pursuant to the Code of Federal Regulations, Title 49: Transportation, Subtitle A: Office of the Secretary of Transportation, Part 21: *Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964*

As part of federal requirements, a recipient of funds from DOT must ensure that it has written policies and procedures in place to ensure nondiscrimination in its programs, up to and including, developing a Title VI Plan.

By submitting its application as part of the TIP process, the Project Sponsor certifies that it has reviewed the federal requirements regarding nondiscrimination in federally assisted programs and believes that the Project Sponsor complies with the required policies and procedures.

Nondiscrimination Notification

A recipient of any federal funds from the U.S. Department of Transportation ("DOT") must comply with federal statutes, regulations, executive orders, and other pertinent directives that govern nondiscrimination in federally assisted programs. Below is a list of the statutes and regulations that may apply to a recipient's program; however, other federal requirements regarding nondiscrimination may be imposed by DOT.

- Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d, and implementing regulations at 49 CFR Part 21 – *Nondiscrimination in Federally Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act*;
- The equal employment opportunity provisions of 49 U.S.C. § 5332 and Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000e *et seq.*, and implementing regulations;
- Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. §§ 1681 *et seq.*, and implementing regulations at 49 CFR Part 25 – *Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance*;
- Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, and the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. §§ 12101 *et seq.*, and implementing regulations, including:
    - 49 CFR Part 37—*Transportation Services for Individuals with Disabilities (ADA)*;
    - 49 CFR Part 27—*Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance*;
    - 36 CFR Part 1192 and 49 CFR Part 38—*Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles*;

- 28 CFR Part 35—*Nondiscrimination on the Basis of Disability in State and Local Government Services*;
- 28 CFR Part 36—*Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities*;
- 41 CFR Subpart 101 – 119—*Accommodations for the Physically Handicapped*;
- 29 CFR Part 1630—*Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act*;
- 47 CFR Part 64, Subpart F—*Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled*;
- 36 CFR Part 1194—*Electronic and Information Technology Accessibility Standards*;
- 49 CFR Part 609—*Transportation for Elderly and Handicapped Persons*; and
- Federal civil rights and nondiscrimination directives implementing those federal laws and regulations, unless the federal government determines otherwise in writing.

- The Age Discrimination Act of 1975, as amended, 42 U.S.C. §§ 6101 *et seq.*, and implementing regulations at 49 CFR Part 90 – *Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance*;
- The Age Discrimination in Employment Act, 29 U.S.C. §§ 621 through 634, and implement regulations of the U.S. Equal Employment Opportunity Commission 29 CFR Part 1625—*Age Discrimination in Employment Act*;
- The Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. §§ 1101 *et seq.*, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended, 42 U.S.C. §§ 4541 *et seq.*, and the Public Health Service Act of 1912, as amended, 42 U.S.C. §§ 290dd through 290dd-2;
- Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 42 U.S.C. § 4321 note, and DOT Order 5620.3 at Federal Register Vol. 62 No. 18377—*Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*;
- Executive Order 13166 – Improving Access to Services for Persons with Limited English Proficiency, 42 U.S.C. § 2000d – 1 note, and implementing policy guidance at Federal Register Vo. 70 No. 74087—*DOT Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficiency (LEP) Person*; and

By submitting its application as part of the TIP process, the Project Sponsor certifies that it has reviewed the federal requirements regarding nondiscrimination in federally assisted programs and understands that if the Project Sponsor does not have the required policies and procedures in place prior to federal funds being obligated, then the Project Sponsor's project may become ineligible for federal funding.

Charles Adams

Certification Signature

*I. Right-of-Way Acquisition Certification Statement*

To be completed by Missouri project sponsors only.

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) have the right and responsibility to review and monitor the acquisition procedures of any federally funded transportation project for adherence to "The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970." Those projects found in non-compliance may jeopardize all or part of their federal funding.

A. The Project Sponsor hereby certifies that ANY right of way, and/or permanent or temporary easements necessary for this project, obtained prior to this application, were acquired in accordance with The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

B. The Project Sponsor also certifies that any additional right of way, and/or permanent or temporary easements, subsequently required to complete the project, will be acquired according to The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

Charles Adams

Certification Signature

**J. Reasonable Progress**

To be completed by Missouri project sponsors only.

Attached is a copy of the resonable progress policy adopted by the East-West Gateway COG Board of Directors.

The undersigned representative of the Project Sponsor hereby certifies that he/she has read this policy and understands its requirements. The representative acknowledges that failure to meet all of the reasonable progress requirements could result in federal funds being revoked and returned to the regional funding pool, as dictated by the policy.

Certification Signature: Charles Adams

EAST-WEST GATEWAY
Council of Governments
Creating Solutions Across Jurisdictional Boundaries

# Policy on Reasonable Progress

## Reasonable Progress

For projects or programs included in the Transportation Improvement Program, "reasonable progress" will have been made if the project has advanced to the point of obligating all federal funds programmed for that project in the current fiscal year, regardless of the phase of work (i.e., Preliminary Engineering (PE), Right of Way Acquisition (ROW), or Plans Specifications and Estimates (PSE)/Construction). If a project fails to obligate the programmed federal funds by September 30 of the current year, the funding will be forfeited and returned to the regional funding pot. Actual progress toward implementation is measured against the schedule submitted by the project sponsor in the project application.

## Policy Procedures and Enforcement

Projects that do not obligate all federal funds by the September 30 suspense date will be removed from the TIP, and the federal funds associated with those projects will be returned to the regional funding pool for redistribution. The removal of projects from the TIP will require no further Board action and the sponsor would have to repay any federal funds already spent if the funding is forfeited.

If a project is realizing delays that will put the federal funding at risk of forfeiture (i.e., not meet a September 30 deadline), the project sponsor will have the opportunity to ask for consideration of a "one-time extension" in their project schedule. The one-time extension can only be requested for the implementation/construction phase of the project. The extension request will only be considered once a year, and has to be made before June 1 of the current fiscal year of the TIP.

To be considered for this extension the sponsor has to demonstrate on all counts: a.) The delay is beyond their control and the sponsor has done diligence in progressing the project; b.) Federal funds have already been obligated on the project or in cases that no federal funds are used for PE and/or ROW acquisition, there has been significant progress toward final plan preparation; c.) There is a realistic strategy is in place to obligate all funds.

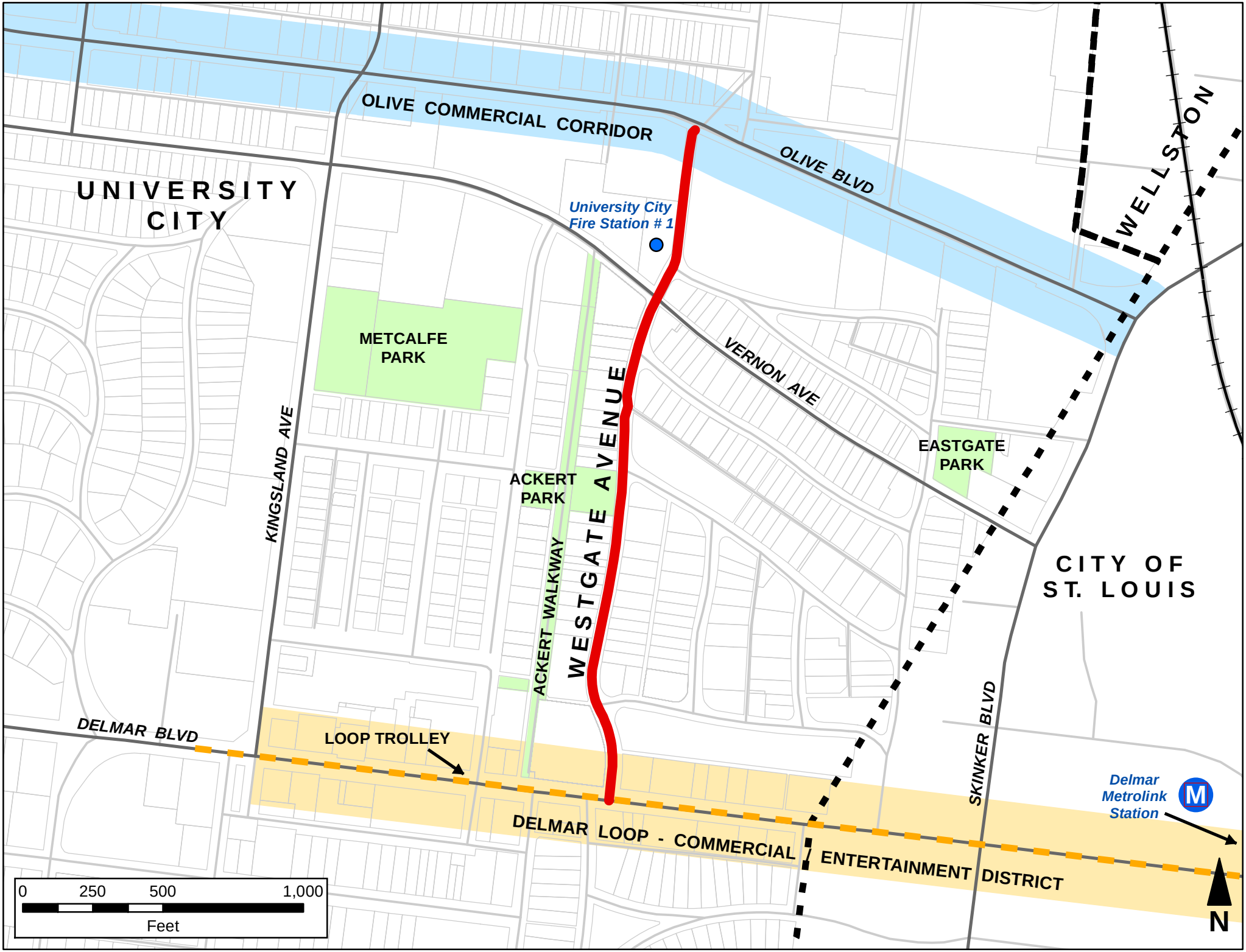
One-time extensions of up to three (3) months may be granted by East-West Gateway staff and one-time extensions greater than three (3) months, but not more than nine (9) months, will go to the Board of Directors for their consideration and approval. Projects requesting schedule advancements will be handled on a case-by-case basis(subject to available funding) and are subject to the Board adopted rules for TIP modifications.

EAST-WEST GATEWAY
Council of Governments
Creating Solutions Across Jurisdictional Boundaries

# Policy on Reasonable Progress

## Project Monitoring

An extensive monitoring program has been developed to help track programmed projects and ensure that funding commitments and plans are met. Monthly reports are developed and posted on the East-West Gateway website, utilizing project information provided by the IDOT and MoDOT District offices. Additionally, project sponsors are contacted, at least every three months, by EWGCOG staff for project status interviews.


OLIVE COMMERCIAL CORRIDOR
OLIVE BLVD
UNIVERSITY CITY
University City Fire Station # 1
WELLSTON
METCALFE PARK
VERNON AVE
KINGSLAND AVE
ACKERT PARK
WESTGATE AVENUE
EASTGATE PARK
ACKERT WALKWAY
CITY OF ST. LOUIS
SKINKER BLVD
DELMAR BLVD
LOOP TROLLEY
Delmar Metrolink Station
DELMAR LOOP - COMMERCIAL / ENTERTAINMENT DISTRICT
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## Estimate of Project Costs

| | |
|---|---|
| Project Sponsor: | University City |
| Project Title: | Westgate Ave pavement and sidewalk upgrades |
| Date: | 2/28/2017 |

**Specific Roadway Items**

| Item | Quantity | Unit | Unit Price | Amount |
|---|---|---|---|---|
| Removal of Improvements | 1 | L.S. | $75,000.00 | $75,000.00 |
| Bituminous Pavement Mixture PG64-22, (BP-1) | 582 | Tons | $85.00 | $49,470.00 |
| Biuminous Asphalt Parking Pavement, 8 In. | 49 | SqYd | $100.00 | $4,900.00 |
| Tack Coat | 520 | Gal | $5.00 | $2,600.00 |
| Adjust to Grade Water Meters | 1 | L.S. | $5,000.00 | $5,000.00 |
| Adjusting Manhole | 5 | Ea. | $1,000.00 | $5,000.00 |
| Adjusting Basin or Inlet | 10 | Ea. | $1,600.00 | $16,000.00 |
| Paved Approach, 8 In. | 477 | SqYd | $90.00 | $42,930.00 |
| Type 5 Aggregate for Base (4 In. Thick) | 477 | SqYd | $7.00 | $3,339.00 |
| Pervious Pavement for on street parking (pavers and underlying structure) | 1,650 | SqYd | $119.25 | $196,762.50 |
| Concrete curb (6 In. Height and Under) Type S | 2,050 | L.F. | $35.00 | $71,750.00 |
| Traffic control | 1 | L.S. | $5,000.00 | $5,000.00 |
| Mobilization | 1 | L.S. | $40,000.00 | $40,000.00 |
| Coldmilling bituminous pavement for removal of surfacing (3 In. Thick or less) | 10,453 | SqYd | $3.00 | $31,359.00 |
| Contractor Furnished Surveying and Staking | 1 | L.S. | $5,000.00 | $5,000.00 |
| Small block retaining wall repair/adjustment | 18 | L.F. | $150.00 | $2,700.00 |
| Sediment Removal | 1 | CUYD | $300.00 | $300.00 |
| Curb Inlet Check | 11 | Ea. | $100.00 | $1,100.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | **SUBTOTAL** | **$558,210.50** |

**Specific Bicycle Items**

| Item | Quantity | Unit | Unit Price | Amount |
|---|---|---|---|---|
| Bicycle Route Signage | 1 | L.S. | $3,200.00 | $3,200.00 |
| Post Anchor for 2 In. PSST-12 GA | 7 | L.F. | $39.00 | $273.00 |
| 36 In. or 900 MM Stop Sign | 2 | Ea. | $162.00 | $324.00 |
| Perforated Square Steel Tube Post, 2 In., 12 GA | 27 | L.F. | $13.00 | $351.00 |
| Type 2 Performed Marking Tape (Grooved), Left/Right Arrow | 4 | Ea. | $275.00 | $1,100.00 |
| Bicycle Sharrows | 23 | Ea. | $90.00 | $2,070.00 |
| 4 In. White High Build Waterborne Pavement Marking Paint | 77 | L.F. | $5.00 | $385.00 |
| 4 In. Yellow High Build Waterborne Pavement Marking Paint | 188 | L.F. | $5.00 | $940.00 |
| 24 In. White Waterborne Pavement Marking Paint | 835 | L.F. | $7.00 | $5,845.00 |
| Loop Detectors (Removal and Replacement) | 1 | L.S. | $3,000.00 | $3,000.00 |

| | | | | |
|---|---|---|---|---|
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | **SUBTOTAL** | **$17,488.00** |

| **Specific Pedestrian Items** | | | | |
|---|---|---|---|---|
| **Item** | **Quantity** | **Unit** | **Unit Price** | **Amount** |
| Curb ramps | 295 | SqYd | $150.00 | $44,235.00 |
| Truncated Domes | 326 | SqFt | $30.00 | $9,780.00 |
| Concrete Sidewalk, 4 In. | 1,711 | SqYd | $60.00 | $102,678.00 |
| Miscellaneous Concrete, Colored | 250 | SqYd | $65.00 | $16,224.00 |
| Type 5 Aggregate For Base (4 In. Thick) | 2,256 | SqYd | $7.00 | $15,790.60 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
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| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | **SUBTOTAL** | **$188,707.60** |

| **Specific Transit Items** | | | | |
|---|---|---|---|---|
| **Item** | **Quantity** | **Unit** | **Unit Price** | **Amount** |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | **SUBTOTAL** | **$0.00** |

| **Miscellaneous Other Items** | | | | |
|---|---|---|---|---|
| **Item** | **Quantity** | **Unit** | **Unit Price** | **Amount** |
| Washington University - Lighting (Not Part of Grant Funding) | | | $750,000.00 | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |
| | | | | $0.00 |

| | | | | |
|---|---|---|---|---|
| | | | | $0.00 |
| | | | **SUBTOTAL** | **$0.00** |

| | |
|---|---|
| **Construction Cost Total** | **$764,406.10** |
| **Contingency** | **$93,931.32** |
| **Inflation** | **$70,754.61** |
| **Preliminary Engineering** | **$140,000.00** |
| **Right-of-Way** | **$11,250.00** |
| **Construction Engineering/Inspection** | **$85,000.00** |
| **Project Total *** | **$1,165,342.03** |

* The project total cost should match the total cost reported in the project application.

Add lines as needed.

**ENGINEER'S ESTIMATE - OPINION OF PROBABLE COST**

Westgate Avenue STP-S Application

University City, MO

County: St. Louis

Agency: City of University City, MO

CMT Project No: 17401-03-00

| Line Item | Pay Item | Description | Unit | Quantity | Unit Price | Extended Price |
|---|---|---|---|---|---|---|
| **ROADWAY ITEMS:** | | | | | | |
| | | **ROADWAY** | | | | |
| 1 | 2022010 | REMOVAL OF IMPROVEMENTS | L.S. | 1 | $75,000.00 | $75,000.00 |
| 2 | 4011209 | BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1) | TONS | 581.2 | $85.00 | $49,400.88 |
| 3 | 4019905 | BITUMINOUS ASPHALT PARKING PAVEMENT, 8 IN. | SQYD | 48.8 | $100.00 | $4,881.00 |
| 4 | 4071005 | TACK COAT | GAL | 520 | $5.00 | $2,600.00 |
| 5 | 6039901 | ADJUST TO GRADE WATER METERS | L.S. | 1 | $5,000.00 | $5,000.00 |
| 6 | 6042010 | ADJUSTING MANHOLE | EA. | 5 | $1,000.00 | $5,000.00 |
| 7 | 6042020 | ADJUSTING BASIN OR INLET | EA. | 10 | $1,600.00 | $16,000.00 |
| 8 | 6085008 | PAVED APPROACH, 8 IN. | SQYD | 477.1 | $90.00 | $42,941.70 |
| 9 | 3040504 | TYPE 5 AGGREGATE FOR BASE (4 IN. THICK) | SQYD | 477.1 | $7.00 | $3,339.70 |
| 10 | 5029905 | PERVIOUS PAVEMENT FOR ON STREET PARKING (PAVERS AND UNDERLYING STRUCTURE) | SQYD | 1650.0 | $119.25 | $196,762.50 |
| 11 | 6091010 | CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S | L.F. | 2050 | $35.00 | $71,750.00 |
| 12 | 6169901 | TRAFFIC CONTROL | L.S. | 1 | $5,000.00 | $5,000.00 |
| 13 | 6181000 | MOBILIZATION | L.S. | 1 | $40,000.00 | $40,000.00 |
| 14 | 6221001 | COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) | SQYD | 10453 | $3.00 | $31,359.00 |
| 15 | 6274000 | CONTRACTOR FURNISHED SURVEYING AND STAKING | L.S. | 1 | $5,000.00 | $5,000.00 |
| 16 | 7209903 | SMALL BLOCK RETAINING WALL REPAIR/ADJUSTMENT | L.F. | 18 | $150.00 | $2,700.00 |
| 17 | 8061016 | SEDIMENT REMOVAL | CUYD | 1 | $300.00 | $300.00 |
| 18 | 8061007A | CURB INLET CHECK | EACH | 11 | $100.00 | $1,100.00 |
| **SUBTOTAL OF ROADWAY ITEMS:** | | | | | | $558,134.78 |
| | | **PEDESTRIAN/BICYCLE FACILITY ITEMS** | | | | |
| 19 | 6081010 | CURB RAMPS | SQYD | 294.9 | $150.00 | $44,231.50 |
| 20 | 6081012 | TRUNCATED DOMES | SQFT | 326 | $30.00 | $9,784.80 |
| 21 | 6086004 | CONCRETE SIDEWALK, 4 IN. | SQYD | 1711.3 | $60.00 | $102,680.53 |
| 22 | 6089905 | MISCELLANEOUS CONCRETE, COLORED | SQYD | 249.6 | $65.00 | $16,224.94 |
| 23 | 3040504 | TYPE 5 AGGREGATE FOR BASE (4 IN. THICK) | SQYD | 2255.8 | $7.00 | $15,790.83 |
| **SUBTOTAL OF PEDESTRIAN/BICYCLE FACILITY ITEMS:** | | | | | | $188,712.61 |
| | | **SIGNING** | | | | |
| 24 | 6209901 | BICYCLE ROUTE SIGNAGE | L.S. | 1 | $3,200.00 | $3,200.00 |
| 25 | 9031271 | POST ANCHOR FOR 2 IN. PSST - 12 GA. | L.F. | 7 | $39.00 | $253.50 |
| 26 | 9039902 | 36 IN. OR 900 MM STOP SIGN | EA. | 2 | $162.00 | $324.00 |
| 27 | 9031270A | PERFORATED SQUARE STEEL TUBE POST, 2 IN., 12. GA. | L.F. | 27 | $13.00 | $351.00 |
| | | **PAVEMENT MARKING** | | | | |
| 28 | 6205130 | TYPE 2 PREFORMED MARKING TAPE (GROOVED), LEFT/RIGHT ARROW | EA. | 4 | $275.00 | $1,100.00 |
| 29 | 6209902 | BICYCLE SHARROWS | EA. | 23 | $90.00 | $2,070.00 |
| 30 | 6206000C | 4 IN. WHITE HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT | L.F. | 77 | $5.00 | $385.00 |
| 31 | 6206001C | 4 IN. YELLOW HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT | L.F. | 188 | $5.00 | $940.00 |
| 32 | 6206124A | 24 IN. WHITE WATERBORNE PAVEMENT MARKING PAINT | L.F. | 835 | $7.00 | $5,842.27 |
| | | **SIGNALS** | | | | |
| 33 | 9029901 | LOOP DETECTORS (REMOVAL AND REPLACEMENT) | L.S. | 1 | $3,000.00 | $3,000.00 |
| **SUBTOTAL OF SIGNALS, SIGNING, PAVEMENT MARKING:** | | | | | | $17,465.77 |
| **SUBTOTAL OF ALL CONSTRUCTION COSTS:** | | | | | | $764,313.15 |
| **CONTINGENCY (10%)** | | | | | | $76,431.32 |
| **TOTAL OF ALL CONSTRUCTION COSTS:** | | | | | | $840,744.47 |
| **TEMPORARY EASEMENTS** | | | | | | |
| | **PARCEL NO.** | | | | | |
| | MULTI. | TEMPORARY CONSTRUCTION EASEMENTS | ACRES | 0.15 | $75,000.00 | $11,250.00 |
| **SUBTOTAL OF APPROXIMATE RIGHT OF WAY COSTS:** | | | | | | $11,250.00 |
| **TOTAL OF ALL CONSTRUCTION & RIGHT OF WAY TAKINGS COSTS:** | | | | | | $851,994.47 |
| **PROFESSIONAL SERVICES:** | | | | | | |
| | | *PROFESSIONAL DESIGN & BID PHASE SERVICES (SURVEY, ROW PLANS, & SEALED PS&E INCLUDED) | L.S. | 1 | $140,000.00 | $140,000.00 |
| | | CONSTRUCTION ADMINISTRATION PHASE SERVICES | L.S. | 1 | $85,000.00 | $85,000.00 |
| **TOTAL ENGINEER'S ESTIMATE AMOUNT:** | | | | | | $1,076,994.47 |

* - DOES NOT INCLUDE TITLE COMMITMENT REPORTS

| SIDEWALK | | PAVED APPROACH | | SMALL BLOCK WALL | |
|---|---|---|---|---|---|
| | SY | 119.89 | SY | 96.18 | LF |
| 37.37 | SY | 120.92 | SY | | |
| 51.16 | SY | | | | |
| 177.99 | SY | | | | |
| **266.52** | | **240.81** | | **96.18** | |

CURB RAMP

**10.18** SY

TRUNCATED DOME

10 S.F

ROW

| | | | |
|---|---|---|---|
| 787.29 SY | 0.1627 ACRES | CURB & GUTTER | |
| 664.50 SY | 0.1373 ACRES | 252.9 | LF |
| | | 194.03 | LF |
| | | **446.93** | |

CROSSWALK PAVEMENT MARKING

66 LF

69.4

**135.4**

NONREINFORCED CONC.

**647.84** SY

TYPE 5 BASE

**741.77** SY

SILT FENCE

79.7

103.37

325.49

251.62

172.87

**933.05**

SODDING

385.1

397.83

101.53

50

80.69

449.98

341.31

**1806.44**

| DECORATIVE FENCE | PAVEMENT MARKING REMOVAL | 4" YELLOW PAINT |
|---|---|---|
| **96.18** LF | 16 LF | 220.36 |
| | 16 LF | 220.36 |
| | 16 LF | |
| | 16 LF | **440.72** |
| | 16 LF | |
| | 16 LF | |
| | 16 LF | |
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| | 16 LF | |
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| | 16 LF | |
| | 16 LF | |
| | **288** | |

*Steven V. Stenger*
*County Executive*

Saint Louis
**COUNTY**
**TRANSPORTATION**
**PUBLIC WORKS**

*Nichalos D. Gardner, Ph.D., P.E.*
*Director*

*Stephanie Leon Streeter, P.E.*
*Deputy Director*

March 1, 2017

James Wild
Executive Director
East-West Gateway Council of Governments
One Memorial Drive, Suite 1600
St. Louis, MO 63102-2451

RE: Request for Sub-allocated Funds for the Westgate Avenue Infrastructure Project

Dear Mr. Wild:

I am writing to express my conditional support for the City of University City's application for sub-allocated STP-S funding for the infrastructure improvement project for Westgate Avenue Delmar Boulevard to Olive Boulevard.

Westgate Avenue crosses two St. Louis County Arterial Roadways; Vernon Avenue and Olive Boulevard. The project includes pavement resurfacing and improving pedestrian facilities with Americans with Disabilities Act (ADA) compliant curb ramps at both intersections. County forces will install all striping and signage in County right-of-way consistent with Manual of Uniform Traffic Control Devices (MUTCD) and St. Louis County Standards. University City will submit plans and secure permits from St. Louis County for any work in St. Louis County right-of-way. All improvements in St. Louis County right-of-way will be done to County standards.

St. Louis County acknowledges that Westgate Avenue corridor is one of University City's primary routes for emergency services, motorists, bicyclists, and pedestrians. Improving this roadway and ADA-facilities through the proposed STP-S project would significantly enhance the community.

Sincerely,

Tobi D. Moriarty, P.E.
South Area Engineer

TDM: pdh

cc: Sinan Alpaslan, P.E., City of University City, Director of Public Works and Parks

Washington University in St. Louis

**Executive Vice Chancellor for Administration**

March 2, 2017

James Wild
Executive Director
East-West Gateway Council of Governments
One Memorial Drive, Suite 1600
St. Louis, MO 63102-2451

Subject: STP Grant Application – Westgate Avenue Resurfacing and Sidewalk Improvement Project

Dear Mr. Wild:

I am writing to express my support of the City of University City's application for the proposed Westgate Avenue road resurfacing and sidewalk improvement project. The project will take place on Westgate Avenue from Delmar to Olive Blvd.

The proposed project improvements include rotomilling the deteriorated roadway surface to improve drivability and drainage. It will also replace the existing sidewalk on both sides of the street to bring it into ADA compliance. Finally, bike facilities such as signage and road markings will help in improving multiple modes of transportation.

Additionally, Washington University will be paying for the installation of approximately fifty (50) pedestrian level lights for this project at an estimated cost to the University of $750,000, with the city and/or the neighborhood association thereafter operating and maintaining these improvements.

Westgate Avenue is a connector street for motorists and pedestrians. Improving this roadway will provide a significant enhancement to the community. I hope you favorably consider University City's Westgate Ave project.

Sincerely,

Henry S. Webber

Washington University in St. Louis, Campus Box 1018, 1 Brookings Drive, St. Louis, Missouri 63130
*Phone:* (314) 935-7877, *Fax:* (314) 935-7919, *E-Mail:* hwebber@wustl.edu

# PARKVIEW GARDENS ASSOCIATION

830 Vanderbilt
St. Louis MO 63130
314-721-5357

## FAX TRANSMISSION COVER SHEET

Date: 2/23/2017

To: CHRIS KALTER, PROJECT MANAGER

Fax: 862-0494

Re: SUPPORT LETTER STP APPLICATION

Sender: MIKE GUYER

YOU SHOULD RECEIVE 2 PAGE(S), INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL 314-721-5357

# PARKVIEW GARDENS ASSOCIATION

830 Vanderbilt Ave.
St. Louis, Mo. 63130
314-721-5357

February 23, 2017

Chris Kalter
Project Manager
City of University City
6801 Delmar
University City, Mo 63130

Re: STP Grant Application – Westgate Ave. Resurfacing and Sidewalk Improvement Project

Dear Chris:

I am writing to express our support of the City of University City's application for the proposed Westgate Ave. road resurfacing and sidewalk improvement project. The project will take place on Westgate Ave from Delmar to Olive Blvd.

The proposed project improvements include rotomilling and repaving the deteriorated roadway surface to improve drivability and drainage. It will also replace the existing sidewalk on both sides of the street to bring the sidewalks into ADA compliance. In addition, bike facilities signage and road markings will be installed to improve multiple modes of transportation.

Westgate Ave is a connector street for motorists and pedestrians. Improving this roadway will provide a significant enhancement to the Parkview Gardens Neighborhood and the Delmar Loop. I hope that you will support U. City's Westgate Ave. project.

Sincerely,

Mike Giger, President

# Operations and Maintenance Form

| | |
|---|---|
| **Name of Local Public Agency** | University City |
| **State** | Missouri |

**1. How many lane miles (total) are maintained by your city/agency, or for transit agencies how many vehicles are in your fleets. If unable to provide lane miles then list centerline miles.**

Lane miles vs Centerline miles — If you don't know what the difference between a lane mile and centerline mile contact Jason Lange

| | | | | | |
|---|---|---|---|---|---|
| Total Lane Miles | 0.46 | (in miles) | **or** | Total Centerline Miles | (in miles) |

*Transit Agencies Only*

| | |
|---|---|
| # of Vehicles in Fleet | |

**2. Budget Information**

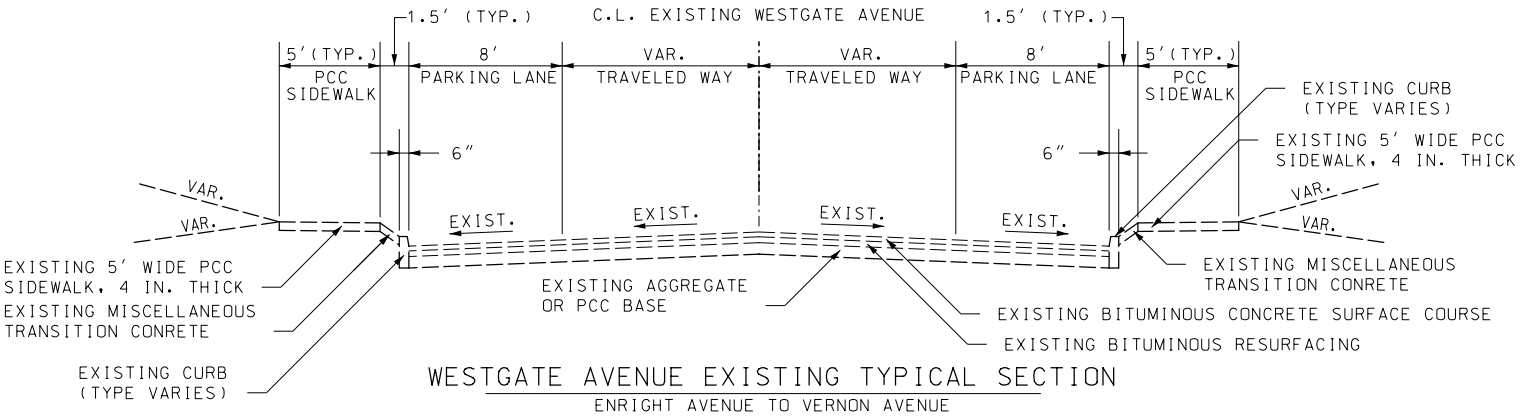
| | |
|---|---|
| Year of most recent budget | 2017 |
| Budgeted Total Revenue | $35,000,000.00 |
| Sources of Revenue (i.e. sales tax, property tax, motor fuel tax) | sales tax, property tax, capital improvement tax, parks and stormwater tax, economic development tax. |

**3. Total expenditures for transportation operations and maintenance – from your current budget**

(*This would include, in total, how much is budgeted for: salaries, fringe benefits, materials and equipment needed to deliver the roadway and bridge maintenance programs. This includes basic maintenance activities like minor surface treatments such as: sealing, small concrete repairs and pothole patching; mowing right of way; snow removal; replacing signs; striping; repairing guardrail; and repairing traffic signals) - DO NOT INCLUDE CAPITAL IMPROVEMENTS SUCH AS OVERLAY RESURFACING, TIP PROJECTS, OR OTHER MAJOR ROAD/SIDEWALK PROJECTS*

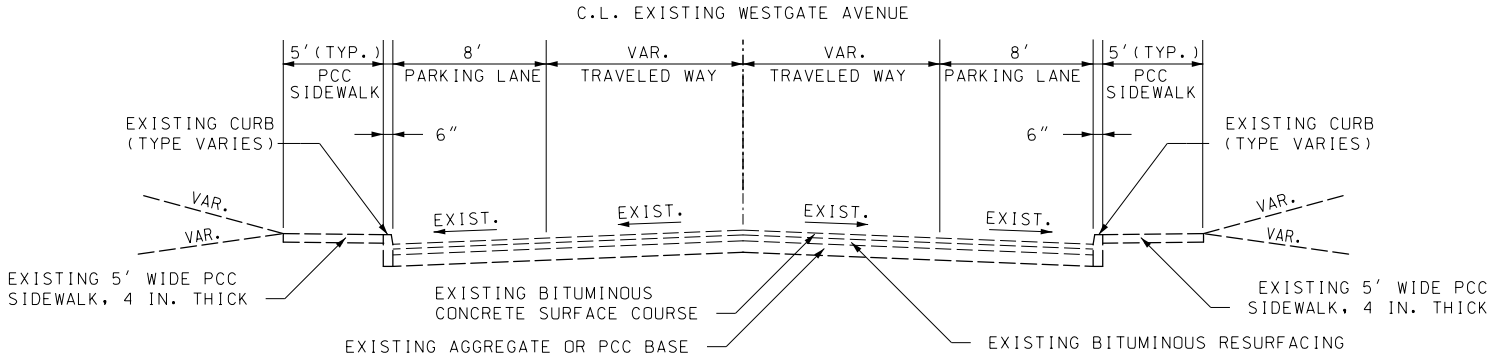
| | |
|---|---|
| Total Transportation Operations and Maintenance Expenditures | $1,703,500.00 |

***Please use information from the most current budget for your city/agency.***



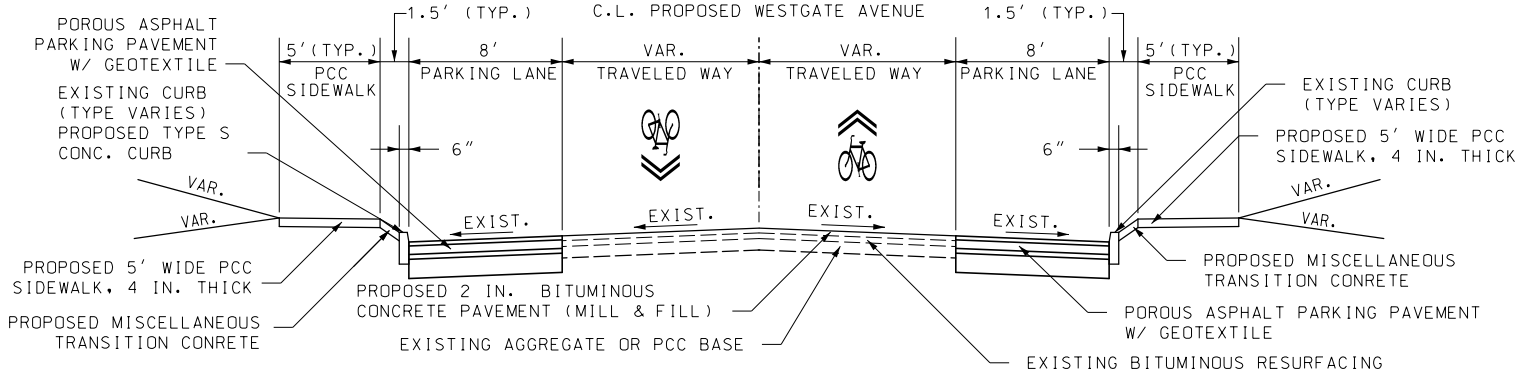

## WESTGATE AVENUE EXISTING TYPICAL SECTION

ENRIGHT AVENUE TO VERNON AVENUE



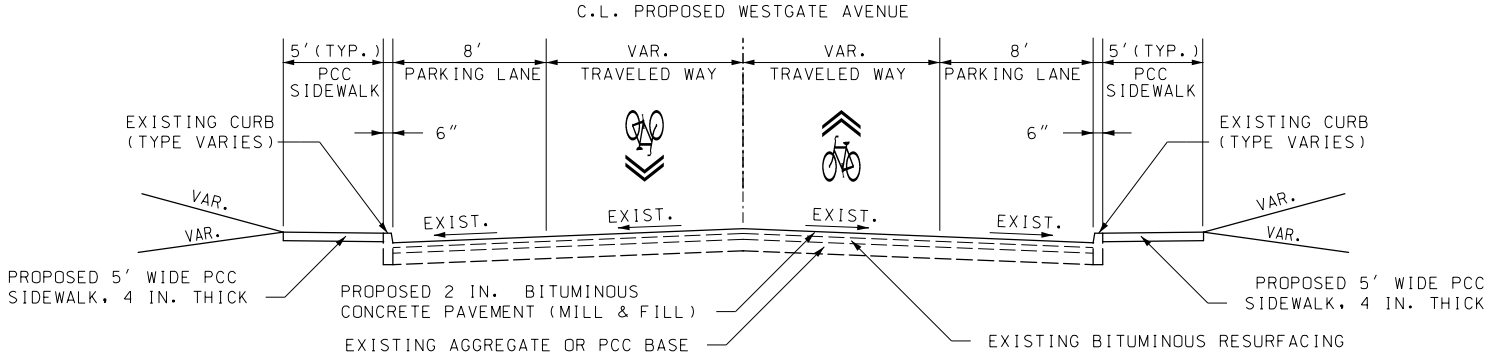

## WESTGATE AVENUE EXISTING TYPICAL SECTION

OLIVE BOULEVARD TO VERNON AVENUE
ENRIGHT AVENUE TO DELMAR BOULEVARD




## WESTGATE AVENUE PROPOSED TYPICAL SECTION

ENRIGHT AVENUE TO VERNON AVENUE




## WESTGATE AVENUE PROPOSED TYPICAL SECTION

OLIVE BOULEVARD TO VERNON AVENUE
ENRIGHT AVENUE TO DELMAR BOULEVARD



CMT

WESTGATE AVE TYPICAL SECTIONS

EXHIBIT 1

City of University City

STP-S Grant Application – Westgate Ave

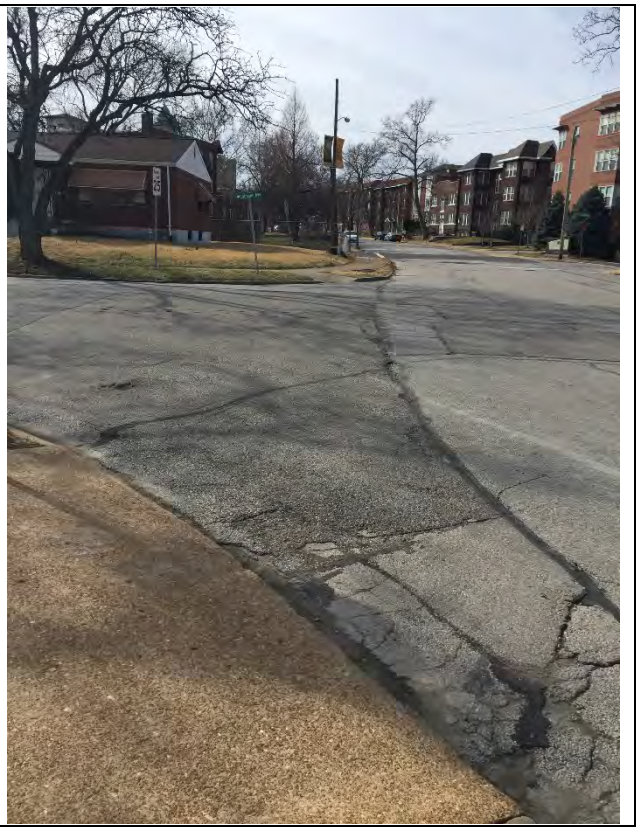
PASER Score - 5

February 21, 2017

Evaluation Team:

Chris Kalter – University City
John Keevan – CMT
Brad Spanberger – CMT

| PASER | Description | Photo |
|---|---|---|
| 5 | Photo 1: Westgate Avenue looking North towards Olive Boulevard.   |  |

| | | |
|---|---|---|
| 4 | Photo 2: Westgate Ave looking South towards Delmar Blvd<br>  |  |

City of University City

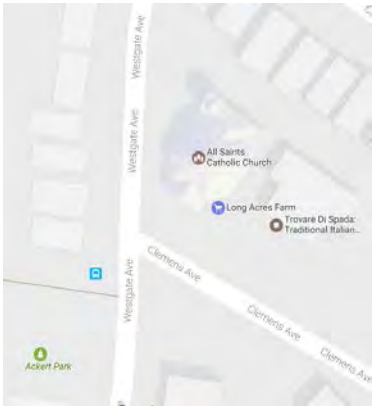
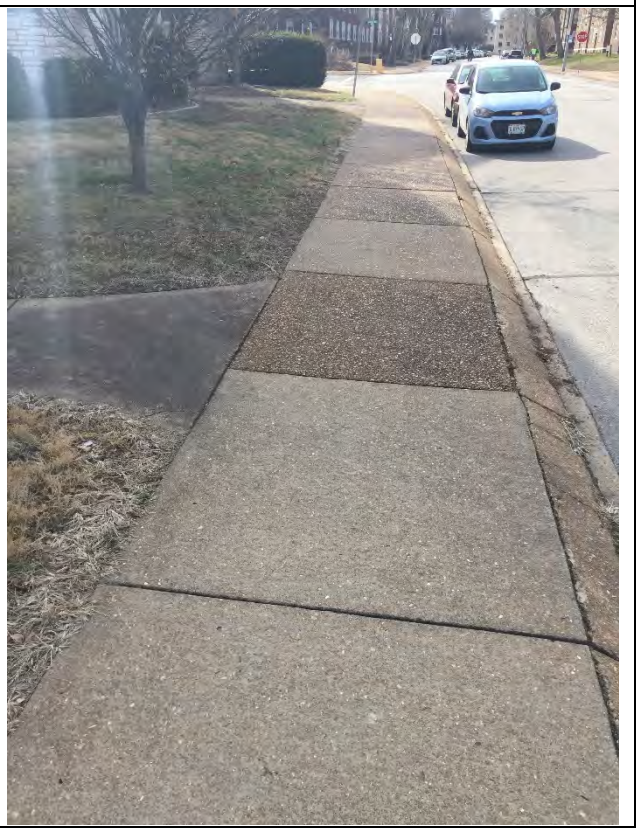
STP-S Grant Application – Westgate Ave

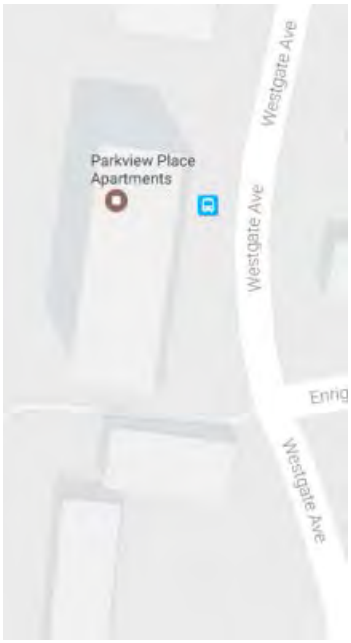
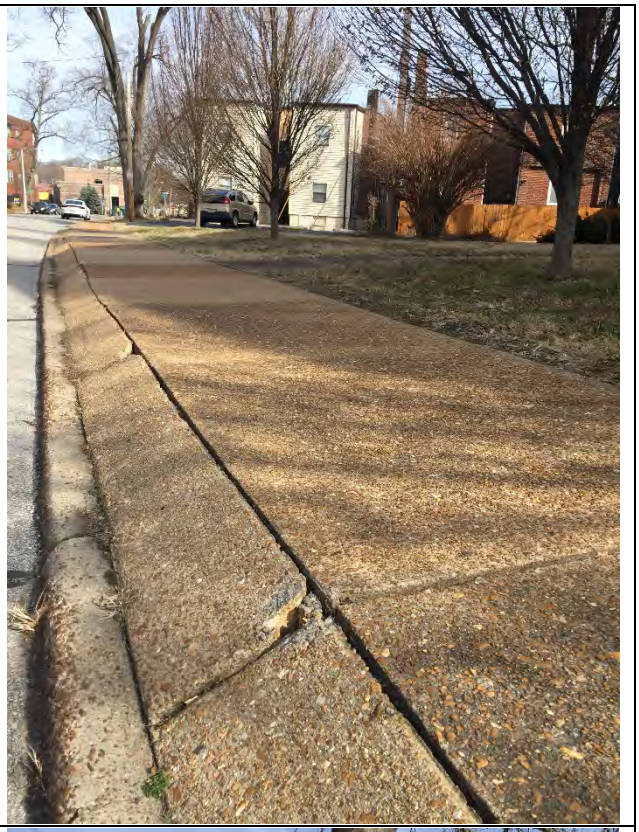
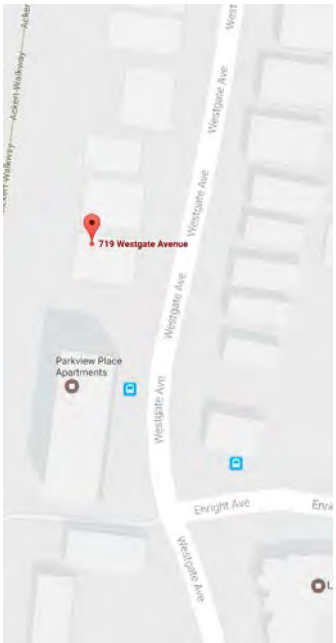
PSR Score - 4

February 21, 2017

Evaluation Team:

Chris Kalter – University City
John Keevan – CMT
Brad Spanberger - CMT

| PSR | Location Notes | Photo |
|---|---|---|
| 4 | Looking South – East side of Street   |  |

| | | |
|---|---|---|
| 4 |  <br>Looking South West side of street |  |
| 4 | 719 Westgate Avenue – Looking North. West side of the street.<br>  |  |

# Crash Summary Form

Safety - This form is required to be completed to gain points in safety

Provide the location and details for correctable collisions(i.e. not random, unpreventable incidents) along the project length for the previous three years.

Fill out a separate row for each correctible collision. Provide information on the location (Main St at Bradley St or Jackson St - 250' north of Morton Ave), collision type, severity, number of vehicles involved, and the primary countermeasure to eliminate or mitigate the collision (the countermeasure must be consistent with the project scope)

**Attach crash reports for fatal and serious/disabling injury only**

EWG staff will use this information to assign points

| # | Date | Collision Location (Provide Location Details) | Collision Type(head-on, broadside, right angle, etc) | Number of Property Damage only | Number of Serious/ Disabling Injuries | Number of Fatalities | Number of Vehicles Involved | Primary Countermeasure (must be consistent with project scope) | How Does Countermeasure address safey concern? |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10/07/2013 | 863 Westgate | sideswipe | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 2 | 02/16/2013 | 701 Westgate | front to rear | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 3 | 01/04/2013 | 701 Westgate | rear to rear | 3 | 0 | 0 | 3 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 4 | 07/21/2012 | 602 Westgate | front to rear | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 5 | 06/25/2012 | 701 Westgate | fixed object | 2 | 0 | 0 | 1 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 6 | 05/04/2012 | 719 Westgate | angle | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 7 | 12/27/2011 | 724 Westgate | rear to side | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 8 | 08/11/2011 | 701 Westgate | rear to front | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 9 | 08/01/2011 | 729 Westgate | unknown | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 10 | 06/03/2011 | 701 Westgate | fixed object | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 11 | 05/09/2011 | 716 Westgate | fixed object | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 12 | 04/28/2011 | 701 Westgate | front to rear | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 13 | 06/11/2010 | 602 Westgate | to front | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 14 | 05/09/2010 | 701 Westgate | front to rear | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 15 | 05/01/2010 | 849 Westgate | fixed object | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 16 | 03/03/2010 | 729 Westgate | front to rear | 2 | 0 | 0 | 2 | Increase friction | Increased friction gives drivers better ability to stop and evade possible collisions |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| | | | **TOTAL** | **31** | **0** | **0** | **30** | | |

add rows as needed

# STP Safety Calculat

## PROJECT TITLE:

**Project ID:**

**Inputs**

| Data | Proposed |
|---|---|
| Number of Crashes: | |
| Fatal (K) | |
| Serious Injury (A) | |
| Minor Injury (B,C) | |
| Property Damage Only (O) | 20 |
| Total | 20 |
| Project Type: | |
| Segment or Intersection | Intersection |
| Entering AADT | 2,260 |
| | |

**Following Data Required Only For Safety Project Priority Area**

| | |
|---|---|
| Lifespan of Countermeasure | 10 |
| Maintenance Cost of Countermeasure | $500 |
| CMF | 0.83 |
| Years To Construction Phase | 3 |
| Total Project Cost | $1,111,754 |

Key:

| |
|---|
| **Inputs** |

| |
|---|
| **Results** |

CHECKS----------

| | |
|---|---|
| Annual Benefit | 75,779.00 |
| PVB | 646,410.24 |
| PVC | 3,187,371.00 |
| PVC Construction | 3,144,719.99 |
| PVC Maintenance | 42,651.01 |
| BCR | 0.20 |

# or

| Comment |
| --- |
| *During the study period* |
| *Input* |
| *Input* |
| *Input* |
| *Input* |
| |
| |
| Select from drop down list |
| Number of vehicles |
| |

| |
| --- |
| Years |
| Annual dollars |
| From CMF clearing house |
| Years |
| Dollars, include all phases of the project |

Clear Data

**Outputs**

| |
| --- |
| Crash Rate |

| |
| --- |
| Fatality & Serious Injury Crash Rate |

| |
| --- |
| Benefit/Cost Ratio |

5 Year Crash Data (per 100 million miles)

| |
|---|
| 484.91 |
| 0.00 |
| 0.20 |

| Calculations |
| --- |
| Crash Rate |
| Fatality & Serious Injury Crash Rate |
| Benefit/Cost Ratio |

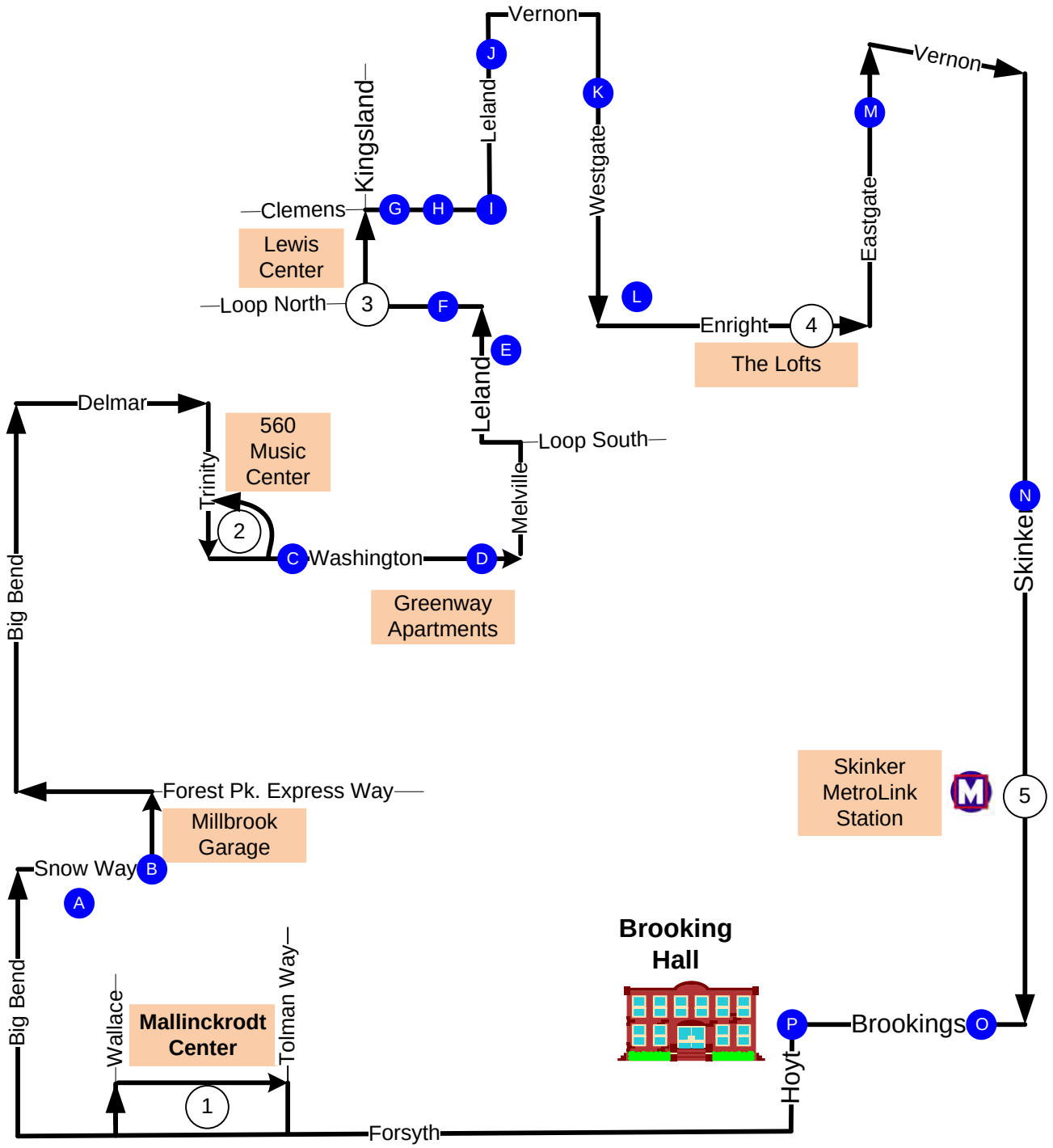
| Interest Rate |
| --- |
| 3% |

| Project Site | Traffic |
| --- | --- |
| Segment | Project Average Daily Traffic |
| Intersection | Entering AADT |

| Average Comprehensive Cost by Injury Severity MODOT's 2014 updated numbers | 2014 Costs |
|---|---|
| Fatal (K) | $5,021,902 |
| Serious Injury (A) | $313,869 |
| Minor Injury (B,C) | $81,606 |
| Property Damage Only (O) | $4,565 |

# GREEN LINE

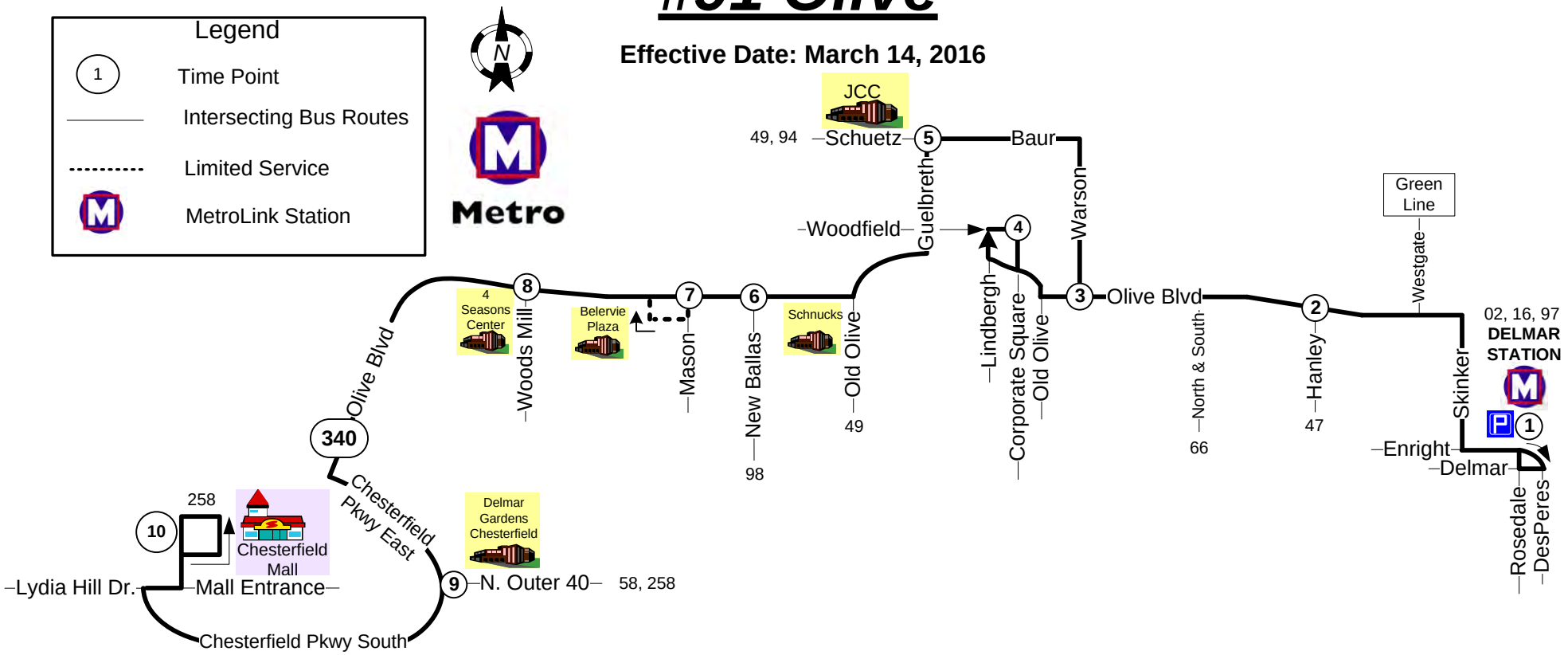
Effective August 31, 2015




| | | | | | |
|---|---|---|---|---|---|
| 1 | Mallinckrodt Center | 3 | Lewis Center | 4 | The Lofts |
| A | Snow Way Apartments | G | Clemens & Syracuse | M | Eastgate & Cates |
| B | Snow Way & Throop | H | Clemens & Heman | N | Skinker & Westminister |
| 2 | 560 Music Center | I | Leland & Clemens | 5 | Skinker MetroLink Station |
| C | Kingsland | J | Leland & Vernon | O | Brookings & Skinker |
| D | Greenway Apartments | K | Westgate & Clemens | P | Brookings Hall |
| E | Delmar Loop | L | Enright & Westgate | 1 | Mallinckrodt Center |
| F | Loop N. & Heman | | | | |

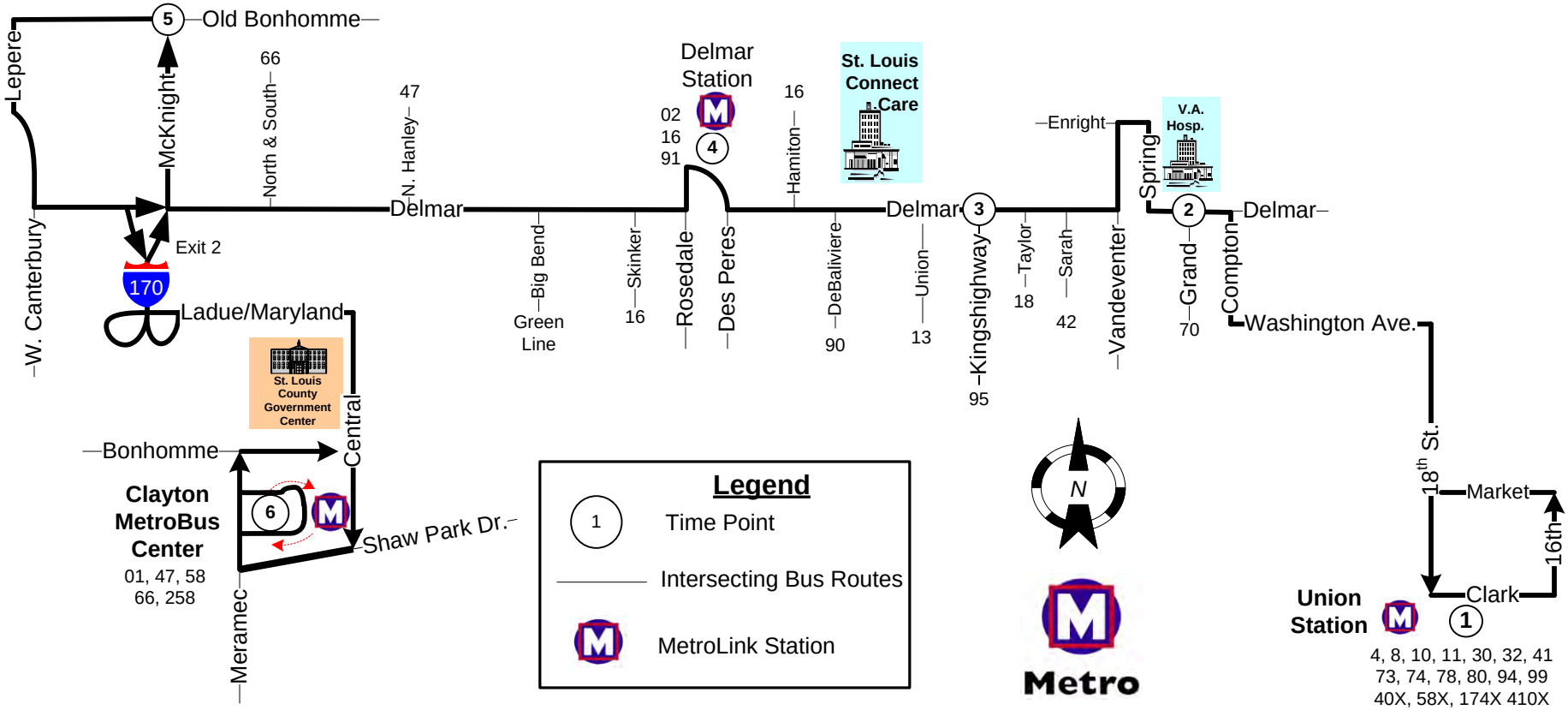
# #91 Olive

**Effective Date: March 14, 2016**



# #97 Delmar

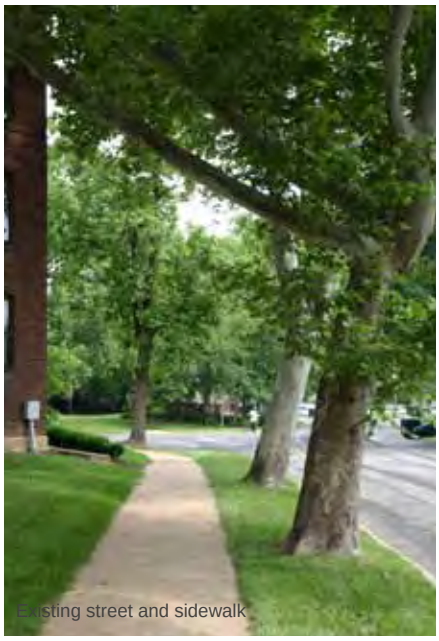
**Effective Date: April 18, 2016**



Existing view of Westgate Avenue looking toward Enright Avenue

Proposed view of Westgate Avenue looking toward Enright Avenue

# Key Streets



Existing street and sidewalk

Existing street and sidewalk, signage of neighborhood street plan

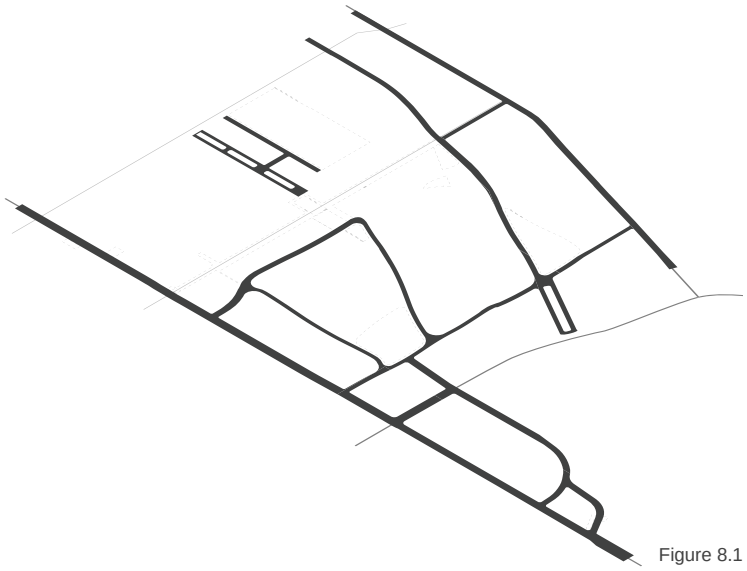


Figure 8.1

**Analysis of Existing Conditions**

Particular streets in Parkview Gardens are high priority for enhancing community life and quality of public space.

Delmar Loop: A premiere regional shopping and entertainment district and the most prominent street in the neighborhood.

Skinker Boulevard: Creates the most important entrance intersection with the Delmar Loop. It is currently highly underdeveloped on both sides, but has potential to be a high-density mixed-use corridor with office and Washington University North Campus developments.

Olive Boulevard: Links Parkview Gardens to University City and other residential communities to the north.

Enright Avenue: Is closed to Skinker Boulevard and only links Eastgate and Westgate Avenue. Home to Washington University's proposed undergraduate housing development.

Westgate Avenue: One of only two entrances to the residential core from the Delmar Loop.

Eastgate Avenue: Links Delmar Loop with Vernon Avenue, but is closed to Olive Boulevard.

Clemens: Links Metcalfe Park, Ackert Park and the proposed Eastgate South Park.

Vernon Avenue: The eastern portion is an alley condition with no facing houses, while the western portion is home to a strip mall, light industrial buildings, and large areas of surface parking. Also, it's a high speed cut through street that disrupts neighborhood fabric and traffic flow. It is extremely unsafe for cyclists

or pedestrians and only serves vehicles.

66th Street: A closed street that used to connect Olive Boulevard to Ackert Walkway and Vernon Avenue.

**Recommendations**

Design residential streets to maintain historic characteristics, but make significant improvements for walkability, bikeability, environmental health, and overall sustainable infrastructure such as improved sidewalks, bike lanes, permeable parking, improved street pavement, street trees, native plants and landscaping, etc.

Design surrounding arterial streets to meet their full market potential and create safe, walkable, and active streets that help Parkview Gardens reach economic, social, and environmental goals. (Figure 8.1)

Delmar Loop: A premiere regional shopping and entertainment district and the most prominent street in the neighborhood continues infill development with higher density buildings, unique public spaces, enhanced transit options, and more.

Skinker Boulevard: Create the most important entrance intersection with the Delmar Loop. Mixed-use development on the east and west sides will create a more significant corridor for office, business, and commercial uses.

Olive Boulevard: Link Parkview Gardens to University City and other residential communities to the north. Redesign as a residential corridor connection Parkview Gardens with residential neighborhoods to the north.

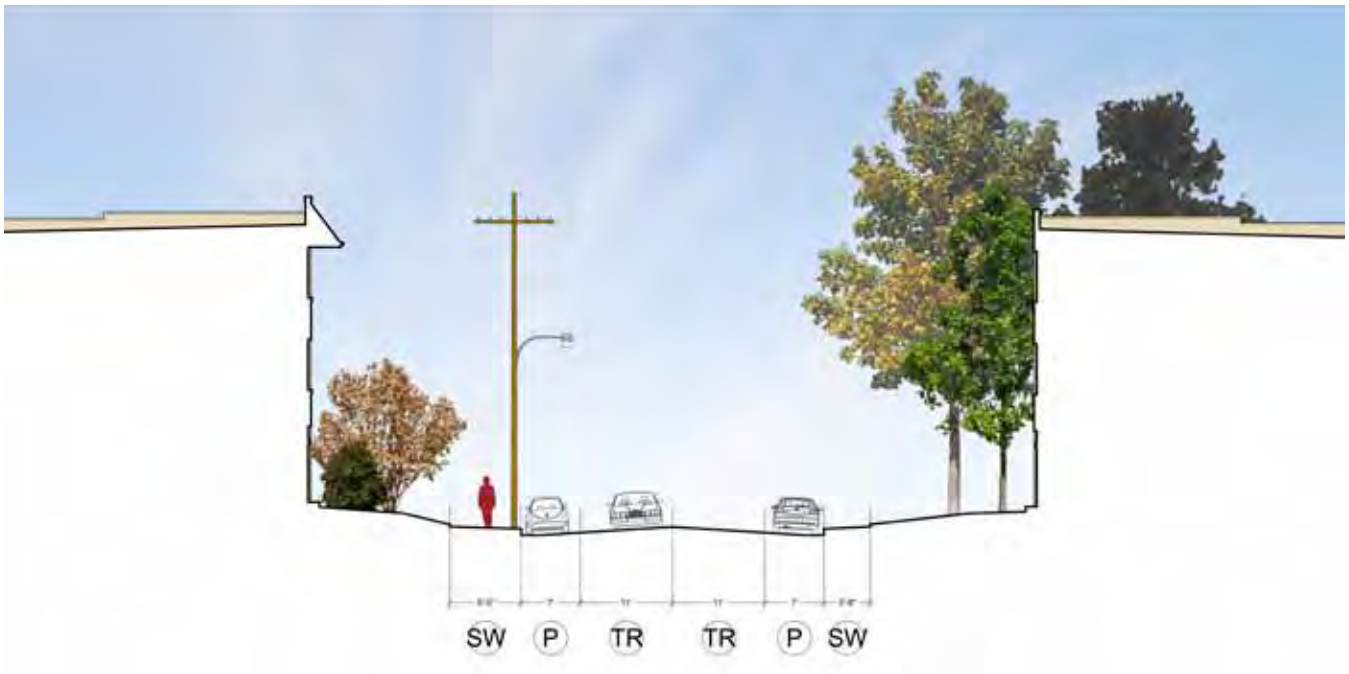
Enright Avenue: Reopen to Skinker Boulevard and redesigned and with a bike lane that links Ackert Walkway and the Centennial Greenway with MetroLink and North Campus.

Westgate Avenue: One of only two entrances to the residential core from the Delmar Loop. Improve the intersection at Delmar to take advantage of the Loop's special characteristics and link neighborhood and regional amenities.

Eastgate Avenue: Continuous residential street links Delmar Loop with Olive Boulevard and links Eastgate South Park and Eastgate North Park.

Vernon Avenue: Reconfigure into a true alley and route main neighborhood traffic to Cabanne Avenue. Calm traffic and provide future park access. Redeveloped the existing strip mallwith contextual housing and mixed-use buildings to serve the needs of residents.

66th Street: Reopen to connect Ackert Walkway to neighborhoods north of Olive Boulevard. Make the assets of Parkview Gardens more accessible to other neighborhoods by walking or biking.




Existing Street Section: Westgate Avenue

Key for all Street Sections

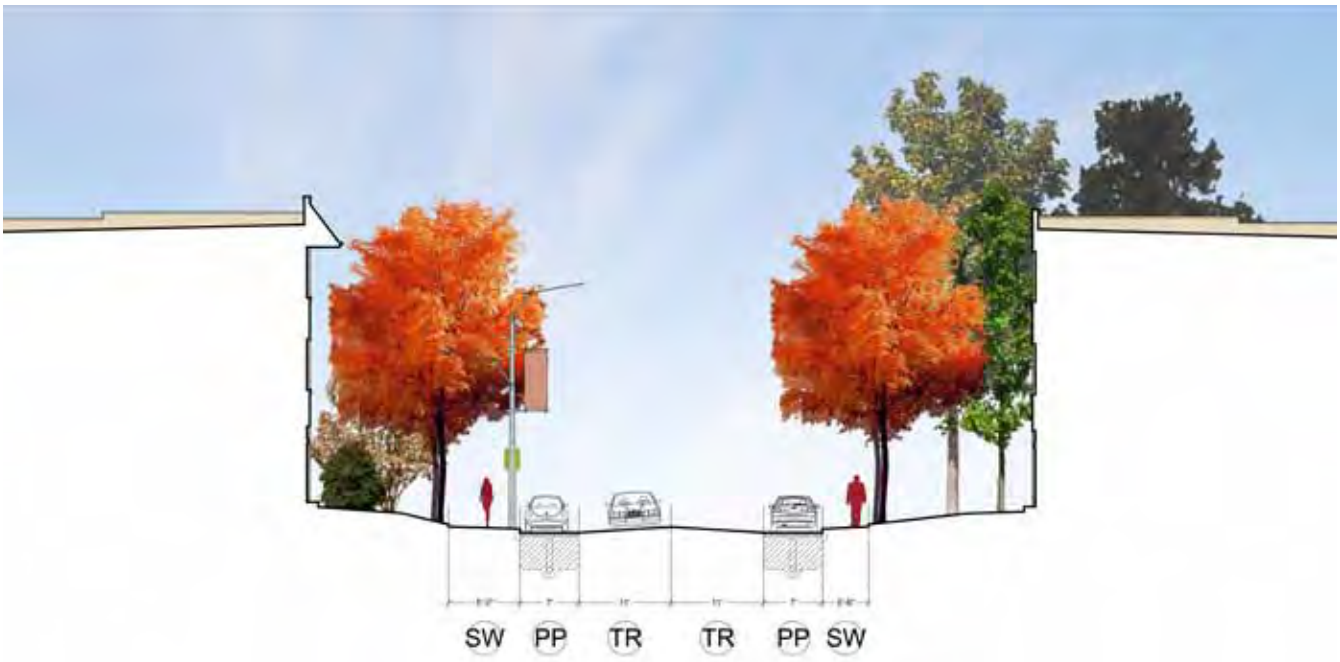
(SW) - Sidewalk

(P) - Parking

(TR) - Travel Lane

(PP) - Permeable Paving Parking

(BL) - Bike Lane




Proposed Street Section: Westgate Avenue

CONCEPTUAL - NOT FOR CONSTRUCTION

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"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

## LEGEND

- EXIST. PROPERTY LINE & R/W LINE
- TEMPORARY CONSTRUCTION EASEMENT (T.C.E.)
- CONCRETE SIDEWALK, 4 IN.
- MISCELLANEOUS TRANSITION CONCRETE, 4 IN.
- CONCRETE PAVED APPROACH, 8 IN.
- CONCRETE CURB RAMP
- BITUMINOUS PARKING LOT / APPROACH
- PAVEMENT - 2" BITUMINOUS MILL & FILL
- PAVEMENT - POROUS ASPHALT (PAVERS)
- BIKE PAVEMENT MARKINGS W/SHARROWS

DELMAR BLVD

WESTGATE AVE

ENRIGHT AVE

MCGINNIS ALLEY

1 HURST, MICHAEL
605 WESTGATE AVENUE
LOOP CONDOMINIUMS (THE)
DB 18650, PG 1522

2 PARKVIEW PLACE APARTMENTS LP
701 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS PT 1 & 2-5, DB 15143, PG 2282

47 WASHINGTON UNIVERSITY
702 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS PT 1 & PT 2, DB 12729, PG 0728

48 WASHINGTON UNIVERSITY
6200 ENRIGHT AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS 4 THRU 9 & 25, DB 13137, PG 0217

49 HOFGRIT LC
6329 DELMAR BOULEVARD
NORTH PARKVIEW SUBDIVISION
LOT 24, DB 12536, PG 0574

BEGIN CONSTRUCTION STA. 0+22

MATCHLINE STA. 5+00.00

ADJUST STRUCTURE
ADJUST INLET
ADA COMPLIANT PCC SIDEWALK
NEW PAVEMENT MARKINGS 4" WHITE PAINT
NEW STOP BAR 24" WHITE PAINT
INDUCTION LOOPS (R&R)
ADJUST STRUCTURE
NEW PAVEMENT MARKINGS DOUBLE 4" YELLOW PAINT
ADJUST INLET
8" DEPTH PCC DRIVEWAY PAVEMENT
ASPHALT PARKING PAVEMENT (R&R)
MISC. TRANSITION CONCRETE
ADA COMPLIANT PCC SIDEWALK
8" DEPTH PCC DRIVEWAY PAVEMENT
ASPHALT PARKING PAVEMENT (R&R)
ADA COMPLIANT CURB RAMP
MISC. TRANSITION CONCRETE
ADA COMPLIANT PCC SIDEWALK
ADA COMPLIANT CURB RAMP
ADJUST INLET
ADA COMPLIANT PCC SIDEWALK
ASPHALT PARKING PAVEMENT (R&R)
8" DEPTH PCC DRIVEWAY PAVEMENT
ADA COMPLIANT CURB RAMP
ADA COMPLIANT PCC SIDEWALK
ADA COMPLIANT PCC SIDEWALK
8" DEPTH PCC DRIVEWAY PAVEMENT
MISC. TRANSITION CONCRETE
ADA COMPLIANT PCC SIDEWALK
ADA COMPLIANT PCC SIDEWALK
8" DEPTH PCC DRIVEWAY PAVEMENT
ASPHALT PARKING PAVEMENT (R&R)
NEW 2'X6' CROSSWALK PAVEMENT MARKINGS WITH 2' GAP
USE IN PLACE SIDEWALK
USE IN PLACE SIDEWALK
USE IN PLACE SIDEWALK
USE IN PLACE SIDEWALK

W16-1P
18"X24"
3 SF SIGN PANEL
1 EA U-CHANNEL POST
INCIDENTAL BASE
SHARE THE ROAD
BIKE ROUTE
D11-1
24"X18"
3 SF SIGN PANEL

D11-1
24"X18"
3 SF SIGN PANEL
1 EA U-CHANNEL POST
INCIDENTAL BASE
BIKE ROUTE
M6-4
21"X15"
2.5 SF SIGN PANEL

SCALE
0 20 40 60

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REVISIONS

| NUMBER | BY | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**PLAN SHEET**
SHEET 1 OF 5

UNIVERSITY CITY, MISSOURI
WESTGATE AVE ADA AND PAVEMENT IMPROVEMENTS
STP-S APPLICATION

CMT

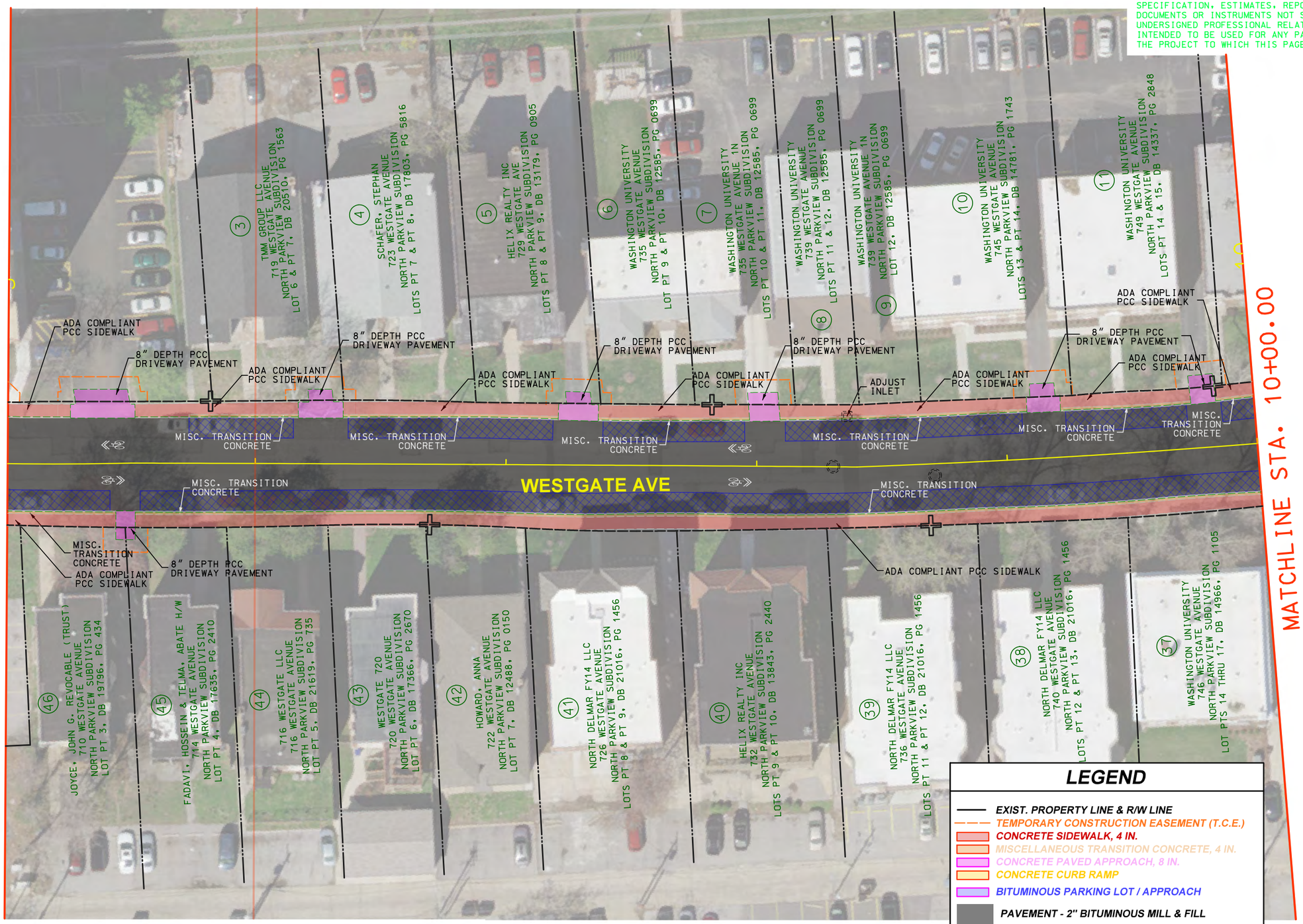
CRAWFORD, MURPHY & TILLY, INC.
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102 (314) 436-5500
ENGINEERING CORPORATION - 000631

DATE: 3/1/2017

JOB No: 17401-03-00

SHEET 1 OF 5

001_Plan Sheet_120.dgn




## LEGEND

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- BITUMINOUS PARKING LOT / APPROACH
- PAVEMENT - 2" BITUMINOUS MILL & FILL
- PAVEMENT - POROUS ASPHALT (PAVERS)
- BIKE PAVEMENT MARKINGS W/SHARROWS

SCALE
0 20 40 60

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

REVISIONS

| NUMBER | BY | DATE |
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**PLAN SHEET**
SHEET 2 OF 5

UNIVERSITY CITY, MISSOURI
WESTGATE AVE ADA AND PAVEMENT IMPROVEMENTS
STP-S APPLICATION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

CMT
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CRAWFORD, MURPHY & TILLY, INC.
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102 (314) 436-5500
ENGINEERING CORPORATION - 000631

DATE: 3/1/2017

JOB No: 17401-03-00

SHEET 2 OF 5

002_Plan Sheet_120.dgn

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MATCHLINE STA. 10+00.00

MATCHLINE STA. 15+00.00

PARKVIEW GARDENS REHABILITATION LP
753 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOT 16, DB 11092, PG 0389

(12)

(13) CITY OF UNIVERSITY CITY
765 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS 17-20, DB 07350, PG 2368

(14) BRAIS, MARLO
805 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOT PT 21, DB 07825, PG 0644

(15) BRAIS, MARLO
807 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS PT 21 & 22,
DB 12274, PG 2466

(16) GARRETT, RANDY
815 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOT 23, DB 13856, PG 0232

(17) RKL REAL ESTATE LLC
817 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOT 24, DB 19985, PG 2917

(18) TAUB JOYCE FELICE TRUSTEE
821 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS 25 & 26, DB 11706, PG 0165

(19) PARKVIEW GARDENS
REHABILITATION LP
827 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS 27 & 28, DB 11092, PG 0389

(20) PARKVIEW GARDENS REHABILITATION LP
831 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS 29 & 30, DB 11092, PG 0389

STOP
R1-1 (RELOC.)
36"X36"
9 SF SIGN PANEL
1 EA U-CHANNEL POST
INCIDENTAL BASE

WESTGATE AVE

ADA COMPLIANT PCC SIDEWALK
8" DEPTH PCC DRIVEWAY PAVEMENT
MISC. TRANSITION CONCRETE
ADA COMPLIANT CURB RAMP
REMOVE EXIST. STOP BAR & STOP SIGN
NEW 2'X6' CROSSWALK PAVEMENT MARKINGS WITH 2' GAP
24" NEW STOP BAR WHITE PAINT
STOP BAR 24" WHITE PAINT
12" NEW STOP BAR WHITE PAINT
ADJUST STRUCTURES

CLEMENS AVE

(33) LUTSKY, MICHAEL & CARYN H/W THE BYRON CO
6428 CATES AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS PT 1 & PT 2, DB 11235, PG 3715

(34) STLC CATHOLIC CHURCH REAL ESTATE
6403 CLEMENS AVENUE
NORTH PARKVIEW SUBDIVISION
LOT PTS 44 THRU 54, DB 17765, PG 4123

(35) CITY OF UNIVERSITY CITY
754 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOTS PT 16 & PT 17, DB 06281, PG 0315

(36) WASHINGTON UNIVERSITY
746 WESTGATE AVENUE
NORTH PARKVIEW SUBDIVISION
LOT PTS 14 THRU 17, DB 14966, PG 1105

D11-1
24"X18"
3 SF SIGN PANEL
1 EA U-CHANNEL POST
INCIDENTAL BASE
M6-4
21"X15"
2.5 SF SIGN PANEL

## LEGEND

- EXIST. PROPERTY LINE & R/W LINE
- TEMPORARY CONSTRUCTION EASEMENT (T.C.E.)
- CONCRETE SIDEWALK, 4 IN.
- MISCELLANEOUS TRANSITION CONCRETE, 4 IN.
- CONCRETE PAVED APPROACH, 8 IN.
- CONCRETE CURB RAMP
- BITUMINOUS PARKING LOT / APPROACH
- PAVEMENT - 2" BITUMINOUS MILL & FILL
- PAVEMENT - POROUS ASPHALT (PAVERS)
- BIKE PAVEMENT MARKINGS W/SHARROWS

SCALE
0 20 40 60

**PLAN SHEET**
SHEET 3 OF 5

UNIVERSITY CITY, MISSOURI
WESTGATE AVE ADA AND PAVEMENT IMPROVEMENTS
STP-S APPLICATION

CMT
CRAWFORD, MURPHY & TILLY, INC.
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SHEET 3 OF 5

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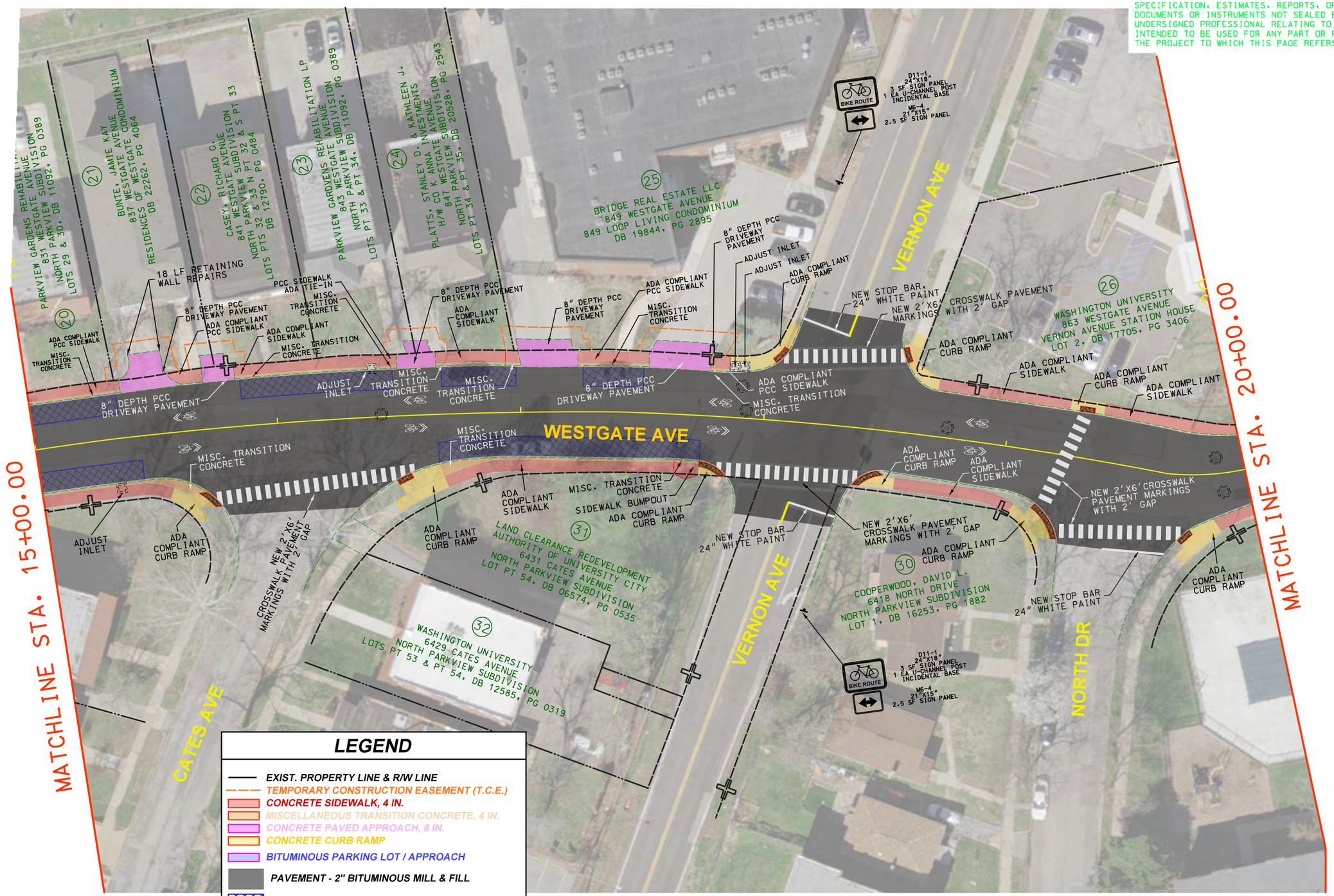


## LEGEND

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- MISCELLANEOUS TRANSITION CONCRETE, 4 IN.
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- CONCRETE CURB RAMP
- BITUMINOUS PARKING LOT / APPROACH
- PAVEMENT - 2" BITUMINOUS MILL & FILL
- PAVEMENT - POROUS ASPHALT (PAVERS)
- BIKE PAVEMENT MARKINGS W/SHARROWS

SCALE
0 20 40 60

**PLAN SHEET**
SHEET 4 OF 5

UNIVERSITY CITY, MISSOURI
WESTGATE AVE ADA AND PAVEMENT IMPROVEMENTS
STP-S APPLICATION


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SHEET 4 OF 5

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MATCHLINE STA. 20+00.00

27
WASHINGTON UNIVERSITY
6601 VERNON AVENUE
VERNON AVENUE STATION HOUSE
LOT 1, DB 17705, PG 3406

26
WASHINGTON UNIVERSITY
863 WESTGATE AVENUE
VERNON AVENUE STATION HOUSE
LOT 2, DB 17705, PG 3406

28
BRYONCO LLC THE BYRON CO
6504 OLIVE BOULEVARD
DELMAR AVENUE ADDITION
LOTS 1 THRU 15 & LOTS 23 THRU 28
& 66TH ST. VAC PT (10859-813)
DB 14850, PG 1288

29
SY UNIVERSITY COMMONS INVESTORS LP
6301 NORTH DRIVE
DELMAR AVENUE ADDITION
DB 13235, PG 0856

WESTGATE AVE

OLIVE BLVD

USE IN PLACE SIDEWALK

ADA COMPLIANT SIDEWALK

ADJUST INLET

ADA COMPLIANT CURB RAMP

NEW 2'X6' CROSSWALK PAVEMENT MARKINGS WITH 2' GAP

8" DEPTH PCC DRIVEWAY PAVEMENT

SHARE THE ROAD
BIKE ROUTE

W16-1P
18"X24"
3 SF SIGN PANEL
1 EA U-CHANNEL POST
INCIDENTAL BASE

D11-1
24"X18"
3 SF SIGN PANEL

END CONSTRUCTION
STA. 24+45

ADJUST STRUCTURE

## LEGEND

- EXIST. PROPERTY LINE & R/W LINE
- TEMPORARY CONSTRUCTION EASEMENT (T.C.E.)
- CONCRETE SIDEWALK, 4 IN.
- MISCELLANEOUS TRANSITION CONCRETE, 4 IN.
- CONCRETE PAVED APPROACH, 8 IN.
- CONCRETE CURB RAMP
- BITUMINOUS PARKING LOT / APPROACH
- PAVEMENT - 2" BITUMINOUS MILL & FILL
- PAVEMENT - POROUS ASPHALT (PAVERS)
- BIKE PAVEMENT MARKINGS W/SHARROWS

SCALE
0 20 40 60

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SHEET 5 OF 5

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# Supporting Photos

Photo 1: Westgate Avenue looking towards Olive Boulevard. New midblock crossing to be constructed where the left sidewalk terminates.


Photo 2: Location of future curb ramp improvements for new midblock crossing in Photo 1.

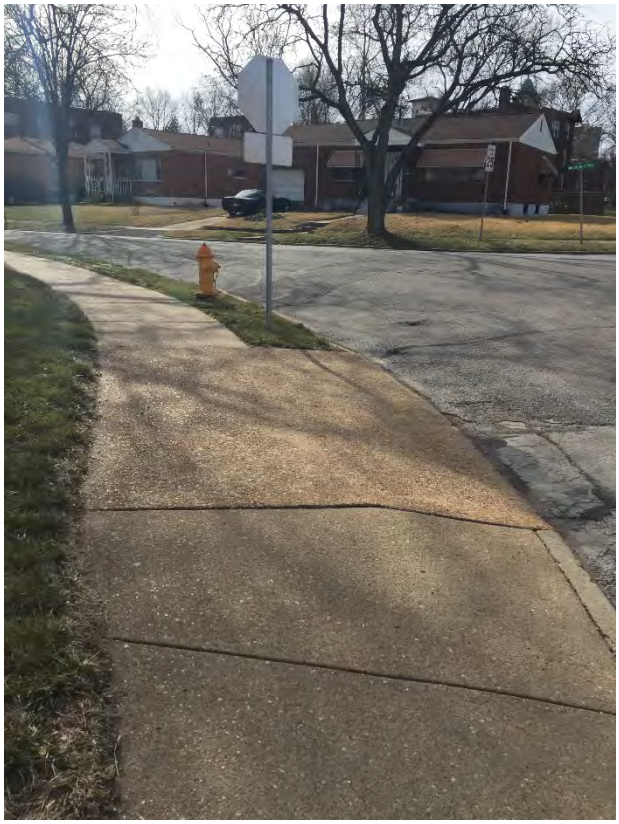

Photo 3:  Non ADA compliant curb ramp at North Drive.

Photo 4: Nonexistent crosswalk pavement markings crossing North Drive.

Photo 5:  Additional non ADA compliant curb ramp at North Drive.

Photo 6:  Non ADA compliant curb ramp at Vernon Avenue.

Photo 7:  Typical sidewalk section at eye-view. Cross slope to steep to be ADA compliant.

Photo 8: Typical sidewalk section at ground level. Cross slope to steep to be ADA compliant.

Photo 9:  Deteriorated crosswalk and stop bar pavement markings in front of Ackert Park

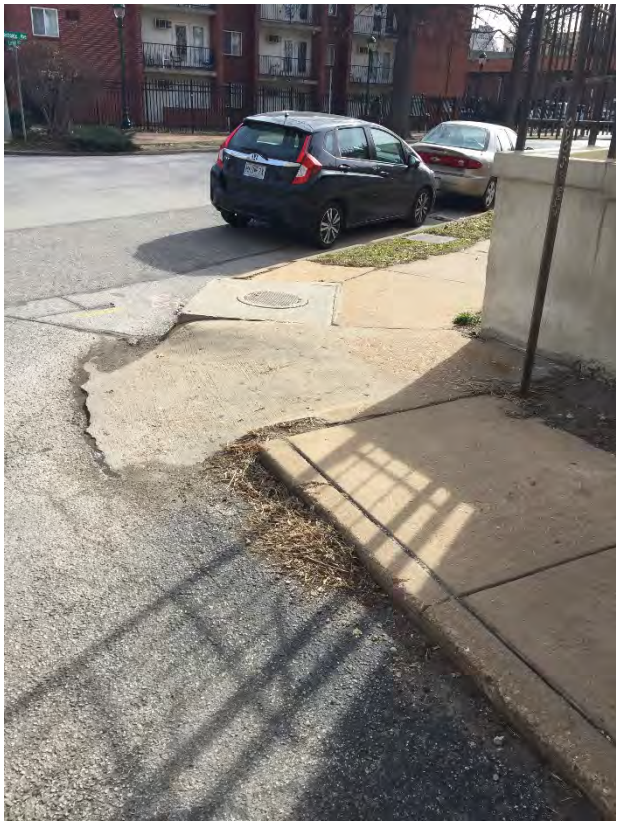

Photo 10:  Non ADA compliant curb ramp at Parkview Place Apartments due to proximity to inlet.

Photo 11:  Large tree extruding from 719 Westgate Avenue, obstructing the sidewalk.

Photo 12:  Retaining wall at 837 Westgate Avenue, to be adjusted.