



AGENDA
PLANNING AND ZONING COMMISSION MEETING
CITY OF CREVE COEUR, MISSOURI
MONDAY, APRIL 20, 2020

6:30 PM

Pursuant to Section 610.022 RSMo, the Planning and Zoning Commission could, at any time during the meeting, vote to close the public meeting and move to closed session to discuss matters relating to litigation, legal actions and/or communications from the City Attorney as provided under Section 610.021(1) RSMo. and/or personnel matters under Section 610.021(13) RSMo. and/or employee matters under Section 610.021(3) RSMo. and/or real estate matters under Section 610.021(2) or other matters as permitted by Chapter 610.

Reports, documents, plans, and related materials are available for examination at the Creve Coeur Government Center, 300 North New Ballas Road, prior to the meeting.

As a precautionary measure to help prevent exposure and spread of COVID-19, the regular Planning and Zoning Commission scheduled for Monday, April 20, 2020, at 6:30 p.m. will be livestreamed online.

The Council Chambers will be closed to the public; however, citizens are encouraged to participate and submit public comments in the following ways:

1. **Video Livestream** — Watch a live video broadcast of the Planning and Zoning Commission meeting here: <https://zoom.us/j/99839062602>. The public will be required to provide a name and email address to enter the meeting. The email address will not be saved or used to contact you. Citizens will have the opportunity to make public comments live during the meeting using the video livestream program ([How to Participate in Online Public Meetings](#)).
2. **Teleconference** — Call in to the meeting by dialing 1-312-626-6799 /// Webinar ID: webinar ID: 998-3906-2602.
3. **Email** — Public comment may also be emailed to the City no later than 5:00 p.m. on Monday, April 20, 2020. Submit public comments to Jessica Stutte, Planning Assistant, at jstutte@crevecoeurmo.gov.
4. **Live Audio** — Listen to a live audio broadcast of the Planning and Zoning Commission meeting by visiting the [Agendas & Minutes](#) page and clicking on the "Audio" link at the start of the meeting (audio only).

Special disabled service may be arranged by contacting the Office of the City Administrator in advance.

CALL TO ORDER

ROLL CALL

Ms. Beth Kistner (Chair)
Mr. Tim Carney
Ms. Muriel Hall
Mr. James Myers
Mr. Gene Rovak
Mr. Larry Potashnick
Mr. Todd Streiler
Mr. Carl Lumley, City Attorney
Mr. Jason Jaggi, Director of Community Development
Ms. Whitney Kelly, City Planner
Ms. Jessica Stutte, Planning Assistant/Recording Secretary

ACCEPTANCE OF THE AGENDA

APPROVAL OF MINUTES

1. March 16, 2020 Planning and Zoning Commission Draft Meeting Minutes

PUBLIC COMMENT

An opportunity for members of the public to address the Planning and Zoning Commission regarding issues or concerns not already on the agenda for this meeting. Those wishing to speak will be asked to limit comments to three minutes and to complete a speaker card.

UNFINISHED BUSINESS

1. Application #20-009: FY2021-FY2025 Capital Improvement Program.

Staff will review the final draft of the proposed five-year Capital Improvement Program (CIP) with the Planning and Zoning Commission and will seek the Commission's recommendation regarding the proposal. The Planning and Zoning Commission reviewed the draft CIP and continued the item at its meeting on March 16th. Staff has also provided the proposed pavement maintenance program for the Commission's information and discussion.

NEW BUSINESS

1. Application #20-007: New LED Parking Lot and Building Lighting for the Dielmann Recreation Complex at 11400 Olde Cabin Road

Matt Wohlberg, City Engineer, on behalf of the City of Creve Coeur, has submitted an application for new LED parking lot and building lighting for the Dielmann Recreation Complex at 11400 Olde Cabin Road, to replace the existing non-conforming lighting. Section 405.680 Lighting states that the Planning and Zoning Commission shall review proposed lighting for non-residential building construction or for the replacement or addition of light standards on an existing non-residential development in accordance with Section 405.1080.

2. PUBLIC HEARING. Application #19-038: A Conditional Use Permit for Ameren Missouri for a New Electrical Power Distribution Substation (NAICS 221122) at 11685 Olive Boulevard

Conway Johnson III, RWA, on behalf of Union Electric Company d/b/a Ameren Missouri, has submitted an application for a conditional use permit, and site development plans to allow for a new Substation at 11685 Olive Boulevard, Creve Coeur, MO, 63141 to replace the existing substation at 11665 Olive Boulevard. Electrical Power Distribution Systems (NAICS 221122) are permitted with conditions in the CB-Core Business District with review at the Planning and Zoning Commission and approval by the City Council.

WORK AGENDA

None

DEPARTMENT REPORTS

Director of Community Development

1. Public hearing procedures during COVID-19 pandemic.

ADJOURNMENT

Posted: _____
Jason W. Jaggi
Director of Community Development



DRAFT MINUTES
PLANNING AND ZONING COMMISSION MEETING
CITY OF CREVE COEUR, MISSOURI
MONDAY, MARCH 16, 2020
6:30 PM

CALL TO ORDER

ROLL CALL

Beth Kistner	Commission Chair
Gene Rovak	Commission Member
Tim Carney	Commission Member
Muriel Hall	Commission Member
Larry Potashnick	Commission Member
James Myers	Commission Member
Todd Streiler	Commission Member

The following staff were also present: Carl Lumley, City Attorney; Jason Jaggi, Director of Community Development; Whitney Kelly, City Planner; and, Jessica Stutte, Planning Assistant/ Recording Secretary.

ACCEPTANCE OF THE AGENDA

Mr. Rovak made a motion to accept the agenda. Mr. Myers seconded. All in favor.

APPROVAL OF MINUTES

1. February 18, 2020 Planning and Zoning Commission Draft Meeting Minutes

Mr. Rovak made a motion to accept the minutes for February 18, 2020. Mr. Carney seconded. All in favor.

PUBLIC COMMENT

None

UNFINISHED BUSINESS

None

NEW BUSINESS

1. Application #20-004: Site Concept Plan Amendment for West Park Center Office Development for Two Structured Parking Decks for Edge @ West Park Office Building, at 12645 Olive Boulevard

Mr. Larry Chapman explained why he was back before the Commission. He explained that they were requesting a two-phase parking deck in order to appease their lender. He said he hoped the Commission could approve their concept plan and then in the future they could return to the Commission with a site development plan.

Mr. Streiler said he had never seen that parking lot full. He suggested they add a letter that this parking lot was not necessary. He said the parking regulations and requirements by the city were sufficient.

Ms. Kelly said the parking structure would bring parking spaces to a total of 1960. She said 1561 was the total number of spaces that were required and with the additional structure there was an excess of 399. She said they did not think the structure was necessary but would allow potential development in other areas.

Mr. Myers made a motion to approve subject to the conditions in the staff report. Mr. Rovak seconded. All in favor.

RESULT:	APPROVED [UNANIMOUS]
AYES:	Kistner, Rovak, Carney, Hall, Potashnick, Myers, Streiler

2. Application #20-005: Site Concept Plan Amendment and Site Development Plan Approval for an Addition to the Pratt Cancer Center on the Mercy Healthcare Campus

Ms. Kistner recused herself as she is employed by Mercy. Mr. Rovak served as chair for the item.

Mr. George Stock of Stock and Associates went through the Staff Report recommendations. He talked about amending the site concept plan.

He explained that they discovered they could leave a parking lot and shift storm water management solution to a location between parking and buildings.

He showed the campus as it is now and the proposed changes. He said they would like to leave the Cardinal Ritter drive by the Ronald McDonald House in place. He said they would like to leave the road but remove the connection point.

He discussed the shared parking agreement with the Temple.

He said they could modify the existing storm water basin to be sufficient to meet the requirement and address the issues.

He said the rooftop mechanical equipment would be replaced.

He said the Muckerman Dr. signal would be changed to video detection versus the timer that was there now.

He said the coverage was at 52.32% and 63% is the allowable coverage.

He showed the two building additions and surface parking lot along the southern part of the Pratt Cancer Center. He said there would be a 1-story addition on the east as well as the Proton Therapy addition on the south end that will have storm water management in the form of a bio-retention garden. He showed the elevations. He said there would be EIFS and he requested the Commission

to consider allowing the use of EIFS at the lantern and the band.

He passed the materials board to the Commission members to examine.

Mr. Carney asked about the brick and if they considered using the textured brick on the new building.

Mr. Ottolino, architect, said they would be using it.

Mr. Myers asked how long they intended to leave the access road.

Mr. Stock said they would like to leave it as long as possible as it helps with construction parking.

Mr. Rovak asked if they could do something to make it more attractive.

Mr. Stock said as part of the landscape plan they would add in 27 trees and 90 shrubs.

Mr. Jaggi said some of the suggestions would be acceptable to staff.

He said the Site Concept Update if acceptable would replace and update the concept plan for the overall campus.

The site development plan would be for the addition.

He said they didn't want there to be gaps showing the mechanical units. Mr. Stock indicated that the drawing did not show the situation as it would be built and agreed there would not be a visible gap.

He said staff is comfortable with the drive access if it is cleaned up and the curbing and sidewalks addressed. He said parking is tight and staff recognizes that.

Mr. Potashnick asked Mr. Jaggi to recap the parking situation.

Mr. Jaggi said they meet parking requirements and are compliant.

Ms. Kelly said the staff report suggests they enter a parking agreement with Temple Immanuel on a temporary basis.

Mr. Stock said they would like to leave the EIFS.

There was some discussion regarding the EIFS.

Mr. Jaggi made a recommendation on Condition 2 regarding the Cardinal Ritter Drive access to be terminated with bollards removed and curbing and sidewalks extended. Additional screening along Conway Road frontage for staff approval to be provided for the portion of Cardinal Ritter Drive which will remain until completion of Mercy South Outpatient Center at which time the full extent of the roadway shall be removed.

Mr. Carney made a motion to recommend approval subject to the conditions in the draft ordinance with the elimination of SDP Condition 3 regarding EIFS and the rooftop screening and the revised SCP Condition 2 as recommended by staff. Mr. Potashnick seconded. All in favor.

RESULT:	APPROVED [6 TO 0]
MOVER:	Tim Carney, Commission Member
SECONDER:	Larry Potashnick, Commission Member
AYES:	Rovak, Carney, Hall, Potashnick, Myers, Streiler
RECUSED:	Kistner

3. Application #20-008: Designation of Right of Way and Easements from City's Property at 523 Emerson Road

Mr. Matt Wohlberg, City Engineer, spoke to the application. He said they have a project slated for Emerson Road. He said they intended to widen the road in some places and add curb cuts. He said a fire hydrant and utilities would be relocated as well.

He said they are trying to start the project next spring. He said this didn't negatively impact the property.

Mr. Streiler asked where the impact would lie.

Mr. Wohlberg said it would start by Des Smet and would finish by Ladue.

Mr. Carney made a motion to recommend approval, Ms. Hall seconded. All in favor.

4. Application #20-009: FY2021-FY2025 Capital Improvement Program

Mr. Matt Wohlberg, City Engineer, spoke to the CIP. He said the CIP combines goals, resources and needs into this 5-year plan. He said a variety of items are included in the plan and that the plan is reviewed by P&Z, the Finance Committee and City Council.

He said there are 2 funds, the Capital Fund and the Police Building Fund.

He showed the financial outlook. He said there was no projection of increase. He showed where the revenues came from. He said most of the expenses are street and sidewalks. He said last year's chart is quite similar to last years. He said grants help fund big projects. He said funding needs to increase if they want to move beyond maintenance.

He went over new projects and said there was a proposed court office renovation.

Ms. Kistner asked if that project was originally part of the government center renovation.

Mr. Wohlberg said it was.

Ms. Kistner asked if it were prudent to do things in pieces without a comprehensive design.

Mr. Wohlberg said the court office is more removed from other areas but they were also looking at moving forward with design of the government center.

He went over park updates and the grants they would be eligible to apply for.

He went over Storm water projects and gave an update on Middlebrook.

Mr. Wohlberg talked about the streets and sidewalks plans and the progress being made on current projects.

Ms. Kistner asked where they were with Mosley Road.

Mr. Wohlberg said they hoped to have it started in spring of 2022 and completed in fall of 2022.

Mr. Wohlberg pointed out some changes to the CIP that included an increase in awarded grant funds. He pointed out there was a new item called "Olive Median Light Stock" and that would be used to purchase lights to have on hand and then use insurance money to purchase replacements.

He talked about the Police Building Bond Fund.

He briefly covered Future Projects and showed the Future Project Total.

Mr. Wohlberg went over Funding Sources.

He said he would be back before the Commission April 6th asking for a recommendation for City Council.

There was some discussion about total funds and the renovation of the government center.

WORK AGENDA

None

DEPARTMENT REPORTS

1. East Olive Corridor Public Meetings Scheduled for March 25 & March 26

Mr. Jaggi gave an update on the East Olive Overlay District. He said he had made the decision to cancel the scheduled residential and commercial meetings for the time being due to the public health crisis.

He said April 6 was the next meeting and the agenda would be light.

He said Quik Trip had not submitted a full application for review just yet.

ADJOURNMENT

Mr. Rovak made a motion to adjourn and the meeting was closed at 8:05 pm.



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: April 16, 2020

TO: Planning and Zoning Commission

CC: Jason Jaggi, Director of Community Development
Mark Perkins, City Administrator
Jim Heines, Director of Public Works

FROM: Matt Wohlberg, P.E., City Engineer

SUBJECT: Review of Changes and Request for Recommendation
FY2021-FY2025 Capital Improvement Program

City staff wishes to review the final draft of the proposed five-year Capital Improvement Program (CIP) with the Planning and Zoning Commission and to seek the Commission's recommendation regarding the proposal. Several changes have been made to the proposed CIP since it was presented to the Commission on March 16. This report aims to highlight and discuss those changes.

Sales Tax Revenue Decline

The primary funding source for the CIP is a half-cent sales tax, which accounts for approximately 63% of the capital improvement fund revenues. The COVID-19 pandemic and the economic disruption associated with it have caused an immediate decline in the projected tax revenue and increased uncertainty for future budgets. In particular, whereas the original draft of this year's CIP included a sales tax increase of 0.1% from FY2020 to FY2021, the updated projections include a 7.6% decrease from FY2019 to FY2020 and for this lower revenue level to generally hold through FY2025. The result is a reduction in the projected sales tax revenue of approximately \$920,000 for the period of FY2020 through FY2025.

Changes to the CIP

Significant changes have been made to the proposed CIP to help account for the lower sales tax revenue projections. Approximately \$660,000 has been removed from the draft CIP that was proposed in February, and the changes impact every funding category in the CIP. The changes to the CIP involve either reducing the scope of projects or delaying those projects by one or more years.

Many of the City's major projects are funded by grants, and each of those projects typically must abide by a certain scope of work and schedule associated with the grant that funds it. Other projects depend on partnerships with the Missouri Department of Transportation (MoDOT) or others. Therefore, the size and schedule of certain projects in the CIP cannot be changed without also abandoning the associated grant or partnership. The result is that the changes to the proposed CIP focus on projects and purchases that are fully within the City's discretion.

While postponing a project by one or more years will not necessarily reduce the planned expenditures in the CIP, doing so limits immediate commitment of funds, which offers the City some flexibility to re-evaluate revenues and priorities on a more frequent – perhaps quarterly – basis.

The differences between the draft CIP that was presented to the Commission in February and that which is currently proposed are highlighted in yellow on the attached CIP spreadsheet and are described below in the order in which they appear on the attached spreadsheet.

GOVERNMENT FACILITIES

CAPITAL FUND

04 Government Center Renovations (Design)

This design has been postponed from FY2021 to FY2022.

05 Court Office Renovation

The construction of this project has been postponed from FY2020 to FY2021.

PARKS AND RECREATIONAL FACILITIES

CAPITAL FUND

10 Historic Building Rehabilitation and Preservation

This work involved two phases: drainage improvements and building repairs. The drainage improvements will be completed in FY2020, as originally planned. The building repairs will be postponed until FY2022, in part to allow enough lead time to get onto a specialty contractor's schedule for the repairs.

16 Dielmann Recreation Complex HVAC Replacement – Phase 2

The City will have the existing air handler and boiler inspected and serviced so that this equipment can be reliably expected to until FY2022 instead of being replaced in FY2021.

19 Venable Memorial Park Improvements (Grant Match)

The anticipated date for applying for a Land and Water Conservation Fund grant has been postponed by one year. Doing so aligns with the scheduled safety surface replacement in Venable Memorial Park in FY2024.

STORMWATER

CAPITAL FUND

04 Ballas Culvert Erosion Rehabilitation (Design)

The design for this project has been postponed from FY2021 to FY2022.

STREETS AND SIDEWALKS

CAPITAL FUND

01 Street and Sidewalk Maintenance Program

The projected annual inflation rate for this program has been reduced from 2.5% to 1.5%, which impacts the annual budgets for FY2022 through FY2025. In addition, the FY2025 budget has been reduced by \$100,000. The result is a net reduction of \$236,700 for the five-year budget of this program.

02 Street Reconstruction/Rehabilitation

The FY2023 budget for this program has been reduced to \$200,000 in anticipation of a smaller reconstruction project that year. Funding for this program has been eliminated for FY2024. The result is a net reduction of \$400,000 for the five-year budget for this program. (No budget appears for this program in FY2022, because those funds had been assigned to the Mosley Road Improvement Project in previous years.)

14 Signal Enhancement Projects

The FY2020 budget for this project was increased to \$312,500 to provide 10% contingency that will make the process easier if the bids for the enhancements exceed the engineer's estimate.

15 Pavement Conditions Update

This project has been postponed from FY2021 to FY2022.

CAPITAL EQUIPMENT**CAPITAL FUND**01 Public Works Equipment

The original proposal for FY2021 included a crack seal machine and a limb chipper, but these two pieces of equipment have been postponed to FY2022. Annual leaf vacuum replacement planned for FY2022 through FY2025 has been postponed by one year, which essentially eliminated one leaf vacuum from the five-year projection and resulted in a net reduction of \$52,700 from the five-year budget for this program.

06 Phone System Replacement

Replacement of the phone system at the Government Center has been postponed from FY2021 to FY2022.

07 Olive Median Street Light Stock

Purchasing a stock of replacement street lights has been postponed from FY2021 to FY2022.

ADMINISTRATION**CAPITAL FUND**Project Management

The projected expenses for project management have been reduced by an average of approximately \$4,700 per year for FY2020 through FY2025.

CAPITAL FUND REVENUES**CAPITAL FUND**Capital Improvement Sales Tax Revenue

Anticipated sales tax revenues have been lowered for FY2020 through FY2025. The original projection was for revenues of approximately \$2.17 million per year, but the new revenue projections are for approximately \$2.0 million to \$2.02 million per year. The result is a net reduction of \$920,000 in anticipated revenue from FY2020 through FY2025.

General Fund Transfers

A transfer of \$250,000 from the General Fund into the Capital Fund was originally scheduled for FY2021 to coincide with the Government Center Renovations design. This transfer was postponed to FY2022 to match the similar delay of the design from FY2021 to FY2022.

BUILDING DESIGN AND CONSTRUCTION**POLICE BUILDING PROJECT BOND FUND**03 Government Center Accessibility & Security Improvements

This work will be completed as part of the renovations of the Government Center. The postponement of Government Center Renovations design from FY2021 to FY2022 has postponed construction of the renovations until at least FY2023.

Recommendation

City staff has prepared, and staff recommends that the City adopt, the proposed five-year Capital Improvement Program. However, the current economic situation and the greater-than-usual uncertainty regarding sales tax revenues may require adjustments to the proposed CIP during the course of FY2021, which could include the reduction or postponement of certain projects or purchases. While the CIP is always considered a “living document” that is subject to change as conditions change, the current situation increases the chances that the CIP will be amended and increases the likelihood that the amendments will be more significant than usual.

Therefore, the recommendation for the approval of the proposed CIP is with the acknowledgement that this proposal is staff’s best current estimate and that it is subject to change.

Requested Action

Staff seeks a recommendation from the Planning and Zoning Commission to the City Council for the approval of the proposed Capital Improvement Program. .

Staff suggests the following motion:

I move to approve the Capital Improvement Program for fiscal years 2021 through 2025, as proposed by City staff and as included in the meeting packet for tonight’s Planning and Zoning Commission meeting.

The Commission’s options would be to approve, approve with conditions, or deny the proposal.

Attachments: CIP Spreadsheet (Exhibit A) with Changes Highlighted
Proposed FY2021-FY2025 Capital Improvement Program
CIP Schedule
Exhibit A - Five-Year Spreadsheet
Exhibit B - CIP Summary and Project Narrative Descriptions
Exhibit C – Citizen Recommendations
Exhibit D – FY2016-FY2025 Ten-Year Projections
Exhibit E – Future Projects

DRAFT 4/16/2020

EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

CAPITAL FUND

9501 GOVERNMENT FACILITIES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Accessibility Improvements (CDBG Grant)	20,000	23,850	20,000	20,000	-	20,000	20,000	20,000	20,000
02 Police Firing Range Improvements	57,000	57,000	-	-	-	-	-	-	-
03 Government Center Gym HVAC Replacement	-	-	-	36,030	-	-	-	-	-
04 Government Center Renovations (Design)	-	-	-	-	-	250,000	-	-	-
05 Court Office Renovation				-	30,000	-	-	-	-
Subtotal (Government Facilities)	77,000	80,850	20,000	56,030	30,000	270,000	20,000	20,000	20,000
% of Total Capital Fund Outlay	2%	3%	1%	2%	1%	7%	1%	1%	1%

9506 PARKS AND RECREATIONAL FACILITIES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Golf Course Irrigation Replacement (Design and Grant Match)	22,500	-	-	-	-	-	-	-	-
02 Park Bridge Replacement	30,000	6,988	-	-	-	-	-	-	-
03 Parks Master Plan	50,000	48,000	-	2,000	-	-	-	-	-
04 Ice Arena Improvements (Municipal Park Grant)	20,000	267,254	-	111,237	-	-	-	-	-
05 Creve-Coeur-Frontenac Missouri Pacific Trail Study	-	-	30,000	-	-	-	-	-	-
06 Tennis Court Repairs	-	35,635	35,000	-	-	-	-	-	-
07 Millennium Park Trail Study	-	-	20,000	9,135	-	-	-	-	-
08 Golf Course Pond Fountain	-	-	25,000	25,000	-	-	-	-	-
09 Ice Arena Compressor Replacement	-	-	30,000	24,059	-	-	-	-	-
10 Historic Building Rehabilitation and Preservation	-	9,973	35,000	10,000	-	25,000	-	-	-
11 Playground Safety Surface Replacement	-	-	-	30,000	-	-	-	100,000	-
12 Dielmann Recreation Complex Parking Lot Lighting	-	-	20,000	10,000	30,000	-	-	-	-
13 Millennium Park Playground Replacement (Grant Match)	-	-	-	-	30,500	-	-	-	-
14 Ice Arena Refrigerant Switchover (Design and Grant Match)	-	-	-	-	15,000	-	75,000	-	-
15 Malcolm Terrace Park Trail Improvements (CDBG Grant)	-	-	-	-	75,000	-	-	-	-
16 Dielmann Recreation Complex HVAC Replacement - Phase 2	-	-	-	-	-	110,000	-	-	-
17 City Entrance & Park Identification Signage Master Plan	20,000	-	-	-	-	20,000	-	-	-
18 Ice Arena Flooring Replacement	-	-	-	-	-	-	200,000	-	-
19 Venable Memorial Park Improvements (Grant Match)	-	-	-	-	-	-	-	150,000	-
20 Tennis Court Replacement Project (Grant Match)	-	-	-	-	-	-	-	-	30,500
Subtotal (Parks and Recreational Facilities)	142,500	367,850	195,000	221,431	150,500	155,000	275,000	250,000	30,500
% of Total Capital Fund Outlay	4%	13%	8%	7%	4%	4%	8%	7%	1%

9509 STORMWATER	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Stormwater Improvements Per Master Plan	-	-	-	-	-	-	-	-	-
02 Middlebrook Drive Culvert Rehabilitation	250,000	3,174	50,000	50,000	200,000	-	-	-	-
03 Balcon Estates Culvert Improvements	-	-	18,250	10,000	-	-	-	-	-
04 Ballas Culvert Erosion Rehabilitation (Design)	-	-	-	-	-	50,000	-	-	-
Subtotal (Stormwater)	250,000	3,174	68,250	60,000	200,000	50,000	-	-	-
% of Total Capital Fund Outlay	8%	0%	3%	2%	5%	1%	0%	0%	0%

DRAFT 4/16/2020

EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

CAPITAL FUND

9510 STREETS AND SIDEWALKS	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Street and Sidewalk Maintenance Program	1,250,000	1,185,389	1,331,250	1,456,500	1,313,300	1,333,000	1,353,000	1,373,300	1,293,900
02 Street Reconstruction/Rehabilitation	300,000	141,605	365,000	483,993	300,000	-	200,000	-	300,000
03 North New Ballas Sidewalk Phase 2A (TAP Grant)	285,000	157,559	-	-	-	-	-	-	-
04 Coeur De Ville Drive Improvements (STP Grant)	80,000	68,496	-	-	-	-	-	-	-
05 Warson Road Improvement Project (STP Grant)	-	337,387	-	21,959	-	-	-	-	-
06 Fernview Sidewalk Concept Plan			35,000	28,642	-	-	-	-	-
07 New Ballas Median Plantings	-	-	-	-	20,000	-	-	-	-
08 Signal Enhancement Projects	100,000	2,200	-	98,136	240,000	-	-	-	-
09 Emerson Road Improvement Project (STP Grant)	34,508	44,227	35,000	34,752	605,000	-	-	-	-
10 Fernview Drive Resurfacing (STP Grant)	50,000	27,953	-	28,471	336,000	-	-	-	-
11 Mosley Road Improvement Project (STP Grant)	150,000	33,689	20,000	100,000	236,907	1,310,000	-	-	-
12 New Ballas Road Improvements - Phase 1 (STP Grant)	-	-	-	-	150,000	180,000	1,020,000	-	-
13 Lindbergh-Old Olive Intersection (State Cost-Share; STP Grant Match)	-	30,306	-	13,100	190,000	25,000	90,160	1,106,140	-
14 Olive-Lindbergh Interchange Enhancements	-	-	70,000	312,500	-	30,000	-	-	-
15 Pavement Condition Ratings Update	-	-	-	-	-	45,000	-	-	-
16 Craig Road Improvements (Design & Grant Match)	40,000	5,970	-	33,830	-	-	100,000	10,000	250,000
17 New Ballas Sidewalk Extension (Design & Grant Match)	-	-	-	-	-	-	50,000	50,000	-
18 New Ballas Road Improvements - Phase 2 (Design & Grant Match)	-	-	-	-	-	-	-	100,000	25,000
19 New Ballas Road Improvements - Phase 3 (Design & Grant Match)	-	-	-	-	-	-	-	-	100,000
Subtotal (Streets and Sidewalks)	2,289,508	2,034,781	1,856,250	2,611,883	3,391,207	2,923,000	2,813,160	2,639,440	1,968,900
% of Total Capital Fund Outlay	70%	70%	79%	80%	82%	74%	78%	79%	79%

9516 CAPITAL EQUIPMENT	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Public Works Capital Equipment	312,372	222,252	88,948	155,884	243,700	359,600	346,300	326,000	316,100
02 Golf Course Capital Equipment	-	-	35,000	31,751	-	20,000	35,000	20,000	40,000
03 Comprehensive Hardware and Software System - Phase 2	98,000	45,859	-	-	-	-	-	-	-
04 Police Investigations Vehicle Replacement	30,000	31,253	-	-	-	-	-	-	-
05 Police Department Fitness Equipment	-	17,500	-	17,500	-	-	-	-	-
06 Phone System Replacement	-	-	-	-	-	48,500	-	-	-
07 Olive Median Street Light Stock	-	-	-	-	-	50,000	-	-	-
08 Public Works Facility Gasoline System Replacement	-	-	-	-	35,000	-	-	-	-
Subtotal (Capital Equipment)	440,372	316,864	123,948	205,135	278,700	478,100	381,300	346,000	356,100
% of Total Capital Fund Outlay	13%	11%	5%	6%	7%	12%	11%	10%	14%

ADMINISTRATION	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Project Management	83,000	83,612	89,505	90,387	91,777	94,530	97,366	100,287	103,296
Subtotal (Administration)	83,000	83,612	89,505	90,387	91,777	94,530	97,366	100,287	103,296
% of Total Capital Fund Outlay	3%	3%	4%	3%	2%	2%	3%	3%	4%

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EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

CAPITAL FUND

TOTAL CAPITAL FUND OUTLAY	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
	3,282,380	2,887,131	2,352,953	3,244,866	4,142,184	3,970,630	3,586,826	3,355,727	2,478,796

9514 DEBT SERVICE	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
N/A	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-
% of Total Year End Figures	0%	0%	0%	0%	0%	0%	0%	0%	0%

TOTAL YEAR END FIGURES (Capital Outlay & Debt Service) - CAPITAL FUND	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
	3,282,380	2,887,131	2,352,953	3,244,866	4,142,184	3,970,630	3,586,826	3,355,727	2,478,796

CAPITAL FUND REVENUES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Beginning Fund Balance (estimated Cash Basis as of July 1)	1,887,040	1,887,040	997,953	1,998,718	1,656,266	830,324	405,468	130,616	110,713
Estimated Capital Improvement Sales Tax Revenue (1/2 Cent)	2,130,456	2,167,326	2,151,761	2,003,242	2,003,242	2,023,274	2,023,274	2,023,274	2,023,274
Estimated Interest Revenue	3,800	9,203	3,000	20,000	10,000	10,000	10,000	10,000	10,000
Est. Additional Revenue (Outside agencies, grants, reimbursement & other)	328,400	422,276	983,600	479,172	893,000	852,500	868,700	892,550	20,000
Proceeds from Equipment Sales	10,000	-	-	-	10,000	10,000	10,000	10,000	10,000
General Fund Transfers In	400,000	400,000	400,000	400,000	400,000	650,000	400,000	400,000	400,000
Public Safety Transfer In	-	-	-	-	-	-	-	-	-
Total Revenues & General Fund Transfers In - Capital Fund	2,872,656	2,998,805	3,538,361	2,902,414	3,316,242	3,545,774	3,311,974	3,335,824	2,463,274
Total Anticipated Year End Expenditures	3,282,380	2,887,131	2,352,953	3,244,866	4,142,184	3,970,630	3,586,826	3,355,727	2,478,796
Ending Fund Balance (Cash Basis) - Capital Fund	1,477,316	1,998,714	2,183,361	1,656,266	830,324	405,468	130,616	110,713	95,192

ESTIMATED ADDITIONAL CAPITAL FUND REVENUE (FUNDING SOURCES)	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Community Development Block Grants for ADA Improvements	20,000	23,850	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Warson Road Improvement Project (STP Grant)	-	241,246	-	-	-	-	-	-	-
Emerson Road Improvement Project (STP Grant)	-	-	444,000	-	444,000	-	-	-	-
North New Ballas Sidewalk Improvement Project (TAP Grant)	212,000	122,180	-	-	-	-	-	-	-
Fernview Drive Improvement Project (STP Grant)	-	-	-	-	250,000	-	-	-	-
North New Ballas Lighting and Signal Enhancements - Olive TDD	60,000	-	-	62,000	-	-	-	-	-
North New Ballas Signal Enhancements - Development Escrow	30,000	-	-	25,705	-	-	-	-	-
Ladue Court Escrow Reimbursement	-	-	-	17,226	-	-	-	-	-
Ice Arena Improvements - Municipal Park Grant	-	-	397,600	347,841	-	-	-	-	-
Mosley Road Improvements - North Phase (STP Grant)	-	-	-	-	84,000	676,000	-	-	-
Park Master Plan (Municipal Park Planning Grant)	6,400	-	-	6,400	-	-	-	-	-
Donation for Police Fitness Equipment	-	35,000	-	-	-	-	-	-	-
New Ballas Improvements - Phase 1 (STP Grant)	-	-	-	-	-	144,000	816,000		
Lindbergh-Old Olive Intersection (State Cost-Share Program)	-	-	-	-	95,000	12,500	32,700	872,550	-
Subtotal	328,400	422,276	861,600	479,172	893,000	852,500	868,700	892,550	20,000

Changes to the CIP are highlighted in yellow.

New or Substantially Modified Projects are in Bold

Adopted through City Council Resolution xxxx on April 27, 2020.

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Attachment: CIP FY2021-FY2025 - P&Z Report of Changes and Request for Recommendation (#20-009: FY2021-FY2025 Capital Improvement

DRAFT 4/16/2020

EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

BUILDING PROJECT BOND FUND (PROP P)

BUILDING PROJECT BOND FUND REVENUES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Beginning Fund Balance (estimated Cash Basis as of July 1)	8,739,611	8,739,612	2,928,351	2,928,351	1,247,351	1,109,351	1,121,351	610,292	620,292
Estimated Bond Proceeds	-	-	-	-	-	-	-	-	-
Estimated Interest Revenue	33,600	130,361	200	78,000	12,000	12,000	10,000	10,000	10,000
Transfers In	-	-	-	-	-	-	-	-	-
Total Revenues & Transfers In	33,600	130,361	200	78,000	12,000	12,000	10,000	10,000	10,000
9501 BUILDING DESIGN AND CONSTRUCTION	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Police Building Professional Services	200,000	369,190	25,000	250,000	-	-	-	-	-
02 Police Building Site Work and Building Construction	5,460,217	5,572,432	1,418,341	1,500,000	-	-	-	-	-
03 Government Center Assessability & Security Improvements	-	-	-	-	-	-	521,059	-	-
04 Government Center Electrical Switchgear Replacement			17,500	9,000	150,000	-	-	-	-
Transfers Out	-	-	-	-	-	-	-	-	-
Total Anticipated Year End Expenditures & Transfers	5,660,217	5,941,622	1,460,841	1,759,000	150,000	-	521,059	-	-
Ending Fund Balance (Cash Basis) - Building Project Bond Fund (Prop P)	3,112,994	2,928,351	1,467,710	1,247,351	1,109,351	1,121,351	610,292	620,292	630,292
9514 DEBT SERVICE	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
DEBT SERVICE (PROP P) REVENUES									
Beginning Fund Balance (estimated Cash Basis as of July 1)	258,532	258,532	380,522	362,136	552,380	745,524	932,467	1,118,061	1,307,755
Estimated Property Tax Collection Revenue	832,396	815,260	901,000	901,000	901,000	901,000	901,000	901,000	901,000
Estimated Interest Revenue	1,000	-	1,000	2,500	2,500	2,500	2,500	2,500	2,500
Total Anticipated Revenues	833,396	815,260	902,000	903,500	903,500	903,500	903,500	903,500	903,500
DEBT SERVICE (PROP P) EXPENSES									
Estimated Expenditures	-	250	250	250	250	250	250	250	250
Estimated Interest Expenses	291,406	291,406	283,006	283,006	270,106	261,306	247,656	233,556	236,956
Estimated Principal Expenses	420,000	420,000	430,000	430,000	440,000	455,000	470,000	480,000	490,000
Total Anticipated Expenditures	711,406	711,656	713,256	713,256	710,356	716,556	717,906	713,806	727,206
Ending Cash Balance	380,522	362,136	569,266	552,380	745,524	932,467	1,118,061	1,307,755	1,484,049

CAPITAL IMPROVEMENT PROGRAM SUMMARY

TOTAL COMBINED CAPITAL PROGRAM (CAPITAL FUND & BUILDING PROJECT BOND FUND)	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Total Combined Revenues & Transfers In	3,739,652	3,944,426	4,440,561	3,883,914	4,231,742	4,461,274	4,225,474	4,249,324	3,376,774
Total Combined Anticipated Year End Expenditures & Transfers	9,654,003	9,540,409	4,527,050	5,717,122	5,002,540	4,687,187	4,825,791	4,069,533	3,206,002
Ending Fund Balance (Cash Basis) - All Capital Funds	4,970,832	5,289,202	4,220,337	3,455,997	2,685,198	2,459,286	1,858,969	2,038,760	2,209,533



City of Creve Coeur

To: Mayor and City Council

Date: February 21, 2020 (*Updated April 14, 2020*)

Re: Proposed FY2021-FY2025 Capital Improvement Program

I am pleased to present the proposed Capital Improvement Program (CIP) for the five-year period beginning July 1, 2020. The overview of the proposed five-year capital plan includes both the Capital Fund and the Building Project Fund, along with its associated Debt Service.

This proposed plan will be submitted to the Planning & Zoning Commission and Finance Committee for their review and comment.

The schedule for when the proposed CIP will be discussed with the Planning and Zoning Commission, the Finance Committee, and the City Council is included at the end of this memorandum. A public hearing before the City Council to discuss the CIP is scheduled for Monday, April 13. Suggestions from the public, City staff, and the City's boards, commissions, and committees have been considered as part of the CIP update.

CAPITAL FUND

Capital Fund Revenues

The ½-cent capital improvement sales tax is the primary funding source for the CIP. Capital improvement sales tax revenues are projected to be \$2,003,242 at the end of the current fiscal year (i.e. FY2020), which represents a 7.6% decrease from the \$2,167,326 that the City received in FY2019. Sales tax revenues are projected to remain at or near the FY2020 level throughout the five-year plan due to the current and anticipated impacts from the coronavirus. However, the full economic impact of the pandemic cannot be predicted, and the uncertainty regarding sales tax income will require frequent monitoring and perhaps adjustments to the projects outlined in this plan.

A transfer of at least \$400,000 from the General Fund to the Capital Fund is proposed for each fiscal year in the proposed CIP. These transfers provide an important supplemental funding source for the City's street program. General Fund transfers to the Capital Fund are made in most years and are appropriate based on the transportation-oriented revenue sources of the General Fund which include the County road and bridge tax revenues.

The City has been successful in obtaining grant funding for several projects to improve streets, sidewalks, and public facilities, as detailed on Exhibit A. City staff anticipates that we will continue to obtain grant funding over the next five years to supplement the proposed plan, although grants are competitive and continued success cannot be guaranteed.

Capital Fund Expenditures

Capital outlay for the next five years ranges from approximately \$2.48 million to \$4.14 million annually in the Capital Fund. These figures will likely increase as federal transportation funds and local municipal park grant funds are secured for certain projects. The increased expenses will be offset by grant funding identified in the plan as new revenue once the grants have been awarded.

Brief status updates for FY2020 CIP projects and highlights of the proposed projects in FY2021 through FY2025 projects are included below. These project highlights are arranged to be consistent with their order in the five-year CIP spreadsheet in Exhibit A and the project narrative descriptions in Exhibit B. Details about projects that ended in FY2019 have not been included.

GOVERNMENT FACILITIES

CAPITAL FUND

1. Americans with Disabilities Act (ADA) Improvements / Community Development Block Grant (CDBG)

FY2020: \$20,000. FY2021 – FY2025: \$20,000 annually

The City receives \$20,000 in Community Development Block Grant funding each year. FY2020 funds have been dedicated for accessibility improvements to the pedestrian signals at the intersection of New Ballas Road and Magna Carta Drive. FY2021 funds will be used to assist with improvements to the parking lot at Malcolm Terrace Park. The application for these funds and commitment to a particular project typically occur one year prior to the fiscal year in which the funds are spent.

3. Government Center Gym HVAC Replacement

FY2020: \$36,030.

The HVAC unit that serves the gymnasium at the Creve Coeur Government Center unexpectedly failed in early FY2020 and required immediate replacement.

4. Government Center Renovations Design

FY2022: \$250,000. Future: TBD

This project involves designing renovations to the Creve Coeur Government Center to include modification to the City Council chamber, employee work spaces, and building equipment. A concept plan and design will be developed in FY2022, the cost of which will be offset by a General Fund transfer into the Capital Fund. At least some of the costs associated with the accessibility and safety improvements to the Government Center will be paid from the Police Building Project Bond Fund as outlined in Proposition P.

5. Court Office Renovation

FY2021: \$30,000.

The current court offices will be renovated to improve the space and to possibly accommodate additional staff if the City begins joint operations with other area communities and hosts the joint effort at the Government Center.

PARKS AND RECREATIONAL FACILITIES

CAPITAL FUND

Park Improvements Grant Match

Funding specified as projects in the five-year plan. Future: \$30,500.

This line item contains place holders for the City's matching funds for Municipal Park Grant applications,

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

which the City pursues in odd-numbered fiscal years. The proposed CIP includes specific project descriptions for FY2021 (Millennium Park Playground), FY2023 (Ice Arena Refrigerant Switchover) and FY2025 (Tennis Court Replacement), with highlights of each below.

3. Parks Master Plan

FY2019: \$48,000. FY2020: \$2,000.

This project included a study to provide the City with a guiding document to assist with planning for the future of City parks and to help secure outside funding to supplement the CIP. The study included an inventory and assessment of the parks, current maintenance needs, status of amenities compared to local and national standards, and recommendations for future improvements.

4. Ice Arena Improvements

FY2019: \$267,254. FY2020: \$111,237

The City was awarded a Municipal Park Grant to make several improvements to the Creve Coeur Ice Arena, including roof beam reinforcement, new boards around the ice, a new sound system for the ice arena, repairs for the staff office area, a new front door for the building, a new boiler, and three new water heaters. The grant reimbursement is expected to be approximately \$347,841, about 92% of the total project cost.

5. Creve-Coeur-Frontenac Missouri Pacific Trail Study

FY2020: \$0.

The intent of this project was to create a concept-level plan to study the feasibility of a walking trail along the former Missouri Pacific Railroad corridor between Malcolm Terrace Park and Villa Coublay Drive. This project was postponed due to lack of support from the City of Frontenac for the possible connection to a new park there.

6. Tennis Court Repairs

FY2020: \$0.

The intent of this project was to repair and repaint the tennis courts at Conway Park. This project was postponed due to ongoing discussions about how these courts will be used in the future and how that will coordinate with the Parks Master Plan.

7. Millennium Park Trail Study

FY2020: \$9,135.

This project involved a feasibility study and concept-level plans for a new path at Millennium Park and several possible connections to the park from adjacent neighborhoods. These projects will be added to the list of possible future parks improvement projects.

8. Golf Course Pond Fountain

FY2020: \$20,000.

This project will replace the fountain and its power supply at the southern pond near the hole #5 green at the Creve Coeur Golf Course.

9. Ice Arena Compressor Replacement

FY2020: \$24,059.

The project involved the replacement of one (1) 100-ton ice rink plant compressor that is necessary to create and maintain the ice for the ice arena at the Dielmann Recreation Complex. The compressor that was replaced was one of the originals from the major renovation of the Ice Arena in 2003. It had internal damage

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that could not be repaired.

10. Historic Building Renovation and Preservation

FY2019: \$9,973. FY2020: \$10,000. FY2022: \$25,000.

Drainage improvements around the Lake School House will be completed in the spring of 2020, and building repairs for the Lake School House are planned for the spring of 2022. These repairs were recommended by the building assessment report from FY2019.

11. Playground Safety Surface Replacement

Prior years: \$56,508. FY2020: \$30,000. FY2024: \$100,000.

This project includes the replacement of damaged areas and rejuvenation of the rubberized safety surface beneath the City's playgrounds. The surfaces beneath the playgrounds at Millennium Park were repaired in FY2017. Additional emergency repairs will be completed at Millennium Park in FY2020 in order to keep both of the playgrounds open. The surface at Venable Memorial Park is planned for replacement in FY2024.

12. Dielmann Recreation Complex Parking Lot Lighting

FY2020: \$10,000. FY2021: \$30,000.

This project involves the replacement of the lighting for the parking lots at the Dielmann Recreation Complex. The purpose of the project is to provide adequate and consistent light for the parking lots to increase safety and functionality of the lots. The new lighting will be energy-efficient LED lights.

13. Millennium Park Playground Replacement (Grant Match)

FY2021: \$30,500.

Both of the primary playgrounds at Millennium Park have deteriorating safety surfaces, and the equipment for the larger playground is becoming obsolete. This project would replace both playgrounds and their associated safety surfaces. The amount shown for FY2021 represents the City's anticipated 6% share of a Municipal Park Grant for the project. The total project cost would be approximately \$500,000.

14. Ice Arena Refrigerant Switch-Over (Design and Grant Match)

FY2021: \$15,000. FY2023: \$75,000

The Ice Arena cooling system currently uses R-22 refrigerant. Beginning January 1, 2020, the production and importation of R-22 refrigerant is prohibited due to environmental and health risks. The budget identified in FY2023 is for a grant match for the cost of transitioning to an alternate cooling system, such as Ammonia or CO2, which is estimated to be \$550,000. A preliminary design is planned for FY2021 to prepare the City for an application for a Municipal Park Grant in FY2023.

15. Malcolm Terrace Park Trail Improvements (CDBG Grant)

FY2021: \$75,000.

This project involves repairing and resurfacing two asphalt trails and the parking lot at Malcolm Terrace Park. The cost of this project is offset by \$20,000 in Community Development Block Grant funding.

16. Dielmann Recreation Complex HVAC Replacement – Phase 2

FY2022: \$110,000.

This project involves the removal and replacement of the remaining air handler and condensing unit that serve the Dielmann Recreation Complex. The replacement of this equipment will complement and complete the air handler, condenser, and boiler units that were replaced in FY2018. The new units will be more reliable and more efficient than the two aged units that are proposed to be replaced.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

17. City Entrance and Park Identification Signage Master Plan

FY2022: \$20,000.

This project includes working with a consultant to design new signs or monuments for the various points of entry into the City and the City's parks, as well as directional signs leading visitors to City facilities. This study was included among the goals of the City's Strategic Plan FY2018-2021.

18. Ice Arena Floor Replacement

FY2023: \$200,000.

This project involves replacing the rubberized flooring that is around the ice rink, in the player's locker rooms, and in the referee's changing room. Most of this flooring dates back to the 2003 building renovation. The existing floor is wearing out, and is beginning to require more frequent maintenance. Replacement is recommended to avoid future failures that could be hazardous.

19. Venable Memorial Park Improvements (Grant Match)

FY2024: \$150,000.

Several of the existing facilities at Venable Memorial Park are ageing and need updates or replacement. These include the pavilion, walking paths, restrooms, and tennis court. The City plans to apply for a Land and Water Conservation Fund (LWCF) grant to assist with the cost of some of these improvements. The amount shown is the City's 50% match for what is expected to be an application for a \$300,000 project.

20. Tennis Court Replacement Project (Grant Match)

FY2025: \$30,500.

The tennis courts at Venable Memorial Park and Lake School Park are asphalt courts that have been overlaid several times and cannot be effectively overlaid in the future. Through this project, the City would either replace the courts at both parks or remove and expand the courts at Lake School Park, as was suggested by the Parks Master Plan. The amount shown represents the City's anticipated share of a Municipal Park Grant for the project.

STORMWATER

CAPITAL FUND

2. Middlebrook Drive Stormwater Improvements

Prior Years: \$42,075. FY2020: \$50,000. FY2021: \$200,000.

This project includes replacing the culvert pipe under Middlebrook Drive and making associated repairs to the creek and the roadway. Construction of the project is expected to begin in FY2020 and to extend into FY2021. The project had been identified as a high priority by the Stormwater Committee, and Missouri American Water encouraged the project due to concerns that the site instability could damage the water main on Middlebrook Drive.

3. Balcon Estates Culvert Improvements

FY2020: \$10,000.

MSD replaced a collapsed stormwater inlet on Balcon Estates Court that the City had begun to review for a possible stormwater project.

4. Ballas Culvert Erosion Rehabilitation

FY2022: \$50,000.

Funding is recommended in FY2022 to design repairs for erosion at the downstream end of a box culvert

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

beneath New Ballas Road south of Tarrytown Drive. Repairs are recommended before the issue threatens the integrity of the culvert. This project has been identified as a high priority by the Stormwater Committee.

STREETS AND SIDEWALKS

CAPITAL FUND

The types of several federal and state roadway grants are abbreviated due to the length of their names. These include the federal Surface Transportation Program (STP) grant, the federal Transportation Alternatives Program (TAP) grant, the Community Development Block Grant (CDBG), the State of Missouri's Cost Share Program (State Cost Share), and the Governor's Transportation Cost-Share Program (Governor's Program).

1. Street and Sidewalk Maintenance Program

FY2020: \$1,456,500. FY2021: \$1,313,300.

Much of the Capital Fund CIP expenditures are dedicated to preserving the City's streets and sidewalks through concrete slab replacement, asphalt resurfacing, microsurfacing, sidewalk repairs and improvements, and other preservation techniques. Priorities are guided by the City's infrastructure management program and street rating system.

2. Street Reconstruction/Rehabilitation

FY2020: \$483,993. FY2021: \$300,000. FY2023: \$200,000. FY2025: \$300,000.

Several of the City's streets are in poor condition and require extensive rehabilitation or reconstruction. Among these are 'composite' streets – old concrete base pavement with asphalt overlay – that are beyond their useful lives. In FY2021, this program will complete the roadway rehabilitation in the Ladue Estates subdivision that began in FY2018. The FY2022 budget has been reduced to zero in order to supplement the work planned for Mosley Road so that all of Mosley Road can be improved that year as one project.

5. Warson Road Improvements (Federal STP grant)

Prior Years: \$651,662. FY2020: \$21,959.

This project involved pavement resurfacing and sidewalk replacement along Warson Road between Olive Boulevard and Countryside Place. The City received a federal STP grant of \$428,800 for the project.

6. Fernview Sidewalk Concept Plan

FY2020: \$28,642

This study reviewed the feasibility and cost of adding a sidewalk to Fernview Drive between Olive Boulevard and Gallagher Road. Sidewalks were not included as part of the Fernview Drive Resurfacing Project.

7. New Ballas Median Plantings

FY2021: \$20,000.

This project involves new trees, median end treatments, and plantings in the centerline median along North New Ballas Road near the Creve Coeur Government Center. This island had been lined with ash trees that were removed due to the emerald ash borer infestation. The Horticulture, Ecology, and Beautification Committee has reviewed the planting plan and has recommended this project.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

8. Signal Enhancement Projects

Prior Years: \$95,792. FY2020: \$98,136. FY2021: \$240,000.

The City has partnered with the Missouri Department of Transportation (MoDOT) and the Olive Boulevard Transportation Development District (Olive TDD) to include illuminated street name signs onto several new traffic signals along Lindbergh Boulevard and Olive Boulevard in FY2018, FY2020, and FY2021. Nearly all of the signalized intersections in Creve Coeur along Olive and Lindbergh will have new illuminated street name signs following the FY2021 project.

9. Emerson Road Improvement Project (Federal STP grant)

Prior Years: \$55,016. FY2020: \$34,752. FY2021: \$605,000.

The project includes pavement widening and resurfacing, new curb and gutter, and enclosed stormwater facilities along the City-maintained section of Emerson Road from Old Ballas Road to De Smet Jesuit High School. Construction is expected to begin in the winter of 2020 and extend through the spring of 2021 (FY2021). The City received a federal grant that will reimburse up to \$444,000 (73%) of construction costs.

10. Fernview Drive Resurfacing (Federal STP grant)

Prior Years: \$27,953. FY2020: \$28,471. FY2021: \$336,000.

This project involves asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. The City was awarded a federal STP grant which will reimburse up to \$250,000 (approximately 75%) of the construction cost. Construction of the project is scheduled for the summer of 2020 (FY2021).

11. Mosley Road Improvement Project (federal STP grant)

Prior Years: \$33,689. FY2020: \$100,000. FY2021: \$236,907. FY2022: \$1,310,000.

This project involves roadway resurfacing, sidewalk upgrades, drainage improvements, and partial roadway reconstruction for Mosley Road, from Olive Boulevard to Ladue Road. Design began in FY2019, easement acquisition is expected to begin in FY2020 and end in FY2021, and construction is expected to be in FY2022. The City was awarded a federal STP grant of \$760,000 for this project.

12. New Ballas Road Improvement Project – Phase 1 (Federal STP grant)

FY2021: \$150,000. FY2022: \$180,000. FY2023: \$1,020,000.

This project involves the replacement of approximately 25% of the roadway pavement, joint repairs, sidewalk improvements, and signal improvements to North New Ballas Road, from Olive Boulevard to Craig Road. Design is scheduled to begin in FY2021, right of way and easement acquisition will be in FY2022, and construction will be in FY2023. The City has been awarded a federal STP grant of \$960,000 to assist with the cost of this project.

13. Lindbergh – Old Olive Intersection Reconstruction (State Cost Share; STP Grant Match)

Prior Years: \$30,306. FY2020: \$13,100. FY2021: \$190,000. FY2022: \$25,000. FY2023: \$90,160. FY2024: \$1,106,140.

This project involves the reconstruction and reorientation of the intersection of Old Olive Street Road at Lindbergh Boulevard to include a traffic signal and a designated crossing for a bicycle and pedestrian trail. The total cost of this project is estimated to be approximately \$2.6 million. The City has been awarded approximately \$1 million in State Cost Share funding, and the City has applied for another \$1.1 million in federal STP funding. The amounts shown are the City's share following a successful STP grant application. Construction is expected in FY2024.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

14. Olive-Lindbergh Interchange Enhancements

FY2020: \$312,500. FY2022: \$30,000.

The City has partnered with the St. Louis Economic Development Partnership and the Missouri Department of Transportation to add decorative elements to the traffic signals and bridge as part of the 2020 project to partially reconstruct the Olive-Lindbergh interchange. Funds are identified in FY2022 for a landscaping design for this interchange following the completion of the roadway project.

15. Pavement Conditions Ratings Update

FY2022: \$45,000.

The City uses pavement management software to evaluate pavement conditions that assist with planning for future repairs. City staff typically update the pavement condition ratings for 25% of the City each year. This review will be for the entire City and will be completed by a consultant to verify that the City's ratings remain accurate.

16. Craig Road Improvements (Design and Grant Match)

FY2019: \$5,970. FY2020: \$33,830. FY2023: \$100,000. FY2024: \$10,000. FY2025: \$250,000.

A traffic study and concept plan were completed in FY2020 to prepare for an FY2021 federal STP grant application for intersection, pavement, and sidewalk improvements to Craig Road from Olde Cabin Road to Olive Boulevard. The funding included in FY2023-FY2025 represents the City's anticipated share of a grant-funded roadway improvement project. The total cost of the project is estimated to be \$1,400,000.

17. New Ballas Sidewalk Extension (Design and Grant Match)

FY2023: \$50,000. FY2024: \$50,000.

This project involves adding a sidewalk along the west side of New Ballas Road between Magna Carta Drive and Rocky Drive to fill in one of the only remaining sidewalk gaps along New Ballas Road. The City plans to apply for a federal TAP grant to assist with the construction cost. The costs shown represent the estimated design fee and City match for the cost to construct the project. The design and construction years are estimated.

18. New Ballas Road Improvements – Phase 2 (Design and Grant Match).

FY2024: \$100,000. FY2025: \$25,000. Future: \$300,000.

This project would involve roadway, sidewalk, and signal improvements along South New Ballas Road, generally from Conway Road to Ladue Road. The cost shown represents the estimated design fee and 20% grant match for the right-of-way and construction phases of the project. The total cost of this project is estimated to be \$1,700,000.

19. New Ballas Road Improvements – Phase 3 (Design and Grant Match).

FY2024: \$100,000. Future: \$250,000.

This project would involve roadway, sidewalk, and signal improvements along North New Ballas Road, generally from Ladue Road to Magna Carta Drive. The cost shown represents the estimated design fee and 20% grant match for the right-of-way and construction phases of the project. The total cost of this project is estimated to be \$1,350,000.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

CAPITAL EQUIPMENT**CAPITAL FUND**

Only capital equipment with a cost of \$20,000 or more, and a useful life of five years or longer, are included in the CIP.

1. Public Works Capital Equipment

FY2020: \$155,884. FY2021: \$243,700. FY2022-FY2025: \$337,000 annual average.

Two one-ton trucks were purchased in FY2020. Recommended purchases for FY2021 include a two-ton dump truck and two leaf vacuums. A continuous vehicle-replacement schedule is recommended to prevent reliance on obsolete equipment, high maintenance costs, and increased equipment down-time.

2. Golf Course Equipment Replacement

FY2020: \$31,751. FY2022: \$20,000. FY2023: \$35,000. FY2024: \$20,000. FY2025: \$40,000.

A new work vehicle and spray system were purchased in FY2020. Several work vehicles are recommended in the five-year plan to replace equipment that will be 15-29 years old when replaced. These vehicles are necessary for the efficient upkeep of the Creve Coeur Golf Course.

3. Police Department Fitness Equipment

Prior Years: \$17,500. FY2020: \$17,500.

The City received a donation of \$35,000 to pay for new fitness equipment for the Creve Coeur Police Department.

6. Phone System Replacement

FY2022: \$48,500.

This project involves the replacement of the phone system used by the City's staff. The City's current phone system will no longer be warranted or supported after 2021. Functioning and reliable phones are essential for City staff to complete their work.

7. Olive Median Street Light Stock

FY2022: \$50,000

The City plans to purchase several decorative street lights to keep in stock so that replacement lights are more readily available if any are struck by a vehicle on Olive Boulevard. Light replacement can currently take months. Insurance proceeds will reimburse the City for the replacement lights.

8. Public Works Facility Gasoline System Replacement

FY2021: \$35,000

The existing gas pumps and fuel-management system are out of date and have begun to require annual maintenance in order to meet the minimum standards to own and operate the fueling station. A new system is recommended to increase efficiency and reliability.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

ADMINISTRATION**CAPITAL FUND****Project Management**

FY2021: \$91,777. FY2022-FY2025: \$98,870 annual average.

This item includes the costs associated with the salary and benefits for a full-time employee to help oversee the Capital Improvement Program in the field. City staff have been successful in obtaining grants to offset costs associated with capital improvements. Grant administration requires oversight by Public Works staff to monitor costs and schedules associated with large grant projects as well as staff to oversee construction of those projects in the field.

CAPITAL FUND FUTURE PROJECTS

The City has many maintenance needs, improvements, and desired facilities that are anticipated for years beyond the five-year projections or for which there is currently not sufficient funding in the capital fund. In addition, several plans have been developed to outline long-term goals for parks and roadways.

The total estimated cost of projects identified as Future Projects for the Capital Fund is approximately \$64 million. The list of Future Projects is attached as Exhibit E.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

BUILDING PROJECT BOND FUND (PROPOSITION P)

Building Project Fund Revenues

In November 2016, Creve Coeur residents voted to approve a \$10.69 million bond measure to provide funding to build a new building for the Police Department and to make accessibility and security improvements to the existing Government Center building. The bonds were publically sold and the revenue was received by the City in FY2017.

Building Project Fund Expenses

The Building Project Bond Fund includes one funding category. Most of the costs listed in this fund were associated with the new Police Department building and site work and are expected to be complete by the end of FY2020.

BUILDING DESIGN AND CONSTRUCTION

BUILDING PROJECT BOND FUND

1. Police Building Professional Services

Prior Years: \$1,305,104. FY2020: \$250,000.

Professional services are necessary for the construction of the new Police Department building and include site survey, building design, site layout, permitting, bidding, and construction inspection. These services also include the consultant hired as the City's representative and project manager for the project. A majority of the design was completed in FY2017-FY2018. Construction-related professional services began in FY2018 and extended through FY2020.

2. Police Building Site Work and Building Construction

Prior Years: \$6,675,712. FY2020: \$1,500,000.

This phase of the project includes the site work, building construction, finishes, and furnishing of the new building for the Police Department. Construction began in FY2018, and the Police Department is currently occupying the building. Some work remains to be completed, and this is expected to be finished by the end of FY2020.

3. Government Center Accessibility and Security Improvements

FY2023: \$521,059.

This project involves assessment of and improvements to various aspects of the Creve Coeur Government Center building in order to bring the building into better compliance with current accessibility and security standards and expectations. These improvements were specifically outlined in the bond referendum.

4. Government Center Electrical Switchgear Replacement

FY2020: \$9,000. FY2021: \$150,000.

This project involves the replacement of the electrical switchgear that serves the Creve Coeur Government Center. The existing equipment is outdated and is recommended for replacement.

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

DEBT SERVICE**BUILDING PROJECT BOND FUND****Debt Service Revenues**

The debt service revenues associated with the Building Project Fund will be collected from real estate and property taxes for the next 20 years (sunset in 2037). The tax collection revenue and interest from the estimated \$0.08 tax levy is estimated to generate approximately \$4.52 million for the five-year period of FY2021-FY2025.

Debt Service Expenses

The debt service expenses associated with the Building Project Bond Fund will be paid through the real and property taxes for the next 20 years (sunset in 2037). The debt service expenditures, including interest and principal expenses, are estimated to be approximately \$3.59 million for FY2021-FY2025.

CITIZEN COMMENTS AND STAFF RESPONSES

Several comments and suggestions for the CIP were submitted for consideration. These comments and the staff responses are included in the attached Exhibit C.

ATTACHMENTS

- Capital Improvement Plan Schedule
- Exhibit A – CIP FY2021-FY2025 Spreadsheet (Capital Fund & Building Project Fund)
- Exhibit B – CIP FY2021-FY2025 Summary Report and Project Descriptions (Capital & Building Funds)
- Exhibit C – Citizen Recommendations for the CIP
- Exhibit D – CIP FY2016-FY2025 Ten-Year Overview Spreadsheet
- Exhibit E – Capital Fund Future Projects

ALL PROJECT DESCRIPTIONS

This report and all of its attachments can be found on the City's website at www.creve-coeur.org/cip.

City Staff and I look forward to reviewing the proposed FY2021-FY2025 Capital Improvement Program during our upcoming City Council Work Sessions.

Sincerely,

Mark Perkins
City Administrator

CC: Planning & Zoning Commission
Finance Committee
Arts Committee
Economic Development Committee
Stormwater Committee
Parks & Historic Preservation Committee
Horticulture, Ecology & Beautification Committee
Energy & Environment Committee

Note: Project numbers correspond to the project numbers on the five-year CIP spreadsheet and narrative report. Projects that ended in FY2019 are not listed in this summary, meaning that some numbers may appear to be missing from this summary.

Schedule for Annual Capital Improvement Program Update Fiscal Years 2021-2025

December 9, 2019 – January 31, 2020	CIP public comment period: City staff solicits input from residents, City committees, staff, and other stakeholders
January 7, 2020	CIP discussion at monthly Department Head meeting
January 31, 2020	Deadline for staff to submit all new and updated CIP project sheets
February 10, 2020	Staff meeting to review the draft CIP.
February 18, 2020	Staff meeting to review final draft of CIP prior to submission to City Council and others.
February 24, 2020	City Administrator submits the draft CIP to City Council, Planning & Zoning Commission, and Finance Committee
March 9, 2020	City Council Work Session #1 – CIP Overview Joint work session with Finance Committee
March 16, 2020	Introduction of CIP to the Planning & Zoning Commission
March 17, 2020	Review of CIP with the Finance Committee
March 23, 2020	City Council Work Session #2 Review Roadway and Sidewalk Programs Review Capital Equipment
March 31, 2020	Review CIP with the Finance Committee
April 6, 2020	Follow-up Meeting with Planning & Zoning Commission
April 13, 2020	Public Hearing before City Council
April 20, 2020	Follow-up Meeting with Planning & Zoning Commission
April 27, 2020	Possible approval of the CIP by City Council

Schedule last revised April 13, 2020.

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EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

CAPITAL FUND

9501 GOVERNMENT FACILITIES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Accessibility Improvements (CDBG Grant)	20,000	23,850	20,000	20,000	-	20,000	20,000	20,000	20,000
02 Police Firing Range Improvements	57,000	57,000	-	-	-	-	-	-	-
03 Government Center Gym HVAC Replacement	-	-	-	36,030	-	-	-	-	-
04 Government Center Renovations (Design)	-	-	-	-	-	250,000	-	-	-
05 Court Office Renovation				-	30,000	-	-	-	-
Subtotal (Government Facilities)	77,000	80,850	20,000	56,030	30,000	270,000	20,000	20,000	20,000
% of Total Capital Fund Outlay	2%	3%	1%	2%	1%	7%	1%	1%	1%

9506 PARKS AND RECREATIONAL FACILITIES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Golf Course Irrigation Replacement (Design and Grant Match)	22,500	-	-	-	-	-	-	-	-
02 Park Bridge Replacement	30,000	6,988	-	-	-	-	-	-	-
03 Parks Master Plan	50,000	48,000	-	2,000	-	-	-	-	-
04 Ice Arena Improvements (Municipal Park Grant)	20,000	267,254	-	111,237	-	-	-	-	-
05 Creve-Coeur-Frontenac Missouri Pacific Trail Study	-	-	30,000	-	-	-	-	-	-
06 Tennis Court Repairs	-	35,635	35,000	-	-	-	-	-	-
07 Millennium Park Trail Study	-	-	20,000	9,135	-	-	-	-	-
08 Golf Course Pond Fountain	-	-	25,000	25,000	-	-	-	-	-
09 Ice Arena Compressor Replacement	-	-	30,000	24,059	-	-	-	-	-
10 Historic Building Rehabilitation and Preservation	-	9,973	35,000	10,000	-	25,000	-	-	-
11 Playground Safety Surface Replacement	-	-	-	30,000	-	-	-	100,000	-
12 Dielmann Recreation Complex Parking Lot Lighting	-	-	20,000	10,000	30,000	-	-	-	-
13 Millennium Park Playground Replacement (Grant Match)	-	-	-	-	30,500	-	-	-	-
14 Ice Arena Refrigerant Switchover (Design and Grant Match)	-	-	-	-	15,000	-	75,000	-	-
15 Malcolm Terrace Park Trail Improvements (CDBG Grant)	-	-	-	-	75,000	-	-	-	-
16 Dielmann Recreation Complex HVAC Replacement - Phase 2	-	-	-	-	-	110,000	-	-	-
17 City Entrance & Park Identification Signage Master Plan	20,000	-	-	-	-	20,000	-	-	-
18 Ice Arena Flooring Replacement	-	-	-	-	-	-	200,000	-	-
19 Venable Memorial Park Improvements (Grant Match)	-	-	-	-	-	-	-	150,000	-
20 Tennis Court Replacement Project (Grant Match)	-	-	-	-	-	-	-	-	30,500
Subtotal (Parks and Recreational Facilities)	142,500	367,850	195,000	221,431	150,500	155,000	275,000	250,000	30,500
% of Total Capital Fund Outlay	4%	13%	8%	7%	4%	4%	8%	7%	1%

9509 STORMWATER	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Stormwater Improvements Per Master Plan	-	-	-	-	-	-	-	-	-
02 Middlebrook Drive Culvert Rehabilitation	250,000	3,174	50,000	50,000	200,000	-	-	-	-
03 Balcon Estates Culvert Improvements	-	-	18,250	10,000	-	-	-	-	-
04 Ballas Culvert Erosion Rehabilitation (Design)	-	-	-	-	-	50,000	-	-	-
Subtotal (Stormwater)	250,000	3,174	68,250	60,000	200,000	50,000	-	-	-
% of Total Capital Fund Outlay	8%	0%	3%	2%	5%	1%	0%	0%	0%

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EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

CAPITAL FUND

9510 STREETS AND SIDEWALKS	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Street and Sidewalk Maintenance Program	1,250,000	1,185,389	1,331,250	1,456,500	1,313,300	1,333,000	1,353,000	1,373,300	1,293,900
02 Street Reconstruction/Rehabilitation	300,000	141,605	365,000	483,993	300,000	-	200,000	-	300,000
03 North New Ballas Sidewalk Phase 2A (TAP Grant)	285,000	157,559	-	-	-	-	-	-	-
04 Coeur De Ville Drive Improvements (STP Grant)	80,000	68,496	-	-	-	-	-	-	-
05 Warson Road Improvement Project (STP Grant)	-	337,387	-	21,959	-	-	-	-	-
06 Fernview Sidewalk Concept Plan			35,000	28,642	-	-	-	-	-
07 New Ballas Median Plantings	-	-	-	-	20,000	-	-	-	-
08 Signal Enhancement Projects	100,000	2,200	-	98,136	240,000	-	-	-	-
09 Emerson Road Improvement Project (STP Grant)	34,508	44,227	35,000	34,752	605,000	-	-	-	-
10 Fernview Drive Resurfacing (STP Grant)	50,000	27,953	-	28,471	336,000	-	-	-	-
11 Mosley Road Improvement Project (STP Grant)	150,000	33,689	20,000	100,000	236,907	1,310,000	-	-	-
12 New Ballas Road Improvements - Phase 1 (STP Grant)	-	-	-	-	150,000	180,000	1,020,000	-	-
13 Lindbergh-Old Olive Intersection (State Cost-Share; STP Grant Match)	-	30,306	-	13,100	190,000	25,000	90,160	1,106,140	-
14 Olive-Lindbergh Interchange Enhancements	-	-	70,000	312,500	-	30,000	-	-	-
15 Pavement Condition Ratings Update	-	-	-	-	-	45,000	-	-	-
16 Craig Road Improvements (Design & Grant Match)	40,000	5,970	-	33,830	-	-	100,000	10,000	250,000
17 New Ballas Sidewalk Extension (Design & Grant Match)	-	-	-	-	-	-	50,000	50,000	-
18 New Ballas Road Improvements - Phase 2 (Design & Grant Match)	-	-	-	-	-	-	-	100,000	25,000
19 New Ballas Road Improvements - Phase 3 (Design & Grant Match)	-	-	-	-	-	-	-	-	100,000
Subtotal (Streets and Sidewalks)	2,289,508	2,034,781	1,856,250	2,611,883	3,391,207	2,923,000	2,813,160	2,639,440	1,968,900
% of Total Capital Fund Outlay	70%	70%	79%	80%	82%	74%	78%	79%	79%

9516 CAPITAL EQUIPMENT	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Public Works Capital Equipment	312,372	222,252	88,948	155,884	243,700	359,600	346,300	326,000	316,100
02 Golf Course Capital Equipment	-	-	35,000	31,751	-	20,000	35,000	20,000	40,000
03 Comprehensive Hardware and Software System - Phase 2	98,000	45,859	-	-	-	-	-	-	-
04 Police Investigations Vehicle Replacement	30,000	31,253	-	-	-	-	-	-	-
05 Police Department Fitness Equipment	-	17,500	-	17,500	-	-	-	-	-
06 Phone System Replacement	-	-	-	-	-	48,500	-	-	-
07 Olive Median Street Light Stock	-	-	-	-	-	50,000	-	-	-
08 Public Works Facility Gasoline System Replacement	-	-	-	-	35,000	-	-	-	-
Subtotal (Capital Equipment)	440,372	316,864	123,948	205,135	278,700	478,100	381,300	346,000	356,100
% of Total Capital Fund Outlay	13%	11%	5%	6%	7%	12%	11%	10%	14%

ADMINISTRATION	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Project Management	83,000	83,612	89,505	90,387	91,777	94,530	97,366	100,287	103,296
Subtotal (Administration)	83,000	83,612	89,505	90,387	91,777	94,530	97,366	100,287	103,296
% of Total Capital Fund Outlay	3%	3%	4%	3%	2%	2%	3%	3%	4%

Attachment: CIP FY2021-FY2025 - P&Z Report of Changes and Request for Recommendation (#20-009: FY2021-FY2025 Capital Improvement

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EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

CAPITAL FUND

TOTAL CAPITAL FUND OUTLAY	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
	3,282,380	2,887,131	2,352,953	3,244,866	4,142,184	3,970,630	3,586,826	3,355,727	2,478,796

9514 DEBT SERVICE	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
N/A	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-
% of Total Year End Figures	0%	0%	0%	0%	0%	0%	0%	0%	0%

TOTAL YEAR END FIGURES (Capital Outlay & Debt Service) - CAPITAL FUND	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
	3,282,380	2,887,131	2,352,953	3,244,866	4,142,184	3,970,630	3,586,826	3,355,727	2,478,796

CAPITAL FUND REVENUES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Beginning Fund Balance (estimated Cash Basis as of July 1)	1,887,040	1,887,040	997,953	1,998,718	1,656,266	830,324	405,468	130,616	110,713
Estimated Capital Improvement Sales Tax Revenue (1/2 Cent)	2,130,456	2,167,326	2,151,761	2,003,242	2,003,242	2,023,274	2,023,274	2,023,274	2,023,274
Estimated Interest Revenue	3,800	9,203	3,000	20,000	10,000	10,000	10,000	10,000	10,000
Est. Additional Revenue (Outside agencies, grants, reimbursement & other)	328,400	422,276	983,600	479,172	893,000	852,500	868,700	892,550	20,000
Proceeds from Equipment Sales	10,000	-	-	-	10,000	10,000	10,000	10,000	10,000
General Fund Transfers In	400,000	400,000	400,000	400,000	400,000	650,000	400,000	400,000	400,000
Public Safety Transfer In	-	-	-	-	-	-	-	-	-
Total Revenues & General Fund Transfers In - Capital Fund	2,872,656	2,998,805	3,538,361	2,902,414	3,316,242	3,545,774	3,311,974	3,335,824	2,463,274
Total Anticipated Year End Expenditures	3,282,380	2,887,131	2,352,953	3,244,866	4,142,184	3,970,630	3,586,826	3,355,727	2,478,796
Ending Fund Balance (Cash Basis) - Capital Fund	1,477,316	1,998,714	2,183,361	1,656,266	830,324	405,468	130,616	110,713	95,192

ESTIMATED ADDITIONAL CAPITAL FUND REVENUE (FUNDING SOURCES)	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Community Development Block Grants for ADA Improvements	20,000	23,850	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Warson Road Improvement Project (STP Grant)	-	241,246	-	-	-	-	-	-	-
Emerson Road Improvement Project (STP Grant)	-	-	444,000	-	444,000	-	-	-	-
North New Ballas Sidewalk Improvement Project (TAP Grant)	212,000	122,180	-	-	-	-	-	-	-
Fernview Drive Improvement Project (STP Grant)	-	-	-	-	250,000	-	-	-	-
North New Ballas Lighting and Signal Enhancements - Olive TDD	60,000	-	-	62,000	-	-	-	-	-
North New Ballas Signal Enhancements - Development Escrow	30,000	-	-	25,705	-	-	-	-	-
Ladue Court Escrow Reimbursement	-	-	-	17,226	-	-	-	-	-
Ice Arena Improvements - Municipal Park Grant	-	-	397,600	347,841	-	-	-	-	-
Mosley Road Improvements - North Phase (STP Grant)	-	-	-	-	84,000	676,000	-	-	-
Park Master Plan (Municipal Park Planning Grant)	6,400	-	-	6,400	-	-	-	-	-
Donation for Police Fitness Equipment	-	35,000	-	-	-	-	-	-	-
New Ballas Improvements - Phase 1 (STP Grant)	-	-	-	-	-	144,000	816,000	-	-
Lindbergh-Old Olive Intersection (State Cost-Share Program)	-	-	-	-	95,000	12,500	32,700	872,550	-
Subtotal	328,400	422,276	861,600	479,172	893,000	852,500	868,700	892,550	20,000

DRAFT 4/14/2020

EXHIBIT A
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY2021 - FY2025

BUILDING PROJECT BOND FUND (PROP P)

BUILDING PROJECT BOND FUND REVENUES	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Beginning Fund Balance (estimated Cash Basis as of July 1)	8,739,611	8,739,612	2,928,351	2,928,351	1,247,351	1,109,351	1,121,351	610,292	620,292
Estimated Bond Proceeds	-	-	-	-	-	-	-	-	-
Estimated Interest Revenue	33,600	130,361	200	78,000	12,000	12,000	10,000	10,000	10,000
Transfers In	-	-	-	-	-	-	-	-	-
Total Revenues & Transfers In	33,600	130,361	200	78,000	12,000	12,000	10,000	10,000	10,000
9501 BUILDING DESIGN AND CONSTRUCTION	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
01 Police Building Professional Services	200,000	369,190	25,000	250,000	-	-	-	-	-
02 Police Building Site Work and Building Construction	5,460,217	5,572,432	1,418,341	1,500,000	-	-	-	-	-
03 Government Center Assessibility & Security Improvements	-	-	-	-	-	-	521,059	-	-
04 Government Center Electrical Switchgear Replacement			17,500	9,000	150,000	-	-	-	-
Transfers Out	-	-	-	-	-	-	-	-	-
Total Anticipated Year End Expenditures & Transfers	5,660,217	5,941,622	1,460,841	1,759,000	150,000	-	521,059	-	-
Ending Fund Balance (Cash Basis) - Building Project Bond Fund (Prop P)	3,112,994	2,928,351	1,467,710	1,247,351	1,109,351	1,121,351	610,292	620,292	630,292
9514 DEBT SERVICE	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
DEBT SERVICE (PROP P) REVENUES									
Beginning Fund Balance (estimated Cash Basis as of July 1)	258,532	258,532	380,522	362,136	552,380	745,524	932,467	1,118,061	1,307,755
Estimated Property Tax Collection Revenue	832,396	815,260	901,000	901,000	901,000	901,000	901,000	901,000	901,000
Estimated Interest Revenue	1,000	-	1,000	2,500	2,500	2,500	2,500	2,500	2,500
Total Anticipated Revenues	833,396	815,260	902,000	903,500	903,500	903,500	903,500	903,500	903,500
DEBT SERVICE (PROP P) EXPENSES									
Estimated Expenditures	-	250	250	250	250	250	250	250	250
Estimated Interest Expenses	291,406	291,406	283,006	283,006	270,106	261,306	247,656	233,556	236,956
Estimated Principal Expenses	420,000	420,000	430,000	430,000	440,000	455,000	470,000	480,000	490,000
Total Anticipated Expenditures	711,406	711,656	713,256	713,256	710,356	716,556	717,906	713,806	727,206
Ending Cash Balance	380,522	362,136	569,266	552,380	745,524	932,467	1,118,061	1,307,755	1,484,049

CAPITAL IMPROVEMENT PROGRAM SUMMARY

TOTAL COMBINED CAPITAL PROGRAM (CAPITAL FUND & BUILDING PROJECT BOND FUND)	FY2019 BUDGETED	FY2019 ACTUAL	FY2020 BUDGETED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED	FY2023 PROJECTED	FY2024 PROJECTED	FY2025 PROJECTED
Total Combined Revenues & Transfers In	3,739,652	3,944,426	4,440,561	3,883,914	4,231,742	4,461,274	4,225,474	4,249,324	3,376,774
Total Combined Anticipated Year End Expenditures & Transfers	9,654,003	9,540,409	4,527,050	5,717,122	5,002,540	4,687,187	4,825,791	4,069,533	3,206,002
Ending Fund Balance (Cash Basis) - All Capital Funds	4,970,832	5,289,202	4,220,337	3,455,997	2,685,198	2,459,286	1,858,969	2,038,760	2,209,533



CITY OF CREVE COEUR

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CAPITAL FUND

BUILDING PROJECT BOND FUND

FISCAL YEARS 2021-2025

EXECUTIVE SUMMARY

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CAPITAL FUND

BUILDING PROJECT BOND FUND

FISCAL YEARS 2021-2025



EXECUTIVE SUMMARY

The Capital Improvement Program (CIP) is the City's long-range plan for improvements to infrastructure, parks, and other community facilities. The CIP is a tool to assess the long-term capital needs, values, and desires of the City and to establish funding of high-priority projects in a timely and cost-effective manner. This plan is a living document and is subject to amendment by the City Council.

The CIP is intended to ensure that policy makers are responsible to the citizens of Creve Coeur with respect to the expenditure of City funds for capital improvements.

CIP Goals

The following are goals of the CIP:

- Provide a planned replacement of deteriorating infrastructure
- Repair deteriorated infrastructure
- Improve operational or functional aspects of existing infrastructure
- Add new facilities and improve the community's infrastructure to enhance the quality of life in Creve Coeur
- Provide for planned replacement of major equipment required for City operations

Relationship between the CIP and the Creve Coeur 2030 Comprehensive Plan

According to the Creve Coeur 2030 Comprehensive Plan:

Within the Creve Coeur 2030 Comprehensive Plan Update, many projects are identified or implied, as specific projects or as conceptual ideas. These projects and others, resulting from recommendations of the Comprehensive Plan, should be developed and incorporated in the City's annual CIP review process. Further detail and refinement of identified and conceptual projects, facilities, or infrastructure improvement needs will be required as the implementation of the Comprehensive Plan occurs.

CIP Criteria

To be eligible for the CIP, projects or equipment must have a useful life of at least five years and a minimum cost of \$20,000.

A special set of criteria has been identified to assist in assessing and prioritizing CIP projects. Proposed projects reflect the goals of the Comprehensive Plan through their demonstration of these criteria:

- *Availability of Outside Funding:* projects that are eligible for and are likely to be considered for grant funding or shared-cost programs.
- *Beautification:* aesthetic improvements to natural habitats or frequently traveled or visited areas within the City for public enjoyment such as the use of public art on public lands

- *Citizen Demand*: projects that have received a level of demonstrated citizen support or demand, including support of City departments, boards, committees, and commissions.
- *Condition of Existing Facility*: improvements that replace or maintain the City's infrastructure, facilities, or equipment so that it remains in a serviceable, safe, and efficient condition.
- *Coordination (projects, regulations, City-adopted plans)*: projects that fit within planned coordination between multiple projects or agencies to reduce costs or minimize disruption to services, meet state or federal law requirements, or identified in other City-adopted plans.
- *Economic Growth*: projects focused on maintaining housing values and attracting businesses, residents, or visitors to the City. Projects supporting private development must include return on investment ratios or a fully documented cost/benefit analysis.
- *Operating Efficiency*: equipment or facilities improvements to streamline work processes or benefit from technological advancements; projects which reduce the cost of operations will receive priority. Projects which increase the cost of operations shall have identified trade-offs to support those additional costs.
- *Protection & Conservation*: improvements to the City's park system or historical landmarks that allow these facilities to be enjoyed by future generations or projects that reduce the City's environmental impact.
- *Public Safety*: improvements that focus on preserving and protecting the general public from harm and reducing the City's risk exposure.

Development and Adoption of the CIP

By City charter, a draft of the five-year CIP is proposed by the City Administrator to the City Council no later than the second regular meeting in February of each year. Prior to the submittal of the draft CIP to the City Council, public input is obtained through the City newsletter, website, and the City's boards, committees, and commissions.

Prior to the City Council's adoption of the CIP, and as required by City charter, the CIP is submitted to the Finance Committee for recommendations and comments. The Planning & Zoning Commission also reviews the plan emphasizing the location, extent, and character of the proposed projects prior to City Council review, approval, and adoption. A public hearing is held by the City Council to review the final draft of the CIP in March or April, prior to adoption.

The CIP includes a description of each proposed project and equipment with details regarding justification, cost estimate, operating and maintenance budget impact, and funding sources.

FY2021-FY2025 CIP Overview

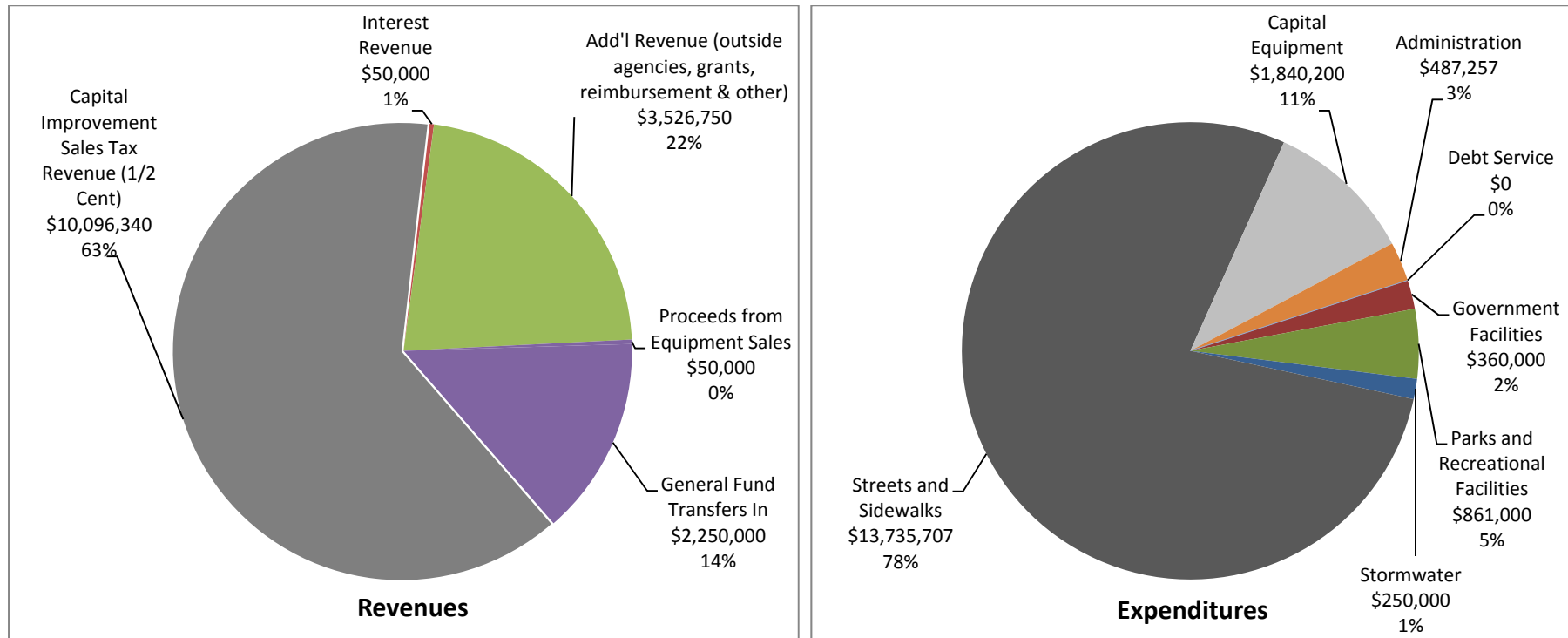
Capital Fund

Over the next five years, the projected revenues for capital projects total approximately \$15.97 million. The total cost of capital projects over the next five years is estimated at \$17.53 million. The Capital Fund's current fund balance will compensate for this discrepancy, but increasing revenue or decreasing expenses appears to be necessary in future budgets.

The half-cent capital improvement sales tax, grants, and transfers from the general fund serve as the primary funding sources for the City's capital projects. The City projects that the current pandemic will cause an immediate 7.6% decrease in sales tax revenue, and the CIP holds this projection for FY2021 before increasing slightly for FY2022 through FY2025. The length and scale of the economic impact of the pandemic is uncertain. The budget and projects planned in the CIP will need to be re-evaluated adjusted if the revenues are significantly higher or lower than anticipated. To limit costs, the proposed CIP emphasizes maintenance and replacement of existing facilities and equipment over the introduction of additional facilities or programs.

The City plans to seek grant funding to assist with the cost of several of the major roadway, sidewalk, and park improvement projects. These grants typically require the City to fund a portion of the project, which is referred to as a local "grant match." Several projects in the five-year CIP include grant matches and are noted accordingly. If the City is awarded the anticipated grant, future capital improvement plans will include the total project expenses and revenues in the applicable years.

Capital Fund Revenues and Expenses by Category for FY2021 - FY2025



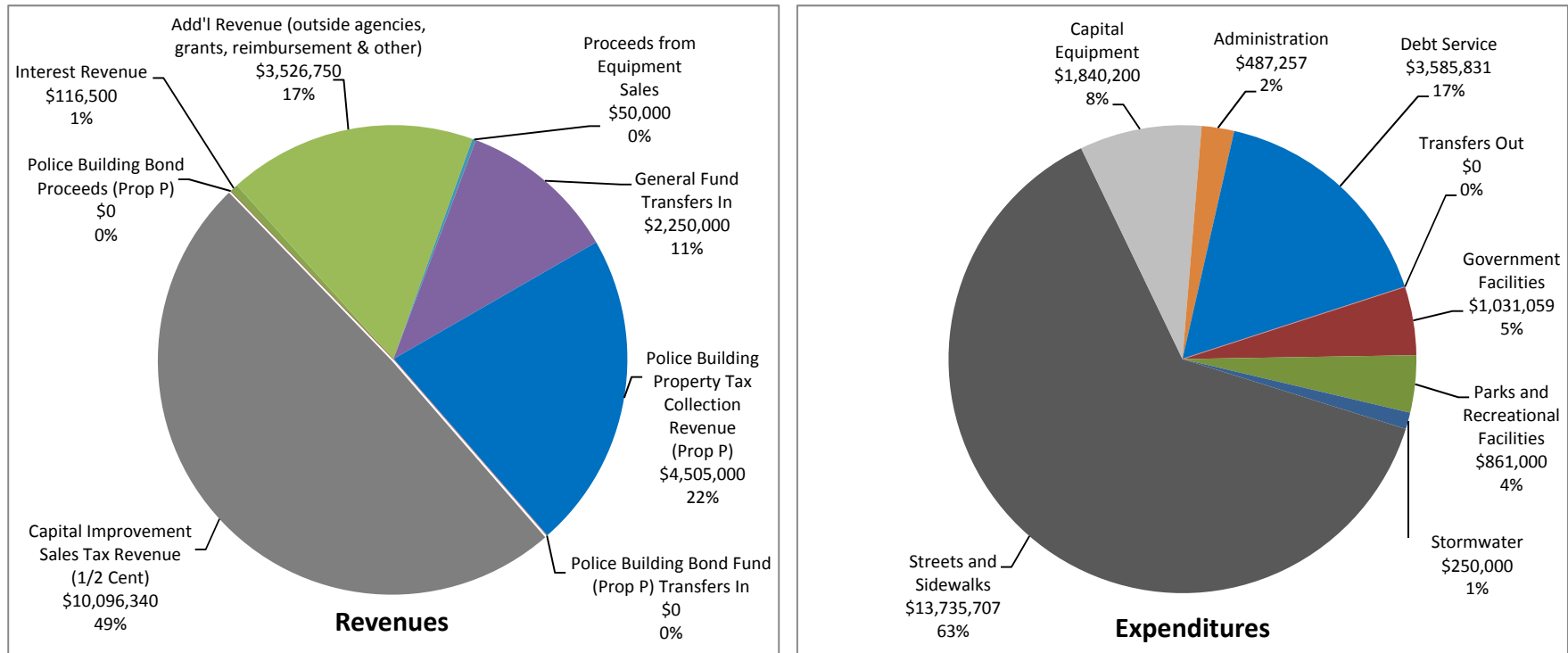
Building Project Bond Fund (Proposition P)

In November 2016, Creve Coeur voters approved a ballot measure authorizing the issuance of general obligation bonds of \$10.69 million for the purpose of constructing, furnishing and equipping a new police station on the existing government center property and making safety, security and accessibility renovations to the existing government center. The expenses for the police building began in FY2018 and will continue through FY2020. Accessibility and security improvements to the existing Government Center building are tentatively planned for FY2023. The debt service for the Building Project Bond Fund will be paid through a 20-year real estate and personal property tax levy, which is anticipated to sunset in 2037.

Combined Capital Fund and Building Project Bond Fund

Over the next five years, the total projected revenues for capital projects in both the Capital and the Building Project Bond funds are estimated to be approximately \$20.54 million. The half-cent capital improvement sales tax and the building project bond property tax collection serve as the primary funding sources for FY2021-FY2025. The total combined projected expenses for capital projects over the next five years is estimated at \$21.79 million.

Combined Capital Fund & Building Project Bond Fund Revenues and Expenses by Category for FY2021 - FY2025



*Bond proceeds for the Building Project Bond Fund occurred in FY2017 and therefore are not reflected in FY2021-FY2025 total revenues.

For more information about the CIP, contact Matt Wohlberg, City Engineer, at mwohlberg@crevecoeurmo.gov or (314) 442-2084.

CAPITAL FUND PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2021-2025



CAPITAL FUND**9501 – GOVERNMENT FACILITIES**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2021-2025

9501 GOVERNMENT FACILITIES - 01

ACCESSIBILITY IMPROVEMENTS (CDBG)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$20,000	\$20,000	\$0	\$20,000	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000

Project Description:

In FY2021, approximately \$20,000 of Community Development Block Grant (CDBG) funds have been committed to providing accessibility improvements to the parking lot at Malcolm Terrace Park. No funding is shown here for FY2021, because the Malcolm Terrace Park project is a separate project under Parks and Recreational Facilities. Projects in FY2022-FY2025 will focus on accessibility improvements for public facilities elsewhere in the City.

Existing Condition:

Projects are designed to improve facilities that are out of compliance with the current Americans with Disabilities Act (ADA) regulations.

Justification: *Public Safety; Coordination; Availability of Outside Funding*

Each project seeks to improve ADA compliance through accessibility improvements to government facilities and along public pedestrian routes. The focus of these projects is to provide public safety as well as to upgrade existing facilities.

Operating Budget Impact:

None. Projects that are undertaken as part of this program are relatively small in scope, and the City typically receives 100% reimbursement for the project costs through the CDBG federal grant.

Comments:

The City is designating this funding with the anticipation of receiving grant funding in the amount of \$20,000 from the CDBG Commission. This is an annual grant available to municipalities to address accessibility projects. Scheduling of this project is subject to a successful grant application and availability of grant funding.

The funding shown in Prior Years reflects improvements to the pedestrian signal on North New Ballas Road at Magna Carta Drive in FY2020.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	20,000
Equipment	\$	
Other	\$	
Annual Total	\$	20,000

9501 GOVERNMENT FACILITIES - 04

GOVERNMENT CENTER RENOVATIONS (DESIGN)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$250,000	\$0	\$250,000	\$0	\$0	\$250,000	\$0	\$0	\$0	TBD

Project Description:

This project involves reviewing the existing concept-level renovation plans for the Creve Coeur Government Center, updating these plans, and developing construction drawings for the renovation project. The design is expected to include modifications to the City Council chamber, employee work spaces, and building equipment. Funds are specified in FY2022 for the design phase, which could extend into FY2023. Construction funds will be programmed in the appropriate fiscal years once the renovation plans and the construction schedule become more clearly defined.

Existing Condition:

The Creve Coeur Government Center has inadequate space for staff, meetings, archives, and storage. The former Police Department and the rest of the Government Center will require extensive renovations to move departments to more accessible locations and to make the Government Center more accommodating, helpful, and useful for both residents and staff.

Justification: *Operating Efficiency; Condition of Existing Facility*

Renovation of the Government Center will require careful design in order to create a building layout that promotes efficient and effective service to the City's residents.

Operating Budget Impact:

None.

Comments:

The City has set aside \$2.2 million in its General Fund for use for renovations to the Government Center. The cost of this project will be offset by General Fund transfers into the Capital Fund.

Expenditure Type:

Planning, Design & Engineering	\$ 250,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 250,000

9501 GOVERNMENT FACILITIES - 05

COURT OFFICE RENOVATION

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$30,000	\$0	\$30,000	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves renovations and expansion of the existing court offices on the lower level of the Creve Coeur Government Center. Several adjacent offices that were previously used by the Police Department will be incorporated into the court office. The renovations will include new ceiling tiles, lighting, carpet, and paint in the offices and a new courtesy window.

Existing Condition:

The existing court offices are outdated with limited space for storage. Adjacent to the court offices are several offices that were used by the Police Department before the police staff moved to their new building.

Justification: *Coordination; Operating Efficiency; Condition of Existing Facility*

Renovation of the court offices will improve the ability of the court staff to serve the public and will make use of the space now available. The extra space will allow the City to consider expansion of the court function.

Operating Budget Impact:

New, energy-efficient light fixtures will decrease future electricity bills.

Comments:

The City is exploring the feasibility of creating and hosting a group of area municipal courts, similar to the West Central Dispatch Center.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	30,000
Equipment	\$	
Other	\$	
Total	\$	30,000

CAPITAL FUND**9506 – PARKS AND RECREATIONAL FACILITIES**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2021-2025**

9506 PARKS AND RECREATIONAL FACILITIES – 00

PARK IMPROVEMENTS (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
TBD	TBD	\$30,500	\$0	\$0	\$0	\$0	\$0	\$0	\$30,500

Project Description:

Funds listed in this account represent the City's anticipated matching funds for projects funded through Municipal Park Grants, for which the City can apply every two years. It is anticipated that, if successful, the grant in FY2021 will be used to replace the playgrounds at Millennium Park, FY2023 will assist with the Ice Arena Refrigerant Switch Over at the Creve Coeur Ice Arena, and FY2025 will be used to replace the tennis courts at Venable Memorial Park and/or Lake School Park. The CIP includes specific project descriptions for FY2021, FY2023, and FY2025. Refer to each project sheet for more information.

Existing Condition:

Numerous aspects of the City's parks (including tennis courts, playgrounds, walking paths, pavilions, ball fields, and other amenities) require maintenance, improvements, or replacement.

Justification: *Availability of Outside Funding; Condition of Ex. Facility; others depend upon the project* Park grants are competitive. By budgeting for the local match, a grant application can be completed without searching for available funds or making amendments to the program. Available grants may help to address any number of CIP criteria including, but not limited to, improving condition of existing facilities, operating efficiency, beautification, and protection and conservation of the park system or historical landmarks. Finally, these projects are supported by the Parks Master Plan and/or the needs assessments of the Dielmann Recreation Complex (FY2014) and Golf Course (FY2016) and the Parks Master Plan (FY2019-FY2020).

Operating Budget Impact:

The improvements brought by these projects typically replace old or failing systems that require significant maintenance. These improvements should reduce operating costs.

Comments:

The current maximum amount of funding that the City is eligible for through the Municipal Park Grant program is currently \$475,000 for a given project. These grants are competitive, and the City's contribution to the project affects the project application score and likelihood of a funding award. The City plans to provide a 6% grant match for its projects in order to maximize the number of points related to the City's contribution, which would make the grant match about \$30,500 for a project that receives the maximum grant funding.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	30,500
Equipment	\$	
Other	\$	
Total (Future Grant Match)	\$	30,500

Anticipated Municipal Park Grant Application Schedule:

FY2021 – Millennium Park Playground Replacement

FY2023 – Ice Arena Refrigerant Switch Over

FY2025 – Venable Memorial Park and/or Lake School Park Tennis Court Replacement

9506 PARKS AND RECREATIONAL FACILITIES – 10

HISTORIC BUILDING REHABILITATION AND PRESERVATION

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$44,973	\$0	\$44,973	\$19,973	\$0	\$25,000	\$0	\$0	\$0	\$200,000

Project Description:

This project involves the assessment, improvement, and preservation of three locally historic buildings that are located in the City's Parks: Hackman Cabin and Clester Cabin in Conway Park, and Lake School House in Lake School Park. Following an assessment of these buildings in FY2019, building repairs and stabilization efforts are recommended for the preservation of the Lake School House in FY2020 and FY2022.

Existing Condition:

All three of the buildings need significant repairs and improvements to help keep rain and/or animals from entering the buildings.

Justification: *Protection and Conservation; Operating Efficiency; Condition of Existing Facility*

The Parks and Historic Preservation Committee requested that the City invest into these buildings, as they are considered to be part of the heritage of Creve Coeur.

Operating Budget Impact:

Structural repairs to stabilize these buildings are expected to decrease future operating costs for building repairs.

Comments:

Funding in prior years includes the assessment of the cabins in FY2019 and the installation of informational signs for these buildings and the Tappmeyer House in FY2019. Improvements to Hackman Cabin and Clester Cabin were deferred to future years due to budget constraints.

Expenditure Type:

Planning, Design & Engineering	\$ 5,100
Land Acquisition	\$
Construction	\$ 35,000
Equipment	\$ 4,873
Other	\$
Total	\$ 44,973

9506 PARKS AND RECREATIONAL FACILITIES – 11

PLAYGROUND SAFETY SURFACE REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Year	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$100,000	TBD	\$100,000	\$30,000	\$0	\$0	\$0	\$100,000	\$0	\$75,000

Project Description:

This project involves the replacement of damaged areas and rejuvenation or replacement of the rubberized safety surface beneath the City's playgrounds. The surface beneath the southern playground at Millennium Park will be overlaid with a new rubberized surface in order to bring it into compliance and allow it to open for the season. This safety surface failed its annual tests in late 2019, forcing the City to close the playground.

Existing Condition:

The rubberized surfaces beneath the City's playgrounds in Millennium Park, Conway Park, and Venable Memorial Park provide the required protection for children and other users against injury from a fall off of the playground or swing set. The edges of the south playground surface at Millennium Park were repaired in FY2017, but this surface no longer meets safety standards and needs rejuvenation with an overlay of a new rubberized surface. Staff will continue to evaluate the surfaces at Conway Park and Venable Memorial Park and will recommend repairs or replacement to these surfaces accordingly. At this time, the safety surface at Venable Memorial Park is scheduled for replacement in FY2024, as it is expected to be the next to need replacement after Millennium Park.

Justification: *Public Safety; Availability of Outside Funding; Condition of Existing Facility*

Keeping the safety surface of the City's playgrounds in good condition is required for the continuing use of the playgrounds and the safety of the playgrounds' users.

Operating Budget Impact:

None.

Comments:

This work would qualify for grant funding through the Municipal Parks Grant program, but the next several grant opportunities will be directed toward other needs.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	100,000
Equipment	\$	
Other	\$	
Total (FY2024)	\$	100,000

9506 PARKS AND RECREATIONAL FACILITIES – 12

DIELMANN RECREATION COMPLEX PARKING LOT LIGHTING

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$40,000	\$0	\$40,000	\$10,000	\$30,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project will include replacing the existing light fixtures with new and additional LED light fixtures for the two parking lots at the Dielmann Recreation Complex. The purpose of the project is to provide adequate and consistent light for the parking lots to increase safety and functionality of the lots.

Existing Condition:

Currently, the parking lots are lit with light poles that were installed by and are maintained by Ameren. The front parking lot has some older and some newer light fixtures, and the back parking lot only has two light poles, but needs several more to cover the entrance and underserved sections of the lot.

Justification: *Public Safety; Operating Efficiency; Condition of Existing Facility*

The safety of the users of the Dielmann Recreation Complex is a primary concern, and the new lights will help limit the City's risk expose. The current poles provide minimal, inadequate coverage, and these light poles need frequent maintenance. The new poles will have LED fixtures that will provide better, more consistent light output.

Operating Budget Impact:

The project would not change that the City currently pays a monthly fee to Ameren for replacing bulbs that go out and for fixing damages that occur to the poles that are out of the City's control (e.g. wind or storm damage). However, the new LED lights should result in lower monthly electric bills.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$ 5,000
Land Acquisition	\$
Construction	\$ 35,000
Equipment	\$
Other	\$
Total	\$ 40,000

9506 PARKS AND RECREATIONAL FACILITIES – 13

MILLENNIUM PARK PLAYGROUND REPLACEMENT (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
TBD	TBD	\$30,500	\$0	\$30,500	\$0	\$0	\$0	\$0	\$0

Project Description:

This project would remove and replace the two main playgrounds and their safety surfaces at Millennium Park. The City Share reflects the required 6% local contribution for a Municipal Park Grant. The City plans to seek \$475,000 in grant funding in FY2021. The FY2021 budget will need to be adjusted to reflect the full project cost if the City is successful in obtaining a grant for the project.

Existing Condition:

The primary (northern) playground at Millennium Park was constructed in 2004, and the secondary (southern) playground was added in 2007. The City capped the safety surface for the northern playground and made repairs to the southern playground's surface in 2017. The safety surface beneath the southern playground no longer provides the cushioning that is required, so the City was forced to close this playground in early 2020. The equipment at the northern playground and the surface beneath it are wearing out and require replacement.

Justification: *Operating Efficiency; Condition of Existing Facility; Availability of Outside Funding; Safety*
The safety surface of the southern playground has failed its annual inspection will be closed until repairs can be made. The safety surface for the northern playground is older and the 2017 overlay is expected to expire soon. These surfaces must meet safety standards in order for the playgrounds to be open.

Operating Budget Impact:

The northern playground is a European design, and the age and style of the playground make it difficult to find parts for the equipment. New playground equipment and safety surfaces are expected to cost less to maintain.

Comments: A grant will be applied for in FY2021 and, if approved, construction will take place in late FY2021.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	30,500
Equipment	\$	
Other	\$	
Total (Grant Match)	\$	30,500

9506 PARKS AND RECREATIONAL FACILITIES – 14

ICE ARENA REFRIGERANT SWITCH-OVER (DESIGN AND GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$90,000	TBD	\$90,000	\$0	\$15,000	\$0	\$75,000	\$0	\$0	\$0

Project Description:

The current system that cools the ice at the Creve Coeur Ice Arena operates using R-22 (Freon), a product that is now illegal to import into or produce in the United States. This project would include transitioning the current cooling system, through retrofit or replacement of the existing equipment, to an alternative coolant such as Ammonia or CO₂. A design of the system is planned for FY2021 to determine the City's options. The total cost of this project is estimated to be \$550,000. The City Share reflects the remaining \$75,000 if the City is awarded a \$475,000 Municipal Park Grant in FY2023. The full project cost will be programmed into the appropriate fiscal years if the City is successful in obtaining a grant for the project.

Existing Condition:

The existing equipment is currently operational, but the three compressors in this system have required frequent maintenance. Even small repairs to the system can result in a loss of coolant and, therefore, require a system "charge" or refill. Vendors who do these repairs are responsible for disposing of lost Freon, and the City often incurs service charges associated with these disposals.

Justification: *Operating Efficiency; Condition of Existing Facility; Coordination; Availability of Outside Funding; Protection & Conservation*

This project directly affects operational efficiency. Under the U.S. Clean Air Act & the Montreal Protocol on Substances that Deplete the Ozone Layer, use of R-22 refrigerant has been phased out of use because of the damage these types of substances can cause to the earth's ozone layer. Starting on January 1, 2020, the U.S. no longer produced or imported R-22. Any repair or catastrophic system failure could mean that the City will be unable to recharge the system to maintain cooling.

Operating Budget Impact:

Once the switch over occurs, the cost of maintaining the system will be included in the building's preventive maintenance contract. The real savings will be seen when the system moves away from the expensive R-22 cost, simply due to the lack of supply for R-22 coolant.

Comments: A grant will be applied for in FY2023 and, if approved, the switchover will take place in FY2023.

Expenditure Type:

Planning, Design & Engineering	\$ 40,000
Land Acquisition	\$
Construction	\$
Equipment	\$ 50,000
Other	\$
Total (Grant Match)	\$ 90,000

9506 PARKS AND RECREATIONAL FACILITIES – 15

MALCOLM TERRACE PARK TRAIL IMPROVEMENTS (CDBG GRANT)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$75,000	\$20,000	\$55,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0

Project Description:

The project involves updating and repairing two asphalt trails and the parking lot at Malcolm Terrace Park. The City has applied for \$20,000 in Community Development Block Grant (CDBG) funding to assist with the cost of this project.

Existing Condition:

Asphalt paths are in use at Venable Memorial Park, Conway Park, Malcolm Terrace Park, and Millennium Park. Most of these trails are in good condition and need preventative maintenance to preserve their condition. The paths at Malcolm Terrace Park, Conway Park, and an access path to Venable Memorial Park, are in poor condition and require resurfacing and localized replacement.

Justification: *Public Safety; Cond. of Existing Facility; Availability of Outside Funding; Citizen Request*

The City's parks are a sense of pride for Creve Coeur, and the City is obligated to provide adequate and safe access to the parks. Grant funding to assist with maintaining this access allows the City to meet its obligations at a reduced cost.

Operating Budget Impact:

Asphalt path maintenance can be costly. Replacement of the paths at Malcolm Terrace Park will reduce maintenance costs for the near future.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	75,000
Equipment	\$	
Other	\$	
Total	\$	75,000

9506 PARKS AND RECREATIONAL FACILITIES – 16

DIELMANN RECREATION CENTER HVAC REPLACEMENT – PHASE 2

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$110,000	\$0	\$110,000	\$0	\$0	\$110,000	\$0	\$0	\$0	\$0

Project Description:

This project involves the removal and replacement of the remaining air handler and condensing unit that serve the Dielmann Recreation Complex. The replacement of this equipment will complement and complete the air handler, condenser, and boiler units that were replaced in FY2018.

Existing Condition:

The Dielmann Recreation Complex uses two air handlers and two condensing units for its heating and air conditioning. The two units that are proposed to be replaced are beyond their useful lives.

Justification: *Operating Efficiency; Condition of Existing Facility*

New units will be more efficient than the existing units, and the new units are expected to require little or no maintenance for several years.

Operating Budget Impact:

Increased efficiency and limited maintenance should result in lower operating costs.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	110,000
Other	\$	
Total	\$	110,000

9506 PARKS AND RECREATIONAL FACILITIES – 17

CITY ENTRANCE AND PARK IDENTIFICATION SIGNAGE MASTER PLAN

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$20,000	\$0	\$20,000	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0

Project Description:

This project includes the City contracting with a consultant to design new City Entrance signs/monuments, Park Identification signs/monuments, and directional sign leading visitors to City Facilities.

Existing Condition:

City entrance signs are about 15 years old and some are damaged and in need of replacement. We have the same issue with the directional signs leading visitors to City facilities. There has been an interest expressed by the Park and Historical Preservation Committee to construct new signage/monuments at the entrance of each City Park.

Justification: *Condition of Existing Equipment; Beautification; Coordination*

Existing signs are old and in need of replacement. Some signs are missing and others are damaged beyond repair. The park identification signs are extremely old and require replacement, however, a couple of parks have brick monument signs that are fairly new. Development of a Sign Masterplan was included as an action item in the FY2018-2021 Strategic Plan.

Operating Budget Impact:

This is a design and cost estimate for the purchase and construction new signage. There is no effect on the operating budget. Once designed, we can obtain cost estimates and budget funding in future years for the manufacturing and installation of the new signs/monuments.

Comments:

By reviewing the entire signage needs of the city, we will have an opportunity to evaluate the current sign types and locations. Although the signs for Parks may be different than the City Entrance signs, we can create a signage theme so that there are similarities with all City signs thus creating sign branding unique to Creve Coeur.

Expenditure Type:

Planning, Design & Engineering	\$ 20,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 20,000

9506 PARKS AND RECREATIONAL FACILITIES - 18

ICE ARENA FLOORING REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$200,000	\$0	\$200,000	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0

Project Description:

This project involves replacing the rubberized flooring that is around the ice rink, in the player's locker rooms, and in the referee's changing room.

Existing Condition:

A majority of the flooring is the original floor from the major renovation project in 2003 and is near the end of its useful life. Some smaller areas have been replaced due to high traffic areas, including the areas beneath the player's benches and near the public entrance gate area that leads onto the ice rink.

Justification: *Public Safety; Condition of Existing Facility*

The project will focus on preserving and protecting the general public from harm when using the ice rink for public skating, special events, or ice rentals and will reduce the City's risk exposure. The project will update the aging flooring and provide an aesthetic look to match the rest of the facility.

Operating Budget Impact:

The rink's ice will need to be taken out to allow the concrete floor temperature to rise to the manufacturer's recommendation to warranty the installation. This will cause a shutdown of the ice for approximately three weeks, two for the floor project and one for the removal and installation of new ice. The Ice Arena will schedule the replacement of the flooring to coincide with a shutdown of the ice in order to limit the construction impact on ice users and possible revenue losses. Once the floor is installed, there will be minimal upkeep involved.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	200,000
Equipment	\$	
Other	\$	
Total	\$	200,000

9506 PARKS AND RECREATIONAL FACILITIES – 19

VENABLE MEMORIAL PARK IMPROVEMENTS (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
TBD0	TBD	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0

Project Description:

In FY2023, the City plans to apply for a Land and Water Conservation Fund (LWCF) grant to make improvements to Dr. H. Phillip Venable Memorial Park. The project will involve such improvements to the park as a new pavilion, new tennis courts, improved walking paths, and more accessible parking. The amount shown in FY2023 is the City's planned 50% grant match for a project that is expected to cost approximately \$300,000. Upon successfully obtaining the grant, the actual costs will be programmed into the FY2024 capital budget through a budget adjustment.

Existing Condition:

Several of the facilities at Venable Memorial Park are ageing and require updates or replacement. The asphalt tennis courts have been overlaid multiple times and can no longer be reliably repaired, and facilities like the pavilion, asphalt paths, and restrooms have not been updated in the past ten years.

Justification: *Availability of Outside Funding; Citizen Demand; Public Safety*

The LWCF grant will allow the City to maximize the effect of the funding available for improvements to Venable Memorial Park.

Operating Budget Impact:

New facilities are expected to require less annual maintenance and fewer funds than the existing equipment.

Comments:

The planned playground safety surface replacement for Venable Memorial Park in FY2024 could be combined with these improvements to further maximize the funding request through the LWCF grant.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	150,000
Equipment	\$	
Other	\$	
Total (Grant Match)	\$	150,000

9506 PARKS AND RECREATIONAL FACILITIES – 20

TENNIS COURT REPLACEMENT PROJECT (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$30,500	TBD	\$30,500	\$0	\$0	\$0	\$0	\$0	\$30,500	\$0

Project Description:

In FY2025, the City plans to apply for a Municipal Park Grant to substantially fund the replacement of the courts at Lake School Park and/or Venable Memorial Park with post-tensioned concrete courts. The amount shown in FY2023 is the City's planned grant match for a project that is expected to cost approximately \$500,000. Upon successfully obtaining the grant, the actual costs will be programmed into the FY2025 capital budget through a budget adjustment.

Existing Condition:

The courts at Lake School Park and Venable Memorial Park are asphalt courts that have been overlaid several times and cannot be effectively overlaid in the future.

Justification: *Availability of Outside Funding; Protection & Conservation; Beautification; Citizen Demand; Public Safety*

Tennis courts need to be meticulously maintained in order to make them suitable for play. Cracks, divots, and other defects can influence the bounce of the ball or cause players to trip, and neither condition encourages use of the courts.

Operating Budget Impact:

Maintenance of the tennis courts has increasingly become the job of the City's Public Works staff. Such work is time consuming. New tennis courts would eliminate the need for significant repair efforts in the near future.

Comments:

The courts at Venable Memorial Park were repaired and repainted in FY2019, but additional maintenance or improvements to the Venable Memorial Park courts may no longer be effective.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	30,500
Equipment	\$	
Other	\$	
Total (Grant Match)	\$	30,500

CAPITAL FUND**9509 – STORMWATER**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2021-2025**

9509 STORMWATER - 01

STORMWATER IMPROVEMENTS PER MASTER PLAN

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000

Project Description:

The 2012 Stormwater Master Plan update identified numerous stormwater-related projects that involve streams and public infrastructure. The City aims to address these issues over time as funding allows and using the master plan benefit rating as a guide. The scope of work for some of the projects listed in the master plan is greater than what this program can afford at the current funding level. These projects have been treated as separate items in the Capital Improvement Plan, but funding for such projects typically replaces the annual funding in this account.

In FY2021, funding is recommended to help address erosion of a creek next to South New Ballas Road. Description of that project is included on its own project sheet.

Existing Condition:

Issues under consideration typically exhibit erosion, deteriorated infrastructure, and/or flooding.

Justification: *Condition of Existing Facility; Public Safety; Citizen Demand, Coordination*

The Stormwater Committee reviewed the issues in the Stormwater Master Plan and agreed that the City's use of public funds should be limited to projects to resolve issues that involve public infrastructure and/or public conveyances of water. Such issues may never be adequately or correctly resolved without the City's initiative, funding, and oversight.

Operating Budget Impact:

None.

Comments:

Funding for FY2019 and FY2020 were used to offset the cost of the Middlebrook Drive Stormwater Improvements.

Expenditure Type:

Planning, Design & Engineering	\$
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Annual Total:	\$ 0

9509 STORMWATER – 02

MIDDLEBROOK DRIVE STORMWATER IMPROVEMENTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$292,075	\$0	\$292,075	\$92,075	\$200,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves replacing a failing culvert pipe beneath Middlebrook Drive and making associated repairs to the impacted area of the roadway and the stream. The project will include decorative elements, similar to those included in the Chilton Lane culvert replacement project in 2013. The easements required for the project were donated by the adjacent property owners. Trees and bushes will be included in the restoration of disturbed area to replace some of the removed vegetation.

Existing Condition:

The culvert pipe is both undersized and failing, with increasing impact to the pavement of Middlebrook Drive above. In a heavy rain event, the creek flow exceeds the culvert capacity, and the creek overtops the street. The voids around the culvert were addressed in 2014 following a partial collapse of the roadway, but this repair was never expected to last more than a few years.

Justification: *Public Safety; Condition of Existing Facility; Beautification; Coordination*

Analysis of the stream found that the existing culvert pipe does not meet current size requirements, so lining the pipe or in-kind replacement would not be permissible. The Stormwater Committee identified the replacement of this culvert as a high priority in 2016, because the failure of this culvert would limit access to or isolate several homes along Middlebrook Drive. This issue rated as one of the highest among reviewed stormwater issues with 145 points, and the project has a benefit-to-cost ratio is 0.6, according to the metrics used in the Stormwater Master Plan.

Operating Budget Impact:

City staff has repeatedly patched the roadway pavement above this culvert, with a significant repair in 2014. This project will eliminate this problem and future needs for such maintenance.

Comments:

The design for this project was completed in FY2013. This project was originally scheduled to be constructed in FY2014; however, the Metropolitan St. Louis Sewer District's (MSD) planned sanitary sewer replacement for this area began in 2016. The City's project is scheduled for construction in 2020 (FY2019-FY2020) now that MSD's project is complete and the City has obtained all of the easements needed for the project. This project uses funding originally set aside for the FY2019 and FY2020 Stormwater Master Plan projects.

Expenditure Type:

Planning, Design & Engineering	\$ 10,000
Land Acquisition	\$ 1,000
Construction	\$ 250,000
Equipment	\$
Other (Design FY2013)	\$ 31,075
Total	\$ 292,075

9509 STORMWATER – 04

BALLAS CULVERT EROSION REHABILITATION (DESIGN)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
TBD	\$0	\$50,000	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0

Project Description:

This project involves the survey and design services needed to develop a plan to repair erosion damage at the downstream end of a large stormwater culvert on the east side of New Ballas Road, generally opposite of Sackston Woods Lane. The design will provide the City with the full scope of the improvements and a reasonable cost estimate for the repair, and this cost will be entered into the appropriate year of the capital improvement program once it is known.

Existing Condition:

Stormwater flowing out of the downstream end of the culvert has carved out a void that is undermining the culvert. Rehabilitation of this area is needed before the erosion causes damage to the culvert.

Justification: *Public Safety; Condition of Existing Facility*

New Ballas Road is the most heavily used road that the City maintains. Protection of New Ballas Road and its infrastructure is necessary to limit impacts to daily traffic. This issue rated as one of the highest among reviewed stormwater issues with 140 points, and the project has a benefit-to-cost ratio is 1.1, according to the metrics used in the Stormwater Master Plan.

Operating Budget Impact:

The eventual repair would be designed to resemble a natural stream and would require little annual maintenance. The design will have no impact on the operating budget.

Comments:

The design for this project uses funding originally set aside for the FY2021 Stormwater Master Plan project.

Expenditure Type:

Planning, Design & Engineering	\$ 50,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total (Design)	\$ 50,000

CAPITAL FUND**9510 – STREETS AND SIDEWALKS**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2021-2025

9510 STREETS AND SIDEWALKS – 01

STREET AND SIDEWALK MAINTENANCE PROGRAM

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Year	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$1,313,300	\$0	\$1,313,300	\$1,456,500	\$1,313,300	\$1,333,000	\$1,353,000	\$1,373,300	\$1,393,900	TBD

Project Description:

The project includes concrete pavement replacement, asphalt pavement resurfacing, asphalt pavement maintenance, microsurfacing, roadway striping, and sidewalk replacement for the annual maintenance of the City's roadway and sidewalk networks.

Existing Condition:

While the majority of the City's pavement network is in good condition, annual and on-going evaluation of pavement and sidewalk conditions find ageing and failing pavement and sidewalks that need to be addressed.

Justification: *Public Safety; Condition of Existing Facility; Coordination; Citizen Demand*

The City's street and sidewalk network form the City's largest asset that serves all of the City's residents and visitors. Annual maintenance of streets and sidewalks is required to preserve their functionality and to limit future repair costs. The City uses a pavement management system to track pavement conditions, and the City aims to evaluate the condition of each street on a four-year rotation. The pavement condition data assists with the prioritization of pavement repairs and maintenance and helps the City preserve its existing infrastructure as efficiently as possible. Federal regulations require that sidewalks meet accessibility standards so that all users have an opportunity to travel safely. The City's sidewalk maintenance program follows the federal regulations and supports the City's Pedestrian Plan.

Operating Budget Impact:

Pavement and sidewalk maintenance programs will improve and preserve the infrastructure and will result in a reduction in the number of pothole repairs and other on-going maintenance needs.

Comments:

Approximately 10% of the annual street and sidewalk improvements are directed toward accessibility improvements to the City's sidewalk network in support of the accessibility transition plan. Larger projects, such as grant-funded improvements, are described in separate project sheets.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	1,313,300
Equipment	\$	
Other	\$	
Total (FY2021)	\$	1,313,300

9510 STREETS AND SIDEWALKS – 02

STREET RECONSTRUCTION/REHABILITATION

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Year	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$300,000	\$0	\$300,000	\$365,000	\$300,000	\$0	\$200,000	\$0	\$300,000	TBD

Project Description:

The City plans to fully or substantially replace sections of failed residential roadways as part of this project. The various needs of the pavement network are evaluated each year to determine which streets will be reconstructed. The FY2018-FY2021 projects involve rehabilitation of the Ladue Estates subdivision, and Winrock Drive was included in the FY2019 project. Funding in FY2022 will be used to offset the costs for the “South Phase” improvements to Mosley Road. Projects in FY2023 and beyond will be determined after future reviews of pavement conditions.

Existing Condition:

Residential streets that are considered for reconstruction have reached the end of their useful lives and are generally in too poor of condition to gain long-term benefits from the City’s typical pavement maintenance programs. Most of the streets that have been included in this program were older concrete streets that were overlaid with asphalt decades ago.

Justification: *Public Safety; Condition of Existing Facility; Citizen Demand*

All of the City’s streets will eventually reach the end of their useful lives, fail at a structural level, and require reconstruction. This program provides the City with a tool to address some of its residential streets that are in poor or failing condition that typical maintenance programs can no longer improve.

Operating Budget Impact:

Streets with failing pavement typically require frequent maintenance in the form of pothole patching and emergency pavement repairs, which City staff often performs to address the issues as quickly as possible. Allocation of funds for reconstruction also allows for more of the maintenance budget to be used for maintaining and preserving streets that are in better condition. This allows for more streets and sidewalks to be addressed and will reduce the number of calls for City staff to make repairs.

Comments:

The budget projections are based upon planned roadway replacement and rehabilitation. These plans typically change due to pavement failures or coordination with utilities or other projects. The candidates listed to the right do not form an exhaustive list and are not necessarily the streets with the lowest condition ratings – some streets with lower surface condition ratings can be repaired through extensive concrete slab replacement or asphalt resurfacing.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	300,000
Equipment	\$	
Other	\$	
Total (FY2021)	\$	300,000

Street Reconstruction/Rehabilitation Candidate Examples (in Alphabetical Order)

Street Name	Pavement Condition Index (0 – 100)
Country Fair Lane	80
Conway Garden Court	62
Craig Road	45
Emerson Road	41
Ladue Estates Drive West	52
Ladue Meadows Drive	75
Magna Carta Drive	90
Mosley Road	50
Tureen Drive	56

9510 STREETS AND SIDEWALKS – 07

NEW BALLAS MEDIAN PLANTINGS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$20,000	\$0	\$20,000	\$0	\$20,000	\$0	\$0	\$0	\$0	TBD

Project Description:

This project involves new trees, median end treatments, and plantings in the centerline median along North New Ballas Road near the Creve Coeur Government Center.

Existing Condition:

The existing island is generally grass with ash trees along its center and landscaping at each end.

Justification: *Coordination; Condition of Existing Facility; Beautification*

The ash trees in this median will be removed in FY2020 as part of the systematic removal of ash trees throughout the City due to the emerald ash borer infestation. This project will add low-maintenance flowers and plants to the planned replacement of the trees in the median.

Operating Budget Impact:

The proposed planting plan is not expected to add any costs to the operating budget.

Comments:

The planting plan is recommended by the City's Horticulture, Ecology, and Beautification Committee.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	20,000
Equipment	\$	
Other	\$	
Total	\$	20,000

9510 STREETS AND SIDEWALKS – 08

SIGNAL ENHANCEMENT PROJECTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$436,128	\$87,705	\$348,423	\$196,128	\$240,000	\$0	\$0	\$0	\$0	TBD

Project Description:

These projects involve partnerships with the Missouri Department of Transportation (MoDOT), the Olive Boulevard Transportation Development District (Olive TDD), and Saint Louis County to add black powder coat and illuminated street name signs to several traffic signals along Olive Boulevard, Lindbergh Boulevard, and North New Ballas Road. The work in FY2021 will involve a partnership with MoDOT to add black powder coating and illuminated street name signs to two projects along Olive Boulevard – one involving the intersections of Olive at Spode and at Old Olive, and the second involving eight intersections along Olive Boulevard west of New Ballas Road.

Existing Condition:

MoDOT plans to replace the old and/or outdated traffic signals at the intersections of Olive at Old Olive Street Road, Spode Road, Tempo Drive, Ross/Questover, and Fernview Drive.

Justification: *Coordination; Condition of Existing Facility; Beautification*

Including these enhancements to new traffic signals as part of the MoDOT and County projects will be much more cost effective and will result in better products than if completed as part of one or more independent projects to add these enhancements once the traffic signals are in place.

Operating Budget Impact:

The City will be responsible to maintain the illuminated street name signs and the black powder coating on the signal equipment, and the City will be responsible to pay the electric bills for the signs. These costs are expected to be minimal.

Comments:

The outside funding sources include construction reimbursement from the Olive TDD (estimated at \$62,000) for the lighting work along New Ballas Road and a development escrow (estimated at \$25,705) for illuminated street name signs at the intersections of New Ballas Road at Studt Avenue and at Old Ballas Road.

Expenditure Type:

Planning, Design & Engineering	\$ 50,592
Land Acquisition	\$
Construction	\$ 385,536
Equipment	\$
Other	\$
Total	\$ 436,128

9510 STREETS AND SIDEWALKS – 09

EMERSON ROAD IMPROVEMENT PROJECT (FEDERAL STP GRANT)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$694,768	\$444,000	\$250,768	\$89,768	\$605,000	\$0	\$0	\$0	\$0	\$0

Project Description:

The project includes pavement widening and resurfacing, new curb and gutter, and enclosed stormwater facilities along the City-maintained section of Emerson Road from Old Ballas Road to De Smet Jesuit High School. In FY2016, the City was awarded a federal grant that will fund up to \$444,000, which is approximately 73% of the estimated construction cost for the project.

Existing Condition:

The existing roadway pavement is in marginal condition: its edges are deteriorating, a retaining wall supporting the street is failing, and the street width is insufficient. The City's portion of Emerson Road was found to have an average pavement condition index (PCI) of 41 in 2019, which indicates that the pavement is in need of significant improvements.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*

Emerson Road does not meet current standards for width and safety. The project will increase the roadway width and will improve drivers' sight lines by lowering the peak of the hill just north of De Smet Jesuit High School.

Operating Budget Impact:

Fixing the street and the failing headwall will reduce the number of maintenance calls to fix Emerson.

Comments:

The Emerson Road Improvement Project follows a concept plan that was developed for Emerson Road in FY2011. The sidewalk improvements that were part of this concept plan will be completed through the Emerson Road Sidewalk Improvement Project in FY2017, for which the City received a federal grant to assist with construction costs. The Missouri Department of Transportation owns Emerson Road south of De Smet Jesuit High School.

Expenditure Type:

Planning, Design & Engineering	\$ 84,988
Land Acquisition	\$ 4,780
Construction	\$ 605,000
Equipment	\$
Other	\$
Total	\$ 694,768

9510 STREETS AND SIDEWALKS – 10

FERNVIEW DRIVE RESURFACING (FEDERAL STP GRANT)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$392,423	\$250,000	\$142,423	\$56,423	\$336,0000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. The City was awarded a federal grant that will reimburse up to \$250,000 (approximately 74%) of the construction cost for this project.

Existing Condition:

Fernview Drive consists of an asphalt street with concrete curbs and gutters between Gallagher Road and Olive Boulevard. Fernview Drive has sections that are currently in good condition, but some sections have deteriorated. Fernview has an average pavement condition index (PCI) of 59, meaning that it is in “fair” condition with the need for a resurfacing soon. This average PCI balances very good sections with PCI in the 80’s with poor sections with PCI in the 40’s.

Justification: *Public Safety; Availability of Outside Funding; Citizen Demand*

The roadway resurfacing is needed to maintain the pavement along Fernview Drive before more substantial rehabilitation becomes necessary. Fernview is used by about 4,300 vehicles per day, making it one of the most heavily traveled City streets in a residential area.

Operating Budget Impact:

The project will result in less need for City staff to patch Fernview Drive. Future maintenance expenses are expected to be lower due to this project.

Comments:

The Missouri Department of Transportation (MoDOT) plans to make signal and accessibility improvements at the intersection of Fernview Drive and Olive Boulevard through a project that begins in FY2021.

Expenditure Type:

Planning, Design & Engineering	\$ 56,423
Land Acquisition	\$
Construction	\$ 336,000
Equipment	\$
Other	\$
Total	\$ 392,423

9510 STREETS AND SIDEWALKS – 11

MOSLEY ROAD IMPROVEMENT PROJECT (FEDERAL STP GRANT)**CAPITAL FUND**

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$1,767,364	\$760,000	\$1,007,364	\$220,457	\$236,907	\$1,310,000	\$0	\$0	\$0	\$0

Project Description:

Improvements to Mosley Road will involve roadway resurfacing, localized roadway reconstruction adjust the vertical alignment, and sidewalk improvements from Olive Boulevard to Ladue Road. The City was awarded a federal Surface Transportation Program (STP) grant for 80% of the anticipated costs for the right-of-way and construction phases for the improvements between Olive Boulevard and Tureen Drive. The design for the project and the improvements south of Tureen Drive will be fully funded by the City.

Existing Condition:

Mosley Road is an asphalt street that last saw major roadway work in 2000 with the addition of the existing sidewalk. The pavement is failing in areas, but the general need for the roadway is resurfacing. The roadway width is also inconsistent, with some areas less than 20 feet wide. Mosley Road was found to have an average pavement condition index (PCI) of 54 in 2016, which indicates that the pavement is a good candidate for resurfacing.

Justification: *Public Safety; Condition of Ex. Facility; Citizen Demand; Availability of Outside Funding*

Of the City's principal roadways, the condition of Mosley Road is one of the worst. Complaints are common regarding the pavement condition, poor ride quality, and stormwater drainage issues. A preliminary design completed in FY2015 for Mosley Road also found several areas where the vertical or horizontal alignments do not meet design standards.

Operating Budget Impact:

The City completes significant pavement patching along Mosley Road nearly every year. Completing this project would eliminate this need and expense.

Comments:

A conceptual design for Mosley Road was completed for \$86,768 in FY2014-FY2016. FY2022 Roadway Reconstruction funds will be used to offset the cost of the improvements to Mosley south of Tureen Drive.

Expenditure Type:

Planning, Design & Engineering	\$ 220,596
Land Acquisition	\$ 150,000
Construction	\$ 1,310,000
Equipment	\$
Other (Concept Plan- FY2016)	\$ 86,768
Total	\$ 1,767,364

9510 STREETS AND SIDEWALKS – 12

NEW BALLAS ROAD IMPROVEMENTS – PHASE 1 (FEDERAL STP GRANT)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$1,350,000	\$960,000	\$390,000	\$0	\$150,000	\$180,000	\$1,020,000	\$0	\$0	\$0

Project Description:

The project includes the replacement of approximately 25% of the concrete pavement, joint replacement, and diamond grinding of the pavement surface along North New Ballas Road between Olive Boulevard and Craig Road. The project would also include sidewalk improvements and updates to highlight the signal at Cityplace Drive and the four-way stop at American Legion Drive.

Existing Condition:

Areas of the concrete pavement are in good condition, but many areas are in poor condition and require replacement. Joint deterioration is the primary issue along this section of North New Ballas Road, and this issue causes poor ride quality. Much of the existing sidewalk was constructed in the early 1990's and falls short of the current accessibility standards. This section of North New Ballas Road was found to have an average pavement condition index (PCI) of 75 in 2016.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*

New Ballas Road is the City's largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street's pavement is a high priority, both for the traveling public and to control future costs. The deteriorating concrete pavement, sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable. An alternative to grant funding would have been to devote approximately 10% of the City's annual concrete repairs to this section of New Ballas Road for approximately 5-10 years.

Operating Budget Impact:

This project will eliminate joint patching needs and sidewalk issues that require staff attention.

Comments:

None.

Expenditure Type:

Planning & Design	\$ 150,000
Land Acquisition	\$ 180,000
Construction	\$ 1,020,000
Equipment	\$
Other	\$
Total	\$ 1,350,000

9510 STREETS AND SIDEWALKS – 13

LINDBERGH-OLD OLIVE INTERSECTION (STATE COST-SHARE; STP GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$1,454,706	\$1,012,750	\$441,956	\$43,406	\$190,000	\$25,000	\$90,160	\$1,106,140	\$0	\$0

Project Description:

This project involves the partial reconstruction of the intersection of Lindbergh Boulevard and Old Olive Street Road in order to add a traffic signal that will provide full access in all directions. This signal will allow for a pedestrian/bicycle crossing across Lindbergh. The costs shown represent approximately 15% of what is expected to be a \$2.58 million project. The City has been awarded State Cost-Share funding in for approximately 40% of the total project cost. In FY2020, staff applied for federal STP grant funding for another 45% of the project cost. If the City is awarded this funding, then the full cost and grant funding will be included in the appropriate years.

Existing Condition:

The existing intersection of Lindbergh Boulevard and Old Olive Street Road allows only right-in, right-out access for Old Olive on both sides of Lindbergh. A concrete barrier along the Lindbergh median prohibits any east-west vehicular or pedestrian crossing of this intersection.

Justification: *Availability of Outside Funding; Coordination*

The proposed improvements to this intersection are supported by the Comprehensive Plan Creve Coeur 2030, the 39 North Master Plan, and the Old Olive Street Road Great Street Plan. These improvements provide the best chance for a pedestrian or bicycle crossing of Lindbergh Boulevard in that area.

Operating Budget Impact:

The City will most likely need to take over the maintenance of Old Olive Street Road from the Missouri Department of Transportation in return for the funding for this project. The ongoing maintenance cost for Old Olive Street Road could be significant.

Comments:

Conceptual plans for this intersection were developed as part of the Old Olive Street Road great street plan, which was completed through a partnership of St. Louis County, the St. Louis Economic Development Partnership, and the City of Creve Coeur. Funding in “prior years” represents design costs in FY2019 and FY2020 to refine the project plans and estimates in preparation for the grant applications. Future improvements to Old Olive are likely to qualify for federal funding, although the classification of Old Olive may change following its removal from the state roadway system.

Expenditure Type:

Planning, Design & Engineering	\$ 337,206
Land Acquisition	\$ 115,160
Construction	\$ 1,002,340
Equipment	\$
Other	\$
Total (Cost Share & STP Grant Match)	\$ 1,454,706

9510 STREETS AND SIDEWALKS – 14

OLIVE-LINDBERGH INTERCHANGE ENHANCEMENTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$342,500	\$0	\$342,500	\$312,500	\$0	\$30,000	\$0	\$0	\$0	TBD

Project Description:

The City has partnered with the St. Louis Economic Development Partnership (SLEDP) and the Missouri Department of Transportation (MoDOT) to add decorative elements to the planned reconfiguration of the interchange of Olive Boulevard at Lindbergh Boulevard. The enhancements include black powder coat and illuminated street name signs to two new traffic signals on Olive and decorative median, pedestrian-scale lighting, and bridge treatments along Olive over Lindbergh. The project will be managed by SLEDP and is expected to be complete by the end of 2020.

The funding identified in FY2022 is for the design of landscaping for the Olive-Lindbergh interchange.

Existing Condition:

The existing cloverleaf interchange is outdated and will be reconfigured to a more compact and more pedestrian-friendly design.

Justification: *Coordination; Condition of Existing Facility; Beautification*

The Olive-Lindbergh interchange serves as one of the main entry points to the City and is located in the middle of the emerging 39 North District. Visual improvements in this area promote the City and encourage growth. Including these enhancements as part of the SLEDP project will be much more cost effective and will result in better products than if completed as part of one or more independent projects to add these enhancements once the traffic signals and bridge improvements are in place.

Operating Budget Impact:

The City will be responsible to maintain the signal and bridge enhancements, but these costs are expected to be minimal for the foreseeable future.

Comments:

The cost to construct the landscaping at this interchange will not be known until the design is complete.

Expenditure Type:

Planning, Design & Engineering	\$ 85,000
Land Acquisition	\$
Construction	\$ 257,500
Equipment	\$
Other	\$
Total	\$ 342,500

9510 STREETS AND SIDEWALKS – 15

PAVEMENT CONDITION RATINGS UPDATE

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$45,000	\$0	\$45,000	\$0	\$0	\$45,000	\$0	\$0	\$0	\$0

Project Description:

The project involves engineering consulting services to provide an independent assessment of the City's pavement conditions and ride quality. These pavement conditions are used as a tool to guide the recommendations of City staff for the annual pavement improvement programs.

Existing Condition:

The pavement conditions were independently evaluated in FY2016. Since then, City staff have updated the condition ratings of about one quarter of the City's streets each year. The City does not have the equipment to efficiently or effectively measure ride quality.

Justification: *Condition of Existing Facility; Operating Efficiency*

Pavement condition ratings need to be up to date in order for them to be reliable tools for planning pavement repairs and for judging the performance of the pavement management program.

Operating Budget Impact:

None.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$ 45,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 45,000

9510 STREETS AND SIDEWALKS – 16

CRAIG ROAD IMPROVEMENTS (DESIGN AND GRANT MATCH)**CAPITAL FUND**

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$399,800	TBD	\$399,800	\$39,800	\$0	\$0	\$100,000	\$10,000	\$250,000	\$0

Project Description:

The project involves improvements to the intersection layout, pavement, and sidewalks of Craig Road between Old Ballas Road and Olive Boulevard. The City plans to apply for federal STP grant funding in FY2021 to assist with the costs of this project. The costs shown are for the full design cost and for an estimated 20% of the right-of-way acquisition and construction costs. The full cost of the project will be included upon award of a grant for the project.

Existing Condition:

The pavement of Craig Road is currently in fair condition, but sections of the pavement have failed. The traffic flow along Craig is hampered by non-standard intersections with Olde Cabin Road and Office Parkway. The sidewalks along Craig Road are generally inadequate and have poor accessibility at the intersections.

Justification: *Public Safety; Cond. of Existing Facility; Availability of Outside Funding; Citizen Request*

Portions of Craig Road are in poor condition, and the City has provided increasing attention to pavement repairs and pothole patching. Improvements to the intersections along Craig Road are recommended to improve the flow and safety of this traffic and to provide better sidewalk crossings at these intersections.

Operating Budget Impact:

The pavement and sidewalks of Craig Road are in increasing need of maintenance. Roadway resurfacing and sidewalk reconstruction would reduce future maintenance costs.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$ 139,800
Land Acquisition	\$ 10,000
Construction	\$ 250,000
Equipment	\$
Other	\$
Total (Design and Grant Match)	\$ 399,800

9510 STREETS AND SIDEWALKS – 17

NEW BALLAS SIDEWALK EXTENSION (DESIGN & GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$110,818	TBD	\$110,818	\$10,818	\$0	\$0	\$50,000	\$50,000	\$0	\$0

Project Description:

This project involves relocating a retaining wall to accommodate a new sidewalk along the west side of North New Ballas Road between Magna Carta Drive and Rocky Drive. Constructing this sidewalk will connect two sections of sidewalk to create a continuous pedestrian path along the west side of New Ballas from Conway Road to Old Ballas Road. The City plans to seek federal funding for this project through the Transportation Alternatives Program. The grant match for this project includes 100% of the design costs and 20% of the estimated construction costs. The full project cost will be included in the appropriate fiscal years if the City is successful in obtaining a grant for the work.

Existing Condition:

No sidewalk currently exists at this site, but pedestrians commonly use the small grass strip nonetheless. The property's retaining wall has been a barrier to constructing a sidewalk here.

Justification: *Public Safety; Availability of Outside Funding*

Completion of this sidewalk will provide a more suitable pedestrian route for those wishing to north along the west side of New Ballas Road.

Operating Budget Impact:

The new sidewalk will eventually need maintenance, but that maintenance will be funded through the City's annual street and sidewalk maintenance program in the capital improvement budget.

Comments:

This project would complete the sidewalk improvements envisioned in a sidewalk concept study from 2008. The conceptual plans from that study provided the basis of the design for a portion of the Ladue Road Sidewalk Project in 2013 and for the New Ballas Sidewalk Improvements between Ladue Road and De Smet Jesuit High School in 2019.

The Transportation Alternatives Program grant is not offered every year, and it is currently unknown when the next grant round will be scheduled.

Expenditure Type:

Planning & Design	\$ 57,968
Land Acquisition	\$ 2,850
Construction	\$ 50,000
Equipment	\$
Other	\$
Total (Design & Grant Match)	\$ 110,818

9510 STREETS AND SIDEWALKS – 18

NEW BALLAS ROAD IMPROVEMENTS – PHASE 2 (DESIGN & GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$425,000	TBD	\$425,000	\$0	\$0	\$0	\$0	\$100,000	\$25,000	\$300,000

Project Description:

The project includes pavement resurfacing, concrete curb and sidewalk replacement, and accessibility improvements along New Ballas Road from Conway Road to Ladue Road. The project will also include extending the existing planted median toward Conway Road, pedestrian connections to the bus stops along the east side of New Ballas, and a review of the traffic operations at New Ballas and Ladue Road. The grant match for Phase 2 (\$425,000) includes 100% of the design costs and 20% of the estimated land acquisition and construction costs. The full project cost will be included in the appropriate fiscal years if the City is successful in obtaining a grant for the work.

Existing Condition:

The asphalt pavement is generally in good condition, but many of the concrete sidewalks, curbs, and entrances are in poor condition. Although much of the sidewalk and curbing was replaced in FY2019, areas still fall short of the current accessibility standards. South New Ballas Road was found to have an average pavement condition index (PCI) of 70 in 2016, which indicates that the pavement is generally in “very good” condition and that is currently an appropriate candidate for pavement preservation. The pavement will be 20 years old at the time of the anticipated construction for this project, and the pavement condition is expected to have deteriorated by then to the point that resurfacing is necessary.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*

New Ballas Road is the City’s largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street’s pavement is a high priority, both for the traveling public and to control future costs. The deteriorating sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable.

Operating Budget Impact:

This project will eliminate pavement patching needs and sidewalk issues that require staff attention.

Comments:

This project is the second of what is expected to be four phases of work along New Ballas Road.

Expenditure Type:

Planning & Design (FY2024)	\$ 100,000
Land Acquisition (FY2025)	\$ 25,000
Construction (FY2026)	\$ 300,000
Equipment	\$
Other	\$
Total (Design & Grant Match)	\$ 425,000

9510 STREETS AND SIDEWALKS - 19

NEW BALLAS ROAD IMPROVEMENTS – PHASE 3 (DESIGN & GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$350,000	TBD	\$350,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$250,000

Project Description:

The project includes pavement resurfacing, concrete curb replacement, illuminated street name signs, and accessibility improvements along New Ballas Road from Ladue Road to Magna Carta Drive. Staff plans to apply for federal grant assistance for this project. The grant match for this phase includes 100% of the design, and 80% of the land acquisition and construction costs. The full project cost will be included in the appropriate fiscal years if the City successfully obtains a grant for this work.

Existing Condition:

The asphalt pavement along New Ballas Road is generally in good condition, but many of the concrete sidewalks, curbs, and entrances are in poor condition. Much of the existing sidewalk falls short of the current accessibility standards. North New Ballas Road was found to have an average pavement condition index (PCI) of 72 in 2016, indicating the pavement was generally in “very good” condition at that time. New Ballas Road was last resurfaced in 2008, meaning that it will be over 20 years old and will need to be resurfaced by the time this project moves to construction.

Justification: *Public safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*

New Ballas Road is the City’s largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street’s pavement is a high priority, both for the traveling public and to control future costs. The deteriorating sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable.

Operating Budget Impact:

This project will eliminate pavement patching needs and sidewalk issues that require staff attention.

Comments:

This project is the third of what is expected to be four phases of improvements to New Ballas Road.

Expenditure Type:

Planning & Design	\$ 100,000
Land Acquisition (FY2026)	\$ 20,000
Construction (FY2027)	\$ 230,000
Equipment	\$
Other	\$
Total (Design and Grant Match)	\$ 350,000

CAPITAL FUND**9516 – CAPITAL EQUIPMENT**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2021-2025**

9516 CAPITAL EQUIPMENT - 01

PUBLIC WORKS CAPITAL EQUIPMENT

CAPITAL FUND

FY2021 Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Year	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$293,300	\$0	\$293,300	\$155,884	\$243,700	\$359,600	\$346,300	\$326,000	\$316,100	\$325,000

Project Description:

The following major equipment purchases are planned for FY2021 as replacements for older equipment used by the Department of Public Works:

- Two-ton Dump Truck with Plow and Spreader\$ 137,500
- Leaf Vacuum (25 CY capacity)\$ 54,500
- Leaf Vacuum (14 CY capacity)\$ 51,700
- \$ 243,700**

Equipment replacement is based upon a scheduled rotation that helps limit the financial impact on any one year. The equipment that will be replaced ranges in age from 9-20 years old.

Existing Condition:

The current equipment has reached the end of its useful and dependable life. Significant maintenance costs can be expected if this equipment is kept in service.

Justification: *Public Safety; Condition of Existing Facility; Operating Efficiency*

Replacement of the equipment noted below is necessary to provide services to the residents and repair the City's infrastructure. Without replacement, it will not only have an effect on public safety, it will also affect the City's operating efficiency due to down time for equipment repairs.

Operating Budget Impact:

Replacement of older equipment helps reduce the overall annual maintenance costs of the Public works fleet. Holding on to older equipment will likely result in significant increases in repair bills and a reduction in efficiency and ability to provide service to the residents due to an increase in downtime cause by equipment failure.

Comments:

Capital equipment includes City equipment costing greater than \$20,000 and having a useful life of at least five years. Public Works staff plans to trade-in or sell the replaced equipment at auction after the new replacement vehicle arrives. The amount of revenue from the auctioned equipment will help offset the cost to purchase new equipment.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	243,700
Other	\$	
Total (FY2021)	\$	243,700

9516 CAPITAL EQUIPMENT – 02

GOLF COURSE CAPITAL EQUIPMENT

CAPITAL FUND

FY2021 Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$0	\$0	\$0	\$31,751	\$0	\$20,000	\$35,000	\$20,000	\$40,000	TBD

Project Description:

The following major equipment purchases are planned at the Creve Coeur Golf Course as replacements for older equipment:

- FY2022 – Heavy-duty turf vehicle\$ 20,000
- FY2023 – Greens mower\$ 35,000
- FY2024 – Heavy-duty turf vehicle\$ 20,000
- FY2025 – Rough mower (used)\$ 40,000
- \$ 115,000**

These vehicles are used to maintain the fairways, rough, and greens at the golf course. The equipment that will be replaced will range in age from 15 to 29 years old at the time of replacement.

Existing Condition:

The golf course staff uses a small fleet of equipment to maintain the golf course. Some of the existing equipment has begun to wear out with age, resulting in either limited use or increased repair costs. Certain equipment, like the turf vehicles, are used for a variety of tasks. Other equipment, like the rough mower, has no back-up for its function.

Justification: *Condition of Existing Unit; Operating Efficiency; Coordination*

Properly functioning and reliable equipment is needed for the effective maintenance of the golf course. The 2015 *Analysis of Golf Course Existing Conditions for Needs Assessment* report found that all of the equipment that is proposed for replacement has exceeded its useful life. The report recommended that all of this equipment be replaced by 2019.

Operating Budget Impact:

New equipment will be expected to require less maintenance than the current equipment, which should result in lower operating costs.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	115,000
Other	\$	
Total (FY2021-FY2025)	\$	115,000

9516 CAPITAL EQUIPMENT – 06

PHONE SYSTEM REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$48,500	\$0	\$48,500	\$0	\$0	\$48,500	\$0	\$0	\$0	\$0

Project Description:

This project involves the replacement of the phone system used by the City's staff. The existing system will no longer be under warranty or supported after 2021.

Existing Condition:

While the existing system is in fair condition, it seems likely that it will need a software or server upgrade in or around FY2021-FY2022.

Justification: *Condition of Existing Unit; Operating Efficiency*

Technical support for the phone system is essential to keeping it functional, and the manufacturer will no longer offer technical support for the City's phone system beginning in 2021. The City's staff cannot fully perform their jobs without a functional phone system.

Operating Budget Impact:

A monthly licensing fee would be added to the operating budget of approximately \$25,800/year. This fee would be slightly offset by eliminating current PRI for phone (\$10,092/year) and phone maintenance (\$2,000/year).

Comments:

Due to Toshiba eliminating its telecommunications division, the current phone system will be unsupported in 2021, requiring the need to move to a new system that is up to date and supported.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	48,500
Other	\$	
Total	\$	48,500

9516 CAPITAL EQUIPMENT – 07

OLIVE MEDIAN STREET LIGHT STOCK

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$50,000	TBD	\$50,000	\$0	\$0	\$50,000	\$0	\$0	\$0	TBD

Project Description:

The City has installed decorative street lights along much of the median of Olive Boulevard. Unfortunately, several of the lights have been damaged or destroyed through vehicular accidents. While the drivers' insurance typically pays for the replacement of the light, the process of ordering and installing the new light can take months, and there is no light in place during that time. The City plans to order three decorative street lights to establish a stock of lights that can be used to more rapidly replace damaged lights. The City would then use applicable insurance proceeds from accidents to replenish the stock of equipment.

Existing Condition:

The City maintains approximately 50 decorative street lights in the medians along nearly two miles of the Olive Boulevard. These lights help light Olive at night, beautify Olive during the day, and provide a sense of place in Creve Coeur.

Justification: *Public Safety; Beautification; Operating Efficiency*

The process of ordering and installing a new light can take months to complete. The City will be able to more rapidly replace damaged lights if replacements are in stock.

Operating Budget Impact:

None.

Comments:

The stock of lights will be stored at one of the City's Public Works facilities, where the equipment will be protected from the weather and from possible damage from on-site operations.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	50,000
Other	\$	
Total	\$	50,000

9516 CAPITAL EQUIPMENT – 08

PUBLIC WORKS FACILITY GASOLINE SYSTEM REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$35,000	\$0	\$35,000	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves the replacement of the gasoline pumps and the software and computer system managing the fuel system at the Creve Coeur Public Works facility at 966 Rue de la Banque Drive.

Existing Condition:

The City operates a fueling station at its Public Works facility for the use of the City's vehicles, primarily the Public Works and Police Department's fleets. This fueling station includes two gasoline pumps and one diesel pump. The two gasoline pumps were installed in 1999 when the property was developed. A computer system is used to track gasoline use for each vehicle and to monitor the underground system for leaks. The software and hardware included in this computer system were installed in 2006. The City is required to have operational pumps and monitoring, and both have needed annual maintenance in order for the City to meet the minimum standards for the system.

Justification: *Public Safety; Condition of Existing Equipment; Operating Efficiency*

Annual repairs are needed to bring the pumps into compliance with state requirements prior to each year's inspection. Both the pumps and the computer system need to be re-calibrated frequently to remain a reliable monitoring system. Updates to the system are not possible, because the system is so old. Replacement is now necessary. The City could use a local gas station for fuel, but doing so would be less efficient for the frequent fueling of the Police and Public Works fleets.

Operating Budget Impact:

New pumps are expected to require less maintenance than the existing pumps. New computer software and hardware will reduce staff time needed to verify that the system is accurate.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	35,000
Other	\$	
Total	\$	35,000

CAPITAL FUND**ADMINISTRATION**

CAPITAL FUND

CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2021-2025**

ADMINISTRATION

PROJECT MANAGEMENT

CAPITAL FUND

FY2021 Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Year	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$91,777	N/A	\$91,777	\$90,387	\$91,777	\$94,530	\$97,366	\$100,287	\$103,296	TBD

Description:

This item includes the costs associated with the full-time salary and benefits for a civil engineer to help oversee the design and construction of projects outlined in the Capital Improvement Program.

Existing Condition:

The project manager assists the Public Works Department-Administration Division with monitoring construction activity, preparing contract documents, performing design surveys, and developing review processes in order to ensure compliance with codes and specifications for capital improvement projects for the City of Creve Coeur.

Justification: *Operating Efficiency*

The responsible and effective administration of the City's capital improvement projects, and grant-related projects in particular, requires significant staff time. Projects often have similar schedules, and multiple projects often require immediate attention at the same time. The City's Public Works Administration staff is too small to consistently accommodate the demands of these projects while also meeting the expectations for the various other services provided by the Department of Public Works.

Operating Budget Impact:

Annual costs for this position include ongoing employee training, city equipment, cell phone, and general supplies, which are anticipated to be approximately \$1,000 per year.

Comments:

Prior to FY2019, this position was fully funded through the General Fund – Public Works/Administration operating budget.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	
Other	\$	91,777
Total (FY2021)	\$	91,777

BUILDING PROJECT BOND FUND PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2021-2025



BUILDING PROJECT BOND FUND (PROPOSITION P)**9501 – POLICE BUILDING CONSTRUCTION**

BUILDING PROJECT BOND FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2021-2025**

9501 POLICE BUILDING CONSTRUCTION – 03

PROPOSITION P

GOVERNMENT CENTER ACCESSIBILITY AND SECURITY IMPROVEMENTS

BUILDING PROJECT BOND FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$521,059	\$0	\$521,059	\$0	\$0	\$0	\$521,059	\$0	\$0	\$0

Project Description:

This project involves assessment of and improvements to various aspects of the Creve Coeur Government Center building in order to bring the building into better compliance with current accessibility and security standards and expectations.

Existing Condition:

The Creve Coeur Government Center is a renovated elementary school. Several aspects of the layout and features of the building do not meet the current standards for accessibility or security.

Justification: *Public Safety; Citizen Demand; Coordination*

These improvements were specifically outlined in the bond referendum. As a public building, the Creve Coeur Government Center is expected to be accessible and secure, both for visitors and City staff.

Operating Budget Impact:

Accessibility and security renovations are expected to have minimal impact on the operating budget. These renovations may replace ageing equipment or facilities, which should decrease the maintenance costs associated with them.

Comments:

The residents of Creve Coeur passed Proposition P in FY2017 to provide funding for a new police station and accessibility, safety, and security improvements to the Creve Coeur Government Center.

Expenditure Type:

Planning, Design & Engineering	\$ 50,000
Land Acquisition	\$
Construction	\$ 396,059
Equipment	\$ 75,000
Other	\$
Total	\$ 521,059

9501 POLICE BUILDING CONSTRUCTION – 04

PROPOSITION P

GOVERNMENT CENTER ELECTRICAL SWITCHGEAR REPLACEMENT

BUILDING PROJECT BOND FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future
\$159,000	\$0	\$159,000	\$9,000	\$150,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves the replacement of the electrical switchgear that serves the Creve Coeur Government Center.

Existing Condition:

The electric service for the Creve Coeur Government Center includes an outdated switchgear that needs to be replaced. The switchgear is located in the lower level of the Government Center. Although it was impacted by the water service line leak several years ago, the switchgear remains functional.

Justification: *Public Safety; Condition of Existing Facility*

The switchgear must be operational for the Creve Coeur Government Center to be open for business. The existing system is too old to be repaired or updated.

Operating Budget Impact:

None.

Comments:

The residents of Creve Coeur passed Proposition P in FY2017 to provide funding for a new police station and accessibility, safety, and security improvements to the Creve Coeur Government Center.

Expenditure Type:

Planning, Design & Engineering	\$ 9,000
Land Acquisition	\$
Construction	\$
Equipment	\$ 150,000
Other	\$
Total	\$ 159,000

EXHIBIT C
CITIZEN RECOMMENDATIONS AND STAFF RESPONSES
CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2021-2025

Each recommendation is summarized below, generally in the order that the request was received. Each recommendation and the corresponding response from City staff are attached.

	Page
1. Susan Hurt (856 Questover Lane)	2
• <i>Add pedestrian connection between Questover subdivision and Millennium Park</i>	
• <i>Add pedestrian bridges over Olive Boulevard.</i>	
2. Mary Schnoring (590 Sarah Lane)	4
• <i>Improve entrances along Old Ballas Road.</i>	
3. Ollie Fisher (953 North Spoele Road)	5
• <i>Improve sidewalk along Spoele Road.</i>	
4. Mike Fries (12949 Gallagher Road)	6
• <i>Add street lights to Gallagher Road.</i>	
5. Barb Finnegan (109 Emerald Green Court)	7
• <i>Extend sidewalk along New Ballas Road north of Magna Carta Drive.</i>	
• <i>Add bike trail along Ladue Road.</i>	
6. Sharon Leve (12317 Boothbay Court)	9
• <i>Make the restrooms at Conway Park for year-round use.</i>	
7. Greg Wilson (address not specified)	10
• <i>Improve sidewalks along Olive Boulevard and New Ballas Road.</i>	
8. Joyce Steiger (200 North New Ballas Road)	11
• <i>Add lighting for sidewalks along New Ballas Road.</i>	
9. David Meyer (433 Shadybrook Lane)	12
• <i>Revise Lindbergh/Quailways/Tealbrook intersection to add right-turn lane.</i>	
10. Barbara Brozek (914 Stablefield Court)	13
• <i>Extend the sidewalk along Ambois Drive.</i>	
11. Carolyn Schuerman (11345 Mosley Lane)	14
• <i>Fix Mosley Road.</i>	
12. Kathy Rockamann (159 Carriage Square Drive)	15
• <i>Add pickleball courts at City parks.</i>	

**Citizen Recommendations
CIP FY2021–FY2025**

Susan Hurt (856 Questover Lane)

Suggestion

I would like the City to continue to develop plans for adding trail connections between Millennium Park and the Questover Subdivision.

Staff Response

The City looked at an option to expand the trail in Millennium Park and several options to connect the adjacent subdivisions to the park. The study is conceptual, with the intent on identifying the feasibility and cost of creating these trails. So far, there are no plans to construct any of these paths.

Exhibit 1 (page 2 of the attached draft report) shows the study locations. Two of these locations sought to connect the Questover subdivision to the east side of Millennium Park. The first ("Connection Spur 2") would begin at Bentley View Court, curve around the north side of the detention basin, and then connect to the trail in Millennium Park. The second ("Connection Spur 2A") would begin at Questover Lane just north of Cabot Manor Circle and then pass between the houses to connect to Millennium Park. We chose these locations because the edge of the park is flatter there than further north.

We would need easements from the adjacent homeowners for either of the paths, so we would want to have pretty strong support from the subdivision and the adjacent homeowners before we start the design and plan for construction.

It appears that we have two feasible options to connect the Questover subdivision to Millennium Park. With the subdivision's support, I think that the City would be likely to add one of these connections into the City's capital improvement plan. If the subdivision is not interested, then the City will likely focus on the connections to the subdivisions to the south of the park.

**Citizen Recommendations
CIP FY2021–FY2025**

Susan Hurt (856 Questover Lane)

Suggestion

As a resident of Creve Coeur who is interested in promoting a safe, walkable community, I ask that you consider constructing pedestrian bridges across Olive, perhaps near the intersection of Questover and Ross or the new BJC Hospital. Currently it is unsafe crossing Olive on foot; the only option is to drive across, leading to further traffic congestion and less community cohesion.

Staff Response

The Missouri Department of Transportation (MoDOT) owns and maintains Olive Boulevard. MoDOT is currently designing roadway and pedestrian improvements along Olive that will include the intersections of Olive at Questover/Ross and Olive at BJC Hospital. Information about this project (including a tentative schedule and conceptual plans) can be found on the project's website at:

<https://www.modot.org/route-340-resurfacing-between-lea-oak-and-i-270>

The project will replace the traffic signal at the intersection of Olive at Questover/Ross and will bring the intersection and its pedestrian crossings into compliance with the standards established through the Americans with Disabilities Act (ADA). The project will also update the pedestrian crossings at the signal for the Olive entrance to BJC Hospital so that these crossings are also ADA compliant.

**Citizen Recommendations
CIP FY2021–FY2025**

Mary Schnoring (590 Sarah Lane)

Suggestion

Having read your invitation to suggest a project that will be beneficial to the residents of Creve Coeur, I am taking this opportunity to request consideration be given to "fixing" the main entrance/exit to Golfview on the Green Condo complex off Old Ballas Road. One would need only to drive in or out once to realize that the construction was not done in a professional manner. Each time I leave the campus, my poor husband is jarred in his seat no matter how slowly I drive. Entering is no different. There are over 90 families who would benefit from this improvement and I am certain all would be most grateful.

Staff Response

Thank you for your suggestion to improve the entrance to the Golfview on the Green complex. The entrances along Old Ballas Road are generally of two different types: ones where the apron begins at the edge of Old Ballas and others with an apron that begins at the top of the rolled curb along Old Ballas. The entrance to the Golfview complex begins at the top of the curb, and I think that is the bump that you feel.

The City made sidewalk updates on Old Ballas Road in 2010 and is currently considering additional updates for that area. It will make sense to consider revising entrances like yours to be smoother at the edge of Old Ballas when the sidewalks are updated there.

Citizen Recommendations CIP FY2021–FY2025

Ollie Fisher (953 North Spoede Road)

Suggestion

I would like the city to consider the sidewalks on Spoede Road between Olive and Ladue. The sidewalk is only on one side of the street, very narrow, and the curbs are in disrepair.

When my wife and I walk we must move into the street to allow strollers, or people walking in the opposite direction to pass.

This is dangerous as the street is also very narrow. Additionally, many sections of the sidewalk are uneven while electric posts block some sidewalks.

Thank you for considering the citizen input.

Staff Response

The City's right of way along Spoede Road varies in width, but the sidewalk for much of the north end of Spoede is located at the extent of this right of way. It appears that widening of the entire sidewalk would require easements from most or all of the residents north of Colonial Hills Parkway, and a project of that scale may take years to become a reality.

The limited right of way is also why mailboxes, utility poles, and fire hydrants are so close to (and – as you point out – within) the sidewalk.

The City will review this sidewalk for any tripping hazards. We will also review whether the sidewalk can be improved with intermittent passing areas, similar to those that were created along Graeser Road several years ago. These areas are slightly wider and spaced about every 200 feet to help prevent the need for you to step onto the grass or out onto Spoede to make way for other pedestrians.

**Citizen Recommendations
CIP FY2021–FY2025**

Mike Fries (12949 Gallagher Road)

Suggestion

Regarding possible candidates for Creve Coeur capital spending in 2020, I would like to suggest one or maybe 2 street lights in the section of Gallagher Rd just east of Fernview Dr. This section is literally a black hole at night and sure could use some light for the 8 houses along it. There is a street light on the section west of Fernview but none on ours. We've been in the dark for the 45+ years we've lived here and I think it's time for a change.

Staff Response

Adding street lights along a street or a neighborhood can be a polarizing idea. We have heard from residents who passionately support or oppose street lights. For this reason, new street lighting on a residential street typically begins with a request from a subdivision's trustees.

Please find the City's street lighting policy attached. This policy includes the process to follow to add street lights to Gallagher. Generally, the process involves:

1. A request from your subdivision trustee to the City to begin the process
2. Your subdivision would coordinate the location of the lights and the installation of the electrical conduit needed for the lights.
3. Ameren installs the lights and the wiring.
4. The City accepts the responsibility to pay for the electricity for the lights.
5. Ameren remains the owner of the lights and maintains them.

**Citizen Recommendations
CIP FY2021–FY2025**

Barb Finnegan (109 Emerald Green Court)

Suggestion

I am a Creve Coeur resident and lived near the City Hall area for over 30 years. We have worked hard to get sidewalks on Ballas Road for a good part of that 30 years. One area of major concern is the area just north of the Post Office where not only the kids from DeSmet try to traverse but I do as well, as many other pedestrians.

There is a narrow strip of grass which is very dangerous to walk on, or you can trespass on the office building landscape area which is what many of us have done for over 10 years. I even talk occasionally to an elder gentleman with a cane who walks that narrow grass strip and it is frightening to see how unstable he is. I am always worried he will stumble into traffic or a side mirror from a truck will knock him down.

Is there someone who can get this project through for the safety of the students and residents who are trying to traverse this area?

I will say the dirty word, "Eminent Domain" which should clearly be used in this situation if there is no cooperation from the building owner. This is very clearly a safety issue and fits the bill to use Eminent Domain before someone is either seriously hurt or killed in this area.

About 10 years ago I met with Jim Heines and some others who showed me the plan for a sidewalk in that area, but it never came to fruition, as I believe the building owner pushed back. I don't think a little push back should hold up the city in ensuring safety for all, particularly in such a very visible location as the Police Department and City Hall right across the street.

That is one suggestion.

My other comment is the same as for the last 30 years living here. We need more accessible biking and pedestrian trails in Creve Coeur. A pedestrian friendly city strongly enhances desirability of a community. It would be nice to have some way to connect to Creve Coeur park or to work with Trail Net or the many organizations who are trying to make our entire St. Louis area more bike friendly.

Take a visit to the Grants Trail in South County. It's a beautiful and very often used biking/walking trail, off the roads, which is a win-win for all.

The bike paths on Olive are very dangerous and way too close to traffic. Perhaps a trail along Ladue Road like they have on Clayton Road would be good, but it needs to be safe and away from traffic traveling at 40 plus mph. I hope someone is looking at what other communities are doing in this respect, not only in St. Louis but in progressive cities like Denver. I don't want to live in a community that falls behind and is known as a town just for an older population. Let's draw the health minded and younger people here as well.

Citizen Recommendations CIP FY2021–FY2025

Barb Finnegan (109 Emerald Green Court)

Staff Response

The City is currently working with the owner of the property north of the post office to provide the right of way and easements needed to add a sidewalk on the west side of New Ballas Road from Magna Carta Drive to Rocky Drive.

The need to relocate the existing retaining wall along this property's New Ballas frontage will make this section of sidewalk quite expensive. For this reason, the City plans to pursue federal funding to assist with the cost of the project. Similar funding was used to help build the sidewalks on Ladue Road, Emerson Road, and New Ballas Road in your area in recent years. These three sidewalk projects originated with the sidewalk plan that you referenced.

The use of eminent domain would be the City's last resort, and it does not appear that would be necessary in this case.

The proposed five-year capital improvement program identifies this project in anticipation of a grant opportunity in the near future and the City's successful application for funding.

Because the process of extending the sidewalk is expected to take several years, and because the pedestrian route to get from Magna Carta to Rocky Drive requires pedestrians to cross to the east side of New Ballas, the City is currently updating its pedestrian crossings along New Ballas Road. The curb ramps and push buttons are currently being replaced at the signal for the medical office buildings and the shopping center that includes St. Louis Bread Company. Similar improvements are planned for the intersection of New Ballas Road at Magna Carta Drive later this year.

The City shares your desire to become more bicycle friendly and better connected. Adding bicycle trails is a long-term process that requires public support and funding. For example, adding a bike trail along Ladue Road would face the challenges of limited right of way, utility relocation, grading, and roadway modifications to accommodate the trail crossings. The cost to add such a trail would need to be weighed against the need to maintain the existing roadway.

The City has been actively working with area agencies to explore possibilities for adding bicycle trails and connections. Recent examples include:

- 2018 addition of a bicycle connection and crossing to Stacy Park near Bayer's entrance on Warson Road
- 2019 study of possible neighborhood connections to Millennium Park
- 2015 study of the possible addition of a bike path along Mason Road
- The on-going effort to reconfigure Old Olive Street Road to include a separate bike path.
- 2019 adoption of the 39 North Greenway plan.

**Citizen Recommendations
CIP FY2021–FY2025**

Sharon Leve (12317 Boothbay Court)

Suggestion

I would like to propose making the bathrooms at Conway Park year round use. PLEASE! I don't know about any other park in Creve Coeur, but each park should have at least one.

Staff Response

The Parks and Historic Preservation Committee has made the same recommendation. The City will try to find ways to renovate or replace the restrooms in the parks so that they can be open all year.

The restrooms in most of the City's parks were designed to be open only during the spring, summer, and fall. The buildings generally use vents to help keep them from becoming too hot during the summer, but this system makes them susceptible to freezing during the winter. The restrooms' plumbing is disconnected and the restrooms are closed during the winter to prevent the pipes in the buildings from freezing and breaking.

Citizen Recommendations CIP FY2021–FY2025

Greg Wilson (address not specified)

Suggestion

I saw on your website that you are requesting ideas for capital improvements. Improve/Create a safe running/biking path along Olive and along New Ballas, with a barrier, even if just a slight curb to protect from cars. I understand it isn't easy, but surely there are spots that you can improve. The whole stretch is dangerous (I run it regularly).

Improve bike paths/running paths on the major arteries.

Great River Greenway may be able to help.

Staff Response

The Missouri Department of Transportation (MoDOT) owns and maintains Olive Boulevard, and the City owns and maintains New Ballas Road. Creating and maintaining accessible sidewalks and pedestrian routes is a high priority for both MoDOT and the City.

MoDOT is currently designing roadway and pedestrian improvements along Olive west of Interstate 270. Information about this project (including a tentative schedule and conceptual plans) can be found on the project's website at:

<https://www.modot.org/route-340-resurfacing-between-lea-oak-and-i-270>

This project will take several years to complete, but the plan is to create continuous sidewalks from Fernview Drive to Interstate 270. Doing so will close some gaps that exist, perhaps the most notable of which are between Fee Fee Road and Mason Road.

The City strives to keep its existing sidewalk network in good shape and to fill gaps where possible. Several projects are planned along New Ballas Road to update both the pavement and the sidewalk, and an additional project is proposed to extend the New Ballas sidewalk on the west side of New Ballas between Rocky Drive and Magna Carta Drive. The City's goal is to eventually create continuous, accessible sidewalks along both sides of New Ballas Road.

**Citizen Recommendations
CIP FY2021–FY2025**

Joyce Steiger (200 North New Ballas Road)

Suggestion

Ballas Road is DARK at night. We have a lovely neighborhood, but cannot walk on the sidewalk on Ballas, because it is dark. I see people out walking with flashlights.

Staff Response

The City currently has plans for several projects to improve the pavement and sidewalks along New Ballas Road, and it would be appropriate to explore the feasibility and cost of street and sidewalk lighting as part of those projects.

Adding lights can be a polarizing topic, so the City will want to carefully vet this before putting anything in place.

**Citizen Recommendations
CIP FY2021–FY2025**

David Meyer (433 Shadybrook Drive)

Suggestion

With the recent and proposed construction near the Quailways/Tealbrook U-Turn, I propose the exchange be improved to allow for two lanes of traffic for cars entering Lindbergh. One lane for cars crossing the boulevard, and the other for right turns on Lindbergh. Often, cars wait for 4-5 minutes to take a simple right on red - even longer during periods of heavy traffic.

Thanks for considering this project.

Staff Response

The Missouri Department of Transportation (MoDOT) owns and maintains Lindbergh Boulevard and the U-turn at the Quailways/Tealbrook intersection. I will forward your request to MoDOT, but I think that it is unlikely that they will expand the intersection, because they recently replaced the traffic signal there.

Citizen Recommendations CIP FY2021–FY2025

Barbara Brozek (914 Stablefield Court)

Suggestion

I would like to submit a suggestion for the Capital Improvement list:

Extension of the sidewalk along Ambois Drive near Bellerive elementary school. Currently the sidewalk abruptly stops along Ambois Drive a few hundred yards past the school.

Ambois is a “connector” street which is used for school traffic as well as cars going from Mason to Fernview to Olive to avoid several stoplights on Olive. Cars frequently speed on Ambois, and the street has several sharp/blind turns.

Extending the sidewalk would allow pedestrians - especially school children - to walk safely.

Staff Response

The sidewalks along Ambois Drive are absent in the Bellerive Estates Second Edition subdivision, but are present in the Bellerive Farms and Maison Manor subdivisions. I think that the standard changed (i.e. sidewalks became required) for the latter two subdivisions.

The City is interested in connecting gaps in the sidewalks, but doing so will take time, planning, and public outreach. Sidewalks can be popular until someone realized that it will impact their landscaping, trees, or driveway.

The City is nearly finished with a conceptual plan to add a sidewalk to Fernview Drive. I imagine that a sidewalk on Ambois would begin with a similar process, and I support adding such a plan to the Capital Improvement Program. That said, funding that plan could be a challenge in FY2021.

Instead of rushing into developing a plan, I think that it would be a good idea for City staff to start by asking those who live along Ambois Drive whether or not they would support the addition of a sidewalk in front of their homes. The City will probably need easements from several of the residents to build the sidewalk, so local support will be necessary in order to have a successful project.

**Citizen Recommendations
CIP FY2021–FY2025**

Carolyn Schuerman (11345 Mosley Lane)

Suggestion

Fix Mosley Rd.

Staff Response

The City is currently in the design phase for an upcoming project to improve Mosley Road from Ladue Road to Olive Boulevard. This project will include sidewalk repairs and updates, smoothing out some of the hills, minor widening to move traffic off of the drainage inlets, and a new asphalt surface for Mosley. Construction of the project is scheduled to begin in the spring of 2022 or 2023, depending on how the design and easement acquisition progress.

The City was awarded a federal grant to fund a substantial portion of this project.

The preliminary plans are complete for the project, and the City is now looking toward this summer to hold a public information meeting to discuss the project with the residents along Mosley.

**Citizen Recommendations
CIP FY2021–FY2025**

Kathy Rockamann (159 Carriage Square Drive)

Suggestion

I am a resident of Creve Coeur and live at 159 Carriage Square Drive. I am writing to request that we get some pickleball courts put in in some of our parks. I know that a tennis court can pretty easily be changed to a pickleball court. With all of the tennis courts that we have in all of the city's parks, it seems only fair to have some courts to use for pickleball. Pickleball is fast growing in popularity and is not only for older players. Younger people, even preteens can play it. Please consider this. I feel it could benefit many of our residents.

Staff Response

The demand for pickleball courts has grown in recent years, and the City plans to add more pickleball options in its parks when work is done on the tennis courts. For example, pickleball lines were added to the courts at Venable Memorial Park when the courts there were repaired and repainted in 2018.

The City has considered adding pickleball lines to the existing courts at Lake School Park and Conway Park. The development of the Parks Master Plan also raised the idea of creating designated pickleball courts at a park like Lake School Park. The renovation of the courts at Lake School Park is tentatively scheduled for FY2025.

DRAFT 4/13/2020

EXHIBIT D
TEN-YEAR CAPITAL IMPROVEMENT PROGRAM
(COMBINED CAPTIAL FUND AND BUILDING PROJECT BOND FUND)
REVENUE AND EXPENDITURES SUMMARY
FY2016-FY2025

REVENUES	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
Beginning Fund Balance <i>(est. Cash Basis as of July 1)</i>	\$ 1,326,656	\$ 2,188,311	\$ 12,168,363	\$ 10,885,185	\$ 5,289,205	\$ 3,455,997	\$ 2,685,198	\$ 2,459,286	\$ 1,858,969	\$ 2,038,760
City Sales Tax	\$ 2,056,301	\$ 2,057,326	\$ 2,130,456	\$ 2,167,326	\$ 2,003,242	\$ 2,003,242	\$ 2,023,274	\$ 2,023,274	\$ 2,023,274	\$ 2,023,274
Building Project Bond Fund (Prop P)	\$ -	\$ 10,843,381	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest on Investments	\$ 1,092	\$ 2,923	\$ 125,409	\$ 139,564	\$ 100,500	\$ 24,500	\$ 24,500	\$ 22,500	\$ 22,500	\$ 22,500
Building Project Property Tax Collection	\$ -	\$ -	\$ 824,154	\$ 815,260	\$ 901,000	\$ 901,000	\$ 901,000	\$ 901,000	\$ 901,000	\$ 901,000
Other Agency Funding	\$ 627,305	\$ 662,851	\$ 664,998	\$ 422,276	\$ 479,172	\$ 893,000	\$ 852,500	\$ 868,700	\$ 892,550	\$ 20,000
Proceeds from Equipment Sales	\$ 15,440	\$ 10,420	\$ -	\$ -	\$ -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Transfers In from Other Funds	\$ 400,000	\$ 400,000	\$ 1,200,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 650,000	\$ 400,000	\$ 400,000	\$ 400,000
TOTAL REVENUES	\$ 3,100,138	\$ 13,976,901	\$ 4,945,017	\$ 3,944,426	\$ 3,883,914	\$ 4,231,742	\$ 4,461,274	\$ 4,225,474	\$ 4,249,324	\$ 3,376,774

EXPENDITURES	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
Government Facilities	\$ 133,986	\$ 482,677	\$ 1,871,699	\$ 6,022,472	\$ 1,815,030	\$ 180,000	\$ 270,000	\$ 541,059	\$ 20,000	\$ 20,000
Parks and Recreational Facilities	\$ 551,553	\$ 163,003	\$ 813,462	\$ 367,850	\$ 221,431	\$ 150,500	\$ 155,000	\$ 275,000	\$ 250,000	\$ 30,500
Stormwater	\$ 40,405	\$ 198,457	\$ 148,370	\$ 3,174	\$ 60,000	\$ 200,000	\$ 50,000	\$ -	\$ -	\$ -
Streets and Sidewalks	\$ 1,492,533	\$ 2,900,591	\$ 2,444,553	\$ 2,034,781	\$ 2,611,883	\$ 3,391,207	\$ 2,923,000	\$ 2,813,160	\$ 2,639,440	\$ 1,968,900
Capital Equipment	\$ 325,710	\$ 252,121	\$ 384,490	\$ 316,864	\$ 205,135	\$ 278,700	\$ 478,100	\$ 381,300	\$ 346,000	\$ 356,100
Administration	\$ -	\$ -	\$ -	\$ 83,612	\$ 90,387	\$ 91,777	\$ 94,530	\$ 97,366	\$ 100,287	\$ 103,296
Debt Service	\$ -	\$ -	\$ 565,622	\$ 711,656	\$ 713,256	\$ 710,356	\$ 716,556	\$ 717,906	\$ 713,806	\$ 727,206
Transfers Out	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL CAPITAL EXPENDITURES	\$ 2,544,187	\$ 3,996,849	\$ 6,228,196	\$ 9,540,409	\$ 5,717,122	\$ 5,002,540	\$ 4,687,187	\$ 4,825,791	\$ 4,069,533	\$ 3,206,002
ENDING FUND BALANCE (CASH BASIS)	\$ 1,882,607	\$ 12,168,363	\$ 10,885,184	\$ 5,289,202	\$ 3,455,997	\$ 2,685,198	\$ 2,459,286	\$ 1,858,969	\$ 2,038,760	\$ 2,209,533

Attachment: CIP FY2021-FY2025 - P&Z Report of Changes and Request for Recommendation (#20-009: FY2021-FY2025 Capital Improvement

DRAFT 3/30/2020

EXHIBIT E
CAPITAL FUND FUTURE PROJECTS

Future Projects are those that have been determined to be necessary or desired but are not identified in the five-year Capital Improvement Program. The reason why a project is not identified in the CIP varies, but many projects are designated as future due to lack of available funding, forecasting future needs, or a combination of the two.

In addition to annual condition assessments of the City's facilities, equipment, and infrastructure, several planning documents have contributed to the Future Projects list:

- 39 North Greenway Plan (2020)
- Golf Course Needs Assessment (2015)
- Historic Building Assessment (2019)
- Millennium Park Trails Study (2019)
- Old Olive Street Road Great Street Plan (2019)
- Parks Master Plan (2019)
- Stormwater Master Plan Update (2012)

The total estimated cost of projects identified as Future Projects is approximately \$64 million, summarized as follows:

\$	2,725,000	Government Facilities
\$	9,180,000	Parks and Recreational Facilities
\$	12,962,000	Stormwater
\$	38,950,000	Streets and Sidewalks
\$	63,817,000	Future Project Total

Specific projects are outlined in the pages that follow.

FUTURE PROJECTS - GOVERNMENT FACILITIES

PROJECT	COST
Community Center Renovation <i>Renovate and update the meeting rooms, multi-purpose room, and restrooms on the lower level of the Government Center to be more useful, attractive, and accessible.</i>	\$ 500,000
Government Center Renovation <i>Reconfigure and update the offices and meeting spaces in the Government Center according to the design planned for FY2021.</i>	\$ 2,500,000
Replace Multi-Purpose Room Chairs <i>The chairs in the multi-purpose room are frequently used for meetings and parties, and these chairs are wearing out. New chairs are recommended.</i>	\$ 25,000
Public Works Equipment Shelter <i>Demolish the existing structure at 1030 N. Lindbergh Boulevard and construct a new building to house the City's leaf vacuums and other equipment when not in use.</i>	\$ 200,000
SUBTOTAL: \$ 2,725,000	

FUTURE PROJECTS - PARKS AND RECREATIONAL FACILITIES

CONWAY PARK	COST
Reconstruct Asphalt Walking Path <i>Remove the existing six-foot-wide asphalt path and replace it with a new ten-foot-wide asphalt path with a stabilized base.</i>	\$ 300,000
Improve Park Signage <i>Replace the existing signage for the park.</i>	\$ 25,000
Expand Parking (Remove Tennis Court) <i>Remove the south tennis court and expand the parking lot north to add about 40 parking spaces.</i>	\$ 200,000
Convert Restrooms to Year-Round Use <i>Replace roof system and add heaters to make the restrooms capable of being open during freezing weather.</i>	\$ 50,000
Dredge Silt from Pond and Stock for Fishing <i>Remove the silt that has accumulated at the bottom of the lake and restore the pond to a suitable depth for fish and a healthy pond system.</i>	\$ 250,000
Repair and Stabilize the Exterior of the Log Cabins <i>Multiple repairs are needed to restore the exterior of the Hackmann Cabin and the Clester Cabin so that both are water-tight and structurally sound.</i>	\$ 175,000
Create Disc Golf Course <i>Add a nine-hole frisbee golf course throughout the park.</i>	\$ 20,000
Add Second Playground with Swingset <i>Construct a second playground that is focused on swings.</i>	\$ 150,000
Create an Arboretum <i>Partner with area agencies to convert the northern portion of Conway Park into an arboretum with entry monuments, informational signage, and interpretative trails.</i>	\$ 200,000
SUBTOTAL - CONWAY PARK: \$ 1,070,000	

FUTURE PROJECTS - PARKS AND RECREATIONAL FACILITIES

LAKE SCHOOL PARK	COST
Improve Park Signage <i>Add signs for Lake School Park that follow the design from the FY2022 sign master plan.</i>	\$ 20,000
Remove Existing Playground <i>The existing playground is no longer functional and is closed. Remove the existing playground and play areas, and convert the hillside to lawn.</i>	\$ 50,000
Convert Restroom Facility to Year-Round Use <i>Replace roof system and add heaters to make the restrooms capable of being open during freezing weather.</i>	\$ 50,000
Renovate Lake School House <i>Future exterior and structural improvements to Lake School House .</i>	\$ 150,000
Create a Walking Path <i>Build an asphalt walking path around the perimeter of the park that connects to the sidewalk on Coeur de Ville Drive.</i>	\$ 150,000
Create New Tennis Complex <i>In addition to the new courts that are envisioned in FY2025, add a new tennis pro shop building and possibly additional courts for pickleball or other racket sports.</i>	\$ 300,000
Dam Repairs <i>The south portion of Lake School Park is a detention facility that uses a large earthen dam to restrict stormwater flow. This dam will need maintenance in time.</i>	\$ 100,000
SUBTOTAL - LAKE SCHOOL PARK: \$ 820,000	

FUTURE PROJECTS - PARKS AND RECREATIONAL FACILITIES

LAVERNE COLLINS PARK	COST
Add a Dog Park <i>Create a fenced-in dog park in the open area of the park.</i>	\$ 100,000
Develop a Community Garden <i>Designate a space for a community garden and set up water service for the garden.</i>	\$ 25,000
SUBTOTAL - LAVERNE COLLINS PARK: \$ 125,000	

MALCOLM TERRACE PARK	COST
Improve Park Signage <i>Add signs for Malcolm Terrace Park that follow the design from the FY2022 sign master plan.</i>	\$ 20,000
Replace Pavillion <i>Replace the existing pavilion near the parking lot.</i>	\$ 50,000
Convert Restroom Facility to Year-Round Use <i>Replace roof system and add heaters to make the restrooms capable of being open during freezing weather.</i>	\$ 50,000
Replace Playgrounds and Safety Surface <i>Remove the existing playgrounds and install new, accessible playgrounds with rubberized safety surface.</i>	\$ 350,000
Park Bridge and Stream Rehabilitation <i>Improve the stream channel and protect the footings for the vehicular bridge at the south end of Townsend Street. This bridge is currently closed.</i>	\$ 500,000
Develop Nature Trails <i>Improve upon the existing mulched walking paths with new signage and additional clearing.</i>	\$ 100,000
Creve-Coeur-Frontenac Rails-to-Trails Project <i>Partner with the City of Frontenac to create a trail connection between Malcolm Terrace Park and a new park in Frontenac using the former railroad right of way.</i>	\$ 250,000
Add Pedestrian Bridges for Nature Trails <i>Two pedestrian bridges are envisioned for the nature trails. Challenges for these bridges include access and their location in the regulatory flood plain.</i>	\$ 500,000
Add a Multi-Use Court <i>Create a new sport court that can be used for sports from basketball to badminton to roller hockey.</i>	\$ 200,000
SUBTOTAL - MALCOLM TERRACE PARK: \$ 2,020,000	

FUTURE PROJECTS - PARKS AND RECREATIONAL FACILITIES

MILLENNIUM PARK	COST
Parking Lot Lighting <i>Add lights to the parking lot closest to Millennium Park that resemble those recently installed by Barnes Jewish Hospital in adjacent lots.</i>	\$ 80,000
Improve Park Signage <i>Add signs for Millennium Park that follow the design from the FY2022 sign master plan.</i>	\$ 20,000
Asphalt Trail Resurfacing <i>Repair, widen, and repave the asphalt trail around Millennium Park.</i>	\$ 200,000
Add Nature Trail with Interpretive Elements <i>Create a new trail through the wooded area along the creek at the south end of the project. Two new bridges would be added to provide access to the trail.</i>	\$ 400,000
Add Outdoor Fitness Equipment <i>Install fitness stations along the walking path.</i>	\$ 50,000
Create an Outdoor Amphitheater/Band Stand <i>Replace one of the ball fields with a permanent amphitheater or band stand to promote summer concerts and other events.</i>	\$ 250,000
Replace and Expand the Water Play Feature <i>Remove the existing splash pad and replace it with a larger water play feature with more interactive elements.</i>	\$ 300,000
Park Trail Connection to Deland Drive <i>Add a bridge and path to create a trail connection between Millennium Park and the Ridgemoor Forest Subdivision to the south.</i>	\$ 175,000
Park Trail Connection to Questover Subdivision <i>Add a trail connection between Millennium Park and the Questover Subdivision on the east side of the park.</i>	\$ 200,000
SUBTOTAL - MILLENNIUM PARK: \$ 1,675,000	

FUTURE PROJECTS - PARKS AND RECREATIONAL FACILITIES

DR. H PHILLIP VENABLE MEMORIAL PARK		COST
Asphalt Trail Resurfacing		\$ 200,000
<i>Repair, widen, and repave the asphalt trail around the park.</i>		
Improve Park Signage		\$ 20,000
<i>Add signs for Venable Memorial Park that follow the design from the FY2022 sign master plan.</i>		
Convert Restroom Facility to Year-Round Use		\$ 50,000
<i>Replace roof system and add heaters to make the restrooms capable of being open during freezing weather.</i>		
Replace Pedestrian Bridge		\$ 150,000
<i>Remove and replace the existing wooden pedestrian bridge between Venable Memorial Park and Foxbrook Drive.</i>		
Replace Tennis Courts		\$ 250,000
<i>The existing asphalt tennis courts can no longer be effectively maintained. New courts would be constructed with post-tensioned concrete.</i>		
Create a Dog Park		\$ 100,000
<i>Designate a section of the park as a new dog park, fence it in, and create a walking path to it.</i>		
Add a Water Play Feature		\$ 200,000
<i>Install an interactive splash pad near the existing playground.</i>		
Replace the 2-5 Year Old Playground		\$ 200,000
<i>Remove the existing play structures and install new, accessible playgrounds and new safety surfaces beneath them.</i>		
Install a New Multi-Use Court		\$ 200,000
<i>Create a new sport court that can be used for sports from basketball to badminton to roller hockey.</i>		
SUBTOTAL - VENABLE MEMORIAL PARK:		\$ 1,370,000

FUTURE PROJECTS - PARKS AND RECREATIONAL FACILITIES

DIELMANN RECREATION COMPLEX AND GOLF COURSE		COST
Dielmann Recreation Complex Renovations - Phase 2		\$ 500,000
<i>Improvements include new locker rooms, renovated concession area, and the addition of a catering kitchen.</i>		
Golf Course Irrigation Replacement		\$ 875,000
<i>Install new pump stations and a new state-of-the-art irrigation system to replace the existing system that is over 40 years old.</i>		
Golf Course Maintenance Bridge		\$ 150,000
<i>Remove the existing, failed wooden maintenance bridge with a culvert that would allow for greater loads to safely cross.</i>		
Golf Course South Fence Replacement		\$ 75,000
<i>Clear brush and trees from the fence line and then replace the existing chain link fence with a new one.</i>		
New Golf Course Maintenance Facility		\$ 500,000
<i>Replace the existing maintenance facility and garage with a new facility.</i>		
SUBTOTAL - DIELMANN REC. COMPLEX:		\$ 2,100,000

FUTURE PROJECTS - STORMWATER

EROSION PROJECTS	BENEFIT SCORE	COST
New Ballas Culvert Rehabilitation <i>Clear area downstream of the culvert beneath New Ballas Road to regrade and armor the banks to protect from future erosion.</i>	1.12	\$ 125,000
Brooktrail Court Bank Protection <i>Install gabion baskets along the banks of Windrush Creek to protect the bank and combat erosion at 257 Brooktrail Court.</i>	0.34	\$ 35,000
Ferntop Lane Bank Protection <i>Use limestone rock to armor the banks of the creek behind 12970 Ferntop Lane to combat bank erosion.</i>	0.28	\$ 70,000
Fairways Circle Bank Protection <i>Stabilize the banks of the creek behind 527 Fairways Circle to limit future bank erosion.</i>	0.31	\$ 32,000
Fernview Drive Outlet Protection <i>Clear out eroded drainage outlet at 1009 Fernview Drive that has been filled with debris and construct a rock-lined swale to limit further erosion.</i>	0.29	\$ 35,000
Royal Manor Bank Stabilization <i>Clear honeysuckle from banks and install bank stabilization behind 12554 Royal Manor.</i>	0.28	\$ 45,000
D'Artagnan Court Outlet Protection <i>Mitigate the erosion at the end of the stormwater discharge at 13200 D'Artagnan Court and construct channel protection to help prevent future erosion.</i>	0.28	\$ 36,000
Laduemont Drive Outlet Protection <i>Mitigate the erosion at the end of the stormwater discharge at 240 Laduemont Drive and construct channel protection to help prevent future erosion.</i>	0.25	\$ 40,000
Country Manor Lane Outlet Protection <i>Mitigate the erosion at the end of the stormwater discharge at 240 Laduemont Drive and construct channel protection to help prevent future erosion.</i>	0.20	\$ 49,000
Chamblee Lane Bank Stabilization <i>Construct vegetated gabions along the creek bank to limit future erosion behind 606 and 622 Chamblee Lane.</i>	0.17	\$ 265,000
Spoede View Bank Stabilization <i>Construct vegetated gabions and heavy stone along the creek bank to limit future erosion behind 10677 Spoede View Court.</i>	0.05	\$ 215,000
SUBTOTAL - EROSION PROJECTS:		\$ 822,000

FUTURE PROJECTS - STORMWATER

FLOODING WITH EROSION PROJECTS	BENEFIT SCORE	COST
Fernridge Creek Flood Mitigation <i>Stabilize the banks of Fernridge Creek from Bellerive Estates Drive to Ambois Drive and increase flood capacity for the creek.</i>	0.17	\$ 5,000,000
Chasselle and Chamblee Flood Mitigation <i>Stabilize and reinforce the banks of the creeks between Chasselle and Chamblee and construct a berm/levy along Hibler Creek to protect homes on Chamblee.</i>	0.12	\$ 3,500,000
Hibler Creek Tributary Stabilization <i>Regrade and reinforce the banks of approximately 400 feet of creek along the west side of 12759 Ladue Road.</i>	0.08	\$ 1,000,000
SUBTOTAL - FLOODING WITH EROSION: \$ 9,500,000		

FUTURE PROJECTS - STORMWATER

INFRASTRUCTURE PROJECTS	BENEFIT SCORE	COST
Hibler Road Swale <i>Rebuild drainage swale along the south side of Hibler Road to deter stormwater from entering back yard of 374 Falaise Drive.</i>	1.30	\$ 20,000
Alden Lane Swale <i>Remove existing inlet and collapsed pipe and replace it with a gabion-lined swale.</i>	1.25	\$ 20,000
Balcon Estates Court Culvert <i>Remove and replace steel culvert pipe beneath Balcon Estates Court. The upstream end of this culvert collapsed and was replaced by MSD in FY2020.</i>	1.00	\$ 150,000
New Inlet at Magna Carta Drive at Templar Drive <i>Replace the existing small, non-standard inlet at the corner of Magna Carta and Templar with a standard grate inlet to reduce the tendency to clog.</i>	0.50	\$ 20,000
Mosley Acres Curbing <i>Replace approximately 400 feet of curbing to help prevent erosion behind the curb. This work would be best incorporated into a larger road project on Mosley Acres.</i>	0.38	\$ 55,000
Oak Park Court Stormwater Improvements <i>New curbing, inlet, and pipes to ensure that the roadway runoff does not flood and erode the yard at #3 Oak Park.</i>	0.30	\$ 50,000
New Inlet at Magna Carta Drive at Runnymede Drive <i>Design and construct a new curb inlet near the intersection of Magna Carta and Runnymede where water tends to collect.</i>	0.20	\$ 50,000
Graeser Lane Drainage Improvements <i>Graeser Lane currently relies upon one area inlet at the end of the street. This project would design and construct additional stormwater facilities along Graeser Lane.</i>	0.13	\$ 75,000
Creve Coeur Golf Course Pond Rehabilitation <i>The golf course ponds serve as detention ponds and have silted in. Work includes dredging the ponds, replacing the dam, and installing rock along pond banks.</i>	0.02	\$ 2,000,000
Inspect and Update New Ballas Stormwater System <i>It is unclear whether the stormwater system along New Ballas was ever dedicated to and accepted by MSD. This work would prepare the system for dedication.</i>	0.00	\$ 200,000
SUBTOTAL - INFRASTRUCTURE PROJECTS: \$ 2,640,000		

FUTURE PROJECTS - SIDEWALKS

NEW SIDEWALK AND TRAIL PROJECTS	COST
39 North Greenway	\$ 5,000,000
<i>Construct a new multi-use path through much of the 39 North District that connects to Stacy Park in the south to the Centennial Greenway in the north.</i>	
Bellerive Estates Sidewalk	\$ 750,000
<i>Design, acquire easements for, and construct a new sidewalk along Bellerive Estates Drive from Fernview Drive to Mason Manor Drive.</i>	
Creekside/Bellerive Trail	\$ 150,000
<i>Add a new multi-use path between Creekside subdivision and Bellerive Elementary School.</i>	
Falaise Sidewalk Feasibility Study	\$ 30,000
<i>Explore the possibility and cost of a sidewalk along Falaise between Hibler and Cross Creek.</i>	
Fernview Drive Sidewalk	\$ 700,000
<i>Design, acquire easements for, and construct a sidewalk along the east side of Fernview Drive from Olive to Gallagher Road and connect to adjacent sidewalks.</i>	
Mason Road Sidewalk Infill	\$ 1,500,000
<i>Add a sidewalk along Mason Road from Conway Road to Hibler Road through a partnership with St. Louis County and Town and Country when Mason is next paved.</i>	
Office Park Sidewalk Improvements	\$ 400,000
<i>Remove and replace the existing sidewalk along Office Parkway and Olde Cabin Road with a 6-foot-wide sidewalk that is protected by a new vertical curb.</i>	
Trail Connection between Ridgemoor Forest and Country Forest Subdivisions	\$ 220,000
<i>Create a multi-use trail from the end of Trammell Court to Cross Green Drive as part of a larger effort to increase connectivity to Millennium Park.</i>	
SUBTOTAL - NEW PROJECTS: \$ 8,750,000	

MAINTENANCE OF THE EXISTING SIDEWALK NETWORK	Cost
Sidewalk Repairs and Accessibility Upgrades	\$ 2,000,000
<i>City-wide repairs to and replacement of existing sidewalk and curb ramps to fix broken areas, correct tripping hazards, and make accessibility improvements.</i>	
SUBTOTAL - EXISTING MAINTENANCE NEEDS: \$ 2,000,000	

FUTURE PROJECTS - SIDEWALKS

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SUBTOTAL - NEW PROJECTS: \$ 8,750,000	

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<i>City-wide repairs to and replacement of existing sidewalk and curb ramps to fix broken areas, correct tripping hazards, and make accessibility improvements.</i>	
SUBTOTAL - EXISTING MAINTENANCE NEEDS: \$ 2,000,000	



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: March 20, 2020

TO: Mark Perkins, City Administrator

CC: Jim Heines, Director of Public Works

FROM: Matt Wohlberg, P.E., City Engineer

SUBJECT: Repair Location Recommendations
FY2021 Pavement Maintenance Program

The Department of Public Works proposes the roadway and sidewalk maintenance program outlined below for the 2021 fiscal year. This program is divided into five different projects, each of which have their own account in the capital improvement plan: concrete pavement replacement, sidewalk improvements, asphalt pavement resurfacing, microsurfacing, and roadway reconstruction/rehabilitation.

The proposals outlined below depend upon several factors, some of which are outside of the City's control. These proposals may need to be revised if conditions change or if current assumptions turn out to be incorrect. Examples of such conditions and assumptions include utility work schedules, roadway grant awards, and the impacts of the corona virus.

Pavement Condition Definitions

Two aspects of the pavement data that are used in this report require some explanation:

1. PCI. The pavement condition index (PCI) for each street is developed based upon the number of cracks, potholes, and other defects that be seen. This index is on a scale of 0-100, where 100 represents perfect pavement with no problems.
2. Roughness Index. The amount of vertical change in the street is measured along its length, and this is converted into an index that reflects the level of discomfort a driver might experience by using that street. This index is on a scale of 0-100, where 100 represents a perfectly smooth street.

The City hired a consultant in 2016 to measure the pavement conditions and the smoothness of the ride for every City-maintained street. Since then, City staff has reviewed and updated the conditions of the pavement in Ward 3 (2017), Ward 4 (2018), and Ward 1 (2019). The pavement conditions in Ward 2 are currently being updated. City staff updates the condition information for approximately one quarter of the City's pavement network each year to keep this information relevant.

The smoothness information, however, will eventually need to be updated by a similar consultant, because this was measured using specialized equipment. The proposed Capital Improvement Program includes an update of the pavement conditions in FY2021.

Roadway Selection

The City invests a significant portion of its annual budget into street and sidewalk maintenance and improvements. As is typical for most communities, the cost to make all needed and wanted repairs exceeds the City's annual budget, so the City's investment must be prioritized and coordinated in order to make it as effective as possible. To this end, staff makes its repair recommendations based upon two goals:

- 1) to find the most impact for the money spent to perform the maintenance, and
- 2) to make repairs that improve the lives of the citizens of Creve Coeur.

To achieve the first goal, the number of motorists using the roadway, the cost of the repair, and the condition of the street are weighed for each street. The opportunity cost of not doing a repair is also considered, and this is an important decision factor for roads that are on the verge of deteriorating to a point where a particular repair can no longer be effective, thus making the street much more expensive to fix. This first goal, therefore, is to perform the right repair on the right street at the right time. This is pavement management in its most basic form.

The City uses a "neighborhood approach" for street repairs in an attempt to achieve the second goal. Where possible, streets within a subdivision are targeted so to improve as much of the pavement in that subdivision as possible within a span of one or several consecutive years. While this will mean that some of the streets addressed each year might be in better condition than a few others in the City, it will also mean that repairs are concentrated in an area for a short time rather than having these repairs performed piecemeal each (and perhaps every) year. The intent is to create a condition in which future repair needs are similar throughout each neighborhood. This leads to clearer and more intuitive planning for projects. This should also minimize the inconvenience to the residents in each area.

Concrete Pavement Replacement

Work involved in this program will include the removal and replacement of failed concrete pavement slabs on concrete roadways and curb and gutter replacement along roads involved with the asphalt resurfacing and microsurfacing programs.

A pavement slab is the typically rectangular section of concrete pavement that extends across one lane of traffic. For most residential roadways in Creve Coeur, a pavement slab is 15-20 feet long and 10-13 feet wide. This program will replace approximately 270 concrete slabs, which represents about 2% of the over 15,000 total concrete slabs that make up the City's concrete streets.

Approximately 2,000 pavement slabs were identified this spring as having a level of distress that would warrant replacement, meaning that this program will replace about 14% of the slabs identified as replacement candidates. While this means that most of the distressed slabs must remain to be re-prioritized for future replacement programs, it is important to note that the total number of distressed slabs has remained fairly constant at about 1,900-2,000 each spring. At the current funding level, the City is generally replacing concrete pavement at the same pace as the concrete pavement network is deteriorating.

The proposed FY2020 concrete pavement replacement program involves two general groups of streets for concrete replacement. The first group includes those streets for which repairs and improvements have been planned. The goal for the work on these streets is to use a concentrated effort that provides a lasting improvement for the street and eliminates the need to return to that

street in the near future. The second group includes streets where pavement failures have occurred which require immediate attention due to the current or likely future hazard these failures may cause. On these streets, the scope of work is generally the replacement of only a few slabs so that the high-priority slabs can be addressed.

The proposed concrete pavement replacement program is listed below, along with the current pavement condition index (PCI) and roughness index for each street with pavement replacement:

Street Name	Current PCI	Roughness Index (2016)
Beauvais Court.....	57	48
Bergerac Drive	63	53
Carriage Square Drive.....	77	50
Center Parkway Drive.....	69	55
Conway Downs Drive (Phase 1).....	57*	55*
Conway Holmes Circle	56*	52*
Corum Way Court.....	62	32
Corum Way Drive (Phase 1).....	61	62
Decker Lane (Phase 1).....	59*	49*
Emerson Road (Phase 2).....	64	54
Executive Estates (Phase 1)	63*	55*
Fairways Circle (Phase 2)	67	60
Fairways Drive.....	53*	55*
Hackman Lane	75*	70*
Ladue Aire Drive	61	39
Larkmont Drive.....	64	46
Montmartre Court	61	34
Montmartre Drive (Phase 2)	61*	44*
Narbonne Drive.....	59*	47*
Pine Manor Drive.....	62	48
Prinetowne Drive (Phase 2)	60*	45*
Royal Valley Drive (Phase 1)	61	45
Runnymede Drive (Phase 4)	63	45
Sandhurst Drive	72	59
Tureen Drive	55	58

** Indicates an average condition rating for multiple street segments.*

“Phase 1” listed for a street indicates that the current repair will be for a section of the street, with further repairs in future years. A different phase listed will mean that work has been completed on that street in recent years.

These streets are proposed to be included in this program for one or several of the following reasons: pavement conditions, previous commitments, support of other projects, and future planning.

Pavement Conditions. City staff reviews the concrete pavement network at the end of each winter to prioritize the repair needs for concrete pavement and curbing. Failed and potentially hazardous pavement and curbing failures have been given the highest priority for replacement, and all of the pavement identified as potentially hazardous is included in the proposed program.

Several factors that should be considered with respect to the PCI for concrete roadways:

- **Local Failures and PCI.** The pavement condition index (PCI) shown for each street represents the average condition for the entire street. One localized failure will lower the street's condition, but it might not make a big impact to the street's PCI, particularly for longer streets. Concrete conditions usually vary from one slab to the next. It is quite possible to have a hazardous slab failure requiring replacement on a street with a high PCI. Such a street would be a high priority to repair despite a relatively high PCI.

Several streets among those proposed for improvements in FY2021 have developed hazard slabs, including Narbonne Drive and Corum Way Drive. The proposed program expands beyond the few hazardous slabs on these streets to address other priority replacement needs, which is expected to significantly improve the condition of these streets and is expected to reduce the need for further repairs in the foreseeable future.

- **Joint Deterioration.** Spalled (i.e. deteriorated) joints present a different problem for a street's PCI. When patched, joint spalling is a relatively low-severity problem which will not significantly lower a street's PCI, particularly if the rest of the concrete slab is in good condition. Joint spalling along many of the concrete joints on a street can become a problem, not just for the number of slabs that are affected, but because the failure of one or two joint patches can change the pavement conditions overnight.

Deteriorated joints are what drivers tend to feel most when driving on a concrete street, prompting several to claim that streets with deteriorated joints are "the worst in the City." Such a sentiment would not be reflected in the street's PCI.

Concrete slabs can be in very good condition except for their joints. Joint issues often impact adjacent slabs, spreading out the problem. Routine crack and joint sealing will help to prevent joint spalling. Once it has begun, however, spalling can be addressed in several ways, but badly spalled joints should be cut out and replaced. If many of the street's joints have this problem, then the best long-term solution becomes full slab replacement. Unfortunately, the cost to replace much of the street is expensive and will seem disproportionate to the street's PCI.

Center Parkway, Decker Lane, and Emerson Road are good examples of streets that are recommended for repairs due, in large part, to generally poor concrete joints. Slab failures on each of these streets also helped to distinguish each street as priorities to address this year. The extent of the repairs needed for these two streets has caused these repairs to be phased over at least two years.

- **Roughness Index.** The 2016 investigation into the roughness of the City's streets offers an insight into the level of joint deterioration on concrete streets. A low (poor) roughness index on a street with a good PCI could indicate that the street has significant joint deterioration. Several streets in the proposed program reflect this situation in varying degrees. The repair recommendations for these streets in particular aim to make the street smoother, not just structurally sound.

Previous Commitments. It is often difficult or impractical to commit enough resources to address all of the repair needs of a subdivision – or in some cases, a single street – in one year. Many of the streets in the proposed FY2021 program are phased into consecutive years:

- The work proposed on Center Parkway, Decker Lane, and Emerson Road will continue a multi-year effort to improve pavement conditions in the business district south of Olive and between New Ballas Road and Interstate 270.
- Slab replacement on Fairways Drive and Fairways Circle will be in support of the second and final phase of asphalt repaving of this subdivision's combination streets.

- The work proposed for Ferntrails Lane and Deauville Court will complete repairs that began on those streets in FY2019.
- Slab replacement on Princetowne and Royal Valley Drive continues a five-year effort to improve concrete streets in the Creve Coeur Place subdivision.
- Improvements in Bellerive Estates continue with Beauvais Court, Bergerac Drive, Montmartre Court, Montmartre Drive, and Narbonne Drive.
- Improvements to Pine Manor Drive will complete the improvements to the Ridgecorde subdivision that began in FY2019.
- The work on Runnymede Drive will focus on the southern entrance to the Runnymede subdivision and is expected to complete a four-year effort to rehabilitate this street. In addition, the work on Hackman Lane, Larkmont Drive, and Sandhurst Drive are intended to complete concrete repairs in the Runnymede subdivision for the foreseeable future.

Support for Other Projects and Future Planning. It is common that more than one type of project or approach is required or recommended to address the needs of a street or sidewalk. This tends to occur with sidewalk projects that require street work (or vice versa) and with composite streets (i.e. concrete streets with an asphalt overlay). The proposed FY2021 concrete program will involve concrete slab replacement on streets like Fairways Drive, Fairways Circle, and Tureen Drive and curb and gutter replacement on other streets to support the asphalt resurfacing and microsurfacing programs.

Sidewalk Improvements

The City is obligated to continue to improve the accessibility of its sidewalks in order to meet the requirements of the Americans with Disabilities Act (ADA). Accessibility improvements are typically made in conjunction with or in preparation for adjacent roadway projects, but the City undertakes stand-alone sidewalk improvements, as well.

The proposed FY2021 sidewalk program includes the following highlights:

Corum Way Drive at Corum Way Court. Curb ramps and other sidewalk improvements will be added to this intersection to accompany the slab replacement needed there.

Cross Creek Drive. The sidewalk along Cross Creek Drive has many curbs and other barriers to access that will be addressed through the FY2021 program.

Studt Avenue. The sidewalk along Studt Avenue east of New Ballas Road is in poor condition and will be replaced in anticipation of pavement resurfacing along Studt in FY2022.

Asphalt Resurfacing. While none of the streets in the proposed asphalt pavement resurfacing program have sidewalks that require repairs, sidewalk improvements to Cross Creek Drive will help to set up future asphalt resurfacing or microsurfacing on Cross Creek.

Microsurfacing Program. Sidewalk improvements will be required for some of the streets in the proposed microsurfacing program, including Hunters Pond Court.

Asphalt Resurfacing

Asphalt resurfacing typically involves the removal and replacement of the top two inches of asphalt pavement on a roadway. This becomes necessary as the pavement surface gets older, dries out, cracks, and fails. Full-depth patching is often needed to replace all of the pavement in areas where the base fails and potholes form. For asphalt streets, base failure occurs if the base was insufficient to begin with or the base is weakened, often by getting wet through cracks in the pavement.

This program targets asphalt and composite streets whose condition is declining. Resurfacing is one of the last forms of maintenance available to the City for an asphalt street before the road needs to be rebuilt.

The asphalt resurfacing program proposed for FY2021 includes the following asphalt roadways:

<u>Street Name</u>	<u>Current PCI</u>	<u>Roughness Index (2016)</u>
Andes Boulevard.....	53.....	60
Fairways Circle (Phase 2)	67	60
Fairways Drive.....	53*	55*
Magna Carta Drive.....	62	55
Tureen Drive	55	58

** Indicates an average condition rating for multiple street segments.*

Asphalt patching for collector and arterial streets:

Craig Road
Mosley Road

Notable elements of the proposed asphalt resurfacing program include:

- The work proposed for Andes Boulevard will be the final phase of a four-year paving program to resurface Research Boulevard, Andes Boulevard, and Ambassador Boulevard in the City's light-industrial area. Work in this area will begin to focus more on pavement preservation rather than pavement repairs.
- The northern portion of Fairways Circle was resurfaced in FY2020. The proposed program will complete Fairways Circle and Fairways Drive. Both streets are combination streets, and concrete slab replacement is expected to be needed on both streets. This resurfacing project will be coordinated with the concrete pavement replacement project.
- Tureen Drive is a combination street and will also need to be coordinated with the concrete pavement replacement project.
- Small-scale asphalt repairs will be necessary to Morwood Drive and Ladue Meadows Drive to help prepare these streets for the FY2021 microsurfacing program.
- Repairs to Craig Road and Mosley Road will be limited but are needed to maintain the driving surface until larger roadway improvements can be made.

Microsurfacing

The proposed microsurfacing program will include minor street repairs and the application of a thin, asphaltic surface treatment to the entire roadway surface. This surface treatment is typically aimed at asphalt and composite roads that are in good condition, where its purposes are to help seal the pavement from water infiltration and to preserve the street's driving surface. Microsurfacing can also be used to slow the deterioration of local roads with distressed asphalt that are nearing the need for structural improvements like asphalt resurfacing.

The goal of this program is to create a schedule that will return the program to a microsurfacing candidate roadway within the expected 8-10 year lifespan of the microsurfacing application.

The roadways proposed for this program are:

Streets along Ladue Road between Spoede and Mosley

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Ladue Meadows Lane	65	49
Oak Park Court	49	38
Shardue Lane	68*	50*
South Graeser Road	74	63

Malcolm Terrace

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Elzey Drive	75*	63*
Eugenia Street	73*	65*
Saint Paul Drive	37*	56*
South Mosley Road	85*	81*
Townsend Street	56*	49*

Streets along Mosley Road

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Hunters Pond Road	55	50
Ladue Meadows Drive	76*	63*
Mosley Acres Drive	67	51
Mosley Farm Court	64	48
Benwood Lane	77*	66*
Morwood Lane	75*	62*
Sarawood Lane	94	64

** Indicates an average condition rating for multiple street segments.*

The microsurfacing project targets subdivisions and groups of similar streets in order to make the program more intuitive, more efficient, and less expensive to implement.

Most of the streets in the proposed program are in relatively good condition and will probably be candidates for another microsurfacing application when the program cycles back to them in 8-10 years. However, for streets like Oak Park Court and Ladue Meadows Drive, the current pavement conditions likely mean that the proposed microsurfacing may be the last before asphalt resurfacing or base rehabilitation will be necessary.

The proposed FY2021 microsurfacing program continues the westward movement of this program through the City.

Roadway Reconstruction/Rehabilitation

The proposed reconstruction/rehabilitation program for FY2021 involves rehabilitating West Ladue Estates Drive in order to complete the rehabilitation of the streets in the Ladue Estates subdivision.

The pavement of Ladue Estates Drive West consists of a concrete pavement base with an asphalt overlay as a driving surface (a combination roadway). This pavement has generally aged beyond its useful life and can no longer be acceptably preserved through routine maintenance. The proposed repairs involve the removal of the concrete curbing and the replacement of the curbing with new concrete curb and gutter. The curb work would be followed by the replacement of failed concrete base pavement and asphalt pavement resurfacing. This work will result in a significant improvement that will match the rest of the subdivision.

The proposed FY2021 program involves one street:

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Ladue Estates Drive (West)	52	57

Schedule

Staff plans to release bids for the concrete/sidewalk, asphalt resurfacing, and reconstruction projects in April and May of 2020, so that the work can begin by July and can be completed by the end of the 2020 construction season.

Staff recommends moving the microsurfacing project to the spring. This project depends on preparation work from the concrete and asphalt projects and from the City's Public Works crews. Given the current state of uncertainty and the amount of coordination needed to make microsurfacing a reality in the fall, staff recommends moving this program to the spring to provide as much time as possible to prepare the program streets.

Program Costs

City staff estimates that completion of the proposed FY2021 Roadway Maintenance Program will cost approximately \$ 1,613,300, summarized as follows:

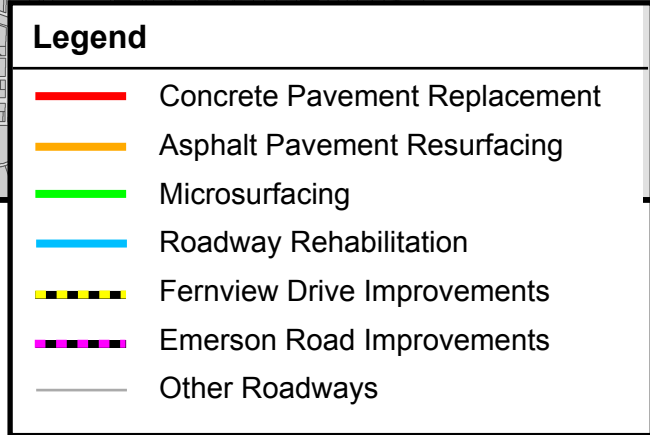
Concrete Pavement Replacement	\$ 413,300
Sidewalk Replacement.....	\$ 200,000
Asphalt Resurfacing.....	\$ 450,000
Microsurfacing.....	\$ 250,000
Reconstruction	\$ 300,000
Total	\$ 1,613,300

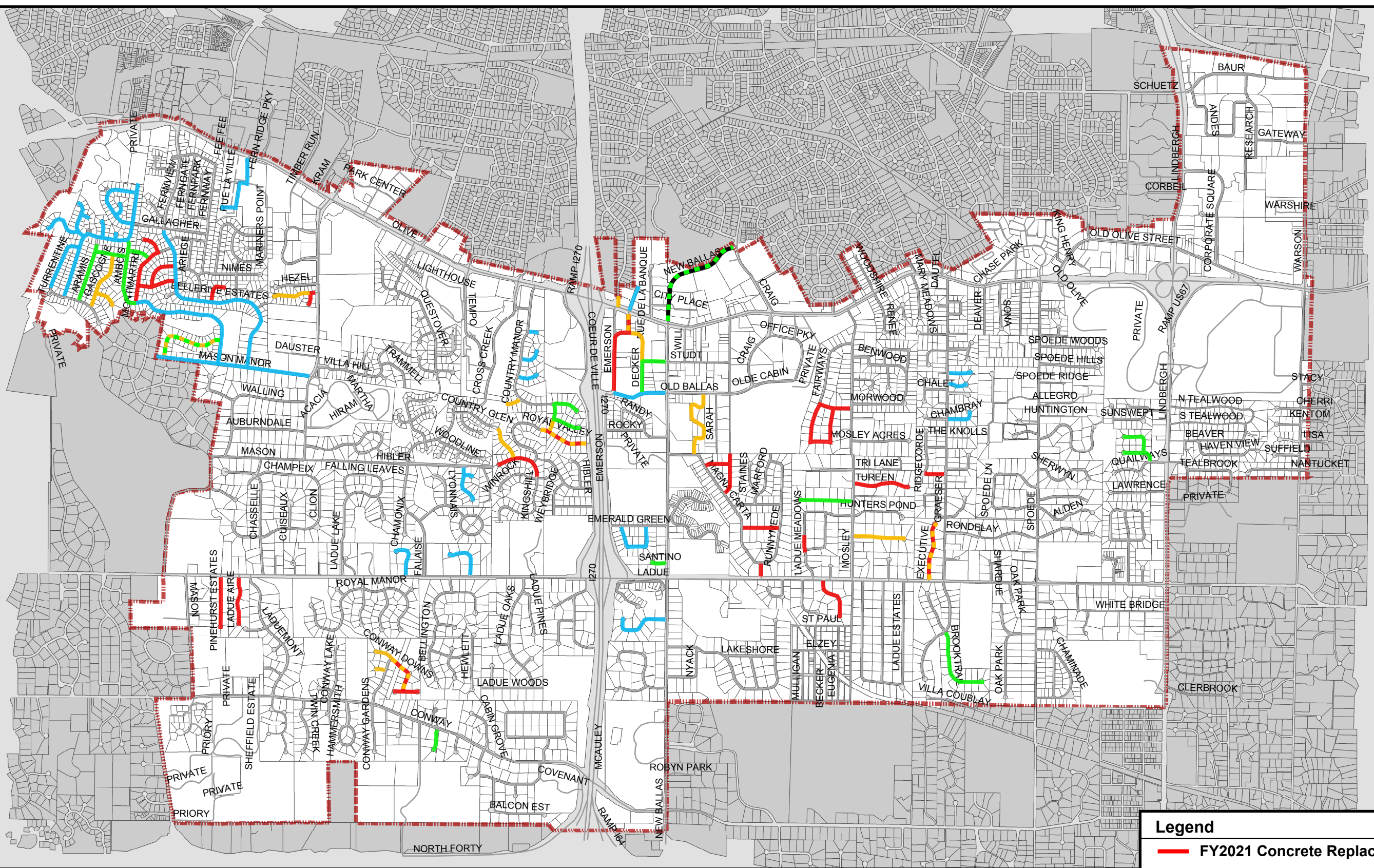
Attachments: Map of Proposed FY2021 Roadway Maintenance Program

Maps of Roadway Program Projections



March 23, 2020





Proposed FY2021 Concrete Pavement Replacement Project with Future Concrete Pavement Replacement Projections

March 23, 2020

Legend

FY2021 Concrete Replacement

FY2022 Concrete Replacement

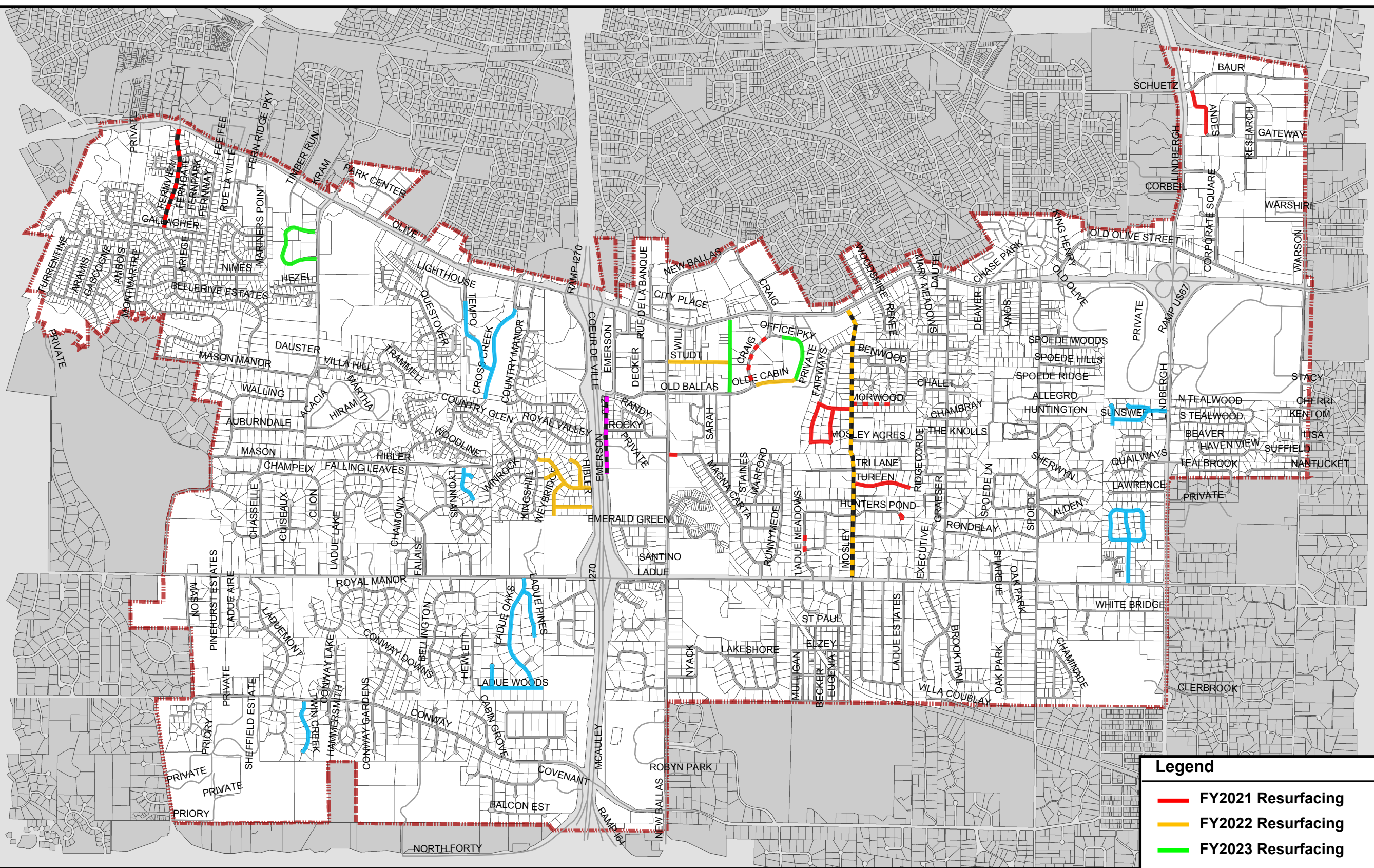
FY2023 Concrete Replacement

Near-Term Concrete Repair Locations

New Ballas Improvements (FY2023)

Other Roadways

Attachment: Proposed 2020-2021 (FY2021) Pavement Maintenance Program (#20-009: FY2021-FY2025 Capital Improvement Program)



Legend

FY2021 Resurfacing

FY2022 Resurfacing

FY2023 Resurfacing

Near-Term Resurfacing Candidates

Fernview Resurfacing (FY2021)

Emerson Improvements (FY2021)

Mosley Improvements (FY2022)

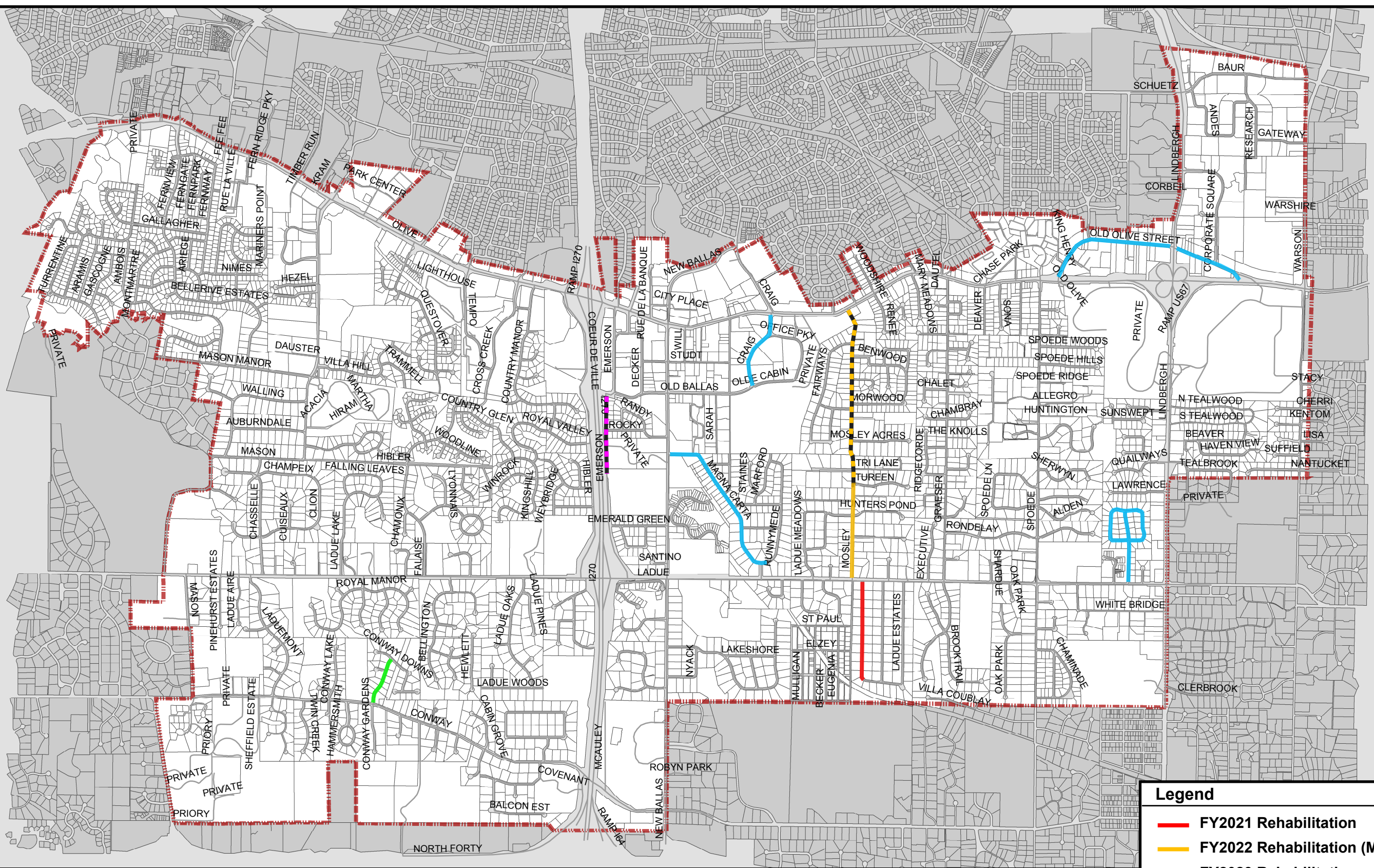
Other Roadways



Proposed FY2021 Asphalt Resurfacing Project with Future Resurfacing Projections

March 23, 2020





Proposed FY2021 Roadway Rehabilitation Project with Future Rehabilitation Projections

March 23, 2020

Legend

FY2021 Rehabilitation

FY2022 Rehabilitation (Mosley)

FY2023 Rehabilitation

Future Rehabilitation Candidates

Emerson Improvements (FY2021)

Mosley Improvements (FY2022)

Other Roadways



city of CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
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www.creve-coeur.org

APPLICATION TO PLANNING AND ZONING COMMISSION #20-007: NEW LED PARKING LOT AND BUILDING LIGHTING FOR THE DIELMANN RECREATION COMPLEX AT 11400 OLDE CABIN ROAD

FOR THE MEETING OF: Monday, April 20, 2020

SUBJECT PROPERTY LOCATION: 11400 Olde Cabin Road. Unzoned-City's Golf Course and Recreation Complex.

REQUEST: Matt Wohlberg, City Engineer, on behalf of the City of Creve Coeur, has submitted an application for new LED parking lot and building lighting for the Dielmann Recreation Complex at 11400 Olde Cabin Road, to replace the existing non-conforming lighting. Section 405.680 Lighting states that the Planning and Zoning Commission shall review proposed lighting for non-residential building construction or for the replacement or addition of light standards on an existing non-residential development in accordance with Section 405.1080. Section 405.1080 requires minor site plan approval by the Planning and Zoning Commission for any proposed alteration that would significantly affect the exterior of a building or site.

ADDITIONAL INFORMATION: The subject property is the City owned recreation complex building and golf course. The original building was developed in 1970, and has existing non-conforming lighting on the building and within the parking lot.

Key Issues:

- Does the request integrate with the existing surrounding uses?
- Does the request further or implement the goals of the Comprehensive Plan?
- Is the request consistent with the Design Guidelines?

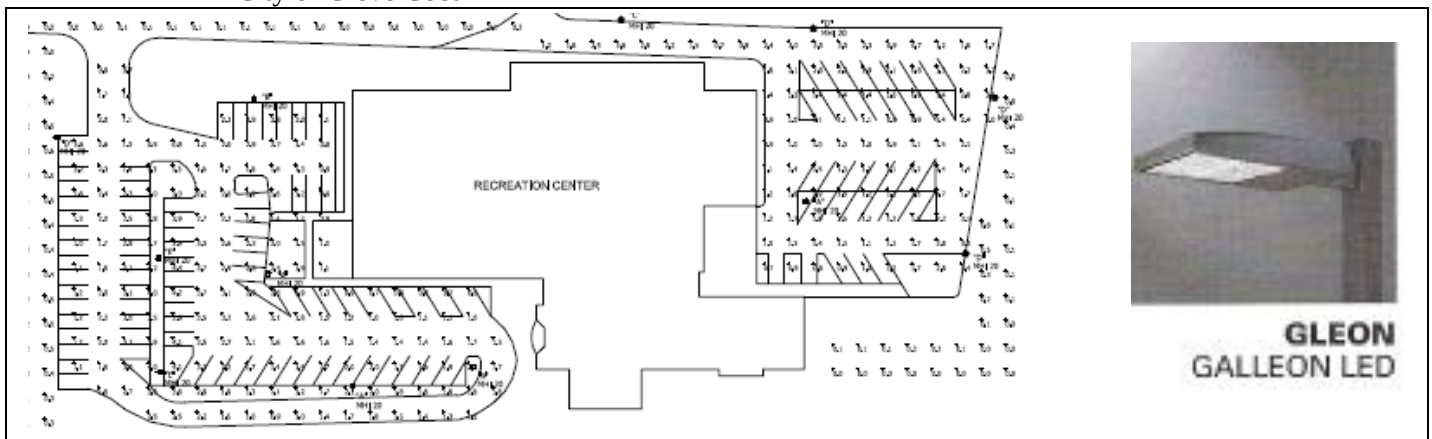
Comprehensive Plan References

- Community Sustainability & Resilience

Zoning Code References

- Section 405.680: Lighting
- Section 1080: Site Concept, Site Development and Minor Site Plan Approval.

APPLICANT: Matt Wohlberg, P.E.
City Engineer
City of Creve Coeur



REPORT PREPARED BY: Whitney Kelly, AICP, City Planner
DATE: 4/16/2020
ATTACHMENTS: Applicants Materials

PROPOSAL

The existing parking lot lighting consists of non-conforming, 15 residential post top carriage style lights, two cobra head lighting on the antenna, and three wall-mounted lights. These will be replaced with 12 new LED in the same standards as those that were installed for the Police Station parking lots. The overall height of the poles will be 20 feet above grade. The 58 lights on the underside of the soffits around the building will also be replaced with the LED canned lighting. New uplights will be added for the sign and artwork installation, near the entrance drive along Olde Cabin Road.

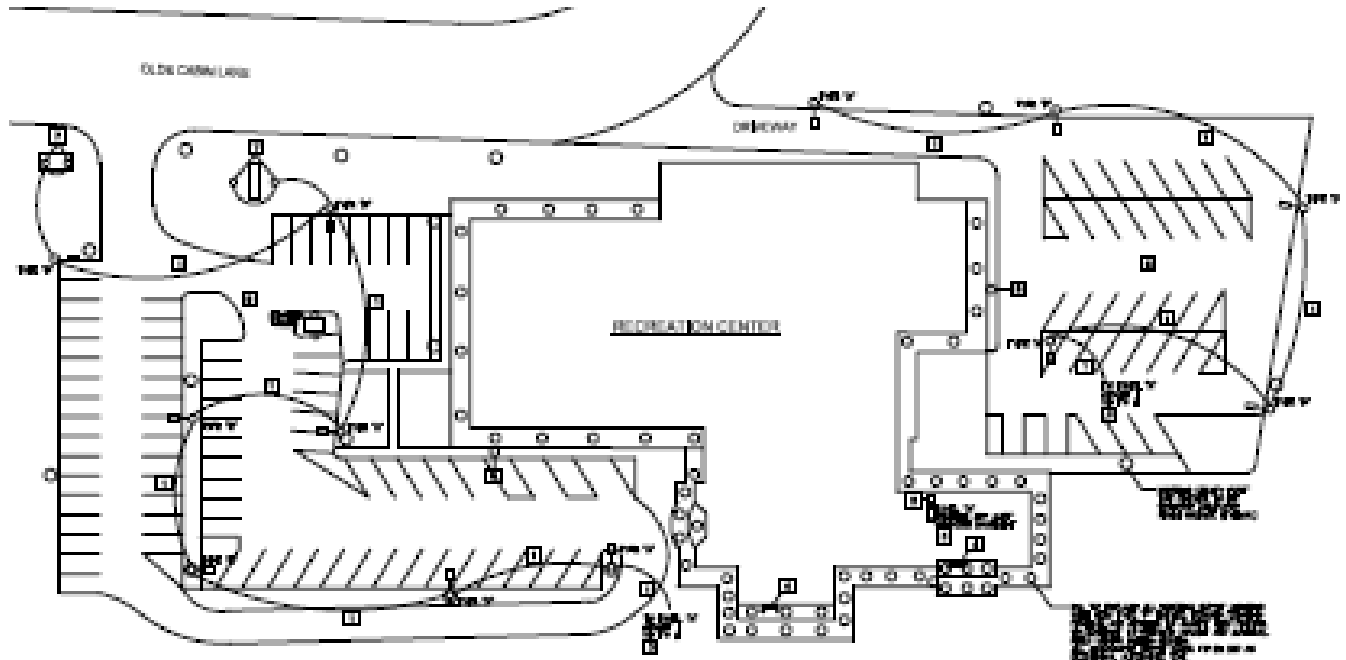


Figure 1: Close-up of sheet E-1 showing placement of new light fixtures.

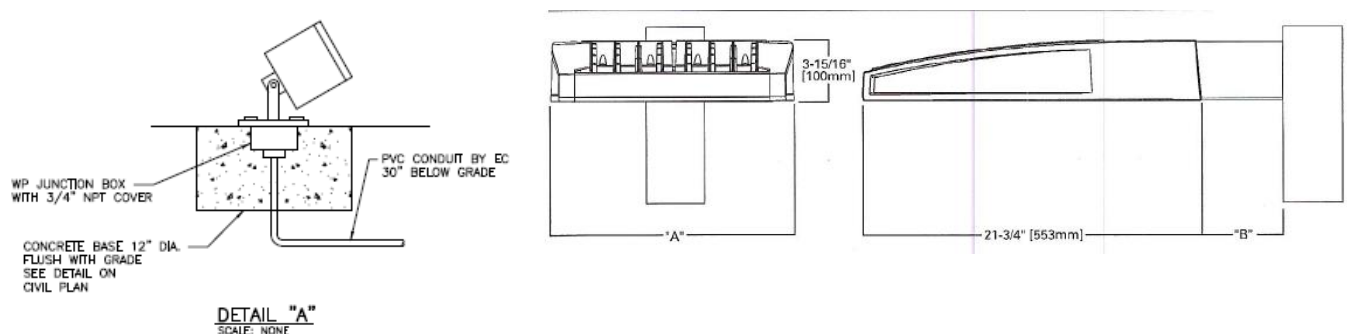


Figure 2: Close-up of the detail of the up lights for the entrance sign and artwork, and pole mounted light fixtures.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

The adjacent zoning and land uses are as follows:

DIRECTION	USE	ZONED	SEPARATED BY
North	Office	Planned Office District	Partial Olde Cabin Road
South	Residential	Partial A Single Family Residential; B Single Family Residential	NA
East	Residential	Partial A Single Family Residential; B Single Family Residential	NA
West	Multi-Family Residential/Condo	Planned Residential Zoning	NA

COMPREHENSIVE PLAN REVIEW

Creve Coeur 2030 Plan does not include the Golf Course, as a city-owned property, in any particular place-type. Instead the *Creve Coeur 2030* does include the promotion of parks, open space & environment as an objective and strategy for the City. Discussion does include the future of the golf course. In Golf Course Scenarios with keeping the municipal golf course as is, that the City should undertake improvements to the facility over time to improve play (p. 81). The Plan also encourages promoting energy efficiency throughout the City as part of the Community Sustainability & Resilience Objectives (p. 51). The question here is not related to the use per se, nor to the appropriateness of the development as a whole. Instead, this analysis focuses more on the zoning regulations regarding new outdoor lighting. The proposed conversion of the lighting to new LED Standards meets with these goals and objectives of the Comprehensive Plan. No other changes to the exterior of the building or site are proposed at this time.

ZONING REVIEW

As the Applicants are only seeking to modify the site to provide for new LED Lighting throughout the parking lot and on the building, zoning review is limited to the lighting standards.

Lighting

Section 405.680 Lighting of the Zoning ordinances provides that the Planning and Zoning Commission shall review all lighting plans that include the type, number, brightness, type of cutoff/shielding and hours of usage of all fixtures. The Applicant is seeking approval to replace the existing non-conforming light fixtures with new LED light fixtures and providing for new parking lot light fixtures that are downcast on both the east and west parking lots at the Dielmann Recreation Complex. Section 405.680(B) requires that all lighting shall be downcast and fully shielded and shall not cast light upon adjacent property or right-of-way nor shall glare be emitted from an illuminant source. Further, any Lighting intended to illuminate building elevations, landscaping or signage shall shine directly onto the intended surface, under Section 405.680(B)(7).

For non-residential parking lots, a minimum illumination of one-foot candle is required, and a maximum height for standard light fixtures is 24 feet in non-residential zoning districts, and 16 feet high for those non-residential developments within a residential district, unless specifically permitted by the site development plan approval in accordance with Section 405.1080. As the property is City zoned, it is not within any zoning district. Adjacent to the east (closest to the parking lot), south, and west are residential zoned developments, and Planned Office (also closest to the parking lot) to the north. The proposed light poles are 18 feet, with a two-foot concrete base, for a total height of 20 feet to the top of the fixture. The existing parking lot lighting at the Dielmann Recreation Complex is inconsistent with current standards and generates complaints from some patrons. The proposal would create a more uniform lighting level across the entire parking lot and to meet with the minimum average of not less than an average of one (1) foot-candle of illumination as required by Section 405.810(4) in the evening. Lowering the height of the light poles to a total height of 16 feet would require additional lights throughout the parking lot, and breaking up the existing concrete.

The photometric plan indicates that no lighting will be cast upon adjacent property, and is 0.0, just beyond the existing parking lot. The light fixture for the parking area on the east side of the building is approximately 139 feet from the closest residential property. If the Commission is satisfied with the proposal as is, they may approve the lights at 20 feet. The lights would remain on throughout the evening.



Figure 3: GIS image with dimension from the parking lot to the closest residential property line.

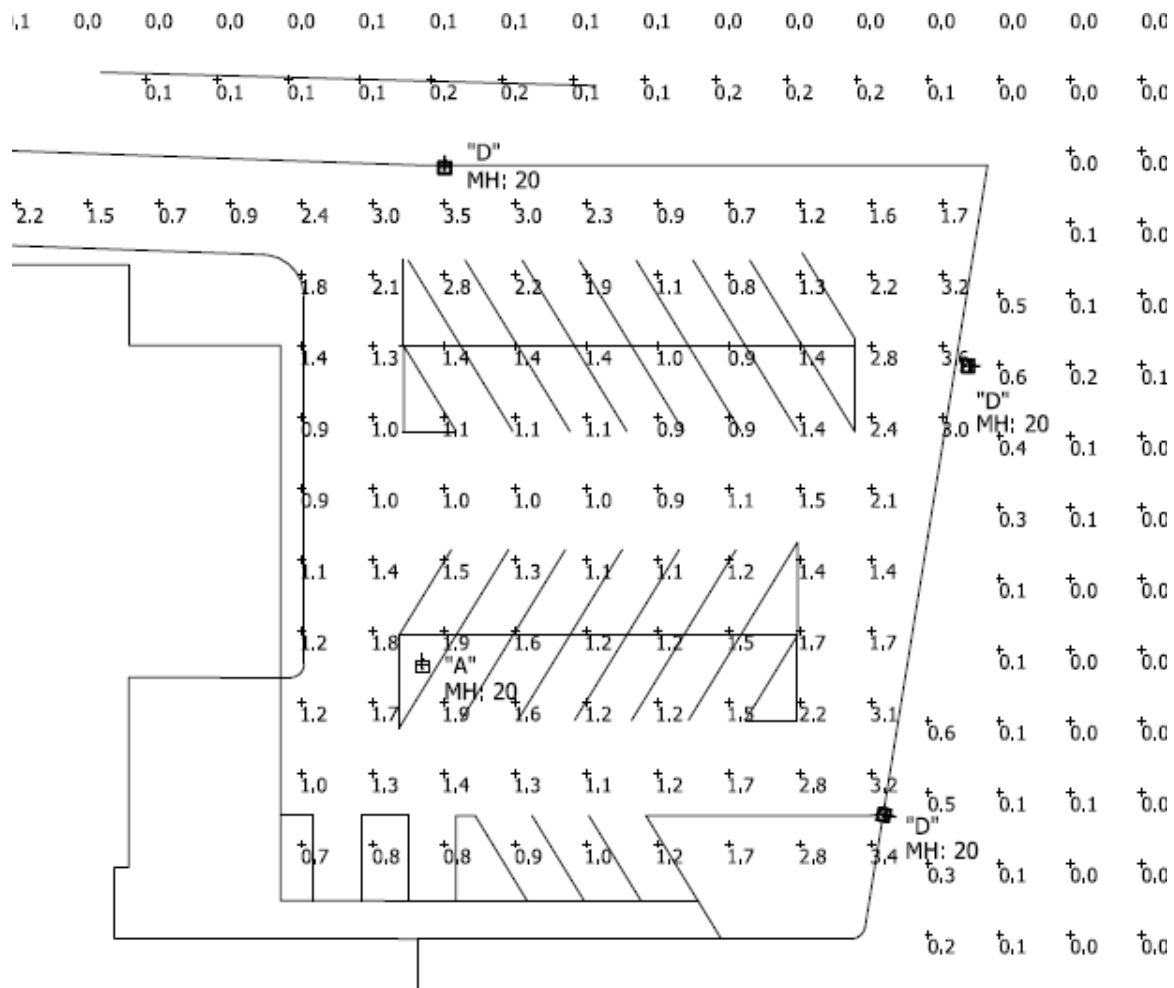


Figure 4: Close-up of the photometric plan of the east parking area.

RECOMMENDATION

Based on the analysis within the Staff Report from the April 20, 2020, Planning and Zoning Commission meeting. Staff recommends the following conditions be incorporated in any motion for the approval of the Minor Site Plan. Council approval will be in the form of approval of the final contract with the installer of the lighting.

1. The Applicant is required to submit a Building Permit application, as required by Article II of the Building Code for the light fixtures as bound together and submitted in conjunction with Application #20-007 as submitted by the City Engineer, and with all conditions of approval.
2. All lighting shall be in conformance with Section 405.680, Lighting, of the Zoning Code, and Section 205.810 of the Parking Ordinance, with a total maximum height of 20 feet, and the light fixtures shall be a dark bronze color as proposed.
3. No site development plan or minor site plan approval shall be valid for a period longer than twelve (12) months from the date it is approved, unless within such period a building permit is obtained and substantial construction is commenced. Substantial construction shall be deemed to consist of clearing the site, completion of footings, basement or building slab and inspection of such work. The Planning and Zoning Commission and the City Council, when required, may grant extensions not exceeding twelve (12) months each upon written request of the original applicant prior to the expiration of such period and resubmission of the application if the application as resubmitted is substantially the same as the initially approved application. However, the Commission and the Council, as applicable, have the power in such cases to attach new conditions to their re-approval or to disapprove the reapplication. Where the application for re-approval contains changes which the Zoning Administrator concludes materially alter the initial application, the Zoning Administrator shall initiate a new site development plan review procedure as stated in Section 405.1080 or a new minor site plan review procedure as stated in Section 405.1080.

MOTION

The motion to approve the site development plans as shown in the Applicant's materials will be in the form of approval, approval with conditions, denial or deferral. City Council action is not required for minor site development plans. The following is an example of an appropriate motion for this proposal:

"I move to recommend approval of the minor site plan for the lighting improvements for the Dielmann Recreation Complex at 11400 Olde Cabin Road as presented to the Planning and Zoning Commission with Application #20-007, subject to the conditions contained in the Staff report for the meeting of April 20, 2020" (conditions may be added, eliminated, or modified by preceding motion).

APPENDIX 1: COMPREHENSIVE PLAN, INCLUDING DESIGN GUIDELINES

Included and attached by reference. See body of report for specific excerpts.

APPENDIX 2: ZONING CODE

Included and attached by reference. See body of report for specific excerpts.

APPENDIX 3: AERIAL PHOTO

Dielmann Recreation Complex





DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: March 11, 2020

TO: Planning and Zoning Commission

CC: Jason Jaggi, Director of Community Development
Jason Valvero, Director of Recreation

FROM: Matt Wohlberg, P.E., City Engineer

SUBJECT: Recommendation for New Parking Lot Lighting
Dielmann Recreation Complex

The Department of Public Works and the Department of Recreation recommend that the City replace the existing lighting for both parking lots of the Dielmann Recreation Complex. The proposed lighting resembles the new lighting at the Creve Coeur Police Department parking lots.

Existing Lighting

The parking lots at the Dielmann Recreation Complex are currently lit by 15 residential-style, post-top lights, two cobra head lights on the antenna, and three wall-mounted lights. Approximately 58 lights also line the underside of the soffits around the building. The post-top lights are concentrated on the facility's western lot, with only three of these lights located around the eastern lot.



Figure 1. Existing post-top light in the western Dielmann Recreation Complex parking lot.



Figure 2. Existing wall-mount lighting and soffit lighting at the eastern Dielmann Recreation Complex parking lot.

An illustration of the existing lighting layout is attached.

Proposed Lighting

The proposed lighting plan begins with the removal of all of the existing lights on the site and will be followed by the installation of new lights as shown on the attached lighting plan and as described below.

1. **Parking Lot Lighting.** The post-top and cobra-head lights will be replaced with 12 new LED luminaires that are the same brand and style as the new lights at the Creve Coeur Police Department.
 - *Fixture Height.* The proposed fixture height will be 20 feet above the parking lot. The light poles will be 18 feet tall and will sit on concrete bases that rise 2 feet above the parking lot. This height was chosen because it is below the 24-foot maximum height for a commercial district, it allows for a more even light distribution, and it allows for the wall-mounted lights to be eliminated. 16-foot-tall fixtures were considered, but these would have needed the wall-mounted fixtures on the east side of the building that faces the adjacent Fairways subdivision.
 - *Fixture Type.* The proposed fixtures will be LED and will be shielded and down-cast.
 - *Light Distribution.* As shown in the attached photometric plan, the proposed lighting will not illuminate the ground outside of the Dielmann Recreation Complex property limits.



Figure 3. Proposed parking lot light fixture, the same as was installed at the Police Department parking lots.

2. Soffit Lighting. All 58 canned lights on the underside of the building's soffits will be replaced with LED canned lights.
3. Emergency Lighting. Two sets of emergency lights will be replaced with comparable fixtures.
4. Art and Sign Lighting. New uplights will be added for the Dielmann Recreation Complex sign and the art installation that flank the entrance to the facility.

Funding

Funding for the design and installation of these lights is included in the Capital Improvement Program for FY2020-FY2021.

Recommendation

The existing parking lot lighting at the Dielmann Recreation Complex is inconsistent and generates complaints from some patrons. The proposal would create a more uniform lighting level across the entire parking lot. The proposal would also replace all of the soffit lights to provide better lighting along many of the facility's exterior walkways, and it would introduce new lighting for the facility's sign and art installation.

Staff from the Department of Public Works and Department of Recreation find that the proposal will be a significant improvement to the appearance of the facility and to the perceived comfort and safety of facility patrons. Therefore, staff from both departments recommend that the City proceed with the proposed project.

Requested Action

The Planning and Zoning Commission is asked to consider the proposed parking lot lighting and approve the plan, approve the plan with conditions, or deny approval for the application.

A suggested motion is:

I move to approve the proposed parking lot lighting, soffit lighting, and uplights for the facility sign and art installation.

Attachments: Layout of Existing Parking Lot Lighting
 Proposed Lighting Site Plan and Photometric Plan
 GLEON Galleon LED (Parking Lot Fixture) Specification Sheet



EXISTING PARKING LOT LIGHTING LAYOUT
DIELMANN RECREATION COMPLEX

DRAWING NOT TO SCALE

LEGEND	
	POST-TOP LIGHT
	WALL-MOUNTED FLOOD LIGHT
	COBRA-HEAD LIGHT ON ANTENNA

Attachment: DRC Lot Lighting Materials (#20-007: Dielmann Recreation Complex Parking Lot Lighting)

POLE FIXTURES MOUNTED ON 18' POLE & 2' BASE
LIGHT LEVEL CALCULATED ON THE GROUND

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Illuminance	Fc	1.87	4.4	0.6	3.12	7.33
SPILL LIGHT	Illuminance	Fc	0.11	1.3	0.0	N.A.	N.A.

Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	LUMEN/CRI	Mnfr.	Fixture Cat. No.	Pole Cat. No.
⊕	4	"A"	SINGLE HEAD	113	452	0.912	--	McGRAW	GLEON-AF-02-LED-E1-5WQ-GM-QM	SSS4A-18STN-1-GM
⊕	1	"B"	SINGLE HEAD	113	113	0.912	--	McGRAW	GLEON-AF-02-LED-E1-T4FT-GM-QM	SSS4A-18STN-1-GM
⊕	1	"C"	SINGLE HEAD	113	113	0.912	--	McGRAW	GLEON-AF-02-LED-E1-SL3-GM-QM	SSS4A-18STN-1-GM
⊕	4	"D"	SINGLE HEAD	113	452	0.912	--	McGRAW	GLEON-AF-02-LED-E1-SL4-GM-QM	SSS4A-18STN-1-GM
⊕	2	"E"	SINGLE HEAD	225	450	0.912	--	McGRAW	GLEON-AF-04-LED-E1-5WQ-GM-QM	SSS4A-18STN-1-GM
○	58	"F"	RECESSED CAN	14.2	823.6	--	1500/835	HALO	HC6-15-D010/HM6-12-835/61-MD-C	

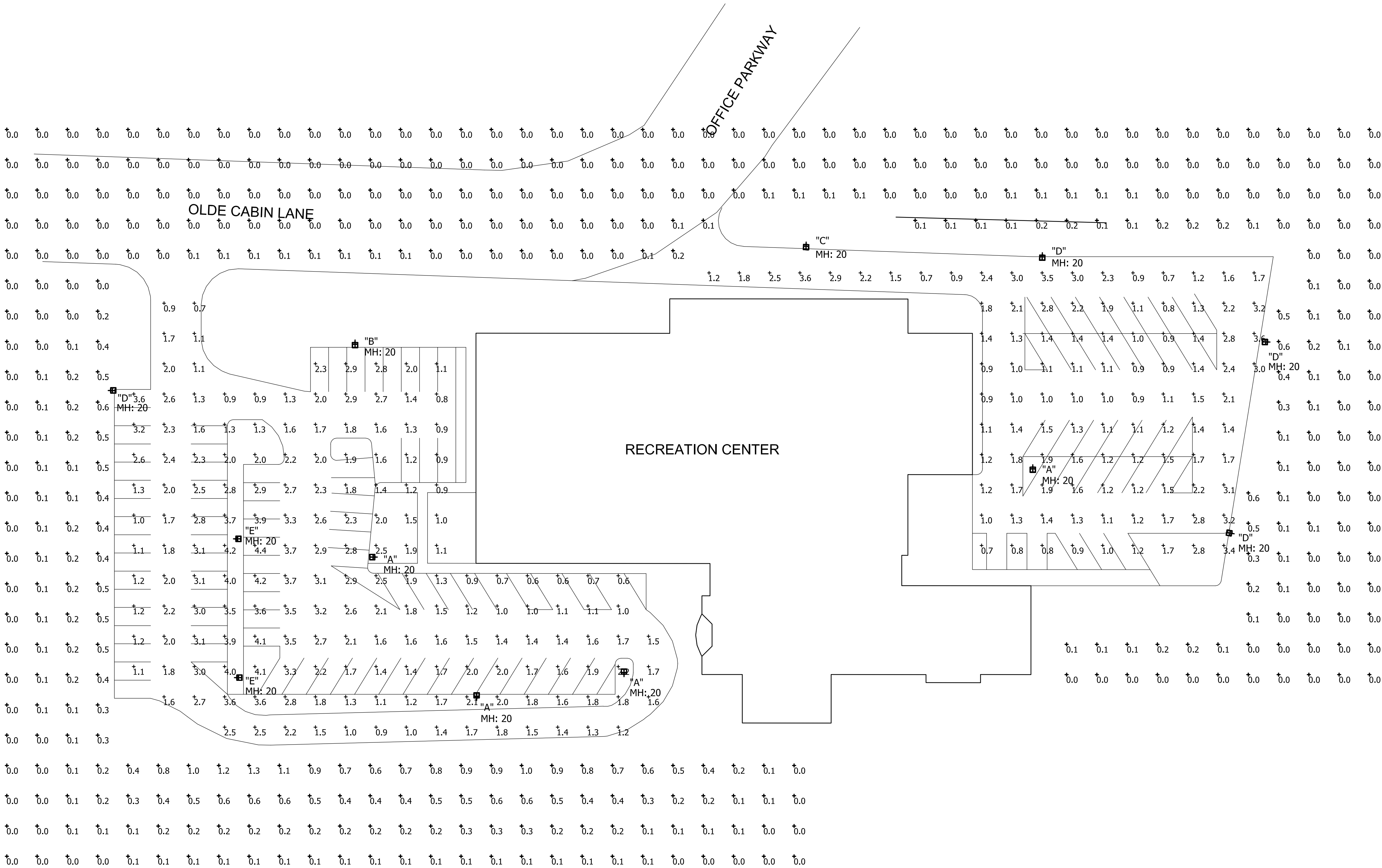
Lloyd E. Moss
Professional Engineer
Missouri #E-15907

MISSOURI STATE
CERTIFICATE of AUTHORITY
Number 2001029034

The Professional Engineer's seal/signature
affixed to this sheet applies only to the
material and items shown on this sheet.
All drawings, instruments or other
documents not exhibiting this shall not
be considered prepared by this Engineer
and this Engineer expressly disclaims
any and all responsibilities for such
plans, drawings, documents, etc. which
do not exhibit this seal/signature.

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St. Louis, MO 63114
314-576-7867 F-576-6352
plutz@conrad-lutz.com

Conrad Lutz



City of Creve Coeur
RECREATION CENTER
11400 Olde Cabin Road
Creve Coeur, MO 63141

ELECTRICAL SITE PHOTOMETRIC PLAN

SCALE: 1" = 30'-0"

DATE: February 27, 2020

SCALE: SEE PLAN

PROJECT NO: #2006

DWG. NO: E-2

DRWN BY: PEL

APPR BY: PEL

REVISION:

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

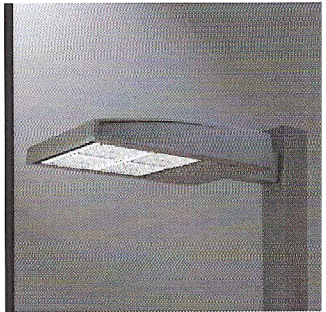
arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.



GLEON GALLEON LED

1-10 Light Squares

Solid State LED

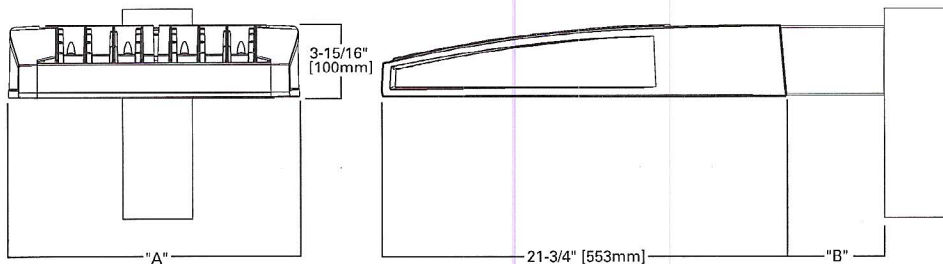
AREA/SITE LUMINAIRE



LumenSafe Technology
[CLICK HERE](#)

WaveLin

DIMENSIONS



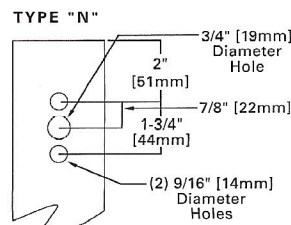
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.



DRILLING PATTERN



CERTIFICATION DATA

3G Vibration Rated
DesignLights Consortium® Qualified*
Dark Sky Approved (3000K CCT and warmer only)
IP66 Rated
ISO 9001
LM79 / LM80 Compliant
UL/cUL Wet Location Listed

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V, 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)



Halo Commercial

Ordering Information

Sample Number: HC620D010REM7 – HM612835 - 61MDC

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

Mounting Frame	Lumens	Input / Control	Options	Accessories
HC6 = 6" new construction and remodeler housing HC6CP = 6" new construction and remodeler housing, CCEA Chicago Plenum rated	10 = 1000 lumens (nominal) 15 = 1500 lumens (nominal) 20 = 2000 lumens (nominal) 30 = 3000 lumens (nominal) 40 = 4000 lumens (nominal)	D010 = 120-277VAC 50/60Hz 0-10V analog 1%-100% dimming D010347 = 347VAC 50/60Hz 0-10V analog 1%-100% dimming (Canada only) ¹ DLV = Distributed Low Voltage driver, 1%-100% dimming DLV for use with Eaton's DLVP system only. Refer to DLVP low-voltage power module and DLVP specifications for details. ¹	REM7 = 7 watt emergency module with remote test / indicator light, use with D010 only ¹ REM14 = 14 watt emergency module with remote test / indicator light, use with D010 only ¹ IEM7 = integral 7 watt emergency module with integral test / indicator light, use with D010 only ¹ IEM14 = integral 14 watt emergency module with integral test / indicator light, use with D010 only ¹ LWTPD1 = factory installed LumaWatt Pro wireless tile mount sensor kit, use with D010 only ¹ SWPD1 = factory installed WaveLinX tile mount daylight sensor, includes control module, sensor, and cable, use with D010 only ¹ REM7V = 7 watt emergency module with remote test / indicator light, use with DLV only ^{1, 2} REM14V = 14 watt emergency module with remote test / indicator light, use with DLV only ^{1, 2} IEM7V = integral 7 watt emergency module with integral test / indicator light, use with DLV only ^{1, 2} IEM14V = integral 14 watt emergency module with integral test / indicator light, use with DLV only ^{1, 2}	HB128APK = L channel hanger bar, 26" pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long H347 = 347 to 120V step down transformer, 75VA H347200 = 347 to 120V step down transformer, 200VA PORLWTPD1 = Field installed LumaWatt Pro wireless sensor kit, use with D010 only ¹ TMSWPD1 = Field installed WaveLinX wireless sensor kit, use with D010 only ¹

LED Module	Lumens	CRI/CCT
HM6 = 6" LED module	12 =1000, 1500 and 2000 lumens (nominal), use with HC610*, HC615*, HC620* housings 34 =3000 and 4000 lumens (nominal), use with HC630*, HC640* housings	827 = 80 CRI (minimum), 2700K CCT 830 = 80 CRI (minimum), 3000K CCT 835 = 80 CRI (minimum), 3500K CCT 840 = 80 CRI (minimum), 4000K CCT 927 = 90 CRI (minimum), 2700K CCT 930 = 90 CRI (minimum), 3000K CCT 935 = 90 CRI (minimum), 3500K CCT 940 = 90 CRI (minimum), 4000K CCT

Reflector	Distribution ³	Finish	Flange	Accessories
61 = 6" conical reflector	ND = narrow 55° beam angle 0.97 SC MD = medium 60° beam angle 1.10 SC WD = wide 65° beam angle 1.28 SC RWW = rotatable wall wash with linear spread lens	C = Specular clear H = Semi-specular clear W = White (white flange)	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	61RWWPK = rotatable wall wash insert for 6" reflector—replacement part kit

Baffle	Distribution ³	Finish	Flange	Accessories
61 = 6" baffle reflector	WD = wide 65° beam angle 1.28 SC (nominal) RWW = rotatable wall wash with linear spread lens	BB = Black baffle (white flange) WB = White baffle (white flange)	Blank = White flange standard with BB, & WB	61RWWPK = rotatable wall wash insert for 6" reflector—replacement part kit

IEM Reflector	Distribution ³	Finish	Flange	Integral Emergency
61 = 6" IEM reflector for integral emergency only	ND = narrow 55° beam angle 0.97 SC MD = medium 60° beam angle 1.10 SC WD = wide 65° beam angle 1.28 SC	C = Specular clear H = Semi-specular clear W = White (white flange)	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	IEM = Reflector for integral emergency only

IEM Baffle	Distribution ³	Finish	Flange	Integral Emergency
61 = 6" IEM baffle reflector for integral emergency only	WD = wide 65° beam angle 1.28 SC (nominal)	BB = Black baffle (white flange) WB = White baffle (white flange)	Blank = White flange standard with BB, & WB	IEM = Reflector for integral emergency only

Reflector	Distribution ³	Finish	Flange
61PS = 6" non-conductive polymer 'dead front' conical reflector ⁴	MD = medium 60° beam angle 1.10 SC (nominal)	W = White (white flange)	Blank = White flange standard with W reflector

Notes:

1. Not available with CP version

2. ULus for U.S. only

3. Values are nominal, with specular clear reflector, other finishes and field results may vary.

4. 61PS reflector is for Non-IC environment only, and up to 3000 lumens only.



300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

**APPLICATION TO PLANNING AND ZONING COMMISSION
#19-038: A CONDITIONAL USE PERMIT FOR AMEREN MISSOURI FOR A NEW
ELECTRICAL POWER DISTRIBUTION SUBSTATION (NAICS 221122) AT
11685 OLIVE BOULEVARD**

FOR THE MEETING OF: Monday, April 20, 2020, at 6:30 PM.

LOCATION: 11685 Olive Boulevard, zoned CB-Core Business District

REQUEST: Conway Johnson III, RWA, on behalf of Union Electric Company d/b/a Ameren Missouri, has submitted an application for a conditional use permit, and site development plans to allow for a new Substation at 11685 Olive Boulevard, Creve Coeur, MO, 63141 to replace the existing substation at 11665 Olive Boulevard. Electrical Power Distribution Systems (NAICS 221122) are permitted with conditions in the CB-Core Business District with review at the Planning and Zoning Commission and approval by the City Council.

ADDITIONAL INFORMATION: 11665 Olive Boulevard, and the lot to the north, Lot B, was created in 2018 with Ordinance No. 5587 as part of the Marriott Courtyard Plaza Plat 2, now addressed as 11685 Olive Boulevard. On October 21, 2019, the Planning and Zoning Commission approved a boundary adjustment to Lot B to revise the layout for the future development of a new substation, and relocation of the cross access along the front between Lot B and 11665 Olive Boulevard. According to Ameren, the existing substation at 11665 Olive Boulevard was originally built in 1962 and is nearing the end of its useful life and utilizes obsolete technology.

APPLICANT: Conway Johnson
Union Electric Company d/b/a
Ameren Missouri
1901 Chouteau Avenue
PO Box 66149, MC 700
St. Louis, MO 63166

**APPLICANT'S
REPRESENTATIVE:**

Joshua Skelly, PE, PMP
Project Manager, Ameren
Ameren Services,
11149 Lindbergh Business Ct.
St. Louis, MO 63123

Key Issues:

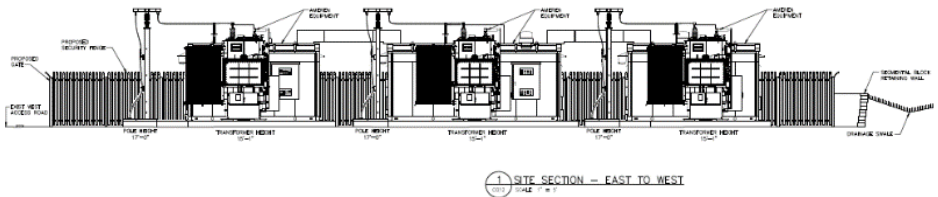
- Does the request integrate with the existing surrounding uses?
- Does the request further or implement the goals of the Comprehensive Plan?
- Does the proposal meet with the requirements of a conditional use permit?

**Comprehensive Plan
References**

- Community Amenities & Facilities
- Central Business District

Zoning Code References

- Section 405.370: CB-Core Business District
- Section 405.470: Conditional Uses
- Section 1080: Site Concept, Site Development and Minor Site Plan Approval



REPORT PREPARED BY:

Whitney Kelly, AICP, City Planner

DATE:

4/15/2020

ATTACHMENTS:

Applicant's Materials submitted on March 13, 2020
Draft Ordinance

DISCUSSION

Ameren adjusted the Lot B (addressed as 11685 Olive Boulevard) property line with Lot A (now addressed as 11715 & 11753 Olive Boulevard) with their existing lot at 11665 Olive Boulevard, to have the future cross access moved to the south between the two parcels, in October 2019 for a new substation and to exchange their existing lot with Mid-County Real Estate, LLC, who is the current owner of Lot A and B, which comprises the Aldi Shopping Center.

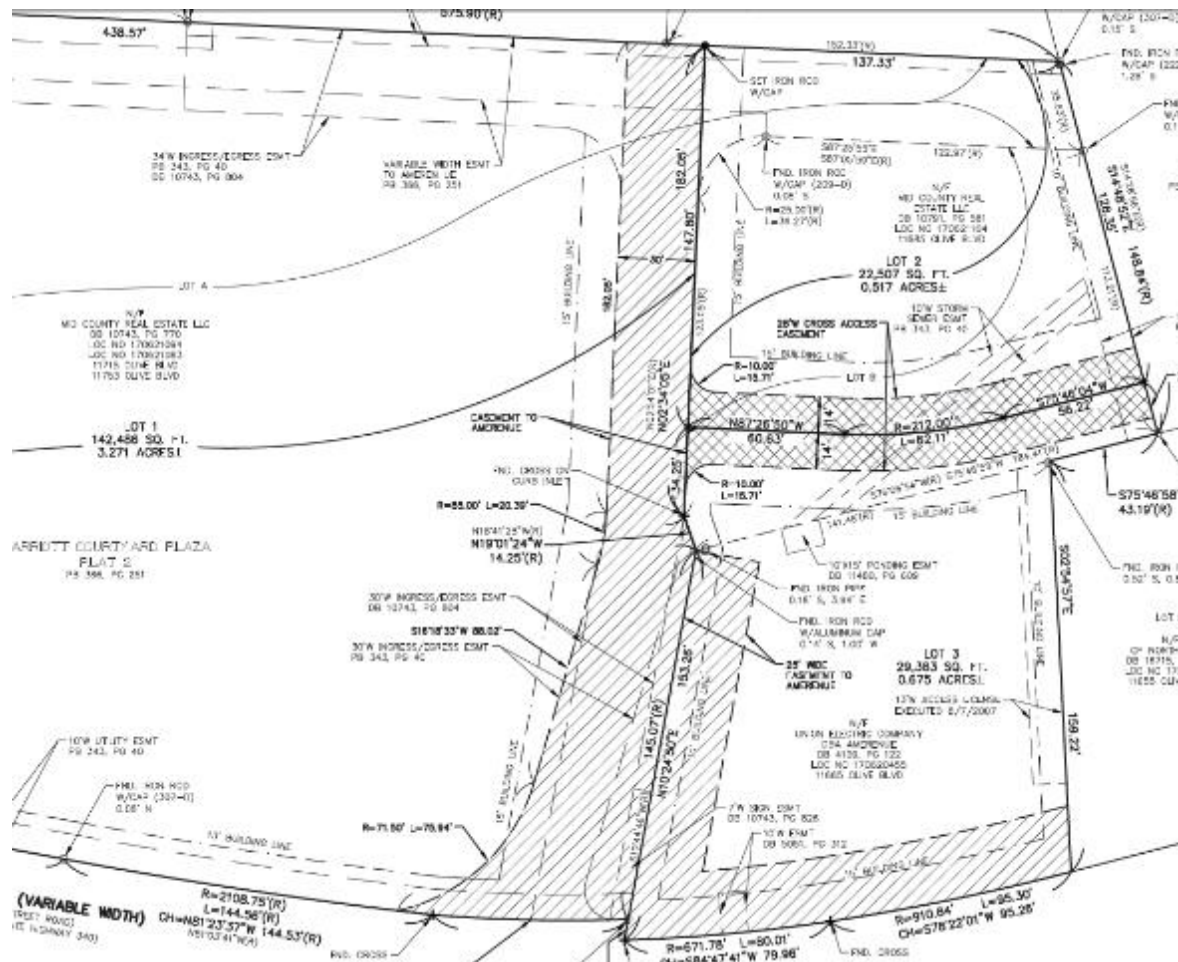


Figure 1: Close-up of the Boundary Adjustment Plat approved in 2019

The existing substation at 11665 Olive Boulevard was originally built in 1962 with the oldest equipment nearly 60 years old. According to the Applicant, most of the equipment for this site is nearing end-of-life and utilizes obsolete technology. Ameren is now seeking approval of a conditional use permit for the development of the new substation at 11685 Olive Boulevard. The new Craig Substation will be equipped with smart technology, which will create a self-healing system that more rapidly detects and isolates outages and speeds power restoration. This site will be able to serve the 2.6 square mile area surrounding the existing site. The proposal includes a black, 8-foot, tall, wrought iron security fence, and a site coverage of 69.3%.

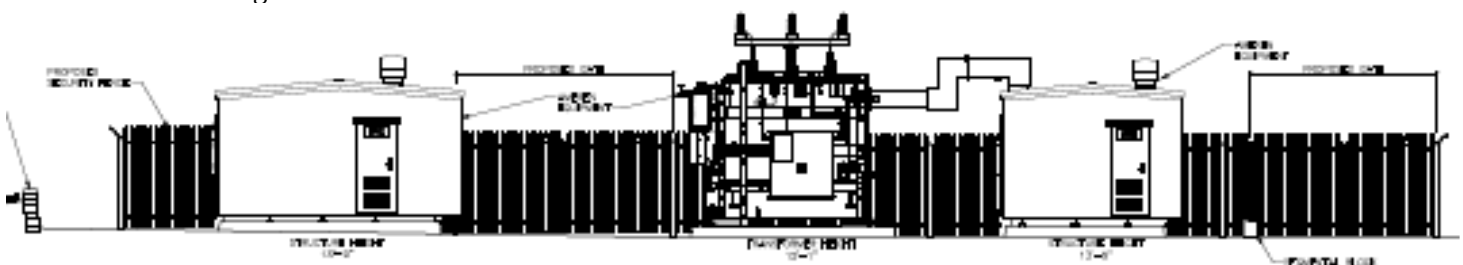


Figure 2: Applicants East-West cross-section

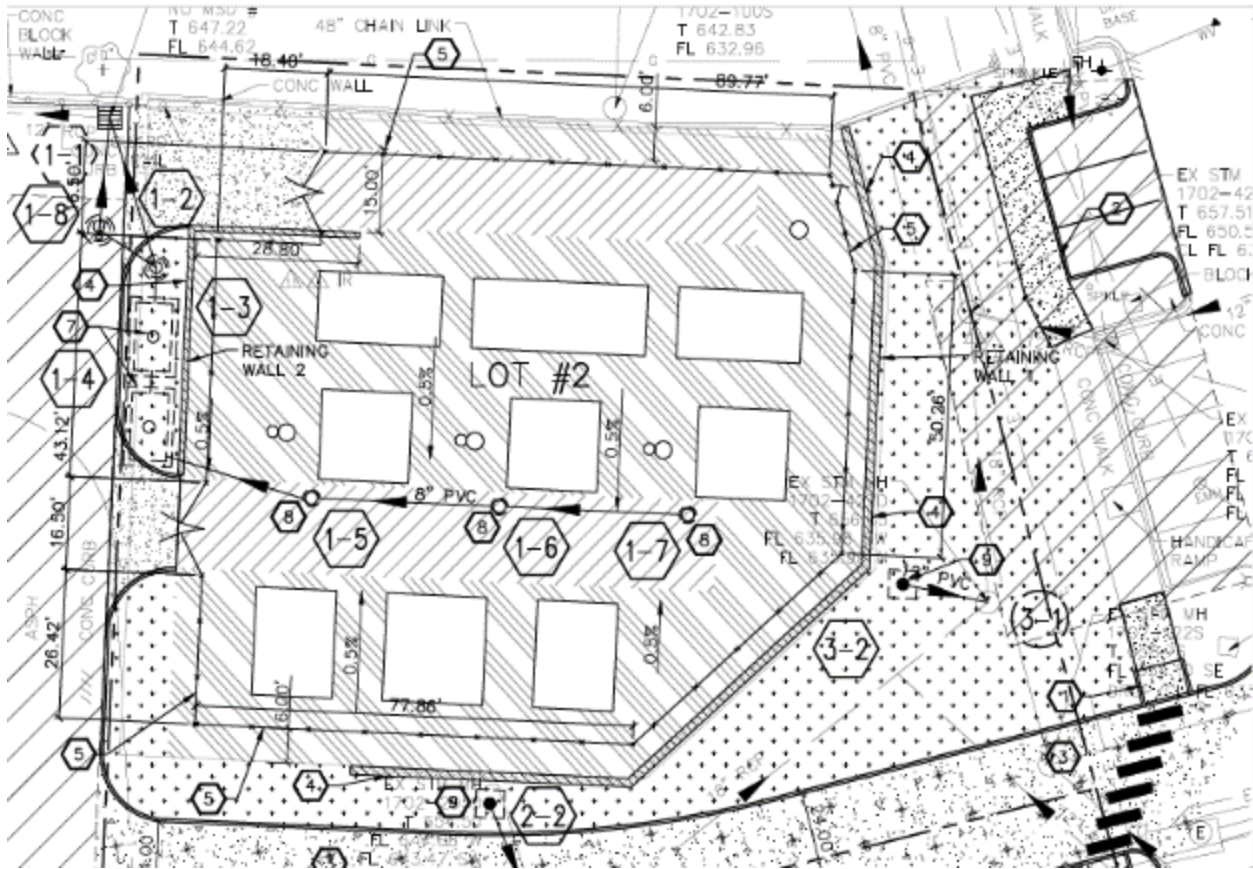


Figure 3: Close-up of the Applicants site development plan.



Figure 4: Applicants example photo of switchgear equipment

LAND USE AND ZONING OF SURROUNDING PROPERTIES

The adjacent zoning and land uses are as follows:

DIRECTION	USE	ZONED	SEPARATED BY
North	Hotel	CB-Core Business District	NA
South	Existing Substation	CB-Core Business District	NA
East	US Bank-City Place	CB-Core Business District; CDD	NA
West	Aldi Retail Shopping Center	CB-Core Business District	NA

COMPREHENSIVE PLAN REVIEW

The Creve Coeur 2030 Plan includes overall city-wide objectives and strategies to actively engage with utility providers, fire protection districts, neighboring governments, and other community service providers to ensure that Creve Coeur continues to be served by high-quality, efficient and effective community services (Strategy 4.5, Community Amenities & Facilities, p. 48). The subject property is located within the Central Business District that has a vision to create a vibrant, walkable, amenity-rich mixed-use commercial center for the community with high intensity, mixed-use development, including dining, retail, office, and multi-family residential. These land uses will be supported by great streets, public realm amenities, and a central City gathering place. Electrical services and utilities are a requirement for such development, as well as the surrounding areas. Therefore, the proposed development meets with the recommendations of the Comprehensive Plan.

The City's Design Guidelines also offer further review of such utility facilities that include that all on-site utilities (electric, telephone, cable TV) shall be installed underground. Surface transformer switching pads shall be located and screened to be unobtrusive (Ch 5, C. Utilities, p. 18). The proposal is moving the substation further away from Olive Boulevard. The development will sit lower than Olive Boulevard and the adjacent cross-access drive by approximately five feet at the highest, and the Applicant's Landscape Plan includes a hedge row of deciduous shrubs *Viburnum 'Eskimo'*. This is a compact shrub (deciduous in St. Louis) that typically matures to 4-5' tall and as wide. Showy white flowers bloom profusely in snowball inflorescences (to 4" diameter) in May, per the Missouri Botanical Garden plant finder website, to provide screening around site. However, discussed further below the planting are spaced at 56 inches apart, so Staff recommends that such planting need to be spaced closer together and allow for layering and greater interest in the overall design, and should be a more solid upright row of evergreen shrubs. Additional plantings are needed around the accent tree at the southeast corner to further the proposal toward the Design Guidelines and the justification for additional site coverage.

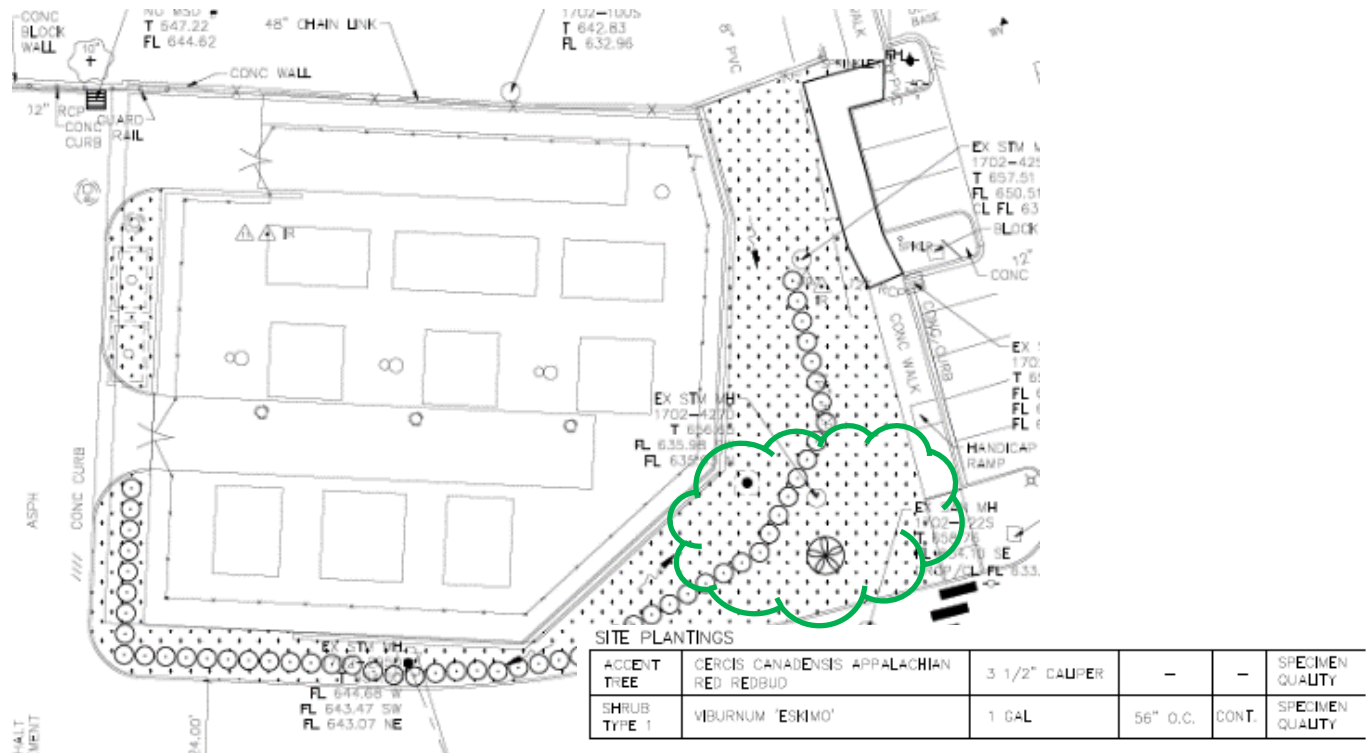


Figure 5: Close-up of the proposed Landscape Plan and Material Schedule, with the area for additional planting is needed.

The City's Design Guidelines recommend Accessory Buildings and Facilities and Fences and Walls are to be compatible with the architecture of the main buildings and should use similar materials, and to minimize the height and length of the retaining walls and screen with appropriate landscaping, and designed to incorporate elements of other architectural features or natural features of the project. Additionally, retaining walls in excess of 4-feet in height should be terraced with planting area terrace separation between levels, and materials utilized for the retaining wall should match the primarily building materials. The retaining wall is internal to the site and is approximately 5 feet in total height. Details on the material for the retaining wall were not provided, and the equipment is a light grey. Staff does recommend that the retaining wall be a dark color, while the equipment is a light grey, a darker retaining wall would blend into the landscaped background.

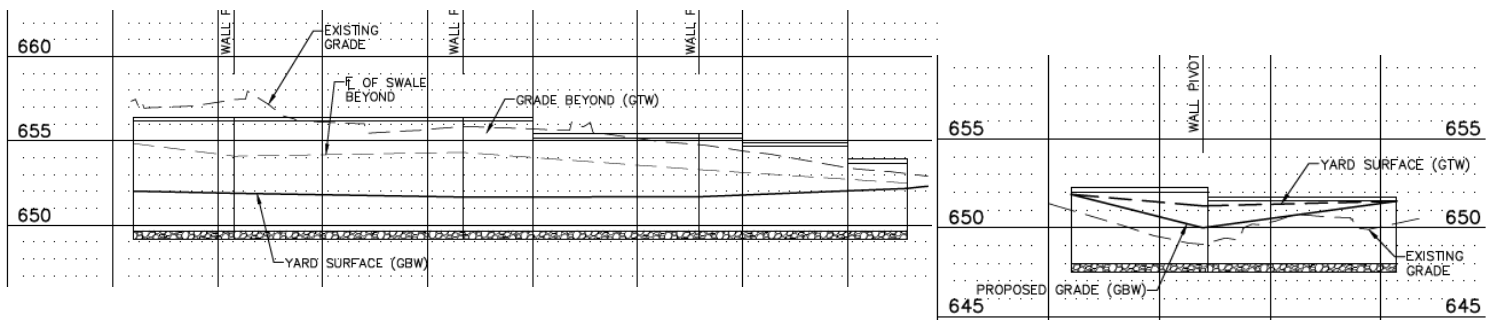


Figure 6: Wall profile 1 and 2, with elevation on the left of the chart.

ZONING REVIEW

The property is zoned CB-Core Business District where Electrical Power Distribution Systems (NAICS 221122) are listed as a conditional in all of the commercial district.

The CB District regulations include a maximum site coverage of 63%, where under Section 405.370(E)(3)(b)(2) the Planning and Zoning Commission may, in its discretion, allow the permitted coverage to be increased as a bonus (not to exceed the total of seventy percent (70%) site coverage) in consideration of special or outstanding landscape and site planning features as demonstrated by a site development plan submitted in accordance with Section 405.1080. As indicated above, the overall proposal includes a total site coverage of 69.3%. Given the public benefit of upgraded electrical facilities that will be able to serve the 2.6 square mile area, the Planning and Zoning Commission may take this into consideration. Below is an image of the service area provided by the new substation. However, Staff does find that additional landscaping is needed to further the proposal towards this requirement and has included a requirement for additional landscaping for the Zoning Administrator's approval.

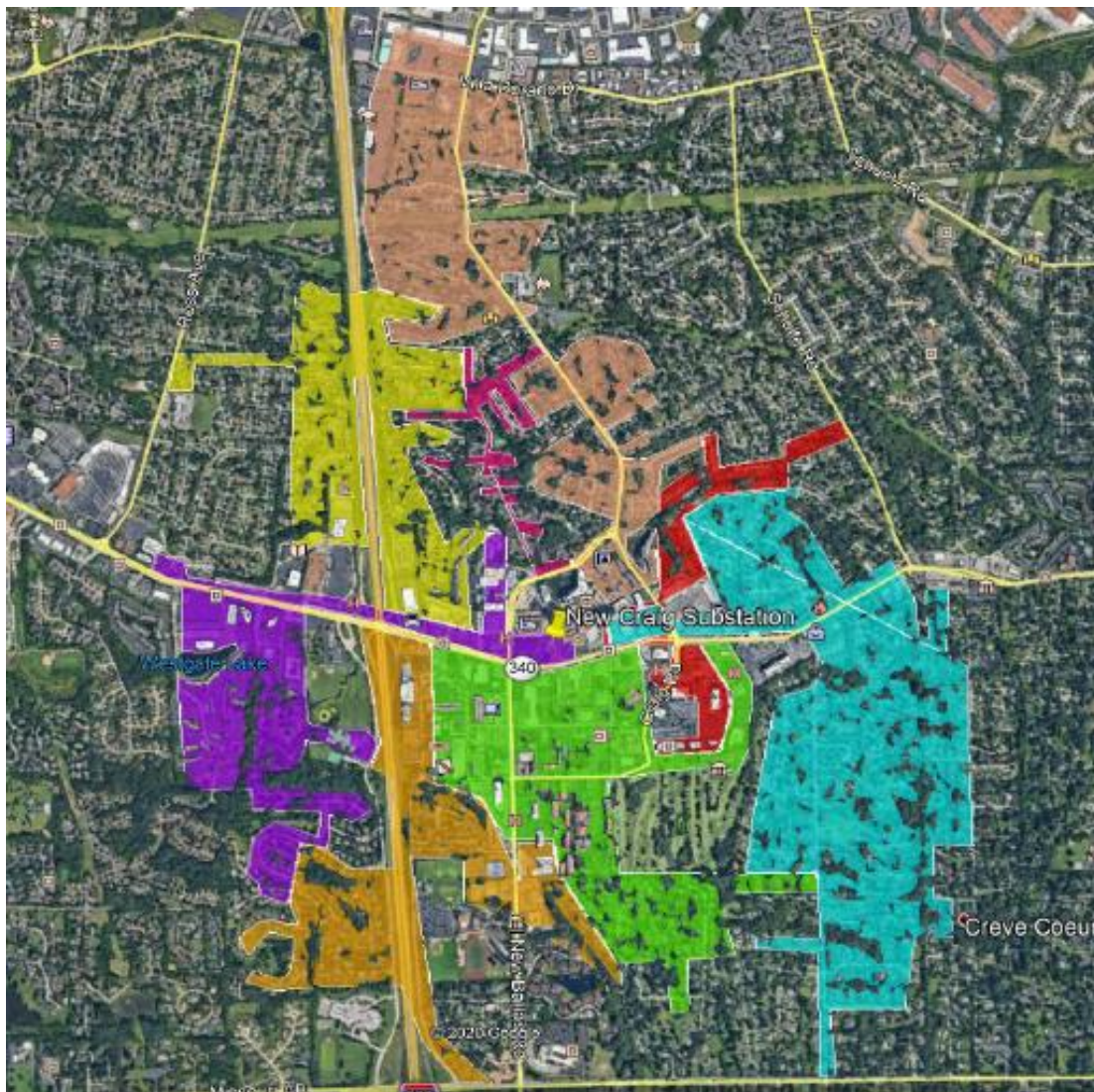


Figure 7: Coverage Area of the proposed New Substation

Section 405.370(E)(4)(a)(1) Maximum front yard of the CB-District Regulations states that a minimum of fifty percent (50%) of the building elevation parallel to the street right-of-way shall be located a maximum of fifteen (15) feet from the right-of-way established by the adopted site development plan for the "CB" Core Business District. The lot was created to allow for the development of the substation, with the cross-access drive shifted southward between the subject property and the existing substation lot.

While the cross-access drive, is not technically a public right-of-way, it is open to the public and used as a drive. The security fence surrounding the site is approximately 15 feet from the edge of pavement on the west, and approximately 15-17 feet from the edge of pavement to the south. Given that the type of development as a utility facility, and not a typical development anticipated of the Zoning Ordinance. Staff finds that the proposal is properly situated on the site.

Landscaping

As discussed above, the proposed landscape plan includes deciduous hedge that when matures is typically matures to 4-5 feet tall and 4-5 feet wide. A tree has also been provided. The drawings show that the hedge will be installed at 56" on center, where Section 405.540(F)(7) of the Landscaping regulations requires that the individual plants used in the development of such a hedge shall be placed so as to be not more than thirty (30) inches on center. Full maturity of plans may take some time, and generally landscape companies' trim plants to be tighter than allowing to grow to full maturity. Additionally, as discussed above, more upright evergreens and trees are needed to provide year-round screening, as well as additional plantings to meet with the requirements for additional site coverage. Staff has included a condition of approval that the landscape plan shall be revised to meet with these recommendations. The hedge could be revised to allow for additional layering of plants to create the same effect and provide a greater interest than just a straight row as shown, provide for more upright evergreens for year round screening, and additional plantings and trees at the southeast corner of the site and along the access drive for the Zoning Administrators approval.

Section 405.540(F)(10) requires that all landscaping shall be permanently maintained in good condition with at least the same quality and quantity of landscaping as initially approved. In order to present a healthy, neat, and orderly appearance, all landscaped areas including interior parking lot islands and grass areas shall be provided with adequate irrigation for the maintenance of grass, shrubs, ground covering and other landscaping. An underground irrigation system shall be installed, operated, and maintained to meet the intent of this Section. Such systems shall be required for all new developments and redevelopment projects. The Applicants have not included an underground irrigation system for the landscaping. They have indicated that it would require placing a new water service line and meter for the irrigation. A water service line is not needed for any site equipment. With regard to establishing vegetation, Ameren's contractor is required to maintain this vegetation and provide a warranty for a period of time. Addition of irrigation and resulting water service line may impact the completed design due to the various underground components buried outside the fence including duct bank, ground grid, spill control piping/manholes, etc. Staff has included that an underground irrigation system shall be installed around the perimeter of the site to ensure that long-term maintenance of the plantings and to meet with the requirement above. The Commission should discuss whether alternatives to an underground system are sufficient to meet with this requirement. Staff has also included a condition that the existing facility site at 11665 Olive Boulevard shall be restored and properly sodded with the removal of the existing station.

Fences and Walls

Section 405.640(A) requires Planning and Zoning Commission approval for any fence over 6 in height for a unique screening problem. Additionally, any fence along a front yard setback also requires Planning and Zoning Commission. As discussed above, the security fence is a black wrought-iron style, that will have a total height of 8 feet, to prevent access into the sight and prevent disruption of any electrical services, or vandalism. Therefore, Staff does not have a concern with the overall height, given the unique nature of the development.

Lighting

The Applicants have provided new lighting within the facility. Section 405.680(B)(1) requires the Planning and Zoning Commission to review all lighting for non-residential buildings and the submittal shall consist of a lighting plan, and shall include the type, number, brightness, type of cutoff/shielding and hours of usage of all fixtures. A photometric plan was not provided. However, the drawings indicate the type of light fixtures that are downcast, and locations that are generally internal to the side and not

directed outward. The lighting is low level and generally for security purposes, or only when someone is on site, and therefore should not be directed outward, or be cast upon adjacent property.

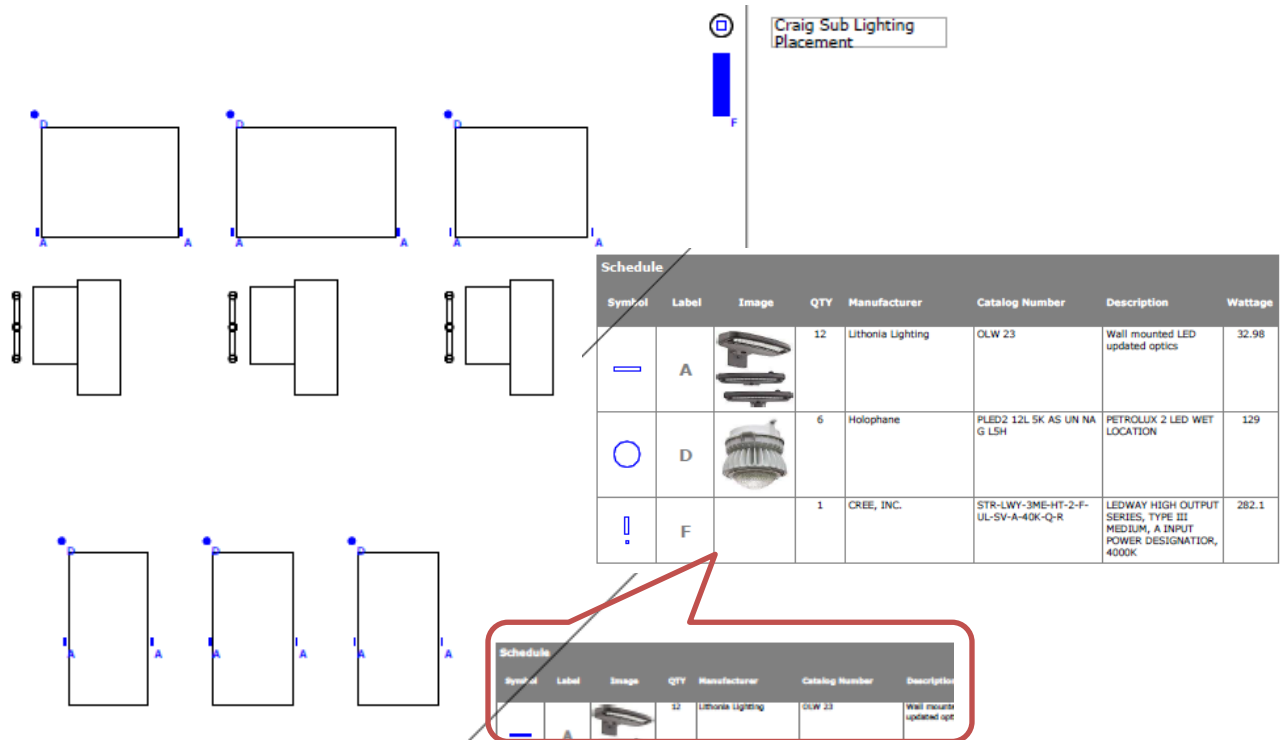


Figure 8: Close-up of the Applicants Lighting Placement Plan and Schedule

Utility Facilities

Section 405.690(C) of Utility Facilities requires that facilities shall be located in such a manner as to reduce or eliminate their visibility and shall be a neutral color and shall not be bright, reflective, or metallic. Black, gray, and tan shall be considered neutral colors, as shall any color that blends with the surrounding dominant color and helps to camouflage the facilities. Sight proof screening, landscape or otherwise, may be required for facilities taller than three (3) feet in height or covering in excess of four (4) square feet in size. Such screening shall be sufficient to reasonably conceal the facility. The proposed switch guard equipment is a light grey, and (as discussed in the prior application of the boundary adjustment) located further from Olive Boulevard on the parking area for the Aldi Shopping Center. The existing substation would then be available for redevelopment, thus locating the substation out of the way and further from the visibility of Olive Boulevard, in keeping with these requirements. The proposed substation surrounded by an 8-foot-tall open slatted wrought-iron security fence, with a row of landscape hedge. As discussed above, more upright evergreens are needed for year-round screening, and to meet with the intent of the site coverage bonus, for the Zoning Administrators approval. With these changes the proposal meets with these recommendations.

Sidewalk

Section 405.730(A)(2) requires that the minimum width of internal sidewalks in non-residential developments shall be at least six (6) feet or eight (8) feet if used as a curb stop. The proposal includes adding additional spaces on City Place property where the existing cross-access is and carrying it southward across the new drive to the parking area for US Bank per the image below. The sidewalk is scaled at 8 feet in width in compliance with these regulations. Staff has not required that a sidewalk be included following along the access drive at this time. Due to the change in grade and to meet with the regulations for accessibility, a sidewalk would best be served on the south side of the drive. In anticipation of the future development on this site, a sidewalk would be provided with the review of a site development plan for this lot.

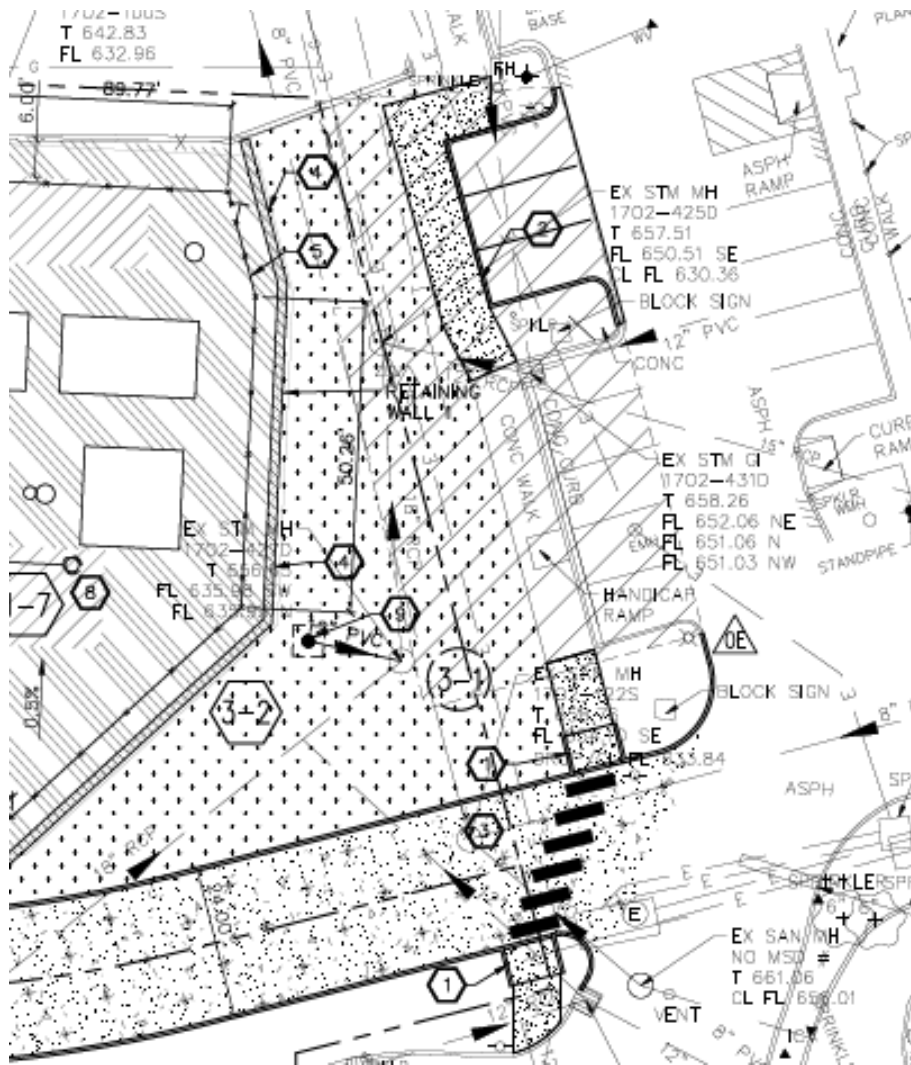


Figure 9: Close-up of the Site Plan showing the new sidewalk along the east property area

RECOMMENDATION

Staff recommends that the follow conditions apply for this request:

1. The Applicant is required to submit Grading and Site Improvement Plans, showing all exterior improvements, for the repair, resurfacing and striping of the parking lot, as required by Section 410.380 of the Subdivision and Land Development Regulations (Subdivision Code). The Grading and Site Improvement Plans shall be in substantial conformance with the Site Plan information received on March 13, 2020 as bound together and submitted in conjunction with Application #19-038, by Union Electric Company d/b/a Ameren Missouri, and with all conditions of approval.
2. The Applicant shall submit for any building permits necessary for this project, including a fence permit, or retaining wall permit.
3. Site coverage is allowed for up to 69.3%, due to the public benefit of providing for electrical services for a 2.5 mile area, and additional landscaping per the Zoning Administrators approval, as discussed in the Staff Report for the April 20, 2020 Planning and Zoning Commission meeting.
4. The black wrought-iron style security fence is to have a maximum height of eight (8) feet.
5. The retaining wall shall be of a darker color consistent with the red brick color of the building.

6. The Applicant shall submit a final Landscape Plan to be in substantial compliance with the drawings received on March 13, 2020 as bound together and submitted in conjunction with Application #19-038, by Union Electric Company d/b/a Ameren Missouri in compliance with Section 405.540 Landscaping, except as modified below.
7. The landscaped plan shall include upright evergreen hedge for year-round screening at no more than 30 inches on center as required by Section 405.540 Landscaping of the Zoning Ordinance. Additional landscaping and trees shall be provided to meet with the intent of the site coverage bonus for the Zoning Administrator's approval.
8. An underground irrigation system shall be installed for the landscaped area surrounding the facility as required by Section 405.540 Landscaping of the Zoning Ordinance. All landscaping shall be permanently maintained in good condition with at least the same quality and quantity of landscaping as initially approved. Vegetation that is totally or predominantly dead and/or disfigured due to disease or injury shall be replaced as needed and in a prompt manner.
9. All new sidewalks shall be a minimum of six (6) feet, or eight (8) feet if used as a curb stop, per Section 405.730.
10. The existing facility at 11665 Olive Boulevard shall be removed and the site sodded and restored once the new substation is brought online.
11. The Applicant shall submit a photometric and lighting detail for any new lighting for the site for the approval of the Zoning Administrator as part of the site improvement permit.
12. Any future enlargement, extension, expansion or exterior alteration in the use of the structures or site must be approved by the City Council upon receipt of the recommendation of the Planning and Zoning Commission as an amendment to the Conditional Use Permit before a Building Permit for the enlargement, expansion or exterior alteration may be issued.
13. Failure to comply with any one or all of the conditions of this permit shall be adequate cause for the revocation of said permit by the City Council, provided, however, no permit shall be revoked without prior notice to the owner of the intention of the City Council to revoke this permit and reasonable time granted to the owner to correct or remedy any such breach of conditions, except for repeated breaches or violations.
14. No conditional use permit granted by the City Council shall be valid for a period longer than one year from the date it grants the conditional use permit, unless within such period: (1) a building permit is obtained and construction is begun; or (2) if a building permit is not required, an occupancy permit is obtained and the use of the building commenced. The City Council may grant extensions to the one (1) year period of not more than one hundred and eighty (180) days each, without notice or hearing, provided that a written request for such extension is filed by the original applicant and approved by the City Council prior to the date the conditional use permit is scheduled to expire.
15. Any transfer of ownership or lease of the property shall include in the transfer or lease agreement a provision that the purchaser or lessee agrees to be bound by the approved Site Development Plan for the property and the conditions herein set forth, and written confirmation thereof signed by the new owner or lessee shall be filed with the City at the time of such transfer or lease. Failure to comply with this provision shall not excuse anyone from these conditions.

MOTION

If the Planning and Zoning Commission is satisfied that the proposal meets with the applicable Zoning requirements and the objectives and recommendations of the Comprehensive Plan and Design Guidelines. They should make a recommendation to the City Council. The motion to approve the application will be in the form of approval, approval with conditions, or deferral.

"I move to recommend approval for a conditional use permit and site development plan for a new electrical power distribution substation (NAICS 221122) at 11685 Olive Boulevard as bound together with Application #19-038, as presented to the Planning and Zoning Commission, subject to the conditions contained in the Draft Ordinance for the meeting of April 20, 2020" (conditions may be added, eliminated, or modified by preceding motion).

APPENDIX 1: COMPREHENSIVE PLAN, INCLUDING DESIGN GUIDELINES

Included and attached by reference. See body of report for specific excerpts.

APPENDIX 2: ZONING CODE

Included and attached by reference. See body of report for specific excerpts.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR/SUBCONTRACTOR SHALL CONFORM TO ANY AND ALL PERMIT REQUIREMENTS OF THE (ANY) VARIOUS AFFECTED UTILITY COMPANIES AND/OR REGULATORY AGENCIES WITH REGARD TO MAKING CONNECTIONS TO, OR CROSSING OF, THEIR FACILITIES; WORKING WITHIN THEIR RIGHT-OF-WAY OR EASEMENTS; INSPECTIONS AND ASSOCIATED CHARGES; AND/OR SPECIAL BACKFILL REQUIREMENTS.
2. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS OR PROFILES ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR/SUBCONTRACTOR TO VERIFY THE FIELD LOCATION(S), ANTICIPATED CLEARANCE(S), AND THE EXISTENCE OF ANY FACILITIES NOT SHOWN HEREON.
3. TOPOGRAPHIC SURVEY BY CENTRAL MISSOURI PROFESSIONAL SERVICES, INC.
4. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH THE LATEST OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) "CONSTRUCTION STANDARDS FOR EXCAVATIONS."
5. PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE OWNER FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK.
6. REFERENCE LINES AND GRADES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO STARTING THE WORK AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
7. THE CONTRACTOR SHALL RESTORE ALL DISTURBED PROPERTY AND SURFACES TO ORIGINAL CONDITION.
8. ALL WORK MUST BE PERFORMED WITHIN EXISTING OR ACQUIRED EASEMENTS. AGENCY APPROVAL OF THESE PLANS DOES NOT AUTHORIZE OR CONDONE WORK OUTSIDE OF THE EASEMENTS. ALL CONSTRUCTION METHODS AND MATERIAL SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF ST. CHARLES COUNTY. IN THE ABSENCE OF ANY APPLICABLE LOCAL STANDARDS, THE REQUIREMENTS SET FORTH HEREON SHALL GOVERN.
9. CONSTRUCTION TO BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT AMEREN STANDARD SPECIFICATIONS.
10. DO NOT SCALE THE DRAWINGS, FOLLOW DIMENSIONS.
11. NO AREAS OTHER THAN DRIVES SHOWN SHALL SUSTAIN PROLONGED VEHICULAR TRAFFIC.
12. ALL UTILITIES SHALL BE LOCATED BY "DIGRITE" OR APPROVED EQUAL PRIOR TO ANY EXCAVATION.

SITE COVERAGE CALCULATIONS

LOT #1 – EXISTING ADLI COMPLEX
NO WORK IS BEING DONE TO THIS LOT AS PART OF THIS PROJECT, THEREFORE, PRE AND POST DEVELOPMENT CONDITIONS WILL BE THE SAME.

BUILDING AREA	35,520 SF (0.82 AC)
PARKING AND DRIVE AISLES	79,248 SF (1.82 AC)
TOTAL	114,768 SF (2.64 AC)

SITE COVERAGE (2.64 AC / 3.271 AC) * 100 = 80.7%

LOT #2 – PROPOSED CRAIG SUBSTATION

PRE-DEVELOPMENT:

PARKING AND DRIVE AISLES	17,779 SF (0.41 AC)
TOTAL	17,779 SF (0.41 AC)

SITE COVERAGE (0.41 AC / 0.517 AC) * 100 = 79.3%

POST-DEVELOPMENT:

NEW SUBSTATION YARD GRAVEL	10,171 SF (0.23 AC)
PAVEMENT (DRIVES & EQUIP PADS)	5,724 SF (0.13 AC)
TOTAL	15,895 SF (0.36 AC)

SITE COVERAGE (0.36 AC / 0.517 AC) * 100 = 69.6%

LOT #3 – EXISTING CRAIG SUBSTATION

PRE-DEVELOPMENT:

EX. SUBSTATION YARD GRAVEL	4,365 SF (0.10 AC)
PAVEMENT (DRIVES & EQUIP PADS)	6,688 SF (0.15 AC)
TOTAL	11,053 SF (0.25 AC)

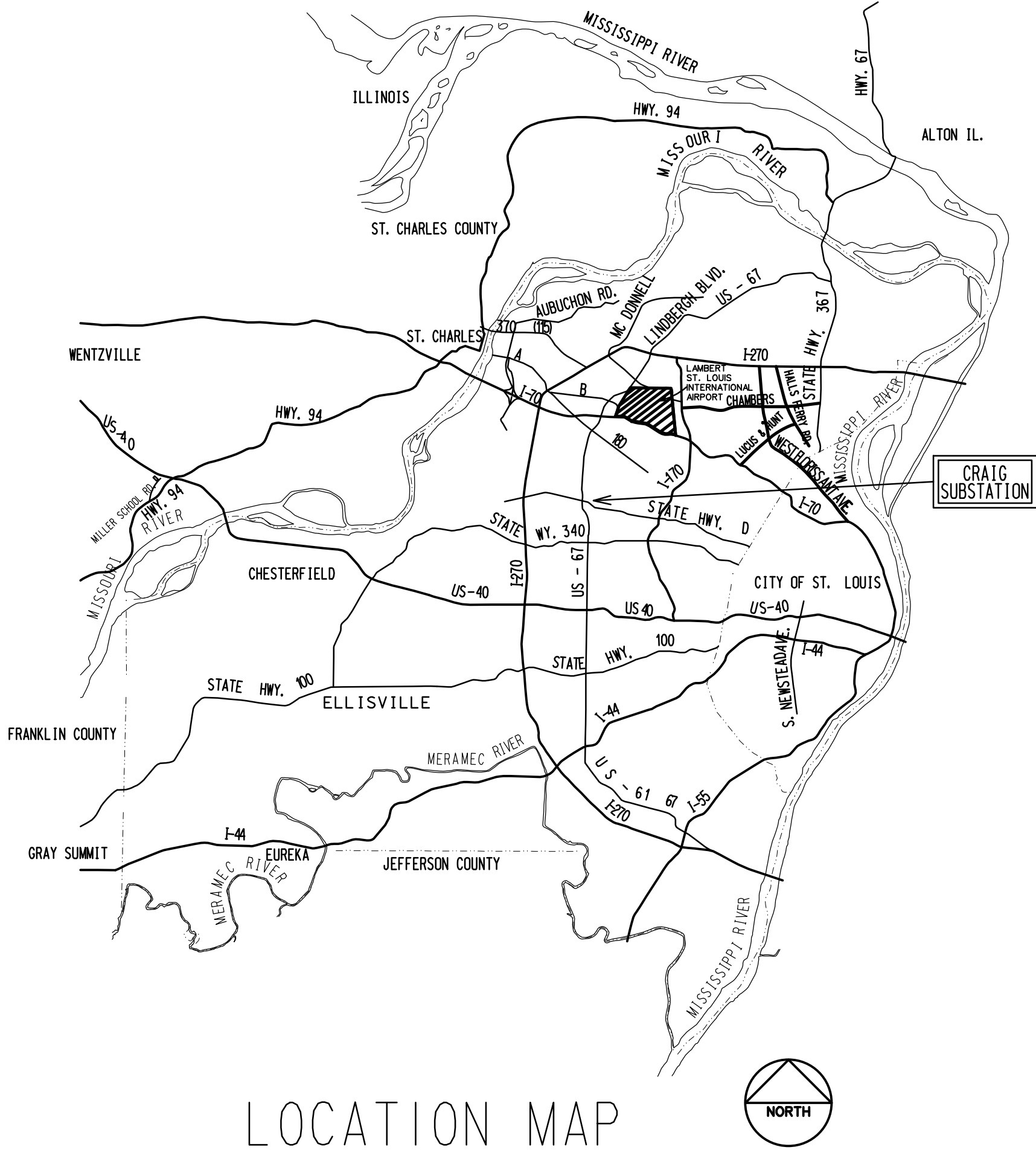
SITE COVERAGE (0.25 AC / 0.675 AC) * 100 = 37.0%

POST-DEVELOPMENT:

PAVEMENT	3,722 SF (0.09 AC)
TOTAL	3,722 SF (0.09 AC)

SITE COVERAGE (0.09 AC / 0.675 AC) * 100 = 13.3%

CRAIG SUBSTATION



OWNER
JOSH SKELLY, AMEREN
1901 CHOUTEAU AVENUE
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JSKELLY@AMEREN.COM

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POST DEVELOPMENT DRAINAGE AREA MAP	PD DAM 2
STORM DRAINAGE AREA MAP	PD DAM 3
BMP DRAINAGE AREA MAP	PD DAM 4

PROJECT DATA:

LOCATOR NOS. 170620455
OWNER N/F UNION ELECTRIC COMPANY
ADDRESS 11685 OLIVE BLVD
CREVE COEUR, MO

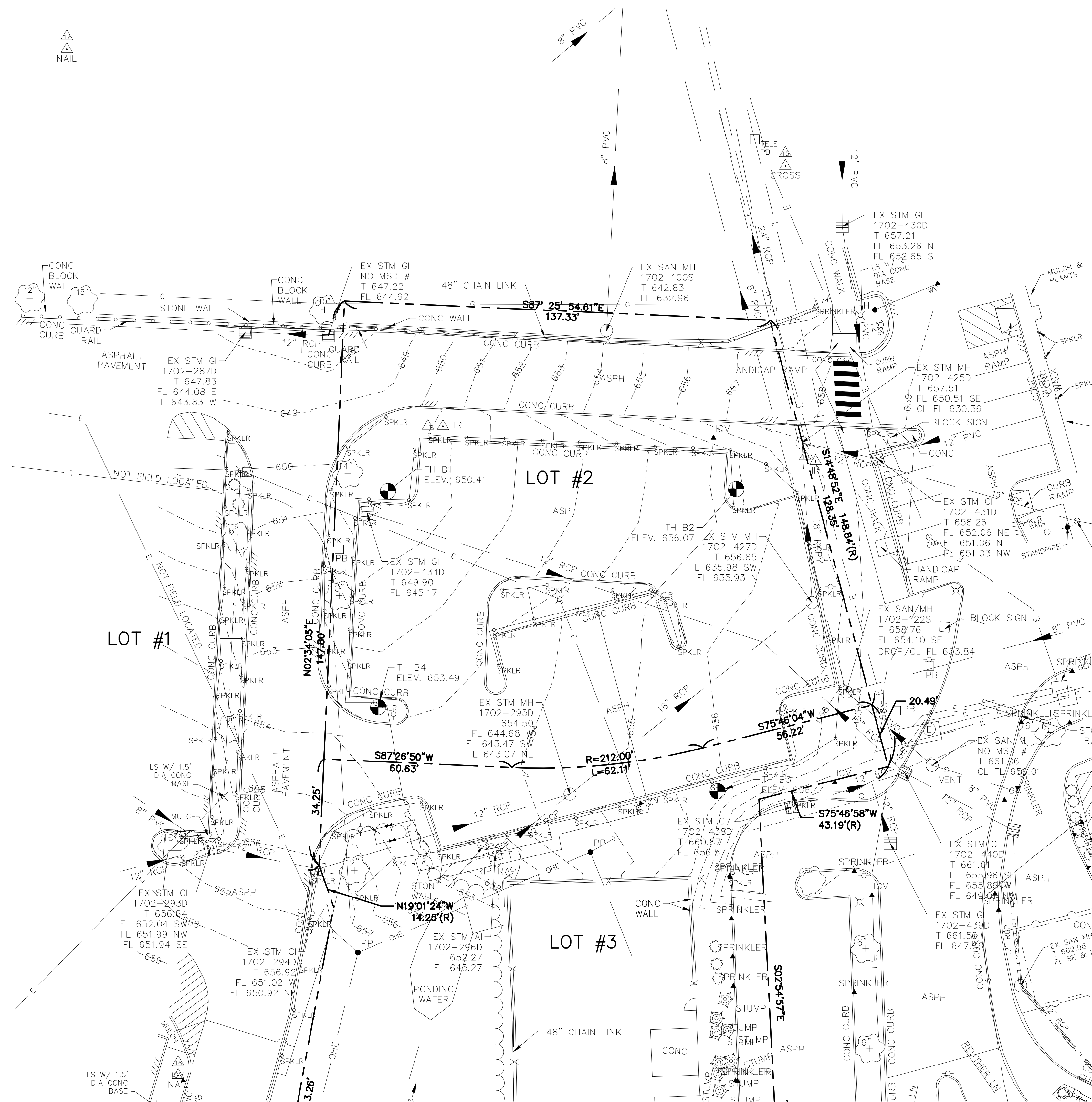
ACREAGE OF TRACT 0.557 ACRES
PRESENT ZONING CORE BUSINESS DISTRICT
PROPOSED ZONING CORE BUSINESS DISTRICT
ADJACENT ZONING CORE BUSINESS DISTRICT
PRESENT USAGE PARKING LOT
PROPOSED USAGE AMEREN ELECTRICAL SUBSTATION
SUBDIVISION NAME MARRIOTT COURTYARD PLAZA PLAT 2
LOT NUMBER ADJUSTED LOT B
SCHOOL DISTRICT LADUE
NEIGHBORHOOD NOT APPLICABLE
ZIP CODE 63141
UTILITIES MISSOURI AMERICAN WATER
EXPLORER PIPELINE CO.
AMEREN MISSOURI
ATT FIBER OPTIC

FIRE DISTRICT CREVE COEUR
MSD WATERSHED RIVER DES PERES
FIRM PANEL -----

PRELIMINARY
FOR ENGINEERING REVIEW
** NOT FOR CONSTRUCTION **

REV	DATE	DRF	DESCRIPTION	ENG	RVW	APPD		PROPERTY - COVERSHEET				
0A	08/16/2019	NPB	ISSUED FOR REVIEW	JFG	JFG	DPJ						
0B	09/17/2019	NPB	ISSUED FOR BID	JFG	JFG	DPJ						
0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ						
0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ						
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ						
							CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO					
								LOC 4147				
							DFR:	DATE: 08-16-19		SCALE: NO SCALE		
							ENG:	DRAWING NUMBER				
							RVW:	CRAIG-C-000001-000_MU-JS528643				
							APPD:					
								REV		0E		

THE RESPONSIBILITY OF THE UNDERSIGNED ENGINEER IS LIMITED TO THE DESIGN WORK SHOWN ON THIS PROJECT DRAWING AND DOCUMENTS BEARING HEREON. NO SIGNATURE OR INITIALS. THESE DOES NOT HAVE AUTHORITY OVER THE PROJECT AS A WHOLE. THE UNDERSIGNED DISCLAIMS ANY RESPONSIBILITY FOR WORK DONE UNDER SUBSEQUENT REVISIONS AND ANY OTHER DOCUMENTS ASSOCIATED WITH THE PROJECT WHICH DO NOT BEAR HEREIN SEAL, SIGNATURE OR INITIALS.



PRELIMINARY
FOR ENGINEERING REVIEW
** NOT FOR CONSTRUCTION **

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0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ



PROPERTY - SURVEY AND TOPO

DFR:	DATE: 08-16-19	SCALE: TB_SCALE	LOC
ENG:		DRAWING NUMBER	REV
RWW:		CRAIG-V-000001-001_MU-JS528643	0E
APPD:			

DAVID MASON
+ ASSOCIATES

800 South Vandeventer Avenue
St. Louis, Missouri 63110
(314) 534-1030

DMA# 2019163-00

DAVID MASON & ASSOCIATES
Missouri Certificate of Authority Number:
Engineer: 001103
Architect: 000620
Survey: 000336



David P. Johnson, Engineer
Missouri License # E-2001004612
Expires: 12/31/2020

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MSD NOTES (FOR ADDITIONAL MSD NOTES SEE SHEET C0.1 MSD NOTES)

- CONTRACTORS' INSURANCE (OFFSITE):
1. PRIOR TO OBTAINING A CONSTRUCTION PERMIT FROM THE METROPOLITAN ST. LOUIS SEWER DISTRICT, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE DISTRICT WITH A COPY OF AN EXECUTED CERTIFICATE OF INSURANCE INDICATING THAT THE PERMITTEE HAS OBTAINED AND WILL CONTINUE TO CARRY COMMERCIAL GENERAL LIABILITY AND COMPREHENSIVE AUTO LIABILITY INSURANCE. THE REQUIREMENTS AND LIMITS SHALL BE AS STATED IN THE RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY AND STORMWATER DRAINAGE FACILITIES, SECTION 10.090. (ADDENDUM)
- PREVAILING WAGE NOTE:
2. NOTICE TO CONTRACTOR:
THIS PROJECT INCLUDES RELOCATION, ALTERATION, OR RECONSTRUCTION OF EXISTING MSD FACILITIES. IN ACCORDANCE WITH MSD REGULATION 3263, THE DISTRICT REQUIRES THE WAGE RATE TO BE AT LEAST EQUAL TO MISSOURI PREVAILING WAGE RATE AT THE TIME OF CONSTRUCTION START. AN AFFIDAVIT CERTIFYING THAT THE MISSOURI PREVAILING WAGE RATE AT THE TIME OF CONSTRUCTION START HAS BEEN PAID FOR ALL WORK RELATED TO RELOCATION, ALTERATION, OR RECONSTRUCTION OF EXISTING MSD FACILITIES IS REQUIRED PRIOR TO MSD CONSTRUCTION APPROVAL OF THIS PROJECT.
3. STORM WATER MANAGEMENT FUTURE DISTURBANCE NOTE:
PROJECT DISTURBANCE = X.XXXX ACRES (XXXXXXX S.F.)
PROJECT RUNOFF DIFFERENTIAL = -0.04 CFS

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORMWATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THE TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN.)
4. ABANDONMENT/PERMITS:
MSD PERMITS ARE REQUIRED PRIOR TO THE ABANDONMENT OR REMOVAL OF EXISTING SEWERS. TO RECEIVE MSD PERMITS THE PROJECT MUST HAVE MSD PLAN APPROVAL. NOTIFY MSD 48 HOURS PRIOR TO SEWER ABANDONMENT AND/OR REMOVAL.
5. COMPACTED FILL REQUIREMENTS:
A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER WILL VERIFY THAT ALL COMPRESSIBLE MATERIAL HAS BEEN REMOVED PRIOR TO FILL PLACEMENT AND THAT ALL FILL, AND FILLED AREAS, INCLUDING TRENCH BACKFILLS, UNDER BUILDINGS AND UNDER SANITARY AND STORM SEWER LINES CONSTRUCTED ABOVE THE ORIGINAL GROUND SURFACE, HAS BEEN COMPACTED TO 90% MODIFIED PROCTOR. FILL IS TO BE PLACED IN A MAXIMUM OF NINE-INCH (9") LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF FIFTY-FEET (50') WIDE INTERVALS ALONG THE ROUTE OF THE PIPE, AT A MAXIMUM INTERVAL, OF TWO FEET (2'), VERTICALLY AND LATERALLY ON EACH SIDE OF THE PIPE, AT A DISTANCE EQUAL TO THE DEPTH OF FILL OVER THE PIPE. A COPY OF THESE RESULTS WILL BE SUBMITTED TO MSD PRIOR TO PLACEMENT OF THE SEWER PIPE.
6. BACKWATER VALVE NOTE:
A BACKWATER VALVE SHALL BE REQUIRED ON ALL BUILDING LATERALS PER LOCAL PLUMBING CODE.
7. DETAIL DRAWINGS:
THE DETAIL DRAWINGS SHOWN HERE ARE ONLY FOR PRIVATE CONSTRUCTION THAT IS NOT UNDER MSD PERMITS. REFER TO MSD SPECIFICATIONS AND STANDARD DETAILS FOR PUBLIC SEWER CONSTRUCTION OR PRIVATE CONSTRUCTION UNDER MSD PERMITS.
8. FILL OR REMOVE ABANDONED SEWER:
ABANDONED SEWERS SHALL BE REMOVED OR COMPLETELY FILLED WITH GROUT.
9. LIMITS OF DISTURBANCE:
THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHEREVER POSSIBLE.
10. PIPE JOINTS WITH ADAPTERS AND COUPLINGS NOTE:
NOTE - PIPE JOINTS WITH ADAPTERS AND COUPLINGS SHALL BE SUPPLIED AND INSTALLED WITH 316 STAINLESS STEEL NUT AND BOLT CLAMPS (T-BOLT) CONFIGURATION; AND WITH STAINLESS STEEL SHEAR BANDS, BEING A MINIMUM OF TWELVE (12) MILS (MSD STD. CONST. SPECS. PT. 2, SUBSECTION H-11). WORM DRIVE HOSE CLAMPS AND CONCRETE BACKFILLING (CAUSTICITY) WILL NO LONGER BE ALLOWED AT THOSE JOINTS. GRANULAR BACKFILL SHOULD BE USED. IF FLOWABLE FILL IS REQUIRED, THE CONTRACTOR SHALL WRAP AND TAPE THE ADAPTERS AND COUPLINGS WITH A SIX (6) MIL POLYETHYLENE SHEET.
11. PUBLIC SEWER MAINTENANCE:
MAINTENANCE OF THE SEWERS DESIGNATED "PUBLIC" SHALL BE THE RESPONSIBILITY OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT UPON DEDICATION OF THE SEWERS TO THE DISTRICT.
12. REMOVE REPLACE OR REHAB NOTE:
THE REMOVAL AND REPLACEMENT, OR REHABILITATION OF THE EXISTING STRUCTURE WILL BE DETERMINED BY THE MSD FIELD INSPECTOR. IF THE STRUCTURE IS DETERMINED TO REMAIN IN PLACE, THEN THE TOP SHALL BE ADJUSTED TO GRADE, IF NEEDED.
13. SHOP DRAWINGS:
THE PROJECT ENGINEER SHALL PROVIDE SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN MISSOURI FOR APPROVAL TO MSD PRIOR TO CONSTRUCTION OF THESE STRUCTURES. STRUCTURES SHALL BE DESIGNED TO SUSTAIN HS-20 LOADS. PLEASE CONTACT THE DISTRICT'S CONSTRUCTION MANAGEMENT DIVISION AT (314) 335-2072 FOR QUESTIONS.

14. STANDARD CONSTRUCTION:
ALL STORM AND SANITARY SEWER STRUCTURES AND APPURTENANCES TO BE DEDICATED TO MSD, OR TO BE PRIVATE UNDER MSD INSPECTION, SHALL CONFORM TO THE METROPOLITAN ST. LOUIS SEWER DISTRICT, STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER AND DRAINAGE FACILITIES, 2009. THAT WILL INCLUDED STANDARD DETAILS SHOWN THEREIN, AND SHALL INCLUDE ALL SUBSEQUENT CHANGES MADE THERETO.

SOME RECENT CHANGES CONCERN PLASTIC PIPE MATERIALS AND PIPE FIELD TESTING AND PERFORMANCE, AND INCLUDING THE FOLLOWING:
PART 2 - MATERIAL OF CONSTRUCTION

HIGH DENSITY POLYETHYLENE (HDPE) PIPE IS NOT ALLOWED FOR GRAVITY SEWERS FOR STORM, COMBINED, OR SANITARY SEWER THAT ARE "PUBLIC" OR "PRIVATE UNDER MSD INSPECTION"

POLYPROPYLENE (PP) PIPE IS ALLOWED AS FOLLOWS AS FOLLOWS FOR GRAVITY SEWERS THAT ARE "PUBLIC" OR "PRIVATE UNDER MSD INSPECTION":

FOR USE IN SANITARY AND COMBINED SEWERS 12 TO 60 INCHES IN DIAMETER IT SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2764 "STANDARD SPECIFICATION FOR 6 TO 60 IN. POLYPROPYLENE (PP) CORRUGATED DOUBLE AND TRIPLE WALL PIPE AND FITTINGS FOR NON-PRESSURE SANITARY SEWER APPLICATIONS."

FOR USE IN STORM SEWERS 12 TO 24 INCHES IN DIAMETER IT SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2881 "STANDARD SPECIFICATION FOR 12 TO 60 IN. POLYPROPYLENE (PP) DUAL WALL PIPE AND NON-PRESSURE STORM SEWER APPLICATIONS;" OR FOR USE IN STORM SEWERS 12 TO 60 INCHES IN DIAMETER IT SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2764 "STANDARD SPECIFICATION FOR 6 TO 60 IN. POLYPROPYLENE (PP) CORRUGATED DOUBLE AND TRIPLE WALL PIPE AND FITTINGS FOR NON-PRESSURE SANITARY SEWER APPLICATIONS."

PART 4 - PIPE SEWER CONSTRUCTION

SECTION B, PIPE TESTS, PARAGRAPH 2, REACH INTEGRITY TESTING - DELETE THE FIRST SENTENCE AND THE FOLLOWING APPLIES:

ALL SANITARY AND COMBINED SEWERS SHALL SUSTAIN A MAXIMUM LEAKAGE LIMIT OF 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY, AS REQUIRED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES SPECIFICATIONS.

SECTION B, PIPE FIELD TESTS, PARAGRAPH 2, REACH INTEGRITY TESTING, SUBPARAGRAPH C, INFILTRATION/EXFILTRATION TESTING - DELETE THE SIXTH SENTENCE, CONCERNING LEAKAGE LIMITS, AND THE FOLLOWING REPLACEMENT APPLIES:

THE MEASUREMENT OF LEAKAGE SHALL NOT EXCEED 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY, AS REQUIRED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES SPECIFICATIONS.

SECTION B, PIPE FIELD TESTS, PARAGRAPH 4, MANHOLE TESTING, SUBPARAGRAPH A, VACUUM TESTING - AFTER FIRST SENTENCE, THE FOLLOWING ADDITION APPLIES:

THE VACUUM TEST MUST BE PERFORMED PRIOR TO BACKFILLING AROUND THE MANHOLE UNLESS THE CONTRACTOR PROVIDES DOCUMENTATION FROM THE PRECAST MANHOLE MANUFACTURER STATING THAT THE THE MANHOLE MAY BE VACUUM TESTED AFTER BACKFILLING HAS TAKEN PLACE. THE CONTRACTOR MUST SUBMIT THIS DOCUMENTATION PRIOR TO BACKFILLING AROUND ANY MANHOLE. SECTION B, PIPE FIELD TESTS, PARAGRAPH 4, MANHOLE TESTING, SUBPARAGRAPH B, EXFILTRATION TESTING - DELETE THE SECOND SENTENCE, CONCERNING LEAKAGE LIMITS, AND THE FOLLOWING ADDITION APPLIES:

FOR EXFILTRATION TESTING, THE ALLOWABLE LEAKAGE LIMIT IS 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY WHEN THE AVERAGE HEAD ON THE TEST SECTION IS THREE FEET (3') OR LESS.

IF REINFORCED CONCRETE PIPE IS USED FOR SANITARY OR COMBINED SEWERS LARGER THAN 27", ALL PIPE AND JOINTS SHALL CONFORM TO ASTM C 361. IN ADDITION, IF THE DIAMETER IS LARGER THAN 48", THE JOINT TYPE MUST INCLUDE A GASKET THAT IS CONFINED IN A GROOVE IN THE SPIGOT OF THE PIPE.

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JSKELLY@AMEREN.COM

REV	DATE	DRF	DESCRIPTION	ENG	RWV	APPD	AMEREN MISSOURI		PROPERTY - MSD NOTES	
0A	08/16/2019	NPB	ISSUED FOR REVIEW	JFG	JFG	DPJ				
0B	09/17/2019	NPB	ISSUED FOR BID	JFG	JFG	DPJ			CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO	
0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ				
0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ			CRAIG-C-000001-001_MU-JS528643	
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ				
									DRAWING NUMBER	
									REV	
									SCALE: NO SCALE	
									DATE: 08-16-19	
									ENGINEER: 001103	
									ARCHITECT: 000620	
									SURVEY: 000336	
									NO SCALE	
									LOC	
									4147	
									REV	
									0E	

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NOTES (THIS SHEET ONLY)

- 1 EXISTING UTILITY STRUCTURE (IF NOT ALREADY) IS TO BE UPGRADED TO H20 LOADING TYPE. LIDS ARE TO BE ADJUSTED TO FINAL GRADE.
- 2 EXISTING LIGHT STANDARD TO BE REMOVED AND SAFELY RETURNED TO OWNER.
- 3 CABLE AND CONDUIT TO BE REMOVED.
- 4 GROUT FILL AND ABANDON PIPE.
- 5 SPRINKLER HEADS AND IRRIGATION LINES TO BE REMOVED WITHIN PROJECT LIMITS.
- 6 IRRIGATION CONTROL VALVES (ICV) ARE TO BE REMOVED. CONTRACTOR TO DETERMINE LOCATION OF WATER SERVICE AND CAP WATER SERVICE LINE.

LEGEND (THIS SHEET ONLY)

- CURB - TO BE REMOVED
- PAVEMENT - TO BE REMOVED
- UTILITY/SEWER LINE - TO BE REMOVED
- TREE/BUSH - TO BE REMOVED
- DEMOLITION - SAWCUT

STORM WATER MANAGEMENT FUTURE DISTURBANCE NOTE:
PROJECT DISTURBANCE = 0.XXXX ACRES (XXXXXX S.F.)
PROJECT RUNOFF DIFFERENTIAL = 0.XXXX CFS

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORMWATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THE TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN.)

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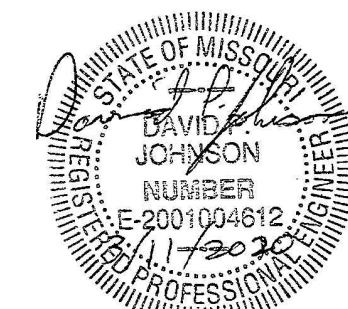
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0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ

DAVID MASON & ASSOCIATES
davidmason.com

800 South Vandeventer Avenue
St. Louis, Missouri 63110
(314) 534-1030

DMA# 2019163-00

DAVID MASON & ASSOCIATES
Missouri Certificate of Authority Number:
Engineer: 001103
Architect: 000620
Survey: 000336



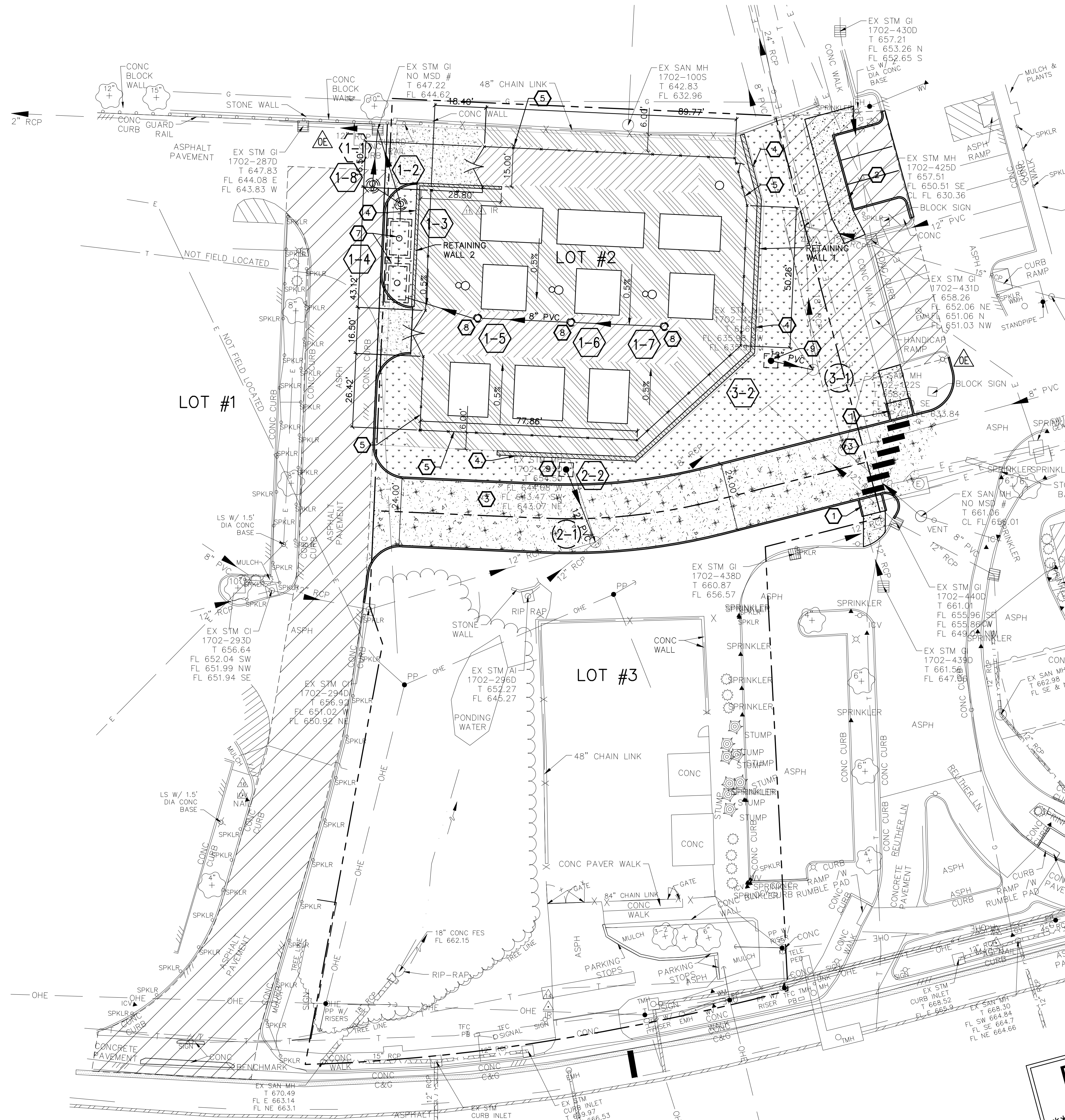
David P. Johnson, Engineer
Missouri License # E-2001004612
Expires: 12/31/2020

PROPERTY - SITE DEMOLITION PLAN



CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO		LOC 4147
DRF:	DATE: 08-16-19	SCALE: 1" = 20'-0"
ENG:	DRAWING NUMBER	
RWW:	CRAIG-C-000001-002_MU-JS528643	
APPD:	REV	
	0E	

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0' 20' 40' 60'
SCALE: 1" = 20'

NOTES (THIS SHEET ONLY)

- 1 ACCESSIBLE SIDEWALK RAMP. SEE DETAIL 12/C-000001-010.
- 2 PROPOSED SIDEWALK. SEE DETAIL 6/C-000001-010 FOR SIDEWALK CONSTRUCTION.
- 3 PROPOSED ASPHALT PAVEMENT. SEE DETAIL 5/C-000001-010.
- 4 PROPOSED VERSA-LOK SEGMENTAL BLOCK WALL. MAXIMUM GRADE CHANGE (FRONT OF WALL TO BACK) IS 4'-0". SEE RETAINING WALL SHEETS FOR MORE INFORMATION.
- 5 8'-0" TALL AMERISTAR IMPASSE II SECURITY FENCE. SEE DETAILS ON SHEET C-000001-004.
- 6 PROPOSED CURB AND GUTTER CONNECTING EXISTING CURB AND GUTTER. MATCH EXISTING CURB AND GUTTER PROFILE.
- 7 SEE SHEET C-000001-005 FOR OIL SPILL CONTAINMENT SYSTEM PROFILES AND STORM SEWER PROFILE.
- 8 SUBSTATION INLET - SEE DETAIL 10 ON SHEET C-000001-010 FOR MORE INFORMATION.
- 9 RETAINING WALL INLET - SEE DETAIL 9 ON SHEET C-000001-010 FOR MORE INFORMATION.

LEGEND (THIS SHEET ONLY)

- SUBSTATION YARD SURFACE. SEE DETAIL 2/C-000001-010.
- SUBSTATION DRIVE SURFACE. SEE DETAIL 3/C-000001-010.
- SUBSTATION ENTRANCE SURFACE. SEE DETAIL 4/C-000001-010.
- PROPOSED ASPHALT ROADWAY. SEE DETAIL 5/C-000001-010.
- PROPOSED CONCRETE SIDEWALK. SEE DETAIL 6/C-000001-010.
- LANDSCAPE AREA. SEE SHEET CRAG-C-000001-011 FOR MORE INFORMATION.
- AGGREGATE BACKFILL ABOVE NEW DUCTBANK AND STRUCTURES UP TO BOTTOM OF PAVEMENT AGGREGATE BASE. SEE DETAIL 5/C-000001-010 FOR PAVEMENT SECTION.

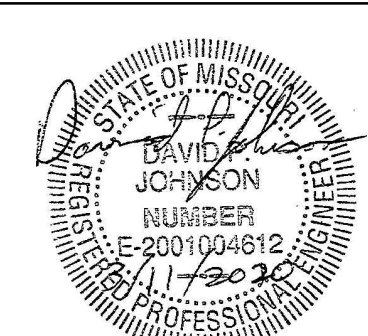
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DAVID MASON & ASSOCIATES
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(314) 534-1030

DMA# 2019163-00

DAVID MASON & ASSOCIATES
Missouri Certificate of Authority Number:
Engineer: 001103
Architect: 000620
Survey: 000336



David P. Johnson, Engineer
Missouri License # E-2001004612
Expires: 12/31/2020

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CELL PHONE: 314-616-8986
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JSKELLY@AMEREN.COM

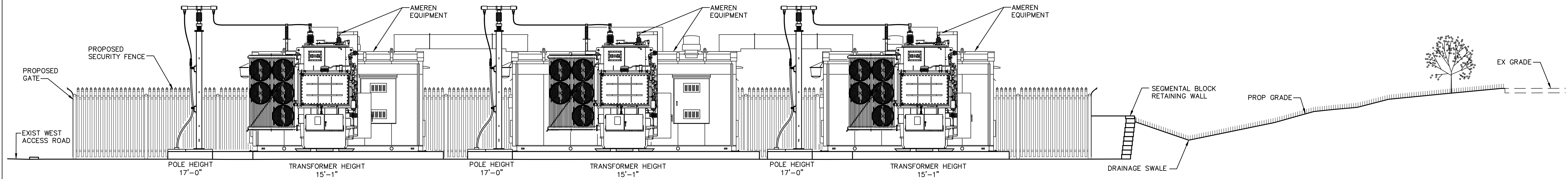
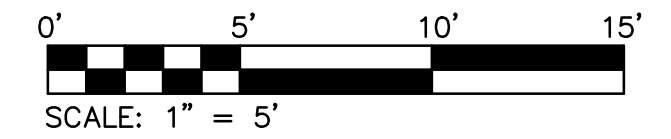
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0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ
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0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ



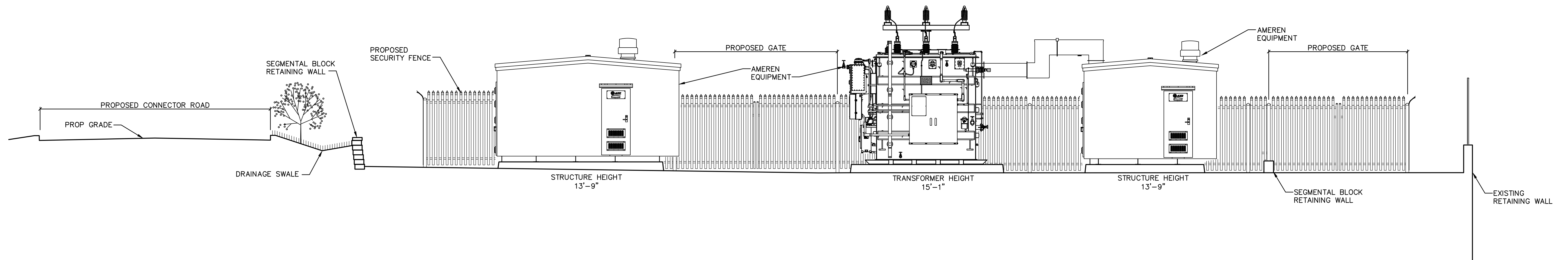
PROPERTY - SITE PLAN

DFR:	DATE: 08-16-19	SCALE: 1" = 20'-0"	LOC 4147
ENG:	DRAWING NUMBER		
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APPD:	REV 0E		

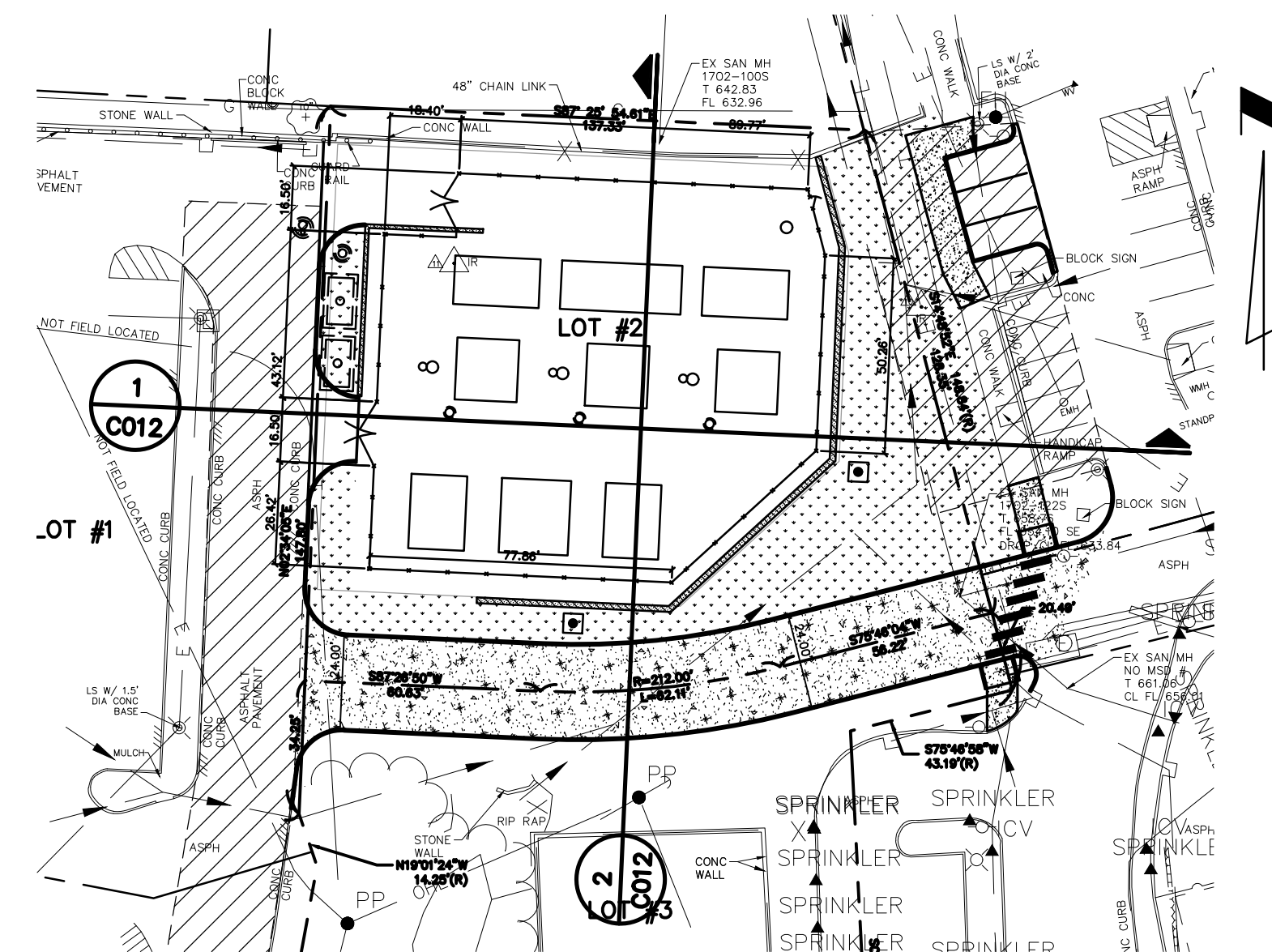
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1 SITE SECTION – EAST TO WEST
C012 SCALE: 1" = 5'



2 SITE SECTION – SOUTH TO NORTH
C012 SCALE: 1" = 5'



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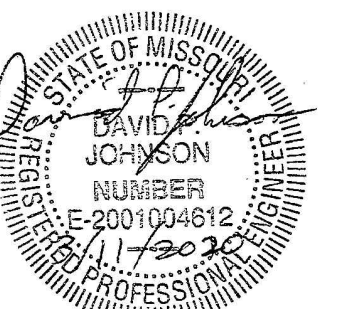
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PROPERTY - SITE SCHEMATIC ELEVATIONS

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0B	09/17/2019	NPB	ISSUED FOR BID	JFG	JFG	DPJ
0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ
0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ

DFR:	DATE: 08-16-19	SCALE: 1" = 5'-0"
ENG:	DRAWING NUMBER	REV
RWV:	CRAIG-C-000001-012_MU-JS528643	0E
APPD:		

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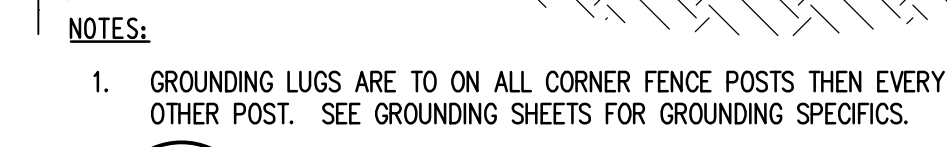
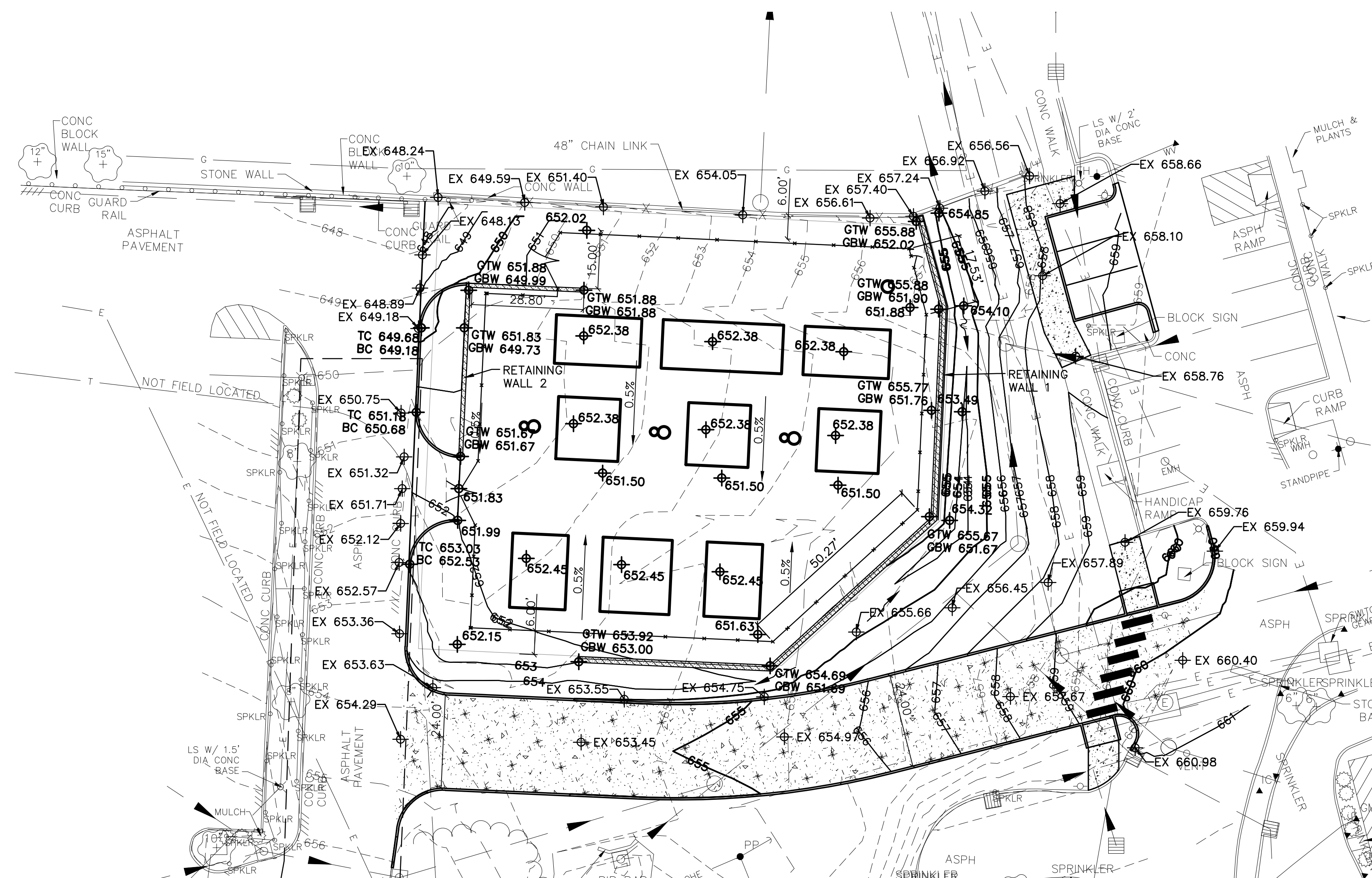


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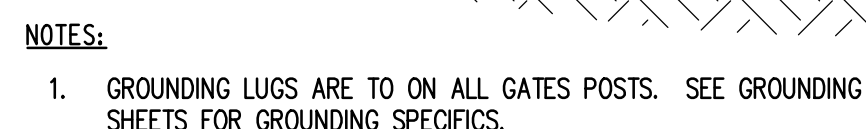


CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO		
PROJECT:	DATE: 08-16-19	SCALE: 1" = 20'-0"
DRAWING:	DRAWING NUMBER	
BY:	CRAIG-C-000001-013_MU-JS528643	
CHECKED:		
APP'D:		

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0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ



C-000001-004 NOT TO SCALE



C-000001-004 NOT TO SCALE

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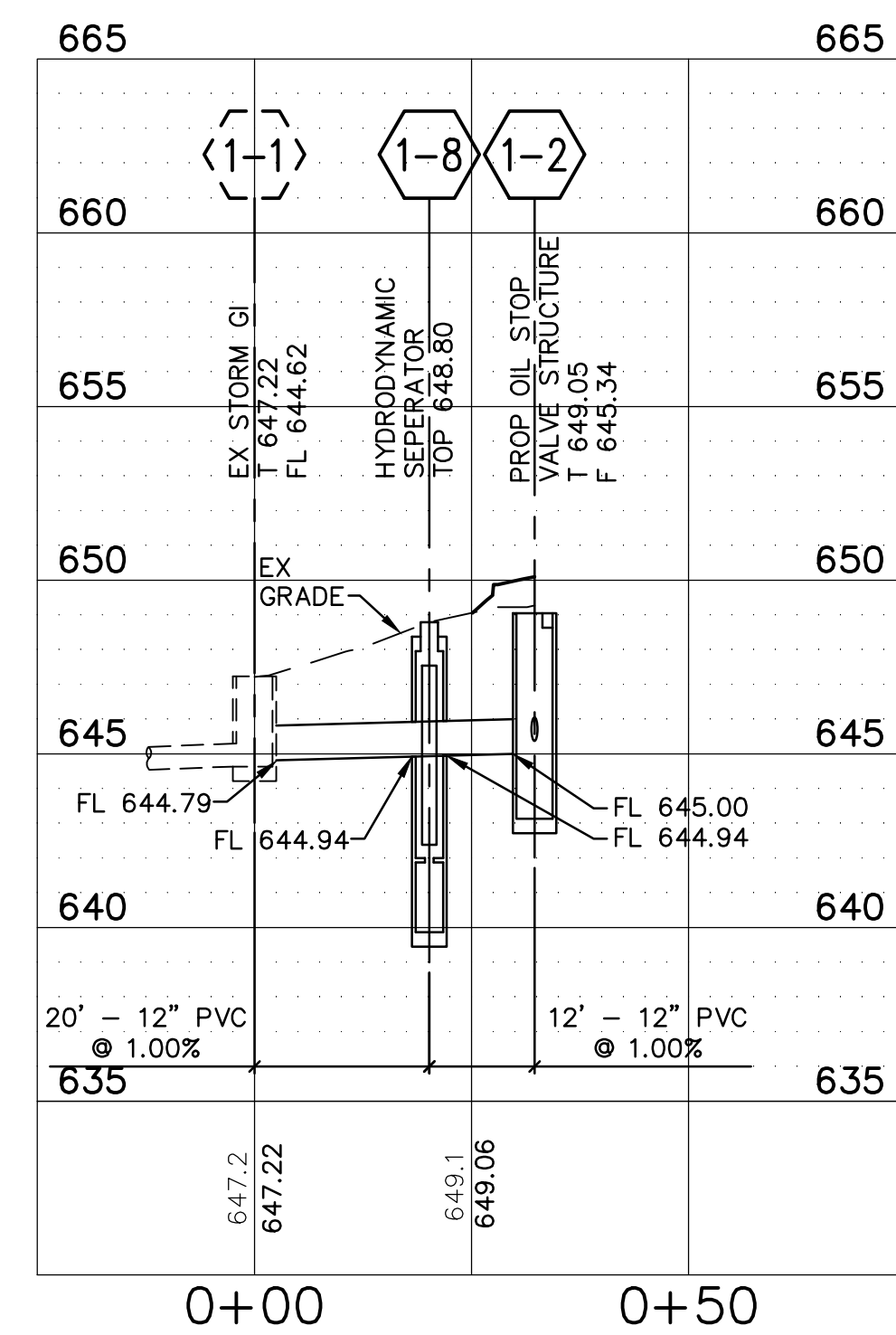
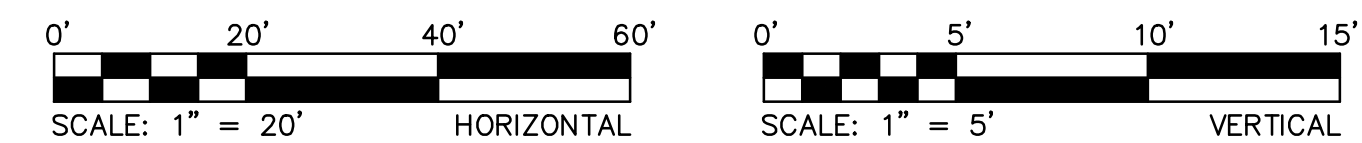
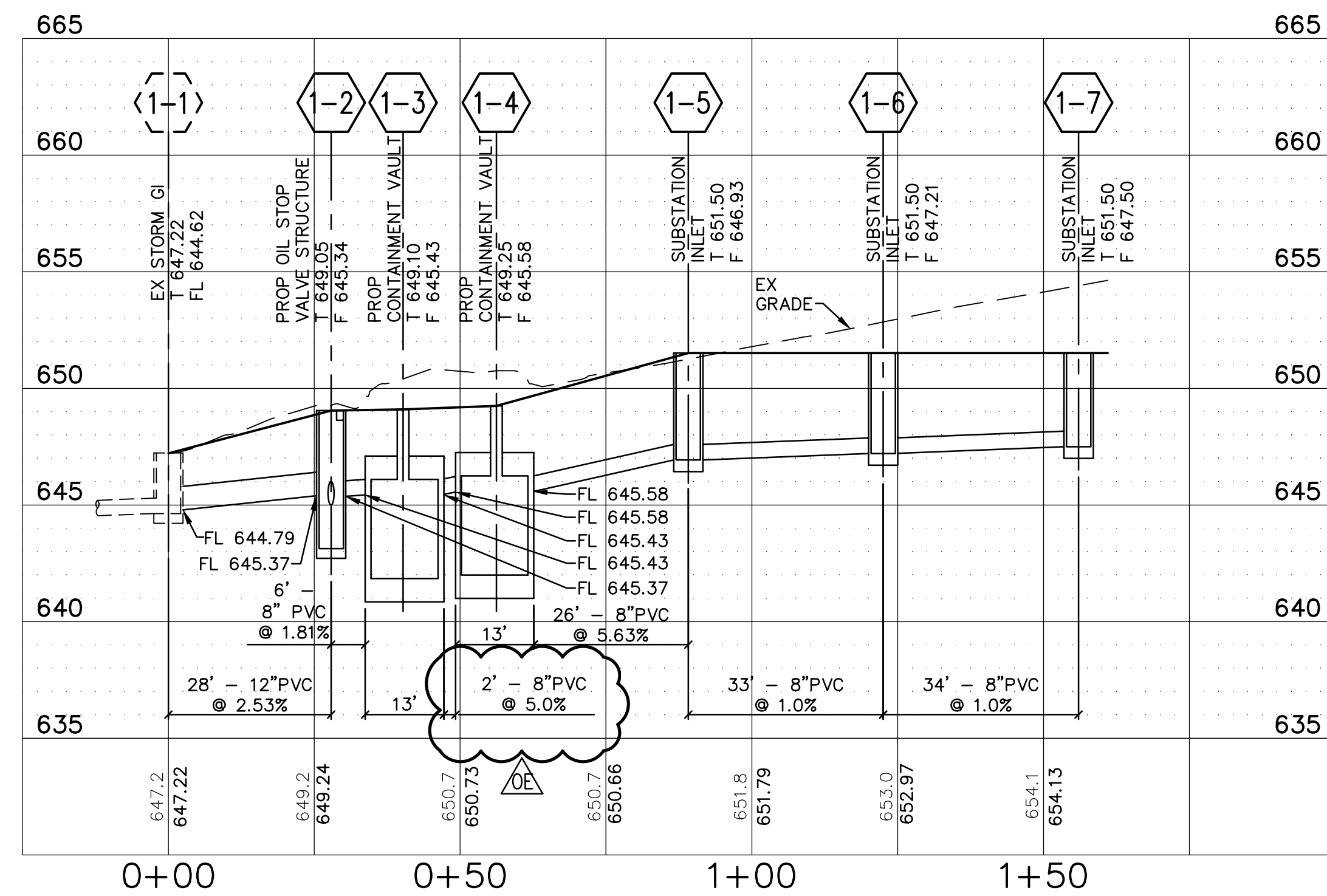
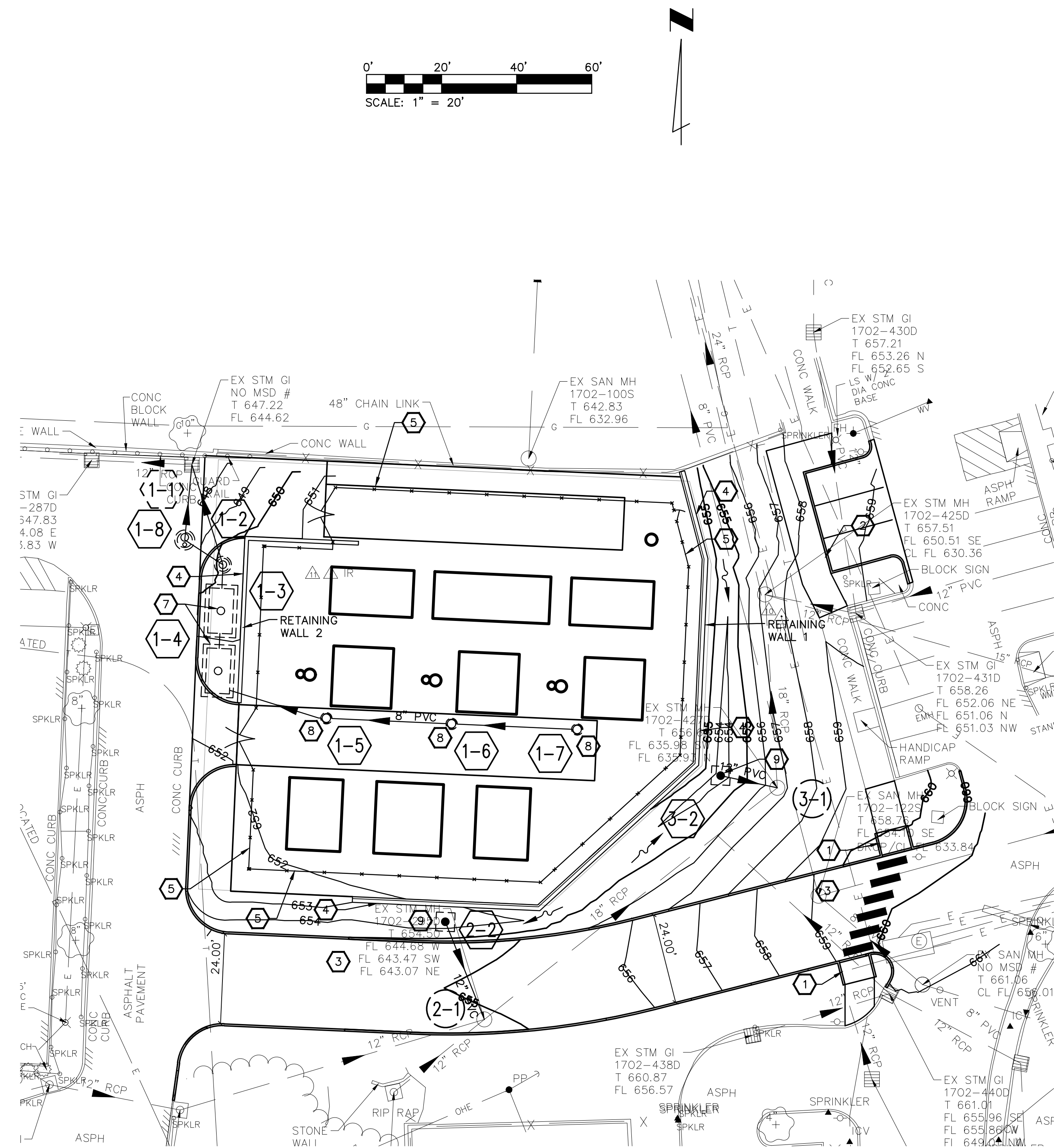
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Missouri License #: E-2001004612
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REV	DATE	DRF	DESCRIPTION	ENG	RWW	APPD		PROPERTY - GRADING AND FENCE PLAN	EXPANDED ACCESS					
0A	08/16/2019	NPB	ISSUED FOR REVIEW	JFG	JFG	DPJ								
0B	09/17/2019	NPB	ISSUED FOR BID	JFG	JFG	DPJ								
0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ								
0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ								
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ								
							CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO							
							DFR:	DATE: 08-16-19		SCALE: AS NOTED	LOC 4147			
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							RWW:	CRAIG-C-000001-004 MU-JS528643				0E		
							APPD:							



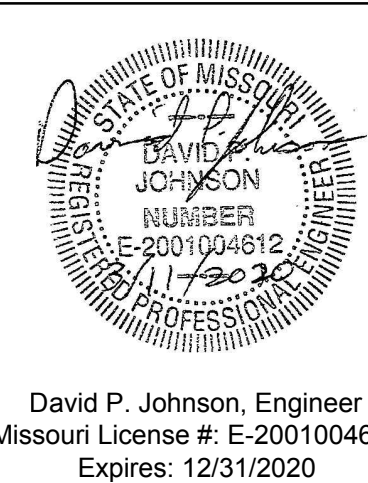
EX INLET TO OIL SPILL VALVE PROFILE

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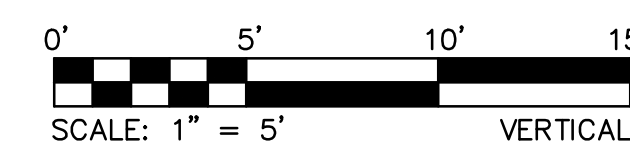
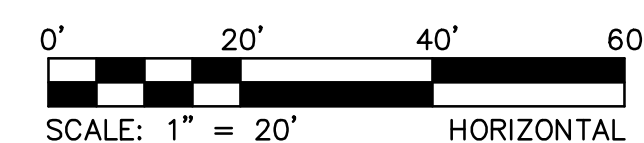
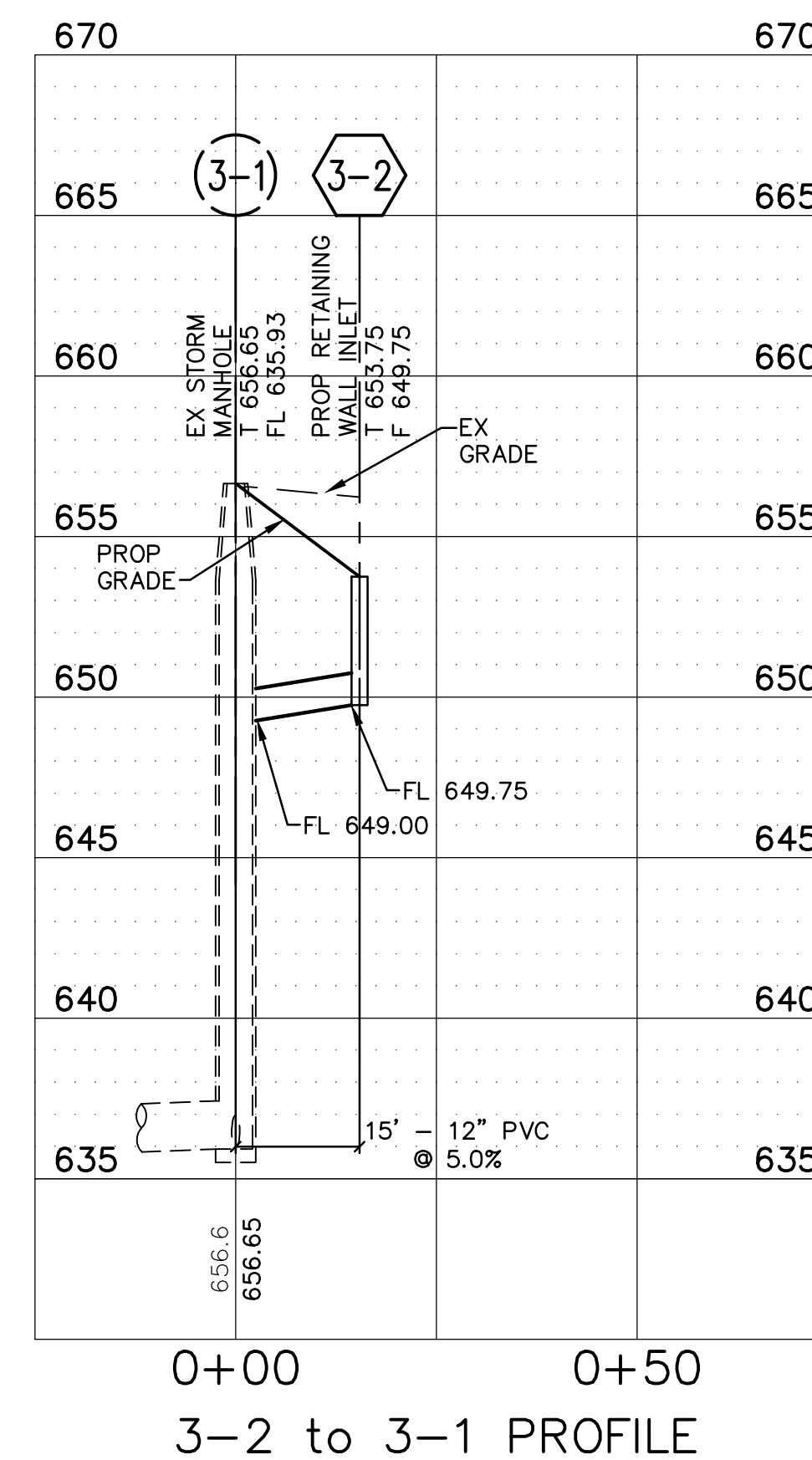
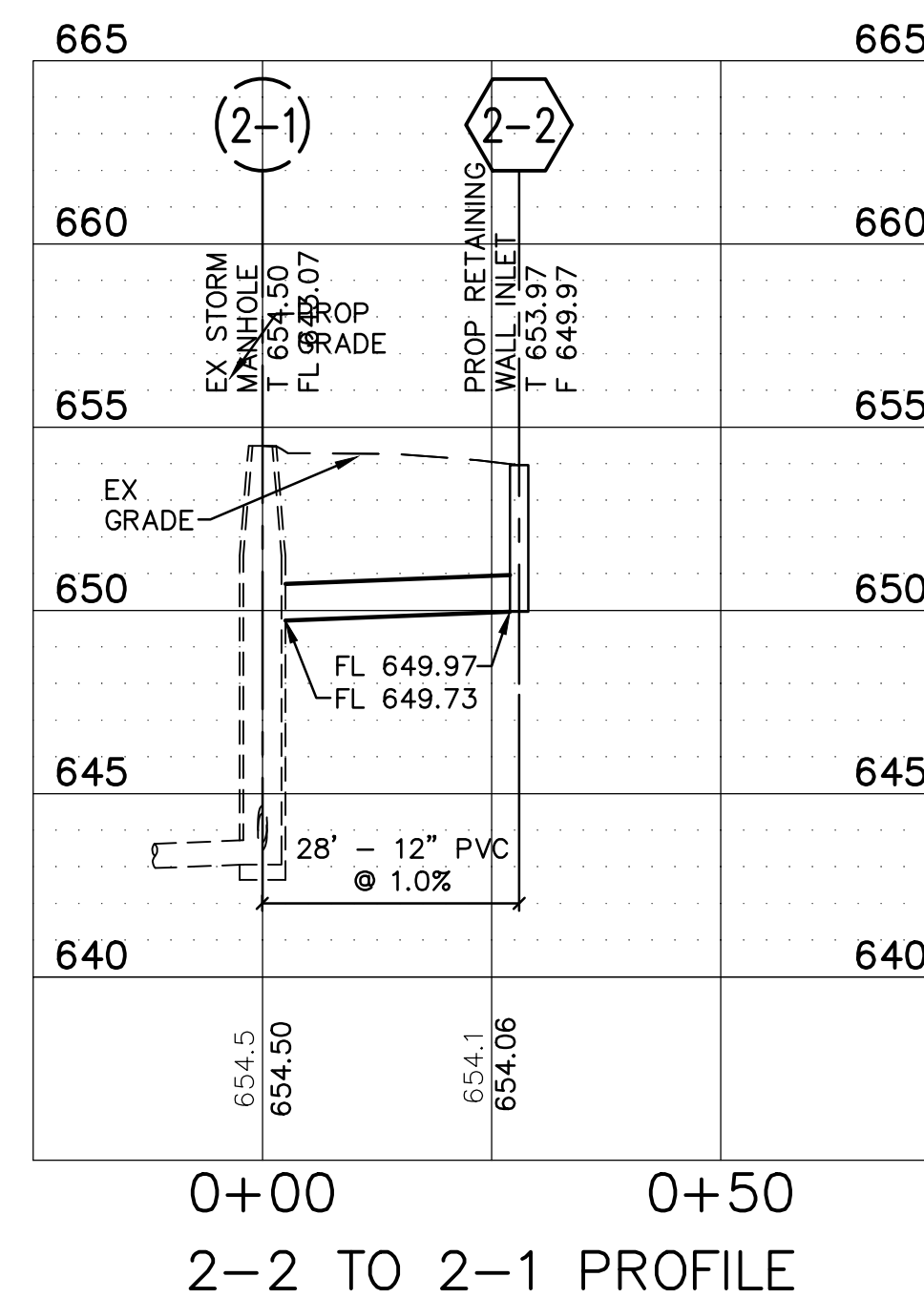
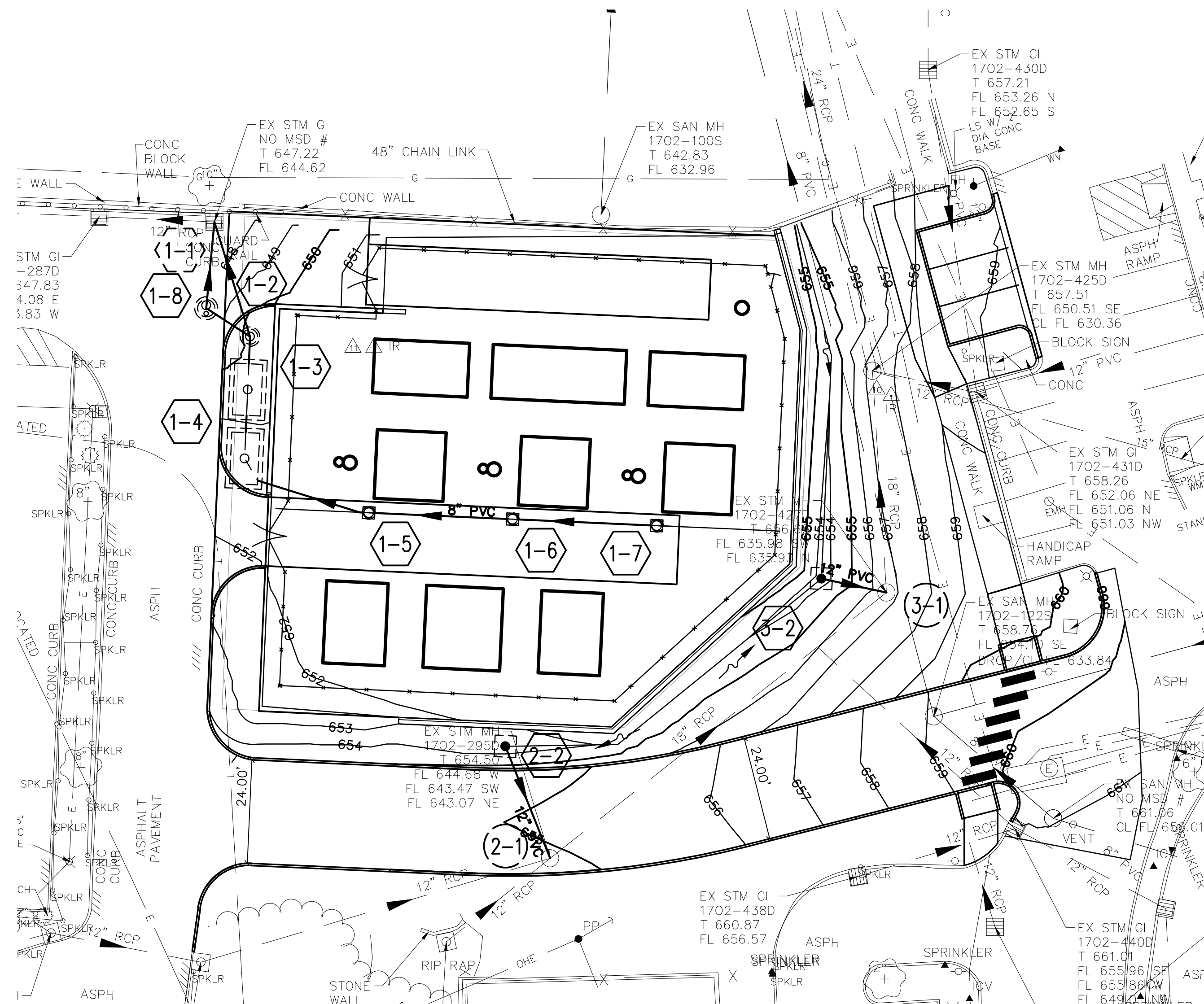
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PROPERTY - SPILL CONTROL AND
STORM SEWER

CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO		LOC
DATE: 08-16-19	SCALE: AS NOTED	4147
DRAWING NUMBER		REV
CRAIG-C-000001-005_MU-JS528643		0E

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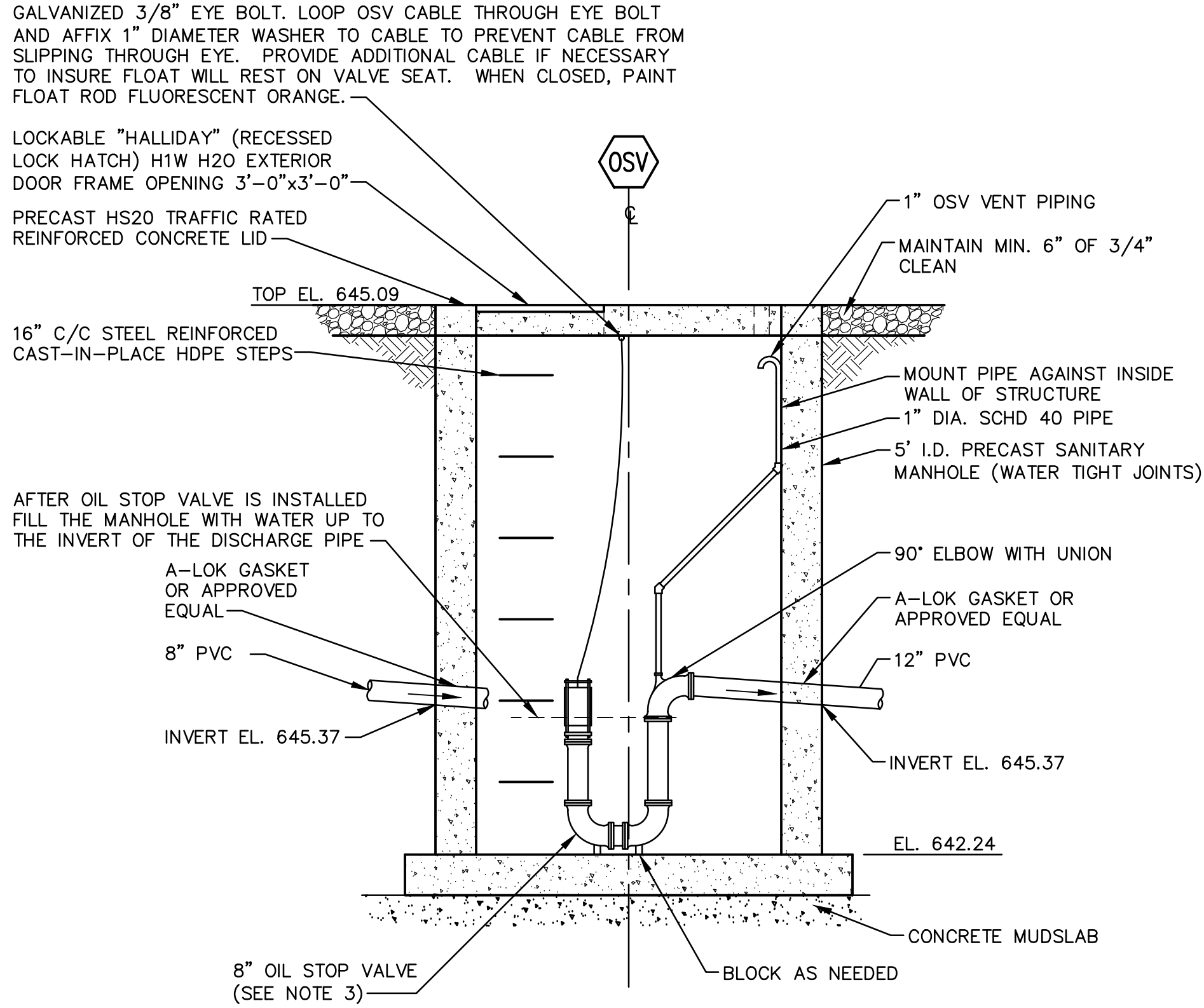


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 DAVID MASON + ASSOCIATES davidmason.com	
800 South Vandeventer Avenue St. Louis, Missouri 63110 (314) 534-1030	DAVID P. JOHNSON REGISTERED PROFESSIONAL ENGINEER NUMBER E-2001004612 12/31/2016

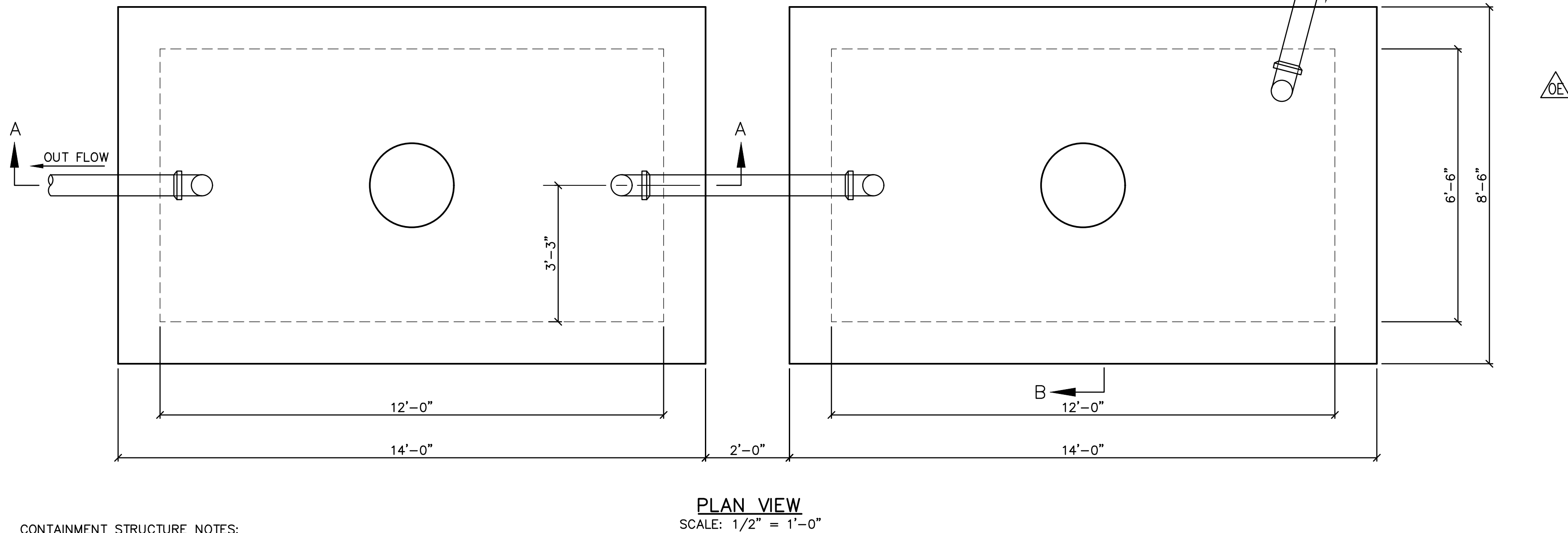
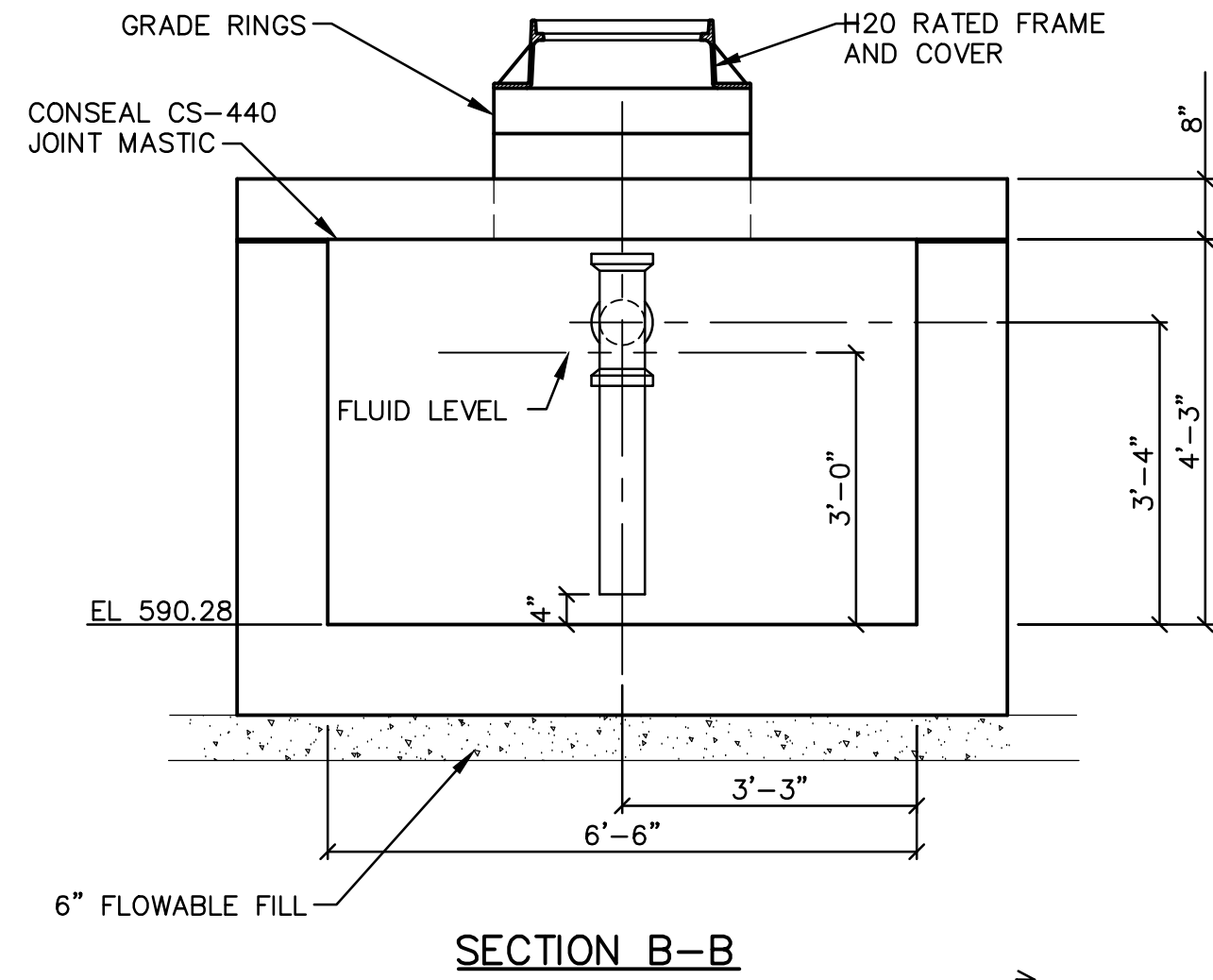
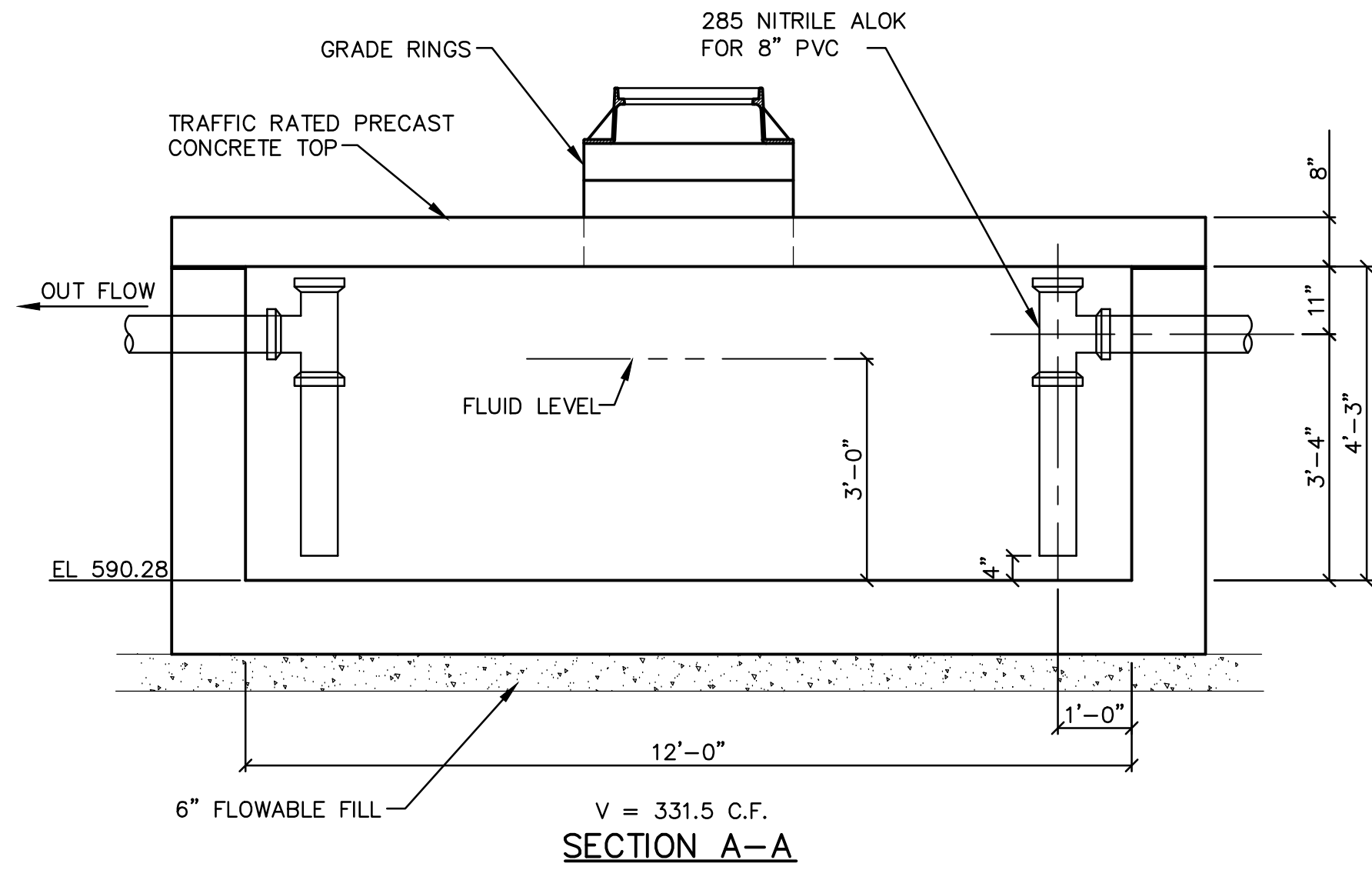
OWNER
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 CELL PHONE: 314-616-8986
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REV	DATE	DRF	DESCRIPTION	ENG	RVW	APPD		STRUCTURE - STORM SEWER DRAINAGE PROFILES	CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO DFR: ENG: RVW: APPD: DATE: 08-16-19 DRAWING NUMBER CRAIG-C-000001-006_MU-JS528643 SCALE: AS NOTED REV 0E
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0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ			
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ			



- NOTES:
1. THE OIL STOP VALVE (OSV) MANHOLE SHALL BE PRECAST SANITARY SEWER MANHOLE WITH A FLAT TOP AND A CAST-IN-PLACE "HALLIDAY" DOOR.
 2. ALL JOINTS IN THE MANHOLE, INCLUDING THE JOINT BETWEEN THE BASE AND BOTTOM RING, SHALL BE WATER TIGHT. ALL PIPE PENETRATIONS SHALL BE WATERTIGHT.
 3. THE OIL STOP VALVE SHALL BE PROVIDED BY AMEREN AND INSTALLED BY THE CONTRACTOR. THE STOP VALVE SHALL BE MANUFACTURED BY AFL INDUSTRIES, OR EQUIVALENT. CONTRACTOR SHALL INSTALL THE OIL STOP VALVE PER MANUFACTURER'S SPECIFICATIONS USING 8"Ø STANDARD OIL STOP VALVE AND PER THIS DRAWING.
 4. IF THE OIL STOP VALVE IS NOT AVAILABLE FOR INSTALLATION AT THE TIME OF MANHOLE CONSTRUCTION, THE CONTRACTOR SHALL EXTEND THE 8" NONCOMBUSTIBLE LINE A MINIMUM OF 12" INTO THE MANHOLE FOR LATER CONNECTION TO THE STOP VALVE.
 5. VENT PIPE IS NOT FURNISHED BY AFL INDUSTRIES AND MUST EXTEND ABOVE CONTAINMENT AREA.
 6. AFTER VALVE IS INSTALLED, THE SUMP MUST BE FILLED WITH WATER UNTIL THE LIQUID LEVEL IS AT THE INVERT OF THE DISCHARGE PIPE.
 7. MANUALLY OPEN THE VALVE BY LIFTING THE FLOAT IN A VERTICAL DIRECTION ONLY. TO FACILITATE MANUAL OPENING OF THE VALVE, ATTACH 1/16" DIAMETER WIRE TO THE FLOAT STEM AND THE OTHER END TO AN EASILY ACCESSIBLE AREA. MAKE SURE THERE IS ENOUGH SLACK IN THE WIRE FOR VALVE (FLOAT) TO CLOSE.
 8. AFTER A SPILL, THE SPILLED LIQUID MUST BE EVACUATED UNTIL WATER ONLY IS IN THE SUMP. ADD WATER IF WATER IS BELOW THE INVERT.
 9. ALL PIPING SHALL BE SCHEDULE 40 PVC. ALL CONNECTIONS SHALL BE GLUED OR GASKETED FITTINGS.

1 OIL STOP VALVE STRUCTURE



- CONTAINMENT STRUCTURE NOTES:
1. VAULT SHALL BE CONSTRUCTED OF REINFORCED CONCRETE WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI.
 2. SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI TO THE ENGINEER OF RECORD TO REVIEW FOR DESIGN COMPLIANCE WITH CONTRACT DOCUMENTS.
 3. INTERIOR VAULT DIMENSIONS SHALL BE MAINTAINED AS SHOWN.
 4. VERIFY VAULT DESIGN WILL ALLOW FOR VERTICAL CLEARANCE FOR INSTALLATION OF 8" TEES SHOWN.

2 CONTAINMENT VAULT STRUCTURES

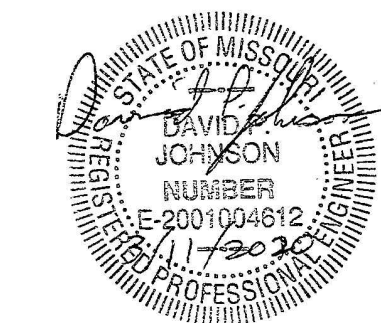
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STRUCTURE - SPILL CONTROL AND
OIL STOP VALVE STRUCTURE

CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO

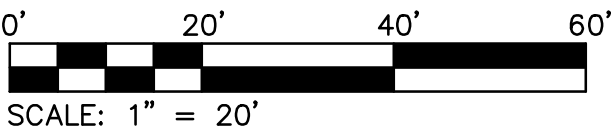
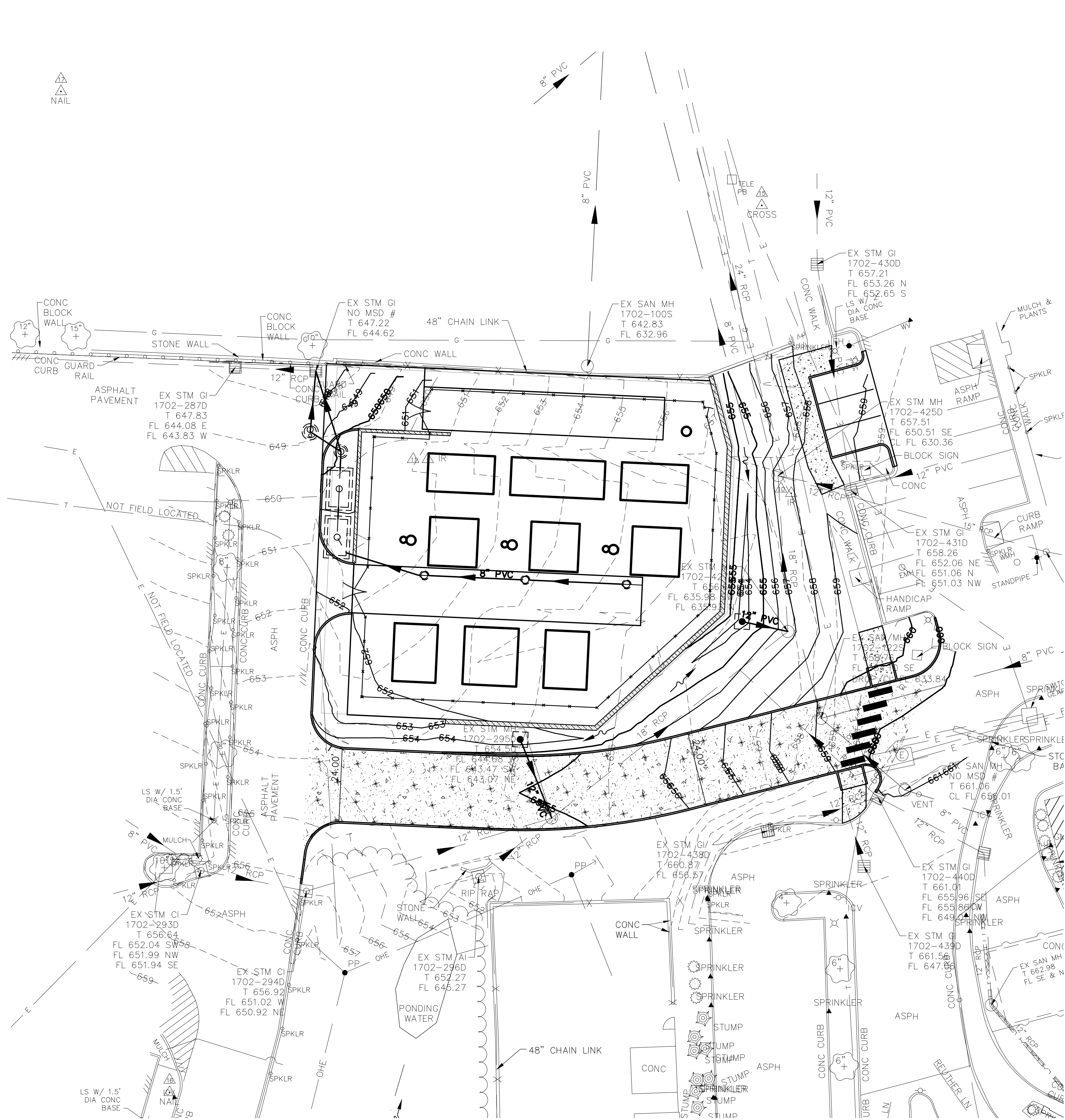
DATE: 08-16-19

DRAWING NUMBER

CRAIG-C-000001-007_MU-JS528643

REV
0E

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POST-DEVELOPED DRAINAGE STRUCTURES - WEST NETWORK												
DRAINAGE AREA	PERVIOUS				IMPERVIOUS				GRAVEL (80% IMPERVIOUS)			
	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q
287D	1130	0.03	1.70	0.04	13617	0.31	3.54	1.11				1.15
1-1	568	0.01	1.70	0.02	9923	0.23	3.54	0.81				0.83
1-5	862	0.02	2.70	0.05	973	0.02	3.54	0.08	3330.56	0.08	3.20	0.24
1-6					1087	0.02	3.54	0.09	2835.50	0.07	3.20	0.21
1-7					938	0.02	3.54	0.08	3928.34	0.09	3.20	0.29
												0.36
												3.02

0.30

POST-DEVELOPED DRAINAGE STRUCTURES - EAST NETWORK												
DRAINAGE AREA	PERVIOUS				IMPERVIOUS				GRAVEL (80% IMPERVIOUS)			
	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q
2-2	647	0.01	1.70	0.03								0.03
3-2	4881	0.11	1.70	0.19	145	0.00	3.54	0.01				0.20
293D	9880	0.23	1.70	0.39	81071	1.86	3.54	6.59				6.97
294D					5678	0.13	3.54	0.46				0.46
296D	20142	0.46	1.70	0.79	38145	0.88	3.54	3.10				3.89
425D	11560	0.27	1.70	0.45	113812	2.61	3.54	9.25				9.70
440D	2840	0.07	1.70	0.11	24830	0.57	3.54	2.02				2.13
												23.38

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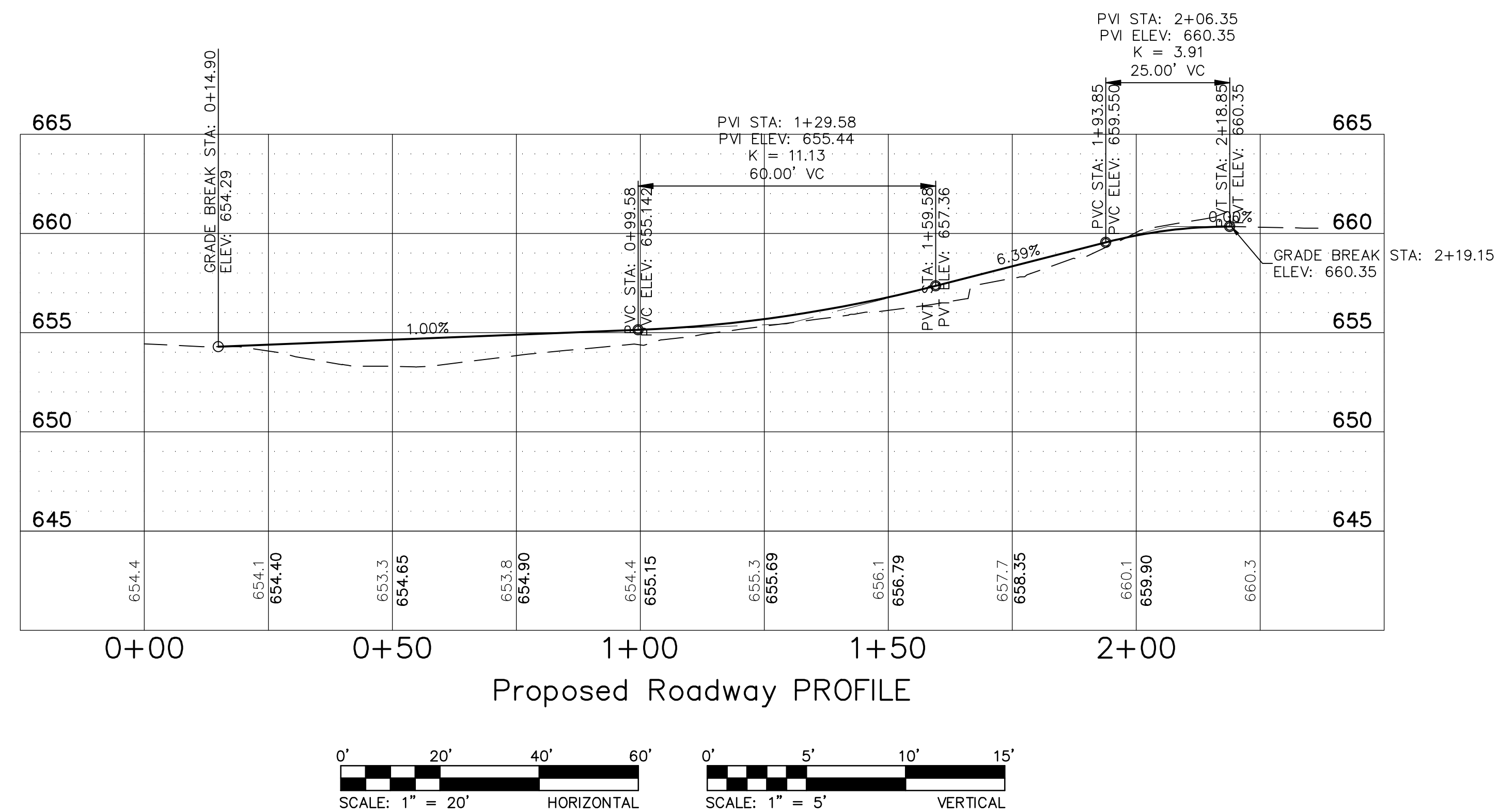


PROPERTY - SITE DRAINAGE

CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO

DRAWING NUMBER
CRAIG-C-000001-008_MU-JS528643

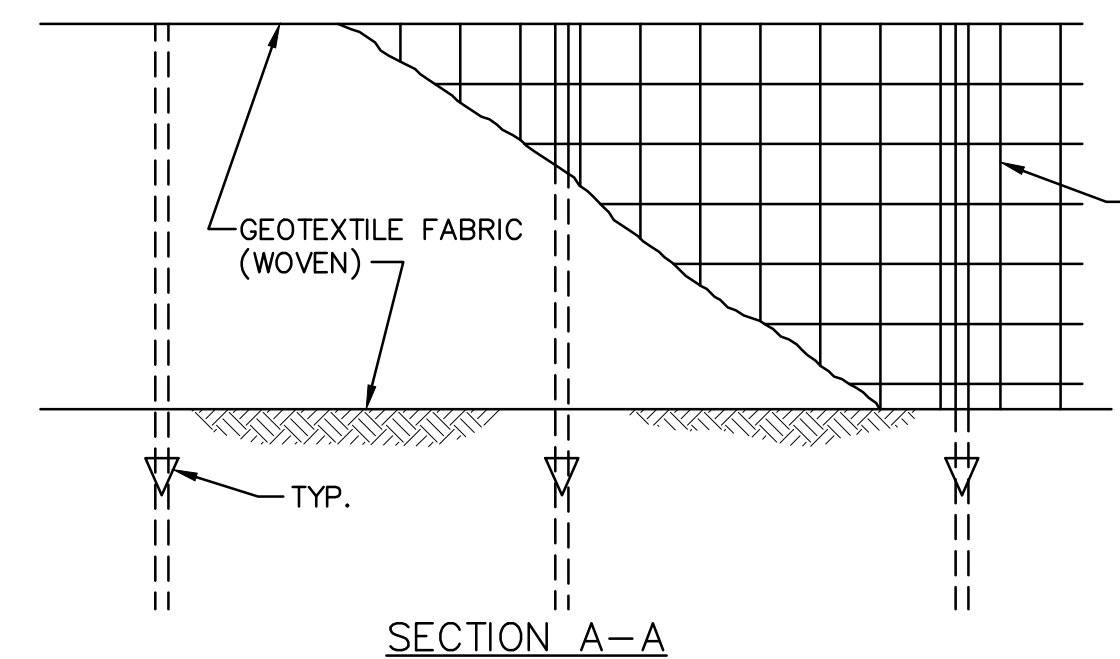
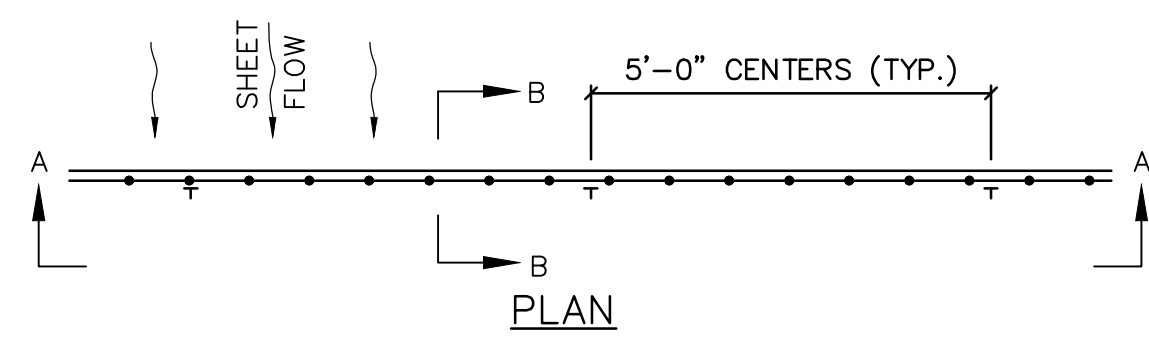
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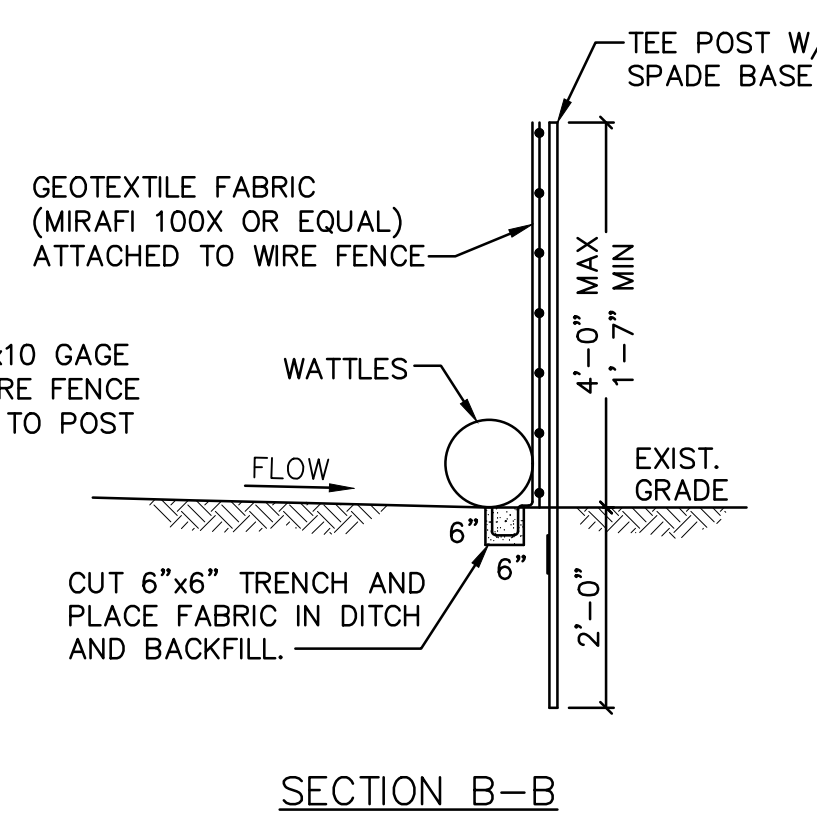
Packet Pg. 170

GRADING/SEDIMENT & EROSION CONTROL NOTES

- SEDIMENT AND EROSION CONTROL SHALL NOT BE LIMITED TO THE MEASURES SHOWN ON THE PLANS. THE CONTRACTOR, WITH THE APPROVAL OF THE CREVE COEUR CITY INSPECTOR, SHALL UTILIZE BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM ENTERING ADJACENT PROPERTIES, ROADWAYS, STORM SEWERS, AND DRAINAGEWAYS.
- ALL TRUCKING OPERATIONS SHALL FOLLOW THE APPROVED TRUCKING HAUL ROUTE. CONCRETE TRUCKS SHALL HAVE PROPER WASHOUTS, AS APPROVED BY THE CITY OF CREVE COEUR. CITY AND STATE ROADS SHALL BE CLEANED AND KEPT CLEAR OF MUD, SEDIMENT, AND ANY OTHER DEBRIS AT ALL TIMES THROUGHOUT CONSTRUCTION.
- ALL ON-SITE TRASH, LITTER, DISCARDED BUILDING MATERIALS, OTHER CONSTRUCTION SITE WASTES, AND DEBRIS, EITHER EXISTING OR FROM CONSTRUCTION, MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.
- DEBRIS AND FOUNDATION MATERIAL FROM ANY EXISTING ON-SITE BUILDING OR STRUCTURE WHICH IS SCHEDULED TO BE RAZED FOR THIS DEVELOPMENT MUST BE PROPERLY DISPOSED OF OFF-SITE.
- CONTRACTOR SHALL PROVIDE THE CITY OF CREVE COEUR INFORMATION CONCERNING STORAGE AND HANDLING OF ALL HAZARDOUS AND TOXIC SUBSTANCES BROUGHT ONTO THE SITE. THE CONTRACTOR WILL ADHERE TO APPLICABLE FEDERAL AND STATE REGULATIONS CONCERNING STORAGE AND DISPENSERS, SPILL PREVENTION CONTROL, AND COUNTERMEASURE PLANS FOR CLEAN-UP.
- ANY WELLS AND/OR SPRINGS WHICH MAY EXIST ON THIS PROPERTY SHOULD BE LOCATED AND SEALED IN A MANNER ACCEPTABLE TO THE CITY OF CREVE COEUR.
- SOFT SOILS IN THE BOTTOM AND BANKS OF ANY EXISTING OR FORMER POND SITES OR TRIBUTARIES OR ANY SEDIMENT BASINS, TRAPS, OR OTHER EROSION CONTROL MEASURES SHOULD BE REMOVED, SPREAD OUT AND PERMITTED TO DRY SUFFICIENTLY TO BE USED AS FILL. NONE OF THIS MATERIAL SHOULD BE PLACED IN PROPOSED PUBLIC RIGHT-OF-WAY LOCATIONS OR ON ANY STORM SEWER LOCATION. ANY OTHER WET SOILS THAT ARE OUTSIDE THE OPTIMUM MOISTURE RANGE TO OBTAIN THE PROPER COMPACTION SHALL BE AIR DRIED SUFFICIENTLY BEFORE USE AS FILL.
- A PRE-CONSTRUCTION CONFERENCE MUST BE SCHEDULED WITH AMEREN PRIOR TO THE START OF EACH CONSTRUCTION PHASE OF LAND DISTURBANCE ACTIVITY. THE PERMITEE WILL BE RESPONSIBLE FOR NOTIFYING ALL CONTRACTORS, UTILITY CREWS, AND OTHER ENTITIES THAT WILL PERFORM WORK AT THE SITE TO BE IN ATTENDANCE.
- THE CITY OF CREVE COEUR SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CLEARING, GRADING, AND/OR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR AN INSPECTION OF THE SITE.
- ALL EXCAVATIONS, GRADING, OR FILLING SHALL HAVE A FINISHED GRADE NOT TO EXCEED A 3:1 SLOPE (33%).
- TEMPORARY SILTATION CONTROL MEASURES (STRUCTURAL) SHALL BE MAINTAINED UNTIL VEGETATIVE COVER IS ESTABLISHED AT A DENSITY SUFFICIENT TO PROVIDE EROSION CONTROL ON THE SITE.
- CONTRACTOR SHALL PROVIDE DUST CONTROL IN ACCORDANCE WITH THE CITY OF CREVE COEUR REGULATIONS.
- UPON COMPLETION OF STORM SEWERS, SILTATION CONTROL SHALL BE PROVIDED AROUND ALL OPEN SEWER INLETS AND SHALL REMAIN UNTIL THE DISTURBED DRAINAGE AREAS HAVE BEEN PROPERLY STABILIZED.
- WHERE NATURAL VEGETATION IS REMOVED DURING GRADING, VEGETATION SHALL BE RE-ESTABLISHED IN SUCH A DENSITY AS TO PREVENT EROSION.
- TEMPORARY VEGETATION OR OTHER APPROVED SURFACE STABILIZATION METHODS SHALL BE ESTABLISHED WITHIN 14 DAYS WHEN THE SOIL DISTURBANCE HAS CEASED ON AREAS GREATER THAN 2,000 SQ. FT.
- PERMANENT GRASS MUST BE ESTABLISHED AT A DENSITY SUFFICIENT TO PROVIDE EROSION CONTROL ON THE SITE WITHIN 30 DAYS OF THE COMPLETION OR SUSPENSION OF GRADING OPERATIONS. BETWEEN PERMANENT GRASS SEEDING PERIODS, TEMPORARY COVER SHALL BE PER CREVE COEUR CITY REGULATIONS.

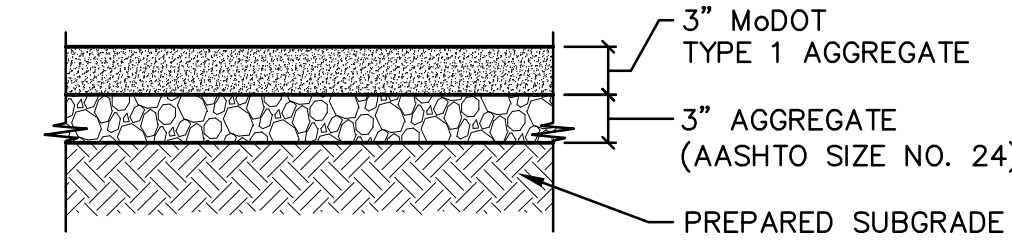


SECTION A-A
1 SILTATION CONTROL DETAILS
C-000001-010 N.T.S.



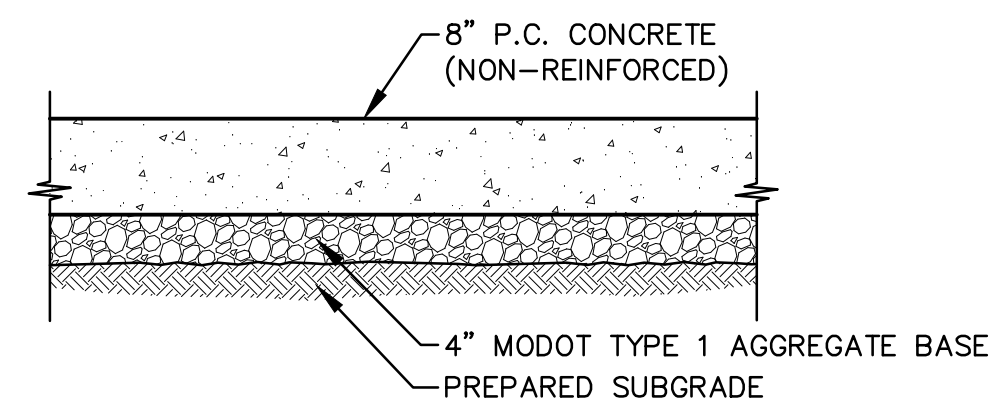
NOTE:
1. USE THIS SECTION TO REMEDIATE ANY DISTURBED AGGREGATE SURFACES WITHIN THE SUBSTATION LIMITS, EXCLUDING DRIVE AISLES.

2 SUBSTATION YARD SURFACING
C-000001-010 N.T.S.

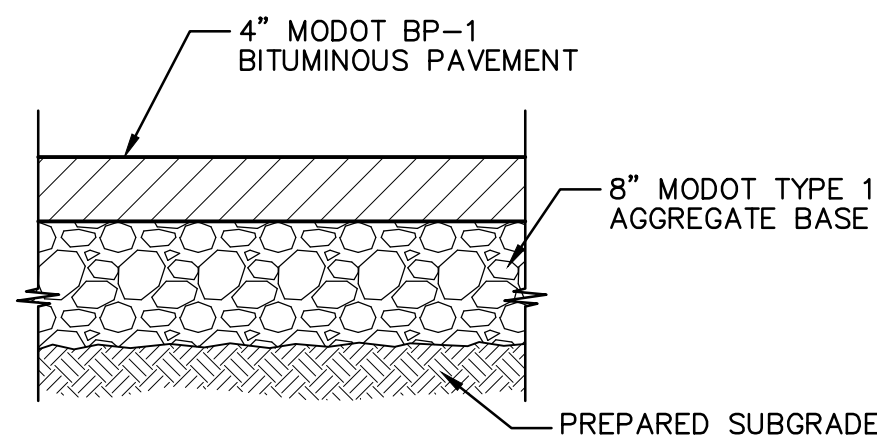


NOTE:
1. USE THIS SECTION TO REMEDIATE ANY DISTURBED AGGREGATE SURFACES WITHIN THE LIMITS OF THE SUBSTATION DRIVE AISLES.

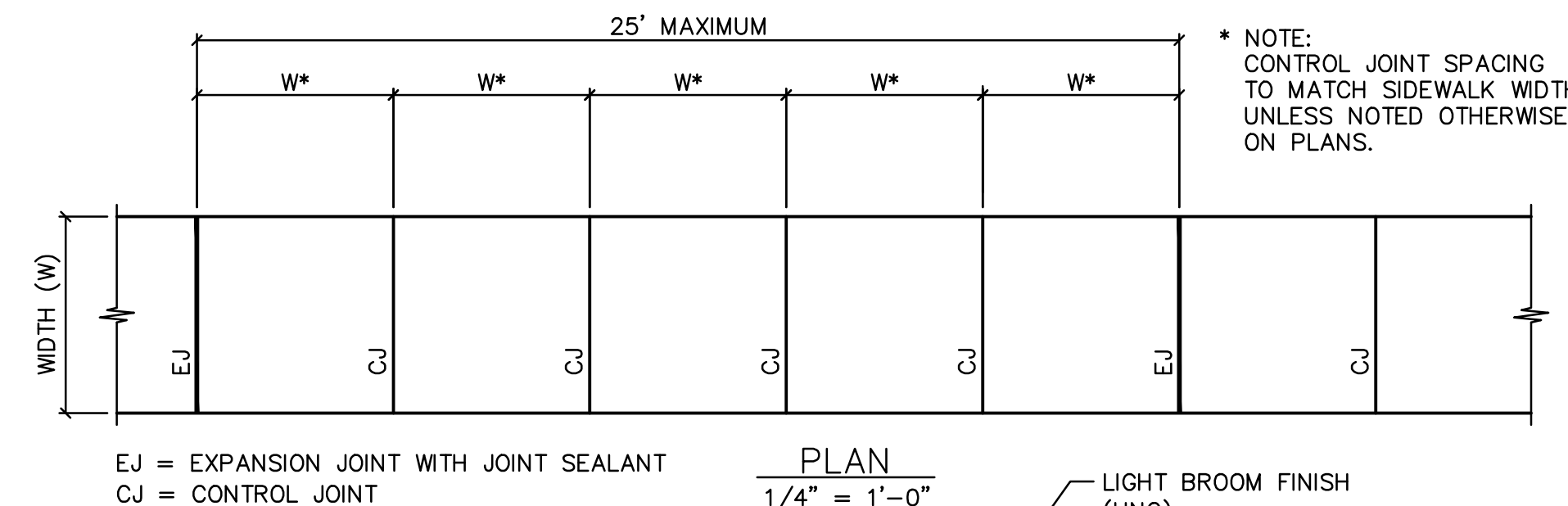
3 SUBSTATION DRIVE SURFACING
C-000001-010 N.T.S.



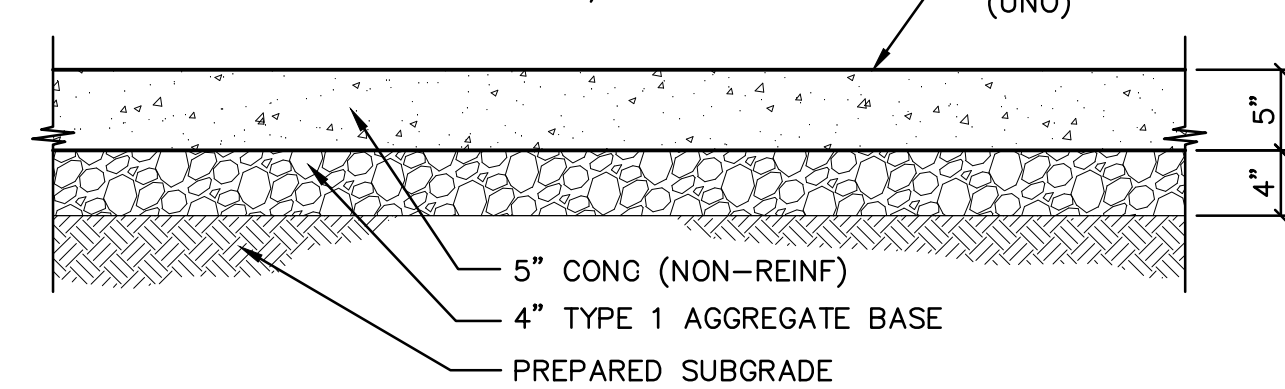
4 TYPICAL FULL DEPTH CONCRETE PAVEMENT
C-000001-010



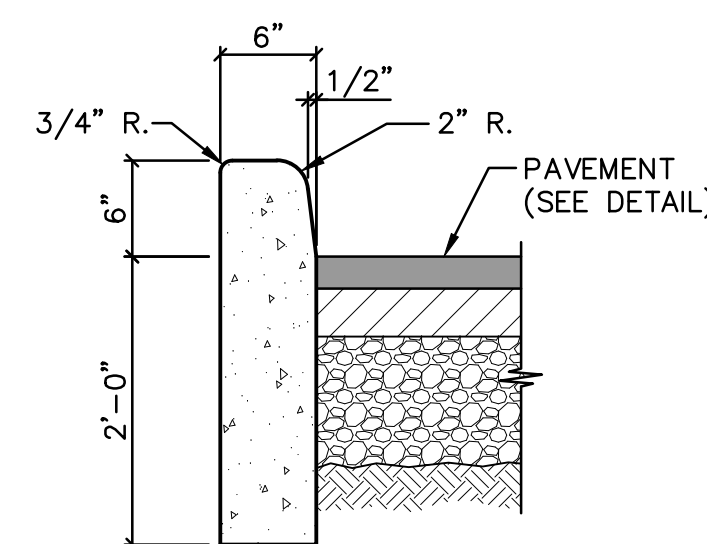
5 TYPICAL FULL DEPTH ASPHALT PAVEMENT
C-000001-010



EJ = EXPANSION JOINT WITH JOINT SEALANT
CJ = CONTROL JOINT

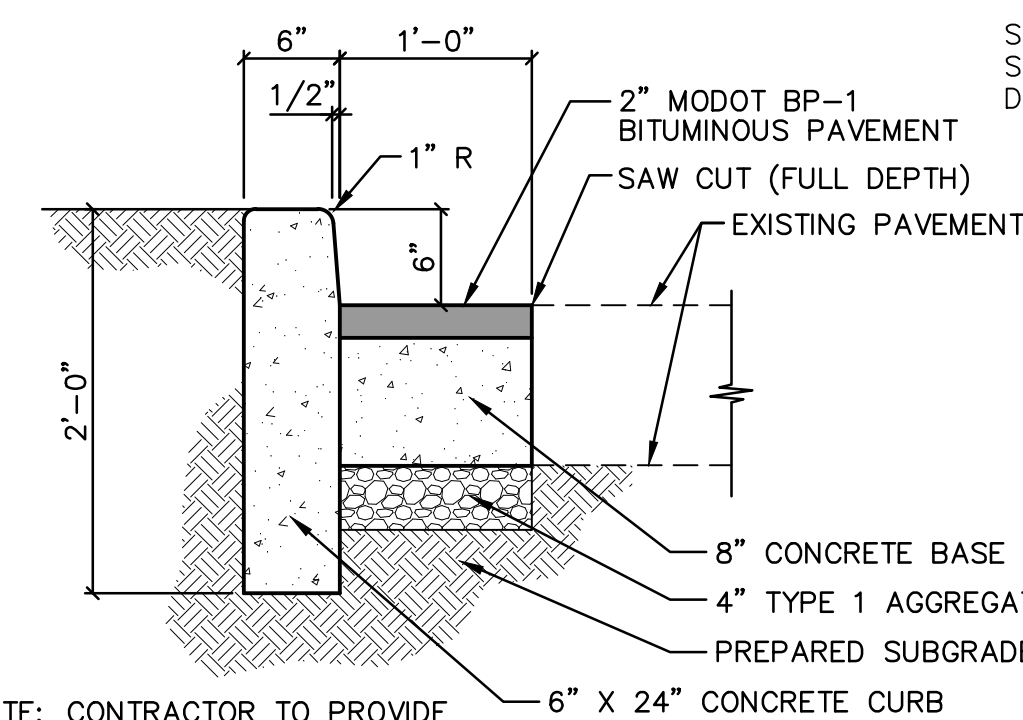


6 CONCRETE SIDEWALK
C-000001-010 N.T.S.



NOTE: CONTRACTOR TO PROVIDE 1/2" EXPANSION JOINTS TO MATCH SIDEWALK EXPANSION JOINT SPACING (25' O.C., MAXIMUM)

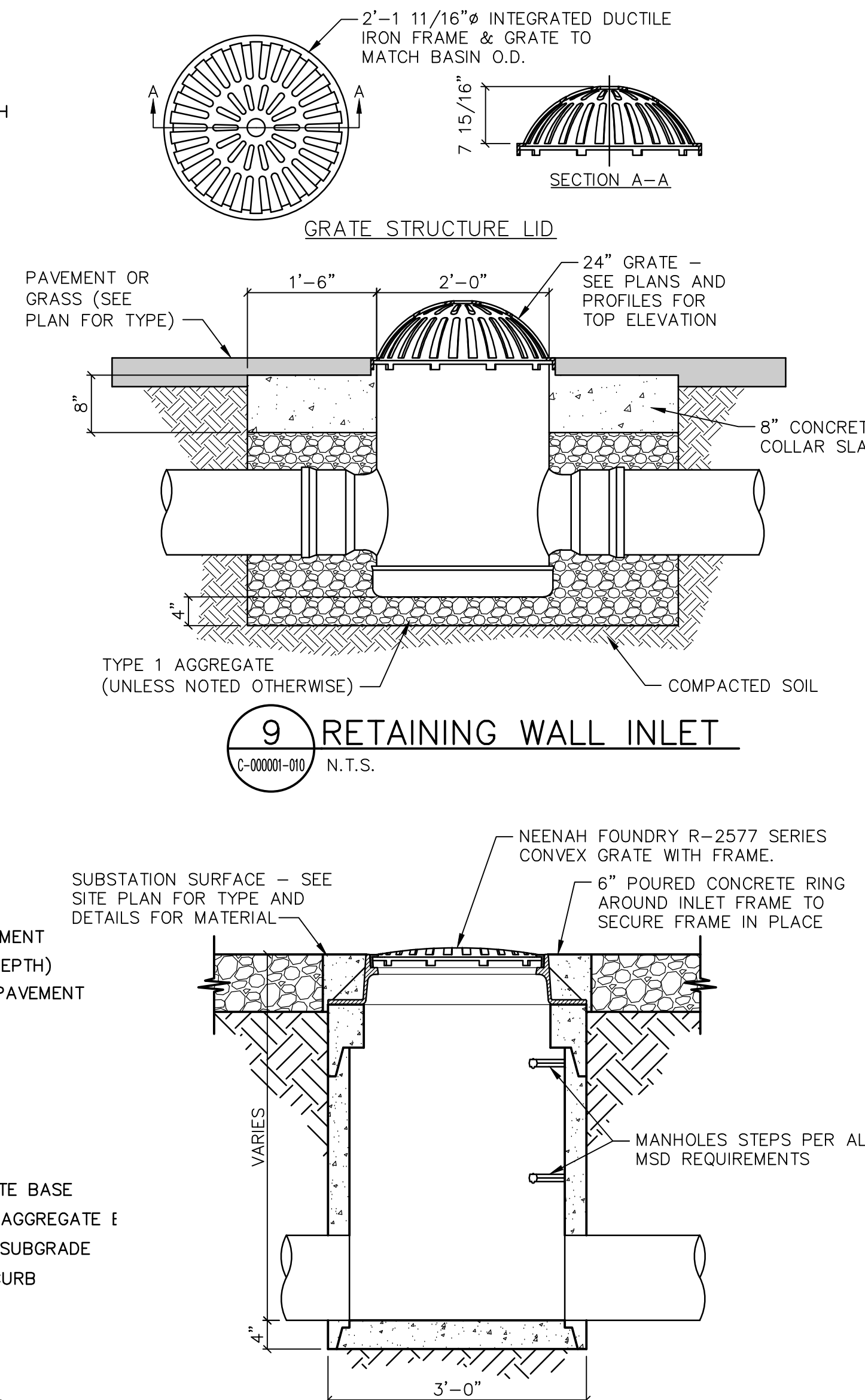
7 CONCRETE VERTICAL CURB
C-000001-010 N.T.S.



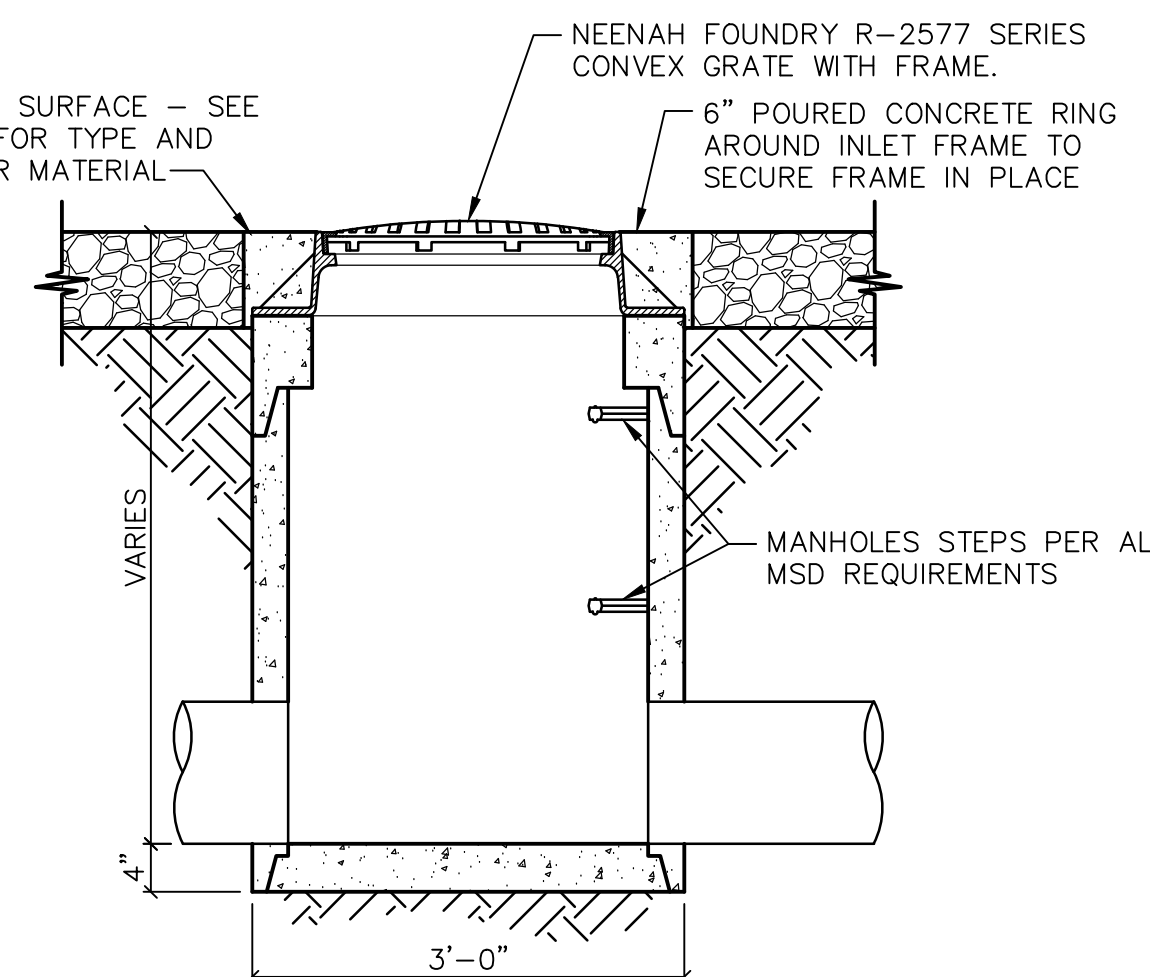
NOTE: CONTRACTOR TO PROVIDE 1/2" EXPANSION JOINTS TO MATCH SIDEWALK EXPANSION JOINT SPACING (25' O.C., MAXIMUM)

8 CONCRETE VERTICAL CURB WITH OVERDIG REPLACEMENT
C-000001-010 N.T.S.

9 RETAINING WALL INLET
C-000001-010 N.T.S.

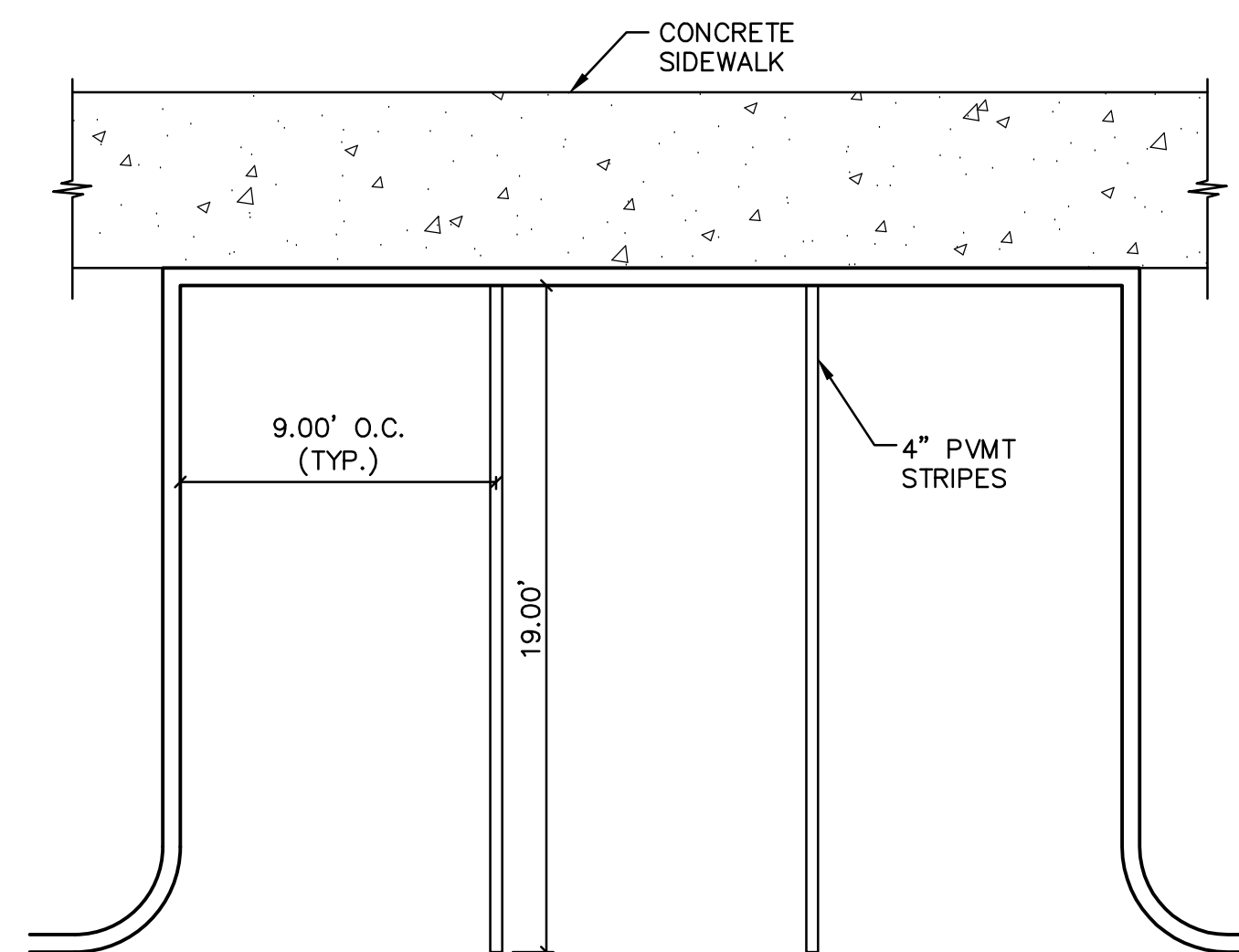
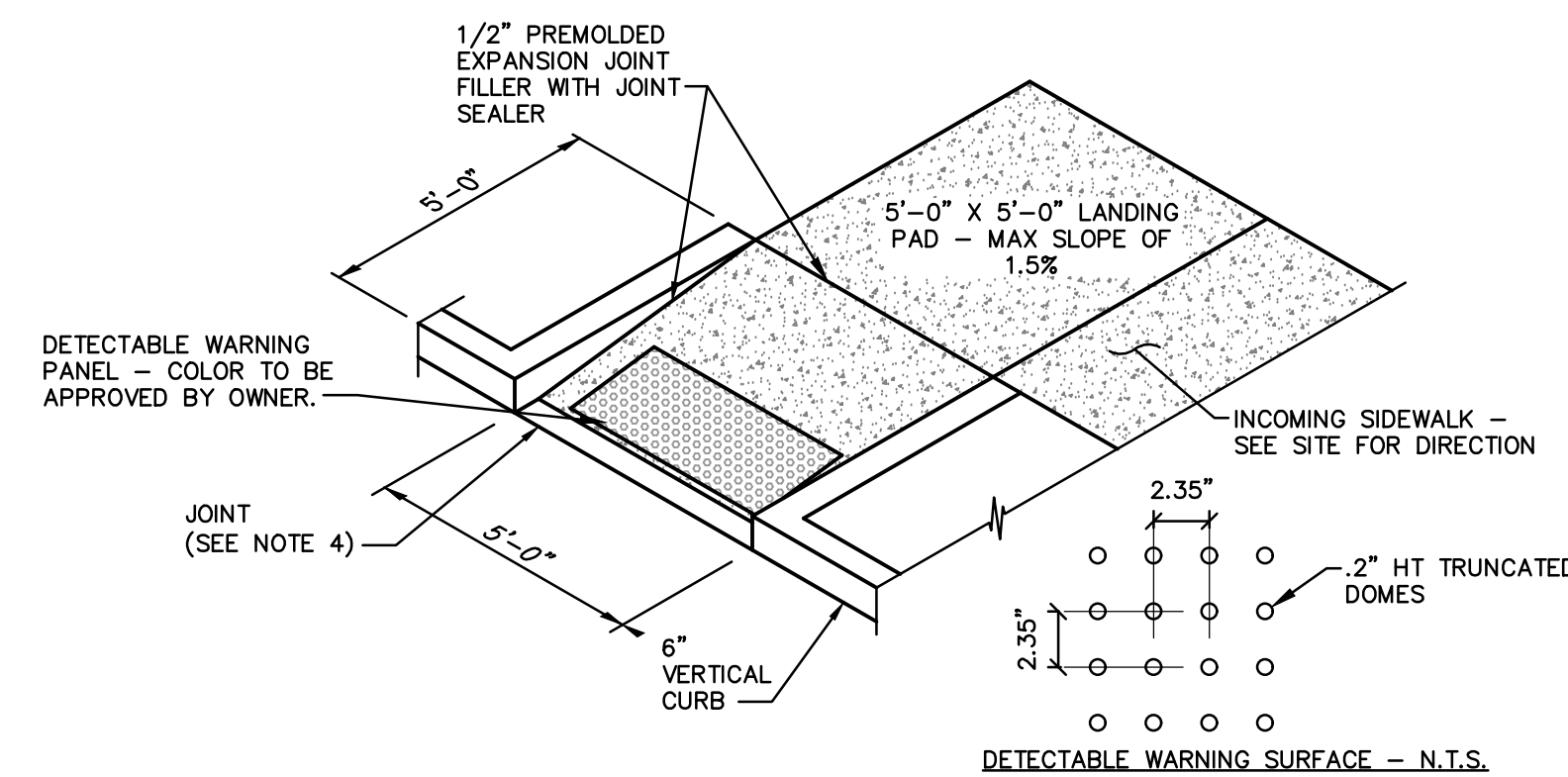


10 SUBSTATION INLET
C-000001-010 N.T.S.



- NOTE:
- LAYOUT AND SLOPE TOLERANCES OF ALL ACCESSIBLE RAMPS TO BE APPROVED BY ENGINEER IN THE FIELD PRIOR TO INSTALLATION.
 - SIDEWALK RAMP SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICAN DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG).
 - WHERE CURB RAMP MEETS PAVEMENT, BULLNOSE WILL NOT BE PERMITTED.
 - IF INTEGRAL CONCRETE CURB IS CONSTRUCTED, STRIKE A DUMMY JOINT ACROSS BOTTOM OF RAMP AT CURB LINE. IF CONCRETE CURB IS DOWELED-ON, BLOCK OUT PAVEMENT TO PROVIDE FULL DEPTH CURB ACROSS RAMP FROM OUTER POINT OF CURB TAPER TO OUTER POINT OF CURB TAPER.

12 PERPENDICULAR CURB RAMP
C-000001-010 N.T.S.



11 TYPICAL PARKING SPACE DETAIL
C-000001-010 NOT TO SCALE

SILT FENCE NOTES

- MINIMUM LONGITUDINAL SPLICE OVERLAP SHALL BE 2' WITH A POST AT EACH END.
- SECURE FABRIC TO POSTS.
- SUPPORT FENCE REQUIRED WITH SILT FENCE AROUND DROP INLET OR WHEN USED ACROSS DITCH.

WATTLE NOTES

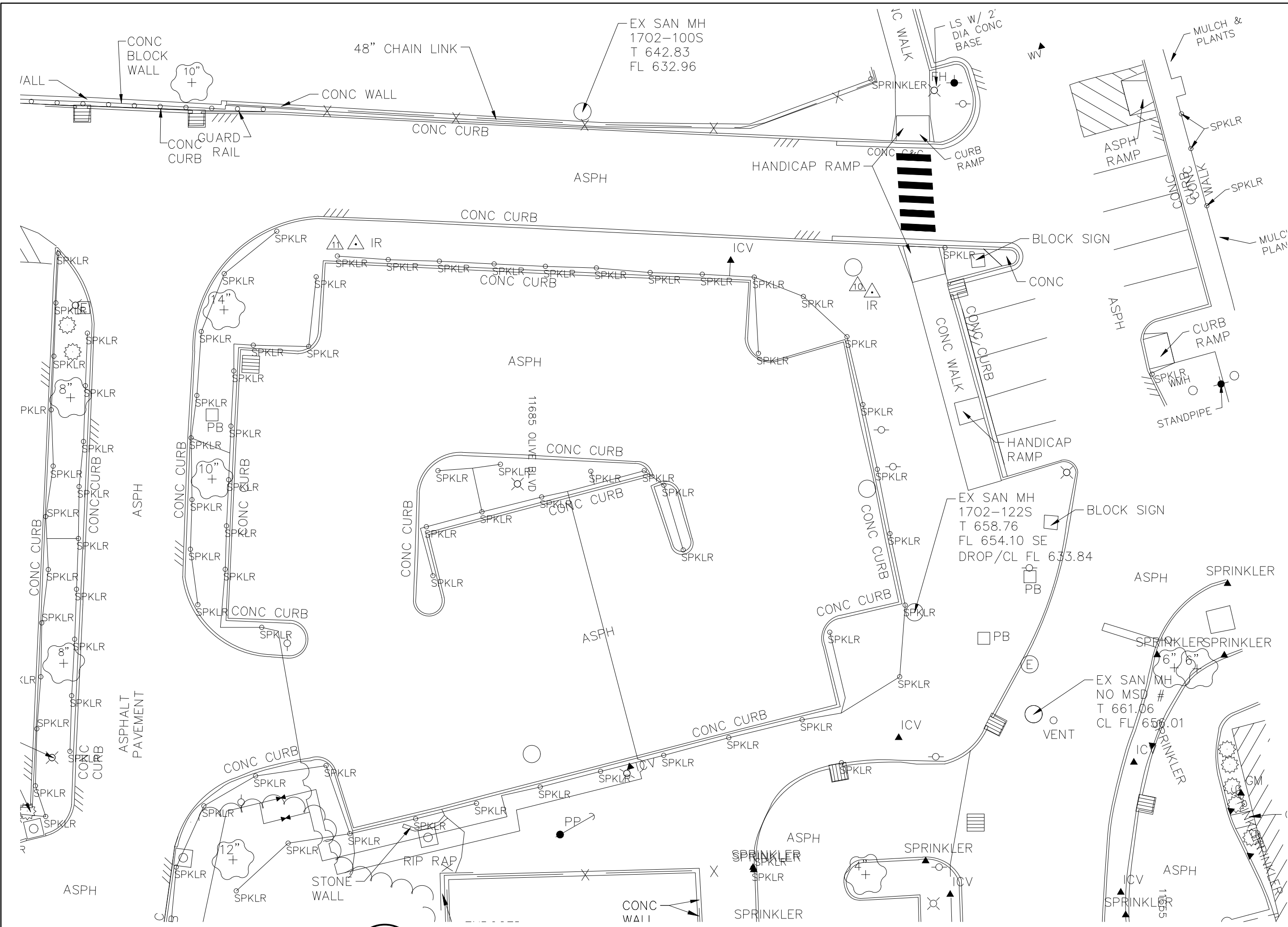
- EXCELSIOR WATTLE TO BE 12" MINIMUM DIAMETER.
- STAKES TO BE 2" X 2" X 2'-0" LONG.
- ONLY INSTALL WATTLES TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125" DIAMETER STEEL WIRE FORMED INTO U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

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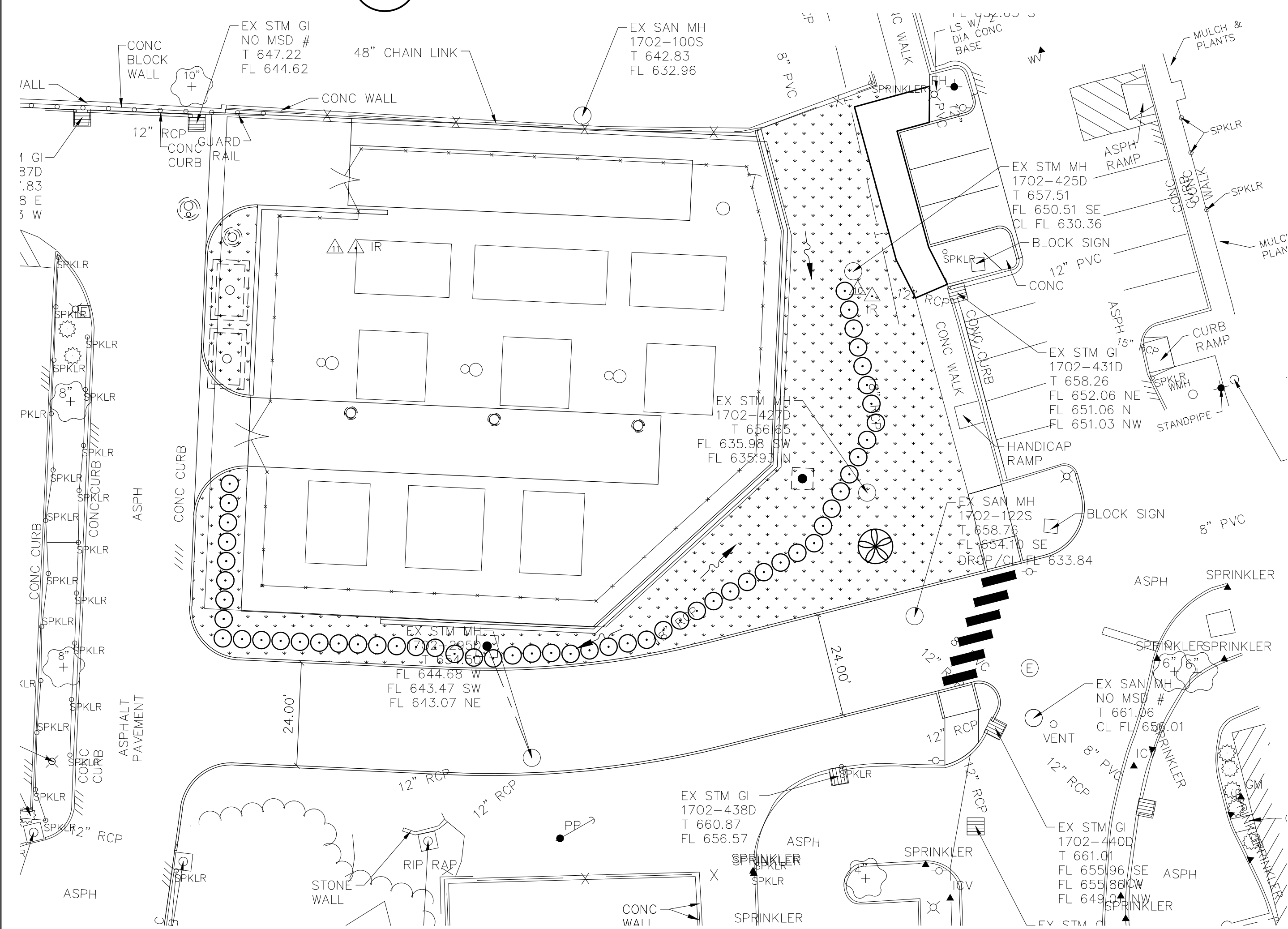
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0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ

		PROPERTY - CIVIL DETAILS	
		CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO LOC 4147	SCALE: AS NOTED REV 0E
DFR: DATE: 08-16-19 ENG: RWV: APPD:		DRAWING NUMBER CRAIG-C-000001-010_MU-JS528643	

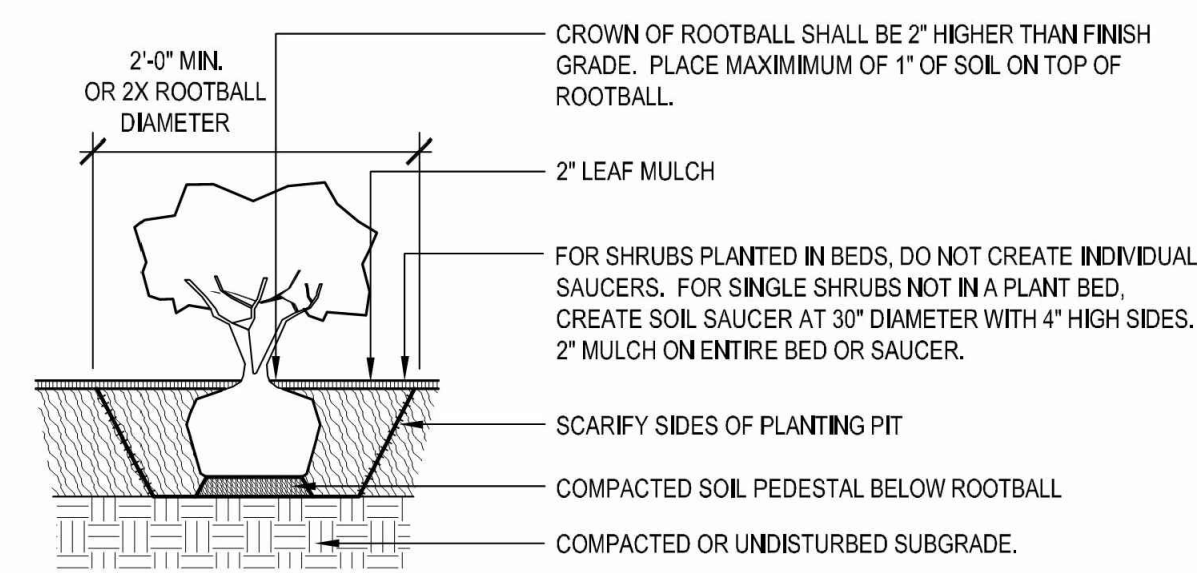
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1 EXISTING LANDSCAPE PLAN
C-000001-011 N.T.S.



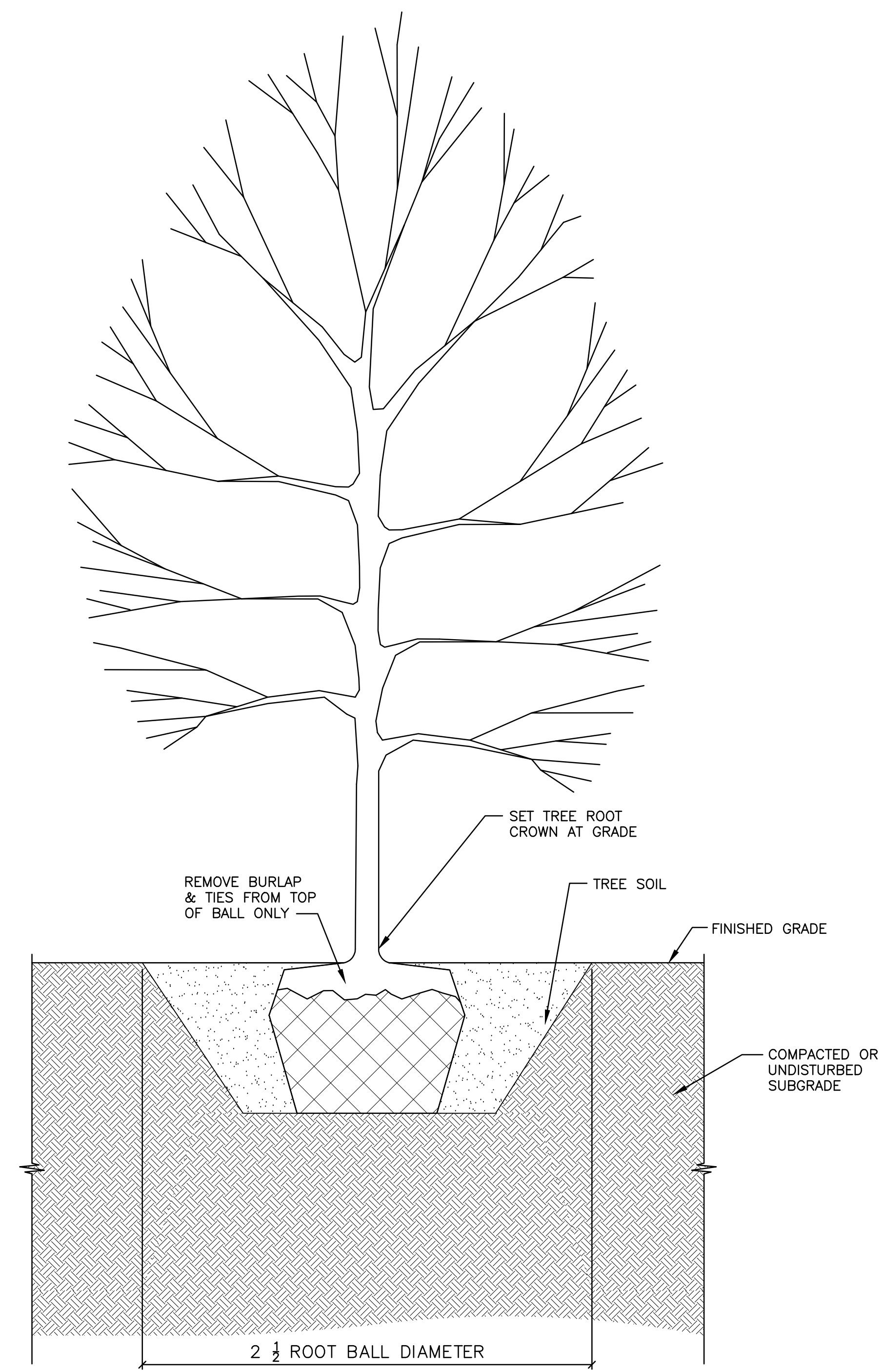
2 CONCEPTUAL LANDSCAPE PLAN
C-000001-011 N.T.S.



- NOTES:
1. REMOVE SPENT FLOWERS PRIOR TO PLANTING.
 2. LOOSEN ROOT MASS AT BOTTOM OF ROOTBALL..
 3. TOP OF ROOTBALL STRIPPED OF 1/4" SURFACE GROWING MEDIA AND COVERED WITH 1/4" LANDSCAPE BED MIX PLUS SURFACE MULCH.

SITE PLANTINGS					
ACCENT TREE	CERCIS CANADENSIS APPALACHIAN RED REDBUD	3 1/2" CALIPER	-	-	SPECIMEN QUALITY
SHRUB TYPE 1	VIBURNUM 'ESKIMO'	1 GAL	56" O.C.	CONT.	SPECIMEN QUALITY

3 PLANTING DETAIL AND SCHEDULE
C-000001-011 N.T.S.



4 TYPICAL TREE PLANTING DETAIL
C-000001-011 N.T.S.

LEGEND (THIS SHEET ONLY)

- SHRUB TYPE 1
- ACCENT TREE
- SEEDING

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0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ

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ENG:	DRAWING NUMBER	REV
RWV:	CRAIG-C-000001-011_MU-JS528643	0E
APPD:		

PROPERTY - CONCEPTUAL LANDSCAPING PLAN AND DETAILS

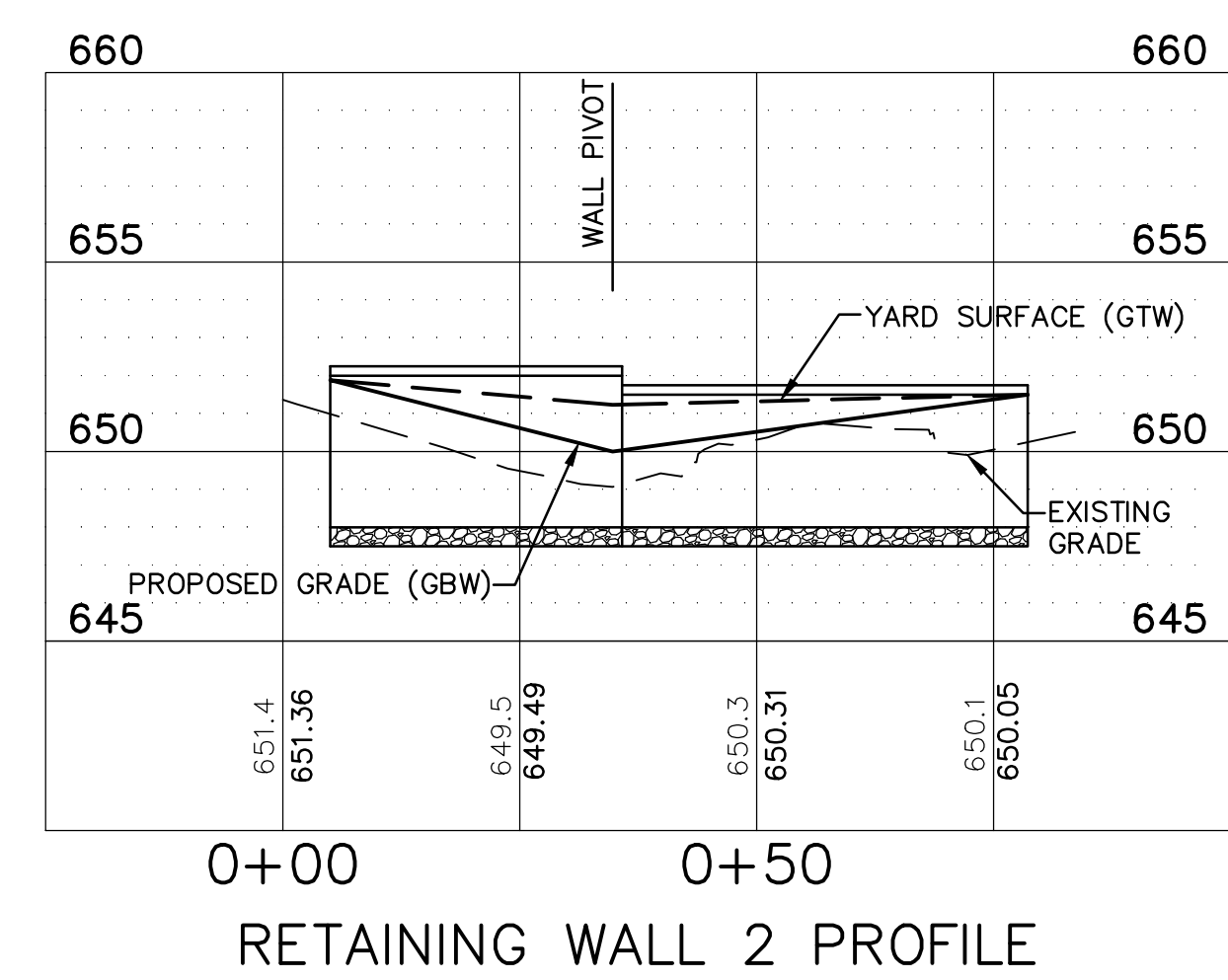
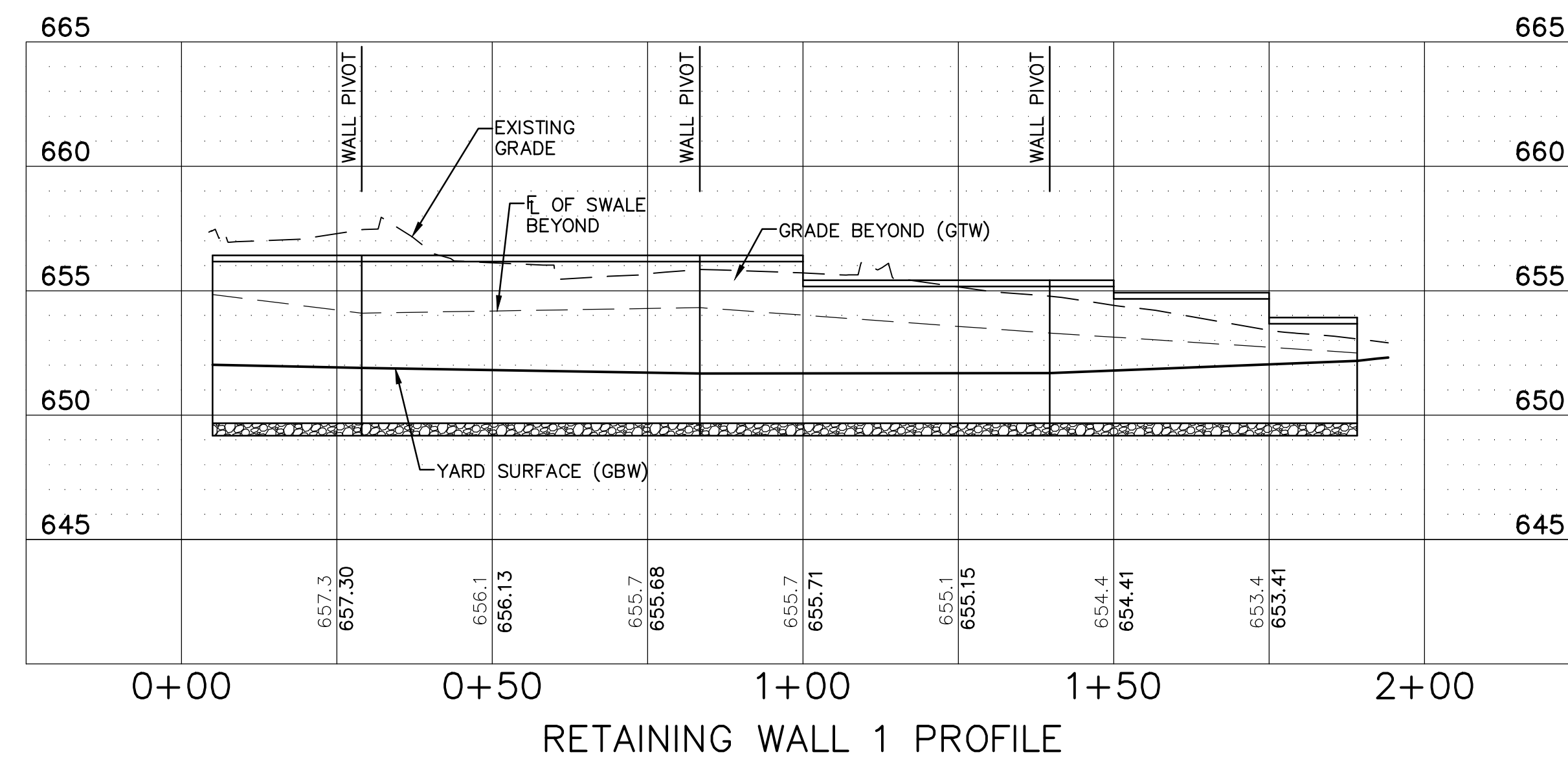
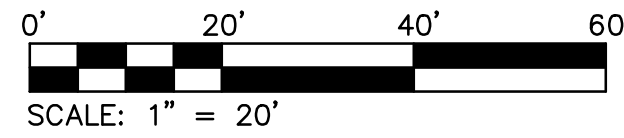
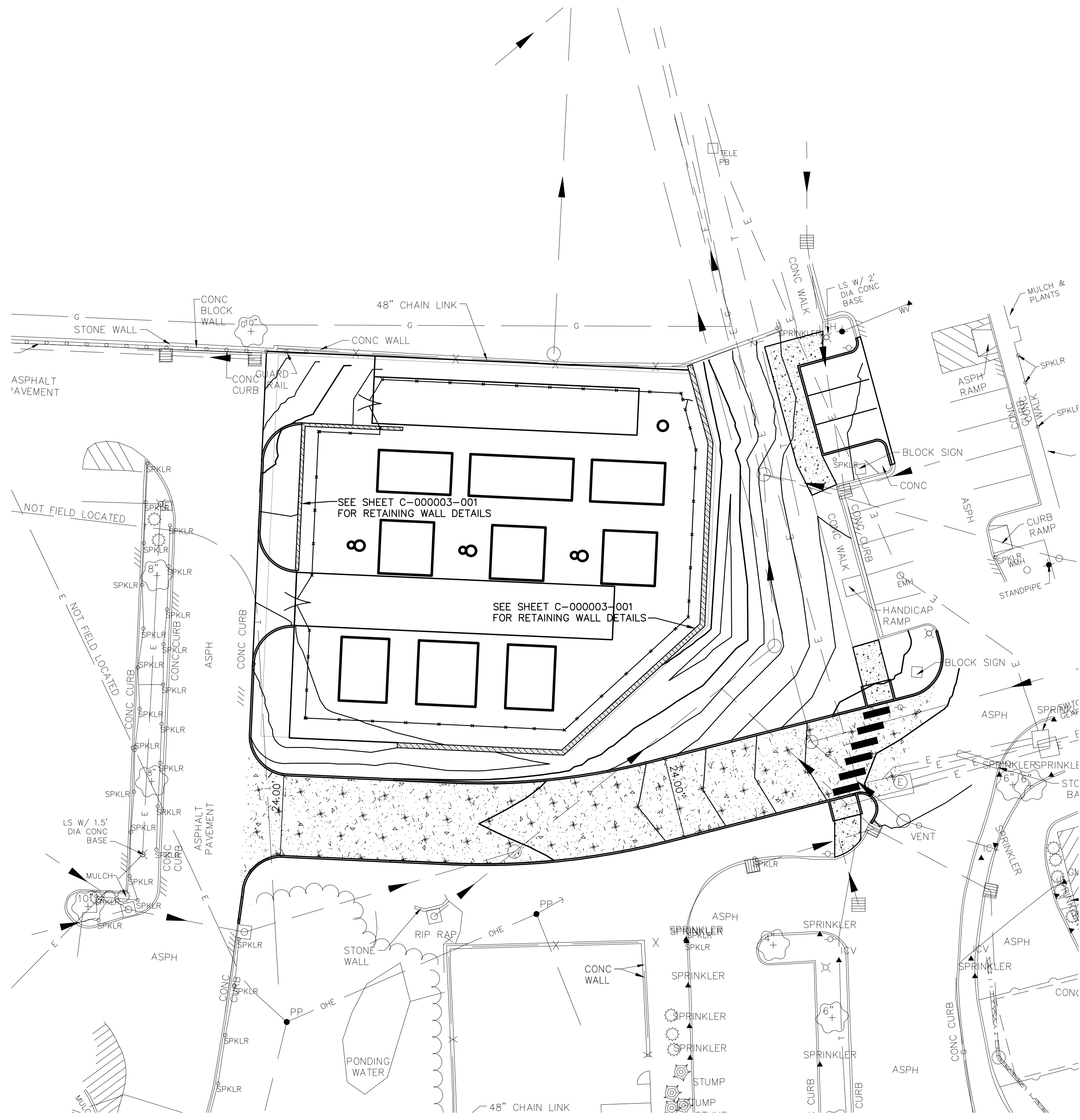
CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO

LOC 4147

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FOR ENGINEERING REVIEW
** NOT FOR CONSTRUCTION **

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DMA# 2019163-00
DAVID MASON & ASSOCIATES
Missouri Certificate of Authority Number:
Engineer: 001103
Architect: 000620
Survey: 000336

STATE OF MISSOURI
WILLIAM PATRICK CHILTON
NUMBER A-6019
REGISTERED ARCHITECT
William P. Chilton, Architect
Missouri License #: A-6019
Expires: 12/31/2020



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REV	DATE	DRF	DESCRIPTION	ENG	RWW	APPD	STRUCTURE - RETAINING WALL PLAN AND PROFILE	
0A	08/16/2019	NPB	ISSUED FOR REVIEW	JFG	JFG	DPJ		
0B	09/17/2019	NPB	ISSUED FOR BID	JFG	JFG	DPJ	CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO	
0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ		
0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ	CRAIG-C-000003-001_MU-JS528643	
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ		
DRAFT							LOC 4147	
ENG:							REV	
RWW:							0E	
APPD:								

STRUCTURE - RETAINING WALL PLAN AND PROFILE

CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO

DATE: 08-16-19 SCALE: AS NOTED

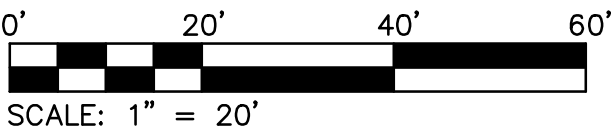
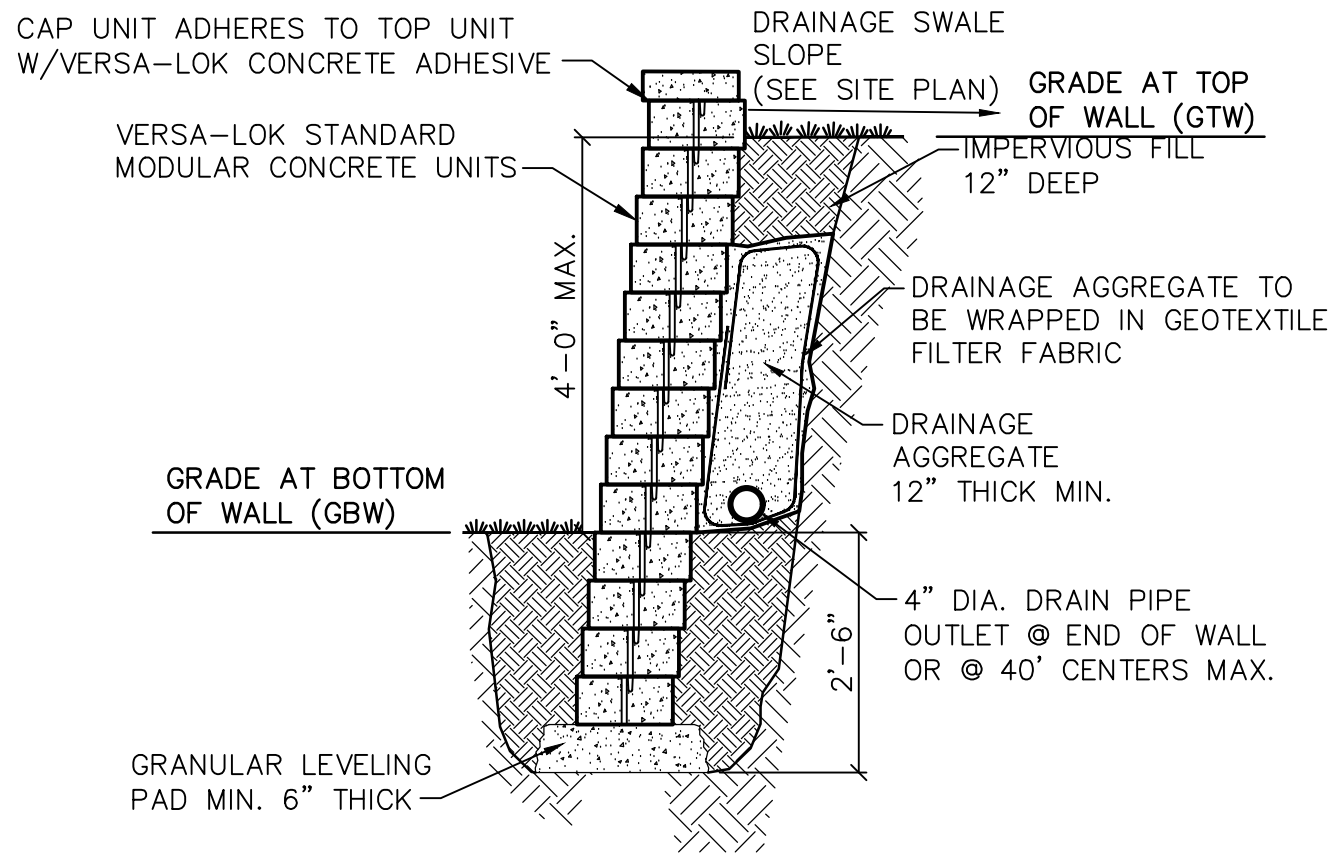
DRAWING NUMBER

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- DESIGN NOTES:
- 100 PSF LIVE LOAD SURCHARGE BEHIND WALL.
 - BLOCK TO BE VERSA-LOK STANDARD UNIT 12"x6"x16" OR ENGINEER APPROVED EQUAL.
 - REFER TO SOILS REPORT FOR RETAINING WALL INFORMATION.
 - DO NOT USE GEO-GRID FOR UN-REINFORCED WALL.
 - SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI TO THE ENGINEER OF RECORD TO REVIEW FOR DESIGN COMPLIANCE WITH CONTRACT DOCUMENTS ONLY.

1

C-000003-002

NTS

TYPICAL SECTION
UN-REINFORCED SEGMENTAL BLOCK RETAINING WALL

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0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ



STRUCTURE - RETAINING WALL
DETAILS

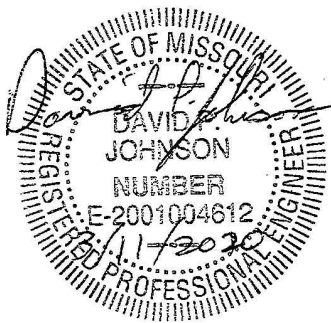
CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO			LOC 4147
R:	DATE: 08-16-19	SCALE: AS NOTED	REV 0E
G:	DRAWING NUMBER		
W:	CRAIG-C-000003-002_MU-JS528643		
D:			

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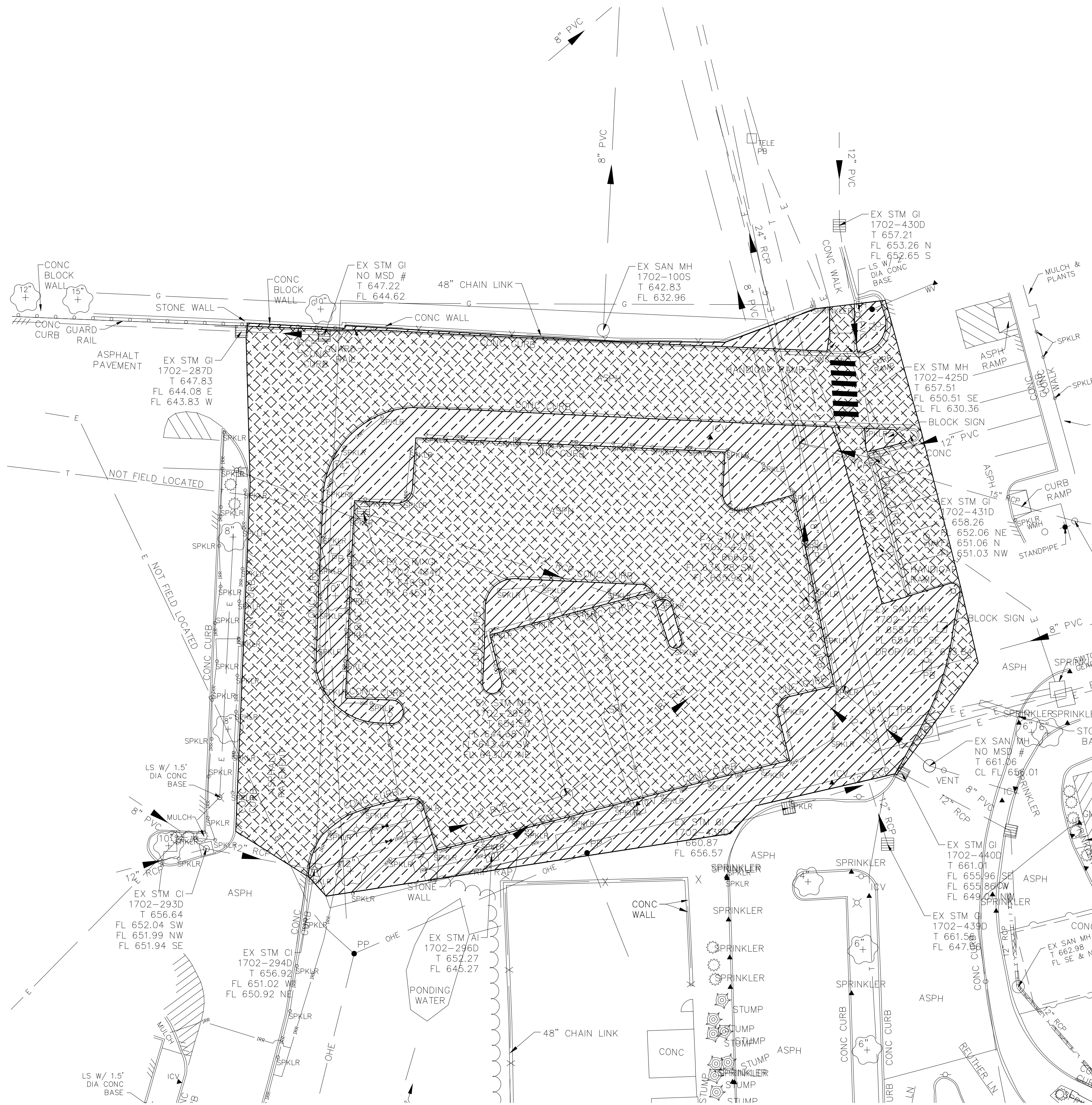
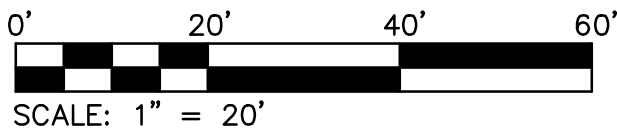
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David P. Johnson, Engineer
Missouri License #: E-2001004612
Expires: 12/31/2020

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DRAINAGE AREA	PRE-DEVELOPED DRAINAGE AREA CALCULATIONS							
	PERVIOUS				IMPERVIOUS			
	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q
Project Limits	10328	0.24	1.70	0.40				0.40
Project Limits					26460	0.61	3.54	2.15
					TOTAL			
					2.55			

LEGEND (THIS SHEET ONLY)

- PRE-DEVELOPMENT IMPERVIOUS AREA
- PRE-DEVELOPMENT PERVIOUS AREA

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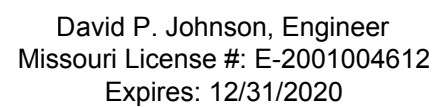
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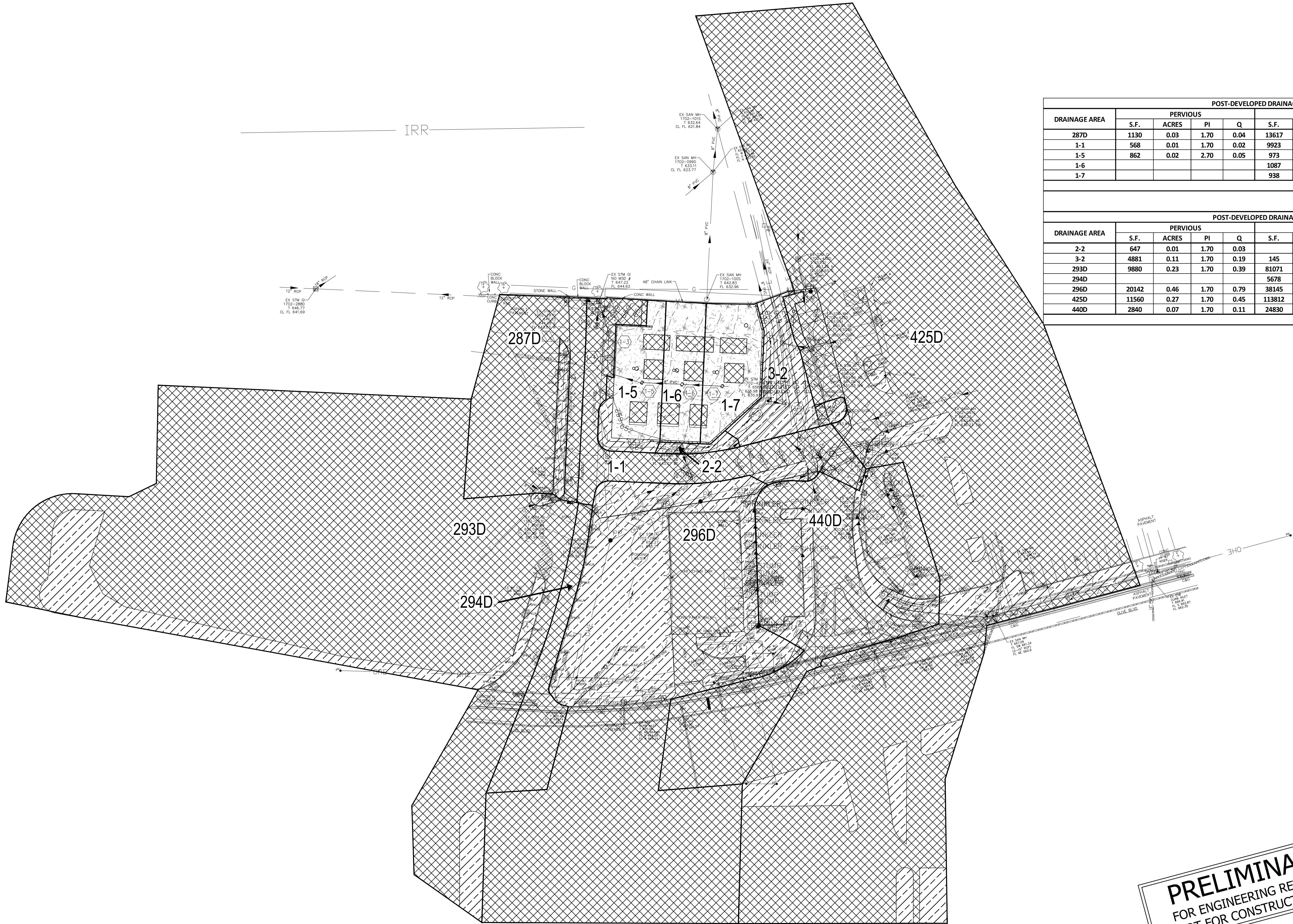
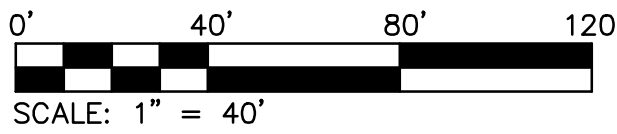
PROPERTY - PRE-DEVELOPMENT
DRAINAGE AREA MAP

CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO		LOC 4147
DFR:	DATE: 08-16-19	SCALE: AS NOTED
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RWW:	PR DAM 1	
APPD:		
		REV 0E

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0E

Packet Pg. 176



POST-DEVELOPED DRAINAGE STRUCTURES - WEST NETWORK												
DRAINAGE AREA	PERVIOUS				IMPERVIOUS				GRAVEL (80% IMPERVIOUS)			
	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q
287D	1130	0.03	1.70	0.04	13617	0.31	3.54	1.11				
1-1	568	0.01	1.70	0.02	9923	0.23	3.54	0.81				
1-5	862	0.02	2.70	0.05	973	0.02	3.54	0.08	3330.56	0.08	3.20	0.24
1-6					1087	0.02	3.54	0.09	2835.50	0.07	3.20	0.21
1-7					938	0.02	3.54	0.08	3928.34	0.09	3.20	0.29
TOTAL:												3.02

0.30

POST-DEVELOPED DRAINAGE STRUCTURES - EAST NETWORK												
DRAINAGE AREA	PERVIOUS				IMPERVIOUS				GRAVEL (80% IMPERVIOUS)			
	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q	S.F.	ACRES	PI	Q
2-2	647	0.01	1.70	0.03								
3-2	4881	0.11	1.70	0.19	145	0.00	3.54	0.01				
293D	9880	0.23	1.70	0.39	81071	1.86	3.54	6.59				
294D					5678	0.13	3.54	0.46				
296D	20142	0.46	1.70	0.79	38145	0.88	3.54	3.10				
425D	11560	0.27	1.70	0.45	113812	2.61	3.54	9.25				
440D	2840	0.07	1.70	0.11	24830	0.57	3.54	2.02				
TOTAL:												23.38

LEGEND (THIS SHEET ONLY)

-
- POST DEVELOPMENT IMPERVIOUS AREA
-
-
- POST DEVELOPMENT PERVIOUS AREA
-
-
- POST DEVELOPMENT GRAVEL AREA

PRELIMINARY
FOR ENGINEERING REVIEW
** NOT FOR CONSTRUCTION **

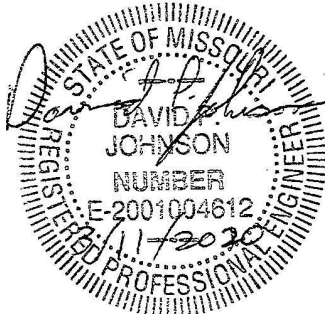
OWNER
JOSH SKELLY, AMEREN
1901 CHOUTEAU AVENUE
ST. LOUIS, MISSOURI 63166-6149
CELL PHONE: 314-616-8986
OFFICE PHONE: 314-957-3306
JSKELLY@AMEREN.COM

REV	DATE	DRF	DESCRIPTION	ENG	RWW	APPD
0A	08/16/2019	NPB	ISSUED FOR REVIEW	JFG	JFG	DPJ
0B	09/17/2019	NPB	ISSUED FOR BID	JFG	JFG	DPJ
0C	09/26/2019	NPB	MSD SUBMITTAL	JFG	JFG	DPJ
0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ

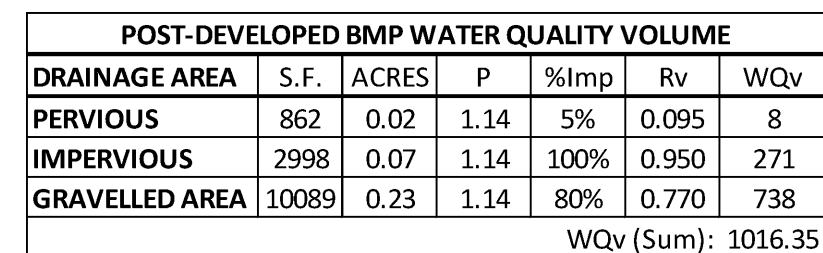


CRAIG SUBSTATION, 11685 OLIVE BLVD, CREVE COEUR, MO		LOC 4147
DFR:	DATE: 08-16-19	SCALE: AS NOTED
ENG:	DRAWING NUMBER	
RWW:	PD DAM 3	
APPD:	REV	
	0E	

DAVID MASON & ASSOCIATES
800 South Vandeventer Avenue
St. Louis, Missouri 63110
(314) 534-1030
DMA# 2019163-00
DAVID MASON & ASSOCIATES
Missouri Certificate of Authority Number:
Engineer: 001103
Architect: 000620
Survey: 000336



David P. Johnson, Engineer
Missouri License # E-2001004612
Expires: 12/31/2020



Where

$$WQ_v = \frac{P \cdot R_v \cdot A}{12} \quad A = \text{area in acres}$$

BMP AREA	TRIBUTARY AREA	BMP	WATER QUALITY VOLUME REQUIRED**	WATER QUALITY VOLUME TREATED
BMP 1	0.32	ADS Downstream Defender	762	762

**Required Volume = 75% of WQv

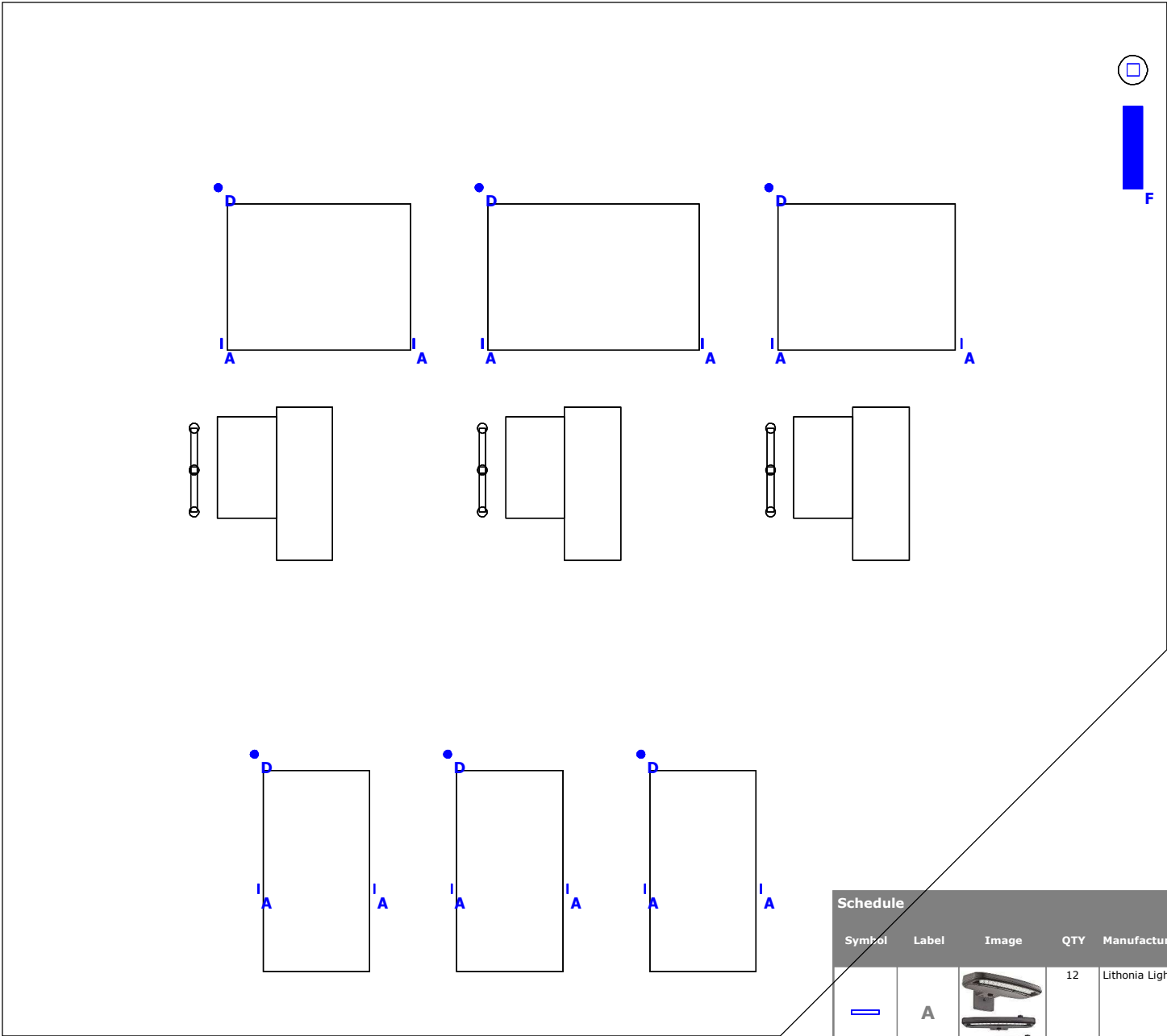
REV	DATE	DRF	DESCRIPTION	ENG	RWVW	APPD
0A	08/16/2019	NPB	ISSUED FOR REVIEW	JFG	JFG	DPJ
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0D	01/09/2020	NPB	FINAL ISSUED FOR BID	JFG	JFG	DPJ
0E	01/31/2020	NPB	ADDENDUM #1	JFG	JFG	DPJ

PROPERTY - BMP DRAINAGE AREA MAP

--	--

PD DAM 4

acket Pg. 178



Craig Sub Lighting Placement

Plan View
Scale - 1" = 16ft

Schedule							
Symbol	Label	Image	QTY	Manufacturer	Catalog Number	Description	Wattage
	A		12	Lithonia Lighting	OLW 23	Wall mounted LED updated optics	32.98
	D		6	Holophane	PLED2 12L 5K AS UN NA G L5H	PETROLUX 2 LED WET LOCATION	129
	F		1	CREE, INC.	STR-LWY-3ME-HT-2-F-UL-SV-A-40K-Q-R	LEDWAY HIGH OUTPUT SERIES, TYPE III MEDIUM, A INPUT POWER 4000K	282.1



Switchgears

Attachment: Substation Equipment Photos-20200311 (#19-38: Ameren Substation at 11685 Olive Blvd.



Switchgear left and Transformer on the right



Cable terminating structure on the left, Transformer on the right, Switchgear in the background



Switchgear left and SCADA mast on the right

BILL NO. _____

ORDINANCE NO. _____

**AN ORDINANCE AMENDING AUTHORIZING ISSUANCE OF A NEW
CONDITIONAL USE PERMIT TO AMEREN MISSOURI FOR A NEW ELECTRICAL
POWER DISTRIBUTION SUBSTATION (NAICS 221122) AT 11685 OLIVE
BOULEVARD**

WHEREAS, under Section 405.370(C), Electrical Power Distribution Systems (NAICS 221122) in the CB-Core Business zoning district require the issuance of a conditional use permit as provided in Section 405.470 and Section 405.1070, Conditional Use Permits; and

WHEREAS, Conway Johnson III, RWA, on behalf of Union Electric Company d/b/a Ameren Missouri, has submitted an application for a conditional use permit, and site development plans to allow for a new Substation at 11685 Olive Boulevard, Creve Coeur, MO, 63141 to replace the existing substation at 11665 Olive Boulevard that is nearing end of its useful life and utilizes obsolete technology; and

WHEREAS, 11665 Olive Boulevard, and the lot to the north, Lot B, was created in 2018 with Ordinance No. 5587 as part of the Marriott Courtyard Plaza Plat 2, now addressed as 11685 Olive Boulevard to facilitate the location of a new substation for Ameren Missouri; and

WHEREAS, a public hearing was held by the Creve Coeur Planning and Zoning Commission on Monday, April 20, 2020, beginning at 6:30 p.m. or immediately following the close of the previous public hearing, on said application for the conditional use permit as provided by Section 405.1070(D)(2); and

WHEREAS, notice of publication for said public hearing had been previously published at least 15 days prior to the hearing, in the St. Louis Countian, a newspaper of general circulation in the City of Creve Coeur; and

WHEREAS, the Planning and Zoning Commission reviewed and, by a __ vote, recommended approval of the conditional use permit and site development plan, subject to the conditions contained herein, at its meeting on Monday, April 20, 2020; and

WHEREAS, all parties desiring to be heard, either for or against said application, were given an opportunity to be heard, and a copy of the proposed ordinance has been made available for public inspection prior to its consideration by the Council; and this Bill having been read by title in open meeting two times before final passage by the City Council, and

WHEREAS, the City Council finds that the application and evidence presented clearly indicate that the proposed conditional use, when subject to certain conditions set forth herein:

1. Will contribute to and promote the community welfare and convenience at the specific location.
2. Will not cause substantial injury to the value of neighboring property.
3. Meets the applicable provisions of the City's Comprehensive Plan and any applicable neighborhood or sector plans and complies with other applicable zoning district regulations and provisions of this Chapter, unless good cause exists for deviation therefrom.

Attachment: 19-038.Draft Ordinance.4-20-2020 (#19-38: Ameren Substation at 11685 Olive Blvd. CUP)

BILL NO. _____

ORDINANCE NO. _____

4. Will be compatible with the surrounding area and thus will not impose an excessive burden or have a substantial negative impact on surrounding or adjacent users or on community facilities or services.

NOW, THEREFORE, be it ordained by the City Council of the City of Creve Coeur, St. Louis County, Missouri, as follows:

Section 1: A Conditional Use Permit is authorized to be issued pursuant to Section 3 hereof for an electrical power distribution systems (NAICS 221122) substation located at 11685 Olive Boulevard in the "CB" Core Business zoning district, whose legal description is as follows:

A TRACT OF LAND BEING PART OF LOT A AND PART OF LOT B OF MARRIOTT COURTYARD PLAZA PLAT 2 AS RECORDED IN PLAT BOOK 366, PAGE 251 ACCORDING TO THE RECORDER'S OFFICE OF ST. LOUIS COUNTY, MISSOURI, BEING LOCATED IN SECTION 3, TOWNSHIP 45 NORTH, RANGE 5 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF CREVE COEUR, ST. LOUIS COUNTY, MISSOURI, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING IN THE WEST LINE OF LOT 4 OF CITYPLACE SUBDIVISION AS RECORDED IN PLAT BOOK 355, PAGES 43-46 OF THE ABOVE SAID RECORDS, SAID POINT BEING NORTH 14 DEGREES 48 MINUTES 52 SECONDS WEST, 20.49 FEET OF THE SOUTHWEST CORNER OF ABOVE SAID LOT 4; THENCE DEPARTING SAID WEST LINE, THE FOLLOWING COURSES AND DISTANCES: SOUTH 75 DEGREES 46 MINUTES 04 SECONDS WEST, 56.22 FEET TO A POINT OF CURVATURE; THENCE ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 212.00 FEET, AN ARC DISTANCE OF 62.11 FEET TO A POINT OF TANGENCY; THENCE NORTH 87 DEGREES 26 MINUTES 50 SECONDS WEST, 60.63 FEET TO THE EAST LINE OF ABOVE SAID LOT A; THENCE ALONG SAID EAST LINE, AND ITS NORTHERLY PROLONGATION THEREOF, NORTH 02 DEGREES 34 MINUTES 05 SECONDS EAST, 147.80 FEET TO THE SOUTH LINE OF ADJUSTED PARCEL 2 OF BOUNDARY ADJUSTMENT OF MARRIOTT COURTYARD PLAZA PLAT 1 AS RECORDED IN PLAT BOOK 343, PAGE 40 OF THE ABOVE SAID RECORDS; THENCE ALONG SAID SOUTH LINE, SOUTH 87 DEGREES 25 MINUTES 55 SECONDS EAST, 137.33 FEET TO THE SOUTHEASTERLY CORNER OF ABOVE SAID ADJUSTED PARCEL 2, SAID POINT BEING IN THE WESTERLY LINE OF ABOVE SAID LOT 4; THENCE ALONG SAID WEST LINE, SOUTH 14 DEGREES 48 MINUTES 52 SECONDS EAST, 128.35 FEET TO THE POINT OF BEGINNING AND CONTAINING 22,507 SQUARE FEET OR 0.517 ACRES, MORE OR LESS, ACCORDING TO CALCULATIONS PERFORMED BY DAVID MASON AND ASSOCIATES ON OCTOBER 15, 2019.

Section 2: The Conditional Use Permit granted shall be subject to all applicable statutes, ordinances, rules and regulations, and the following conditions:

1. The Applicant is required to submit Grading and Site Improvement Plans, showing all exterior improvements, for the repair, resurfacing and striping of the parking lot, as required by Section 410.380 of the Subdivision and Land Development Regulations (Subdivision Code). The Grading and Site Improvement Plans shall be in substantial conformance with the Site Plan information received on March 13, 2020 as bound together and submitted in conjunction with Application #19-038, by Union Electric Company d/b/a Ameren Missouri, and with all conditions of approval.
2. The Applicant shall submit for any building permits necessary for this project, including a fence permit, or retaining wall permit.

BILL NO. _____

ORDINANCE NO. _____

3. Site coverage is allowed for up to 69.3%, due to the public benefit of providing for electrical services that will be provided for the area, and additional landscaping per the Zoning Administrator's approval, as discussed in the Staff Report for the April 20, 2020 Planning and Zoning Commission meeting.
4. The black wrought-iron style security fence is to have a maximum height of eight (8) feet.
5. The retaining wall shall be of a darker color consistent with the red brick color of the building.
6. The Applicant shall submit a final Landscape Plan to be in substantial compliance with the drawings received on March 13, 2020 as bound together and submitted in conjunction with Application #19-038, by Union Electric Company d/b/a Ameren Missouri in compliance with Section 405.540 Landscaping, except as modified below.
7. The landscaped plan shall include upright evergreen hedge for year-round screening at no more than 30 inches on center as required by Section 405.540 Landscaping of the Zoning Ordinance. Additional landscaping and trees shall be provided to meet with the intent of the site coverage bonus for the Zoning Administrator's approval.
8. An underground irrigation system shall be installed for the landscaped area surrounding the facility as required by Section 405.540 Landscaping of the Zoning Ordinance. All landscaping shall be permanently maintained in good condition with at least the same quality and quantity of landscaping as initially approved. Vegetation that is totally or predominantly dead and/or disfigured due to disease or injury shall be replaced as needed and in a prompt manner.
9. All new sidewalks shall be a minimum of six (6) feet, or eight (8) feet if used as a curb stop, per Section 405.730.
10. The existing facility at 11665 Olive Boulevard shall be removed and the site sodded and restored once the new substation is brought online.
11. The Applicant shall submit a photometric and lighting detail for any new lighting for the site for the approval of the Zoning Administrator as part of the site improvement permit.
12. Any future enlargement, extension, expansion or exterior alteration in the use of the structures or site must be approved by the City Council upon receipt of the recommendation of the Planning and Zoning Commission as an amendment to the Conditional Use Permit before a Building Permit for the enlargement, expansion or exterior alteration may be issued.
13. Failure to comply with any one or all of the conditions of this permit shall be adequate cause for the revocation of said permit by the City Council, provided, however, no permit shall be revoked without prior notice to the owner of the intention of the City Council to revoke this permit and reasonable time granted to the owner to correct or remedy any such breach of conditions, except for repeated breaches or violations.
14. No conditional use permit granted by the City Council shall be valid for a period longer than one year from the date it grants the conditional use permit, unless within such period: (1) a building permit is obtained and construction is begun; or (2) if a building permit is not required, an occupancy permit is obtained and the use of the building commenced. The City Council may grant extensions to the one (1) year period of not more than one hundred and eighty (180) days each, without notice or hearing, provided that a written request for such extension is filed by the original applicant and approved by the City Council prior to the date the conditional use permit is scheduled to expire.
15. Any transfer of ownership or lease of the property shall include in the transfer or lease agreement a provision that the purchaser or lessee agrees to be bound by the approved Site Development Plan for the property and the conditions herein set forth, and written confirmation thereof signed by the new owner or lessee shall be filed with the City at the time of such transfer or lease. Failure to comply with this provision shall not excuse anyone from these conditions.

BILL NO. _____

ORDINANCE NO. _____

Section 3: The City Administrator of the City of Creve Coeur is hereby authorized and directed to issue a Conditional Use Permit in accordance with the provisions of this ordinance, said permit to expressly provide for the conditions and stipulations hereinabove set out in Section 2 of this ordinance. Exercise of the rights granted pursuant to the issued permit shall constitute acceptance of all conditions and stipulations set forth herein.

Section 4: This ordinance shall become effective in accordance with Section 3.11 (g) of the City Charter.

ADOPTED THIS ____ DAY OF _____, 2020.

ELLEN LAWRENCE
PRESIDENT OF CITY COUNCIL

APPROVED THIS ____ DAY OF _____, 2020.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK

Attachment: 19-038.Draft Ordinance.4-20-2020 (#19-38: Ameren Substation at 11685 Olive Blvd. CUP)