SECTION 02575 – SURFACE RESTORATION

PART 1 - GENERAL

1.01 SUMMARY

- A. This section covers Work associated with surface restoration within the City's right-of-way, provided easements and other areas disturbed during construction.
- B. The Contractor shall replace all surface material and shall restore paving, curbing, sidewalks, gutters, shrubbery, fences, sod and all other surfaces disturbed or damaged by construction activities to a condition of equal or better than before the start of the Work.
- C. The Contractor shall restore the Site to conditions not less than that which existed prior to starting construction unless otherwise required by: the contract documents, permits and/or licenses.
- D. Coordinate surface restoration work with the affected property owners and the City/Design Professional. Special requests for restoration should be documented in writing and provided to the City/Design Professional.
- E. Private property on which the City has prior rights (i.e. easements, general utility easement, etc.) and/or has obtained easements, rights-of-way, licenses and/or agreements from the property owner shall be restored in conformance with these Contract Documents. Restore public property in accordance with the requirements of the department or public body having jurisdiction. Such entities include, but are not limited to, the following:
 - 1. The City of Kansas City, MO Public Works Department.
 - 2. The City of Kansas City, MO Parks and Recreation Department.
 - 3. Missouri Department of Transportation.

1.02 SPECIFICATION MODIFICATIONS

A. It is understood that throughout this section, these Specifications may be modified by appropriate items in Section 01015 – Specific Project Requirements or as otherwise indicated in the contract documents.

1.03 RELATED SECTIONS

- A. Section 00700 General Conditions.
- B. Section 00800 Supplementary Conditions.
- C. Section 01000 General Project Requirements.
- D. Section 01015 Specific Project Requirements.
- E. Section 01320 Construction Progress Documentation
- F. Section 01322 Photographic and Video Documentation.
- G. Section 01566 Cleanup Operations.
- H. Section 02200 Earthwork.
- I. Section 02250 Trenching, Pipe Embedment and Backfill.
- J. Section 02930 Seeding.
- K. Section 02931 Sodding.
- L. Section 02949 Tree Protection, Removal and Replacement.

1.04 CODES AND STANDARDS

A. The publications listed below form a part of this specification to the extent referenced. The most recent version of the publications are referred to within the text by the basic designation only. Abbreviation used within this specification section to distinguish between the standards of the Public Works Department (PW) and the Parks and Recreation Department (PR).

B. The City of Kansas City, Missouri Department of Public Works Construction and Material Specifications (https://www.kcmo.gov/city-hall/departments/public-works/public-works-design-construction-standards):

KCMO PW 2200	Section 2200, Paving.
KCMO PW 2202	Subsection 2202, Untreated Compacted Aggregate.
KCMO PW 2204	Subsection 2204, Prime and Tack Coat.
KCMO PW 2209	Subsection 2209, Curbing.
KCMO PW 2211	Subsection 2211, Smoothness.
KCMO PW 2301	Subsection Section 2301, Incidental Construction, Standard.
	Sidewalks, Sidewalk Ramps, Driveways and Bicycle/Pedestrian
	Paths.
KCMO PW 2302	Subsection 2302 Asphalt Sidewalks, Driveways and
	Bicycle/Pedestrian Paths.
KCMO PW 2306	Subsection 2306 Pavement Markings.

C. The City of Kansas City, Missouri Department of Public Works Standard Drawings (https://www.kcmo.gov/city-hall/departments/public-works/standard-drawings):

KCMO PW C	Standard Drawing Number C, Curbs.
KCMO PW D-1	Standard Drawing Number D-1, Driveway Entrances.
KCMO PW D-2	Standard Drawing Number D-2, Reconstructed Driveways.
KCMO PW D-US	Standard Drawing Number D-US, Driveway Unimproved
	Streets.
KCMO PW SR-1	Standard Drawing Number SR-1, Street Cut Restoration.

D. The City of Kansas City, Missouri Parks and Recreation Department

(https://kcparks.org/services/parks-planning-and-design-services/):

KCMO PR CR

KCMO PR DC

KCMO PR DC

KCMO PR DR

KCMO PR DR

KCMO PR SC

KCMO PR SC

KCMO PR SC

KCMO PR SC

KCMO PR SR

Standard Detail Number DR, Residential Driveway.

KCMO PR SR

Standard Detail Number SC, Commercial Sidewalk.

KCMO PR SR

Standard Detail Number SR, Residential Sidewalk.

KCMO PR ARA
KCMO PR ARB
KCMO PR C
Standard Detail Number ARA, ADA Curb Ramp-Type A.
Standard Detail Number ARB, ADA Curb Ramp-Type B.
Standard Detail Number C, Curb.

KCMO PR CG
KCMO PR CJ
Standard Detail Number CG, Curb and Gutter.
KCMO PR CJ
Standard Detail Number CJ, Concrete Joint.

E. American Society for Testing and Materials (ASTM):

interredui Society for 1	esting and materials (115 1111).
ASTM D 422	Standard Test Method for Particle-Size Analysis of Soils, grain-
	size, hydrometer analysis, hygroscopic moisture, particle-size,
	sieve analysis.
ASTM C 309	Standard Specification for Liquid Membrane-Forming
	Compounds for Curing Concrete.
ASTM A 615	Standard Specification for Deformed and Plain Carbon-Steel
	Bars for Concrete Reinforcement.
ASTM D 977	Standard Specification for Emulsified Asphalt.
ASTM D 2397	Standard Specification for Cationic Emulsified Asphalt.
ASTM D 2027	Standard Specification for Cutback Asphalt (Medium-Curing
	Type).

ASTM D 2028 Standard Specification for Cutback Asphalt (Rapid Curing

Type).

ASTM E11 Standard Specification for Woven Wire Test Sieve Cloth and

Test Sieves.

ASTM D448 Standard Classification for Sizes of Aggregate for Road and

Bridge Construction.

ASTM C131 Standard Test Method for Resistance to Degradation of Small-

Size Coarse Aggregate by Abrasion and Impact in the Los

Angeles Machine.

F. Missouri Department of Transportation:

MoDOT Missouri Standard Specifications for Highway Construction

(https://www.modot.org/missouri-standard-specifications-

highway-construction).

1.05 DEFINITIONS

A. Established Lawn: An Unpaved Area of soil-covered land planted with grasses which are maintained at a height of 5 inches or less. Established lawns include, but are not limited to, grassed areas associated with residential lots, businesses, parks, cemeteries, etc.

- B. Improved Street: A paved, public street, or portion thereof, that incorporates a curb and a gutter.
- C. Paved Areas: Areas for which the final surfacing will be street pavement, shoulders, driveways, parking lots, curbs, gutters, sidewalks, gravel roads, or other surface construction or structures.
- D. Site: Lands or areas indicated in the Contract Documents as being furnished by the City upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by the City which are designated for the use of the Contractor, or as defined in Section 00700 General Conditions.
- E. Unpaved Areas: Areas for which the final surfacing will not be a Paved Area.
- F. Unimproved Street: A public street, or portion thereof, that does not incorporate a curb and gutter.

1.06 INFORMATION PROVIDED BY THE CITY

A. As provided in the Contract Documents.

1.07 SUBMITTALS

- A. Submit as specified in Section 01300 Submittals.
- B. Shop Drawings:
 - 1. Submit as required by the contract documents.
- C. Product Data:
 - 1. Submit as required by the contract documents.
- D Samples:
 - 1. Submit as required by the contract documents.

E. Other Submittals:

- 1. The Contractor's Restoration Plan and Schedule adhering to all requirements of the contract documents.
- 2. All applicable Department of Public Works standard specifications used to complete the Work.
- 3. All applicable Department of Public Works standard details used to complete the Work.

4. All applicable Parks and Recreation Department standard details used to complete the Work.

1.08 QUALITY ASSURANCE

- A. The Contractor is responsible for the quality assurance and quality control of the Work.
- B. All areas disturbed by the Contractor's operations shall be restored in accordance with the contract documents, applicable permits and as directed by the City/Design Professional.
- C. All Work shall be performed by a Contractor, with a proven record of performance for the required restoration work. The Contractor shall submit the following:
 - 1. The materials to be used to restore the surface.

1.09 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery of materials shall be in manufacturer's original unopened and undamaged packages. They shall be clearly marked to identify brand name, contents and order number on each package. Packages showing indication of damage that may affect condition of contents are not acceptable.
- B. Storage of material shall provide protective cover from damage and stored at temperatures in accordance with manufacturer's recommendation. Materials shall be staked or stored in accordance with manufacturer's recommendations.

1.10 RESTORATION SCHEDULE

- A. Project milestones and restoration schedule criteria shall be as specified in the following sections:
 - 1. Section 00800 Supplemental Conditions.
 - 2. Section 01015 Specific Project Requirements.
- B. The specified milestone and/or restoration schedule criteria shall be incorporated in the project schedule as required by Section 01320 Construction Progress Documentation.

1.11 PROPERTY-SPECIFIC RESTORATION

A. Easements provided by the City for the construction of the Work may include property-specific restoration requirements. These requirements are noted on the Contract Drawings or included in Section 01015 – Specific Project Requirements.

PART 2 - PRODUCTS

2.01 INCIDENTAL CONCRETE CONSTRUCTION

- A. Incidental concrete construction includes curbs, gutters, sidewalks, sidewalk ramps, ADA ramps, driveways, bicycle/pedestrian paths and other Work indicated in the Contract Documents.
- B. Parks and Recreation Department Standards: Incidental concrete surface restoration for Work having jurisdiction of the City of Kansas City, Missouri Parks and Recreation Department shall comply with the standards listed in paragraph CODES AND STANDARDS. All materials and construction standards are noted on the standard details.
- C. Public Works Department Standards: All materials and construction for incidental concrete surface restoration for Work having jurisdiction of the City of Kansas City, Missouri Public shall comply with the standards listed in paragraph CODES AND STANDARDS.

 1.

2.02 GRANULAR SUBBASE MATERIAL

A. Granular subbase material for incidental concrete construction shall conform to the requirements of Section 02200 - Earthwork.

2.03 INCIDENTAL ASPHALT CONSTRUCTION

- A. Incidental asphalt work includes, but is not limited to, the construction of asphaltic concrete sidewalks, driveways, bicycle/pedestrian ramps and other Work indicated in the Contract Documents.
- B. Materials and construction for incidental asphalt surface restoration shall comply with the standards listed in paragraph CODES AND STANDARDS, KCMO PW 2302.

2.04 PAVEMENT

- A. Restoration of pavements shall include, but is not limited to, streets, parking lots, alleys, and other areas subject to traffic and other Work indicated in the Contract Documents.
- B. All materials and construction shall comply with the standards listed in paragraph CODES AND STANDARDS, KCMO PW 2200 and KCMO PW SR-1.
- C. Pavement shall be restored with the type of material existing prior to the Work unless otherwise noted in the Contract Documents.

2.05 PAVEMENT MARKINGS

- A. Materials and construction for incidental asphalt surface restoration shall comply with the standards listed in paragraph CODES AND STANDARDS, KCMO PW 2306.
- B. Paragraph "Method of Measurement" shall not apply.
- C. Paragraph "Basis of Payment" shall not apply.

2.06 AGGREGATE FOR SURFACING

A. Aggregate for surfacing shall meet the requirements of Section 02200-Earthwork, paragraph GRANULAR FILL MATERIAL.

2.07 SEEDING SODDING

A. Seeding shall conform to Section 02930 – Seeding and Section 01015 - Specific Project Requirements.

2.08 SODDING

A. Sodding shall conform to Section 02931 – Sodding and Section 01015 - Specific Project Requirements.

PART 3 - EXECUTION

3.01 GENERAL

A. The Contractor shall restore all permanent type pavements, sidewalks, driveways, curbs, gutters, and surface structures, lawns, landscaped areas, and other land covers that are removed or disturbed as a result of construction operations (unless otherwise requested in writing by the property owner).

3.02 FINAL GRADING

A. Final grading shall conform to Section 02200 – Earthwork, paragraph FINAL GRADING AND PLACEMENT OF TOPSOIL.

- B. Finish grade the area to lines and grades which existed prior to the area being disturbed, with special attention directed to proper surface drainage, and the refilling of settled excavations with earth or fill compacted to the appropriate densities required.
- C. Eroded areas and areas having inadequate drainage, as indicated by ponding of water, within areas impacted by the project work shall be filled.
- D. Ruts, deep tracks, dead furrows, and ridges within areas impacted by the project work shall be eliminated.
- E. The area shall be smoothed by raking and/or dragging.
- F. Before placing topsoil, remove and dispose of excess gravel to the satisfaction of the City. Leave no stones larger than 1 inch on the surface.
- G. Flower and vegetable gardens in existence prior to this project shall have the separately stored topsoil restored unless otherwise requested in writing by the property owner.
- H. Cultivated areas shall be left in tillable condition; compacted areas shall be plowed or cultivated to loosen and aerate the soil.

3.03 AGGREGATE SURFACING

A. Unless otherwise indicated on the Drawings, gravel surfaces shall be restored with a minimum 6 inches of compacted aggregate,

3.04 ESTABLISHMENT OF TURF

A. Sodding

- 1. Sodding shall be conducted in accordance with Section 02931 Sodding.
- 2. Unless otherwise specified in Section 01015 Specific Project Requirements or on the Drawings, all unpaved areas that are established lawns prior to construction that are disturbed by construction shall be sodded (temporary seeding as approved by the City/Design Professional).
- 3. If the Contract Documents do not identify the type of sod to be placed, then the sod type shall be the same as the type removed or damaged as part of the Work, or as directed by the City's representative (unless otherwise requested in writing by the property owner).
- 4. Section 02931 Sodding provides specifications for sod types. (a)

B. Seeding:

1. Seeding shall be conducted in accordance with Section 02930 – Seeding and Section 01015 - Specific Project Requirements.

C. Maintenance:

- 1. The Contractor shall be responsible for maintaining all turfed areas disturbed by construction activities.
- 2. Maintenance Period: The Contractor shall maintain turfed areas until all of the following conditions have been met:
 - (a) The turf, including repairs, has been established as defined herein.
 - (b) The turf meets the requirements of paragraph ACCEPTABLE CONDITIONS to the satisfaction of the City.
 - (c) The minimum establishment period for all new turf, including repairs has passed.
 - (d) The Contractor shall be responsible for maintenance of turfed areas until establishment.
 - (e) If specified in Section 01015 Specific Project Requirements, the Contractor has provided notification in accordance with paragraph NOTIFICATION OF PROPERTY OWNERS.
 - (f) As approved by the City in accordance with paragraph EARLY RELINQUISHMENT OF MAINTENANCE RESPONSIBILITIES.

- 3. All turfed areas shall be kept in a healthy growing condition by watering, weeding, mowing, trimming, edging, repairs, etc.
- 4. Watering and Water Usage:
 - (a) Promptly after seeding or sodding, wet the area thoroughly. Watering shall continue so as to keep all areas moist as needed to promote healthy growth.
 - (b) Water used in this work shall be furnished by the Contractor and shall be suitable for irrigation and free from ingredients harmful to plant life.
 - (c) All watering equipment required for the work shall be furnished by the Contractor.
 - (d) Water may be taken from adjacent fire hydrants or public water lines only through metered and backflow protected hydrant connections permitted and issued by the City.

5. Mowing:

- (a) All turfed areas within the limits of the Site shall be moved with approved moving equipment to a height of 3 inches whenever the average height of vegetation becomes 5 inches.
- (b) Grass clippings shall be bagged with the mowing processes and clippings shall be disposed of off-site.

D. Establishment Period:

- 1. The establishment period for turfed areas shall be no less than 30 calendar days from the time of planting or last time of repair.
- 2. The Contractor may not request the Final Inspection (as specified in Section 00700 General Conditions, Article 14) until all turfed areas have completed the minimum establishment period.

E. Acceptable Conditions:

- 1. Turfed areas will be acceptable when grasses are growing, are in good condition, and no area more than 20 percent of the total areas is bare; of which no single area shall be more than 1-foot square in area. Any bare area larger than this will not be acceptable and shall be re-seeded or re-sodded (as applicable) at no additional cost to the City.
- 2. For sodded areas, the grass shall be sufficiently rooted so that that sod pads cannot be lifted from the sod bed.
- F. Early Relinquishment of Maintenance Responsibilities:
 - 1. The Contractor may request in writing the early acceptance of turfed areas and a return of maintenance responsibilities to the property owner prior to the end of the maintenance period.
 - 2. Limitations on Acceptance of Turf:
 - (a) Acceptance of this request is at the sole discretion of the City.
 - (b) Acceptance of the turf for the purposes of transferring maintenance responsibilities does not constitute acceptance of the Work as a whole, Substantial Completion, Partial Utilization, or a Final Inspection as define in Section 00700 General Conditions and modified in Section 00800 Supplementary Conditions.
 - 3. Before the request is made, the following conditions must be met:
 - (a) The turf, including repairs, has been established.
 - (b) The minimum establishment period has passed for the turf, including repairs.
 - (c) Work has substantially been completed within the area, and no other construction activities are anticipated that will disturb or damage the turf.
 - (d) The Contractor has demobilized all labor and equipment from the area.
 - (e) All construction materials have been removed from the area.
 - 4. The Contractor shall submit a written request to the City indicating the area of the Site for which turf maintenance responsibilities are to be transferred to the property owners.

- 5. The Contractor shall schedule and inspection with the City and /or their representative to determine if the turfed areas are acceptable as specified above.
- 6. If the all turf within the defined area is acceptable, then the City will provide written notification to the Contractor documenting acceptance.
- 7. After acceptance of the request for relinquishment of maintenance, the Contractor shall perform the following:
 - (a) Within 5 working days of acceptance, document the condition of the turfed areas in accordance with Section 01322 Photographic and Video Documentation. Photographic documentation of conditions shall be conducted at no additional cost to the City.
 - (b) Notify all affected property owners in accordance with paragraph NOTIFICATION OF PROPERTY OWNERS.
 - (c) Provide written notification to the City that all affected property owners have been notified of the relinquishment of maintenance responsibilities.
- 8. After all the requirements listed above have been meet, then the City will consider maintenance responsibility of the identified turfed areas to be transferred to the respective property owners.
- G. Notification of Property Owners: In accordance with Section 01581 Public Communications, the Contractor shall notify all affected property owners that the Work on their property has been completed, that turf has been established and that maintenance of the turfed area is now the property owner's responsibility.

3.05 TREES, BUSHES AND PLANTS: PROTECTION AND REPLACEMENT

A. Protection:

- The protection of trees, bushes and plants shall be done in accordance with Section 02949
 Tree Protection, Removal and Replacement.
- B. Transplanting shall be done in accordance with Section 02949:
 - 1. Existing trees, bushes, and hedges which cannot be tied back or trimmed to prevent damage and require removal because of the proposed construction shall be transplanted with a tree spade or replaced.
 - 2. Tree removal shall include the removal of stump and roots as specified in Section 02949.
 - 3. Transplanting shall be at the location directed by the City/Design Professional or as applicable by the Parks and recreation Department.
 - 4. After digging the plants, properly store them until they can be transplanted.
- C. Pruning or Replacement:
 - 1. Pruning or replacement of trees shall be done in accordance with Section 02949 Tree Protection, Removal and Replacement.
 - 2. Replacement plants shall not be delivered until they can be planted.
- D. Plant during the proper seasons. Do not plant in frozen soil or during unfavorable weather conditions. Dig tree pits of such size as to provide ample space for the entire root system, as the tree comes from the nursery, without crowding or bending the roots. The pits shall be 12 inches wider than the ball diameter, have vertical sides, and be six inches deeper than the thickness of the ball. Thoroughly loosen the soil in the bottom of the pit by spading to a depth of six inches. Dig holes immediately before planting. Dispose of soil earth dug from the tree pits off the project site.

3.06 STREET CUT RESTORATION

A. All pavement restoration work in streets shall conform to KCMO PW SR-1 with the following exceptions:

- 1. Pipe bedding material and installation shall conform to Section 02250 Trenching, Pipe Embedment and Backfill.
- 2. Backfill material and installation shall conform to Section 02250 Trenching, Pipe Embedment and Backfill.
- 3. With respect to DETAIL 1 ASPHALT PAVEMENT SURFACE (SR-1, page 1 of 3), the Contractor may pour the Portland cement concrete cap to finish grade. If poured to finish grade, the Contractor shall mill the top of the Portland cement concrete cap a uniform 2 inches ensuring a 2" vertical profile at edge prior to installing the 2" Patch (Type-5-01).

B. Smoothness:

- 1. The finish of the pavement surface shall be substantially free from waves or irregularities and shall be true to the established crown and grade.
- 2. The final surface of pavement will comply with KCMO PW 2211.
- 3. Testing for smoothness shall be conducted as directed by the City/Design Professional.
- 4. Measurements for smoothness shall be pass or fail at the sole discretion of the City or their representative. No pay adjustments will be considered.
- C. Provide a straight joint between the existing and new surface per KCMO PW SR-1. All joints shall be at right angles. Diagonal cutting of pavement is prohibited.
- D. Unless the top 2" will be milled, cure and protect all exposed concrete installed under this contract in accordance with the referenced standard.
- E. Unless additives are used to accelerate curing, concrete shall achieve 70% of maximum strength before allowing traffic or construction equipment on the concrete (as proven by cylinder breaks).

3.07 CONCRETE SIDEWALKS, TRAILS, DRIVEWAY APPROACHES, AND RAMPS

- A. Remove concrete to the nearest joint. Removal of partial squares shall not be allowed.
- B. Saw-cut existing sidewalks at construction joints. Patching existing sidewalk squares damaged during construction activities shall not be allowed.
- C. Construct in accordance with all applicable KCMO Public Works and Parks and Recreation Standards.
- D. Minimum concrete thickness for residential sidewalks, trails, driveway approaches, ADA ramps, etc. shall be in accordance with the applicable KCMO Public Works or Parks and Recreation Standard.
- E. All concrete shall be constructed on a minimum of 4 inches of compacted granular sub-base material.
- F. Where sidewalks are constructed across aggregate driveways, increase the thickness to a minimum of six inches across the width of the driveway.
- G. At locations where sidewalks intersect with streets and sidewalk restoration is required, the Contractor shall construct sidewalk ramps in accordance with KCMO PW 2301.

3.08 CONCRETE CURB AND GUTTER

- A. Curb and Gutter dimensions and cross sections shall conform to existing installations. Construct new curbs and gutter in accordance with KCMO PW C.
- B. Expansion joints with dowels shall be placed where the new curb abuts existing curb and as required by KCMO PW C.

3.09 DRIVEWAY ENTRANCE/APPROACH RESTORATION

A. Driveways shall be restored to a width matching preconstruction conditions, as indicated on the Drawings, or as indicated Section 01015 – Specific Project Requirements.

- B. Subgrades for driveway entrance restoration shall be in accordance with Section 02200 Earthwork, paragraph BACKFILL AND COMPACTION.
- C. The Contractor shall provide full driveway flare/approach replacement if any of the following conditions are met:
 - 1. The Work requires removal of a portion of the driveway which includes the driveway flare/approach.
 - 2. The Contractor damages the driveway flare/approach.
 - 3. As indicated on the Drawings.
 - 4. As specified in Section 01015 Specific Project Requirements.
- D. The Contractor may remove the drive approach and driveway pavement within the right-of-way and/or easements necessary to facilitate the Work.
- E. The limits of restorations beyond disturbed areas shall be as follows:
 - 1. To the Nearest Joint: The Contractor shall restore paved driveway surfaces from the street pavement to the nearest existing driveway joint.
 - (a) The Contractor shall saw cut the full depth of pavement to be removed.
 - (b) In no case shall the joint created by saw cutting be less than 3 feet from an existing joint. Adjust the location of the saw cut accordingly.
- F. Driveway Entrance Replacement Standards: Driveways entrances that abut improved streets shall be reconstructed in accordance with the following standards:
 - 1. Public Works Department Standards:
 - (a) KCMO PW D-1.
 - (b) KCMO PW D-2.
 - (c) Construction shall be in accordance with KCMO PW 2301.
 - 2. Parks and Recreation Department Standards:
 - (a) KCMO PR DC.
 - (b) KCMO PR DR.
 - (c) Construction shall be in accordance with KCMO PW 2301.
 - 3. Asphalt Driveway Entrances Abutting Unimproved Streets: Asphalt driveway entrances that abut unimproved streets shall be reconstructed in accordance with the following standards:
 - (a) KCMO PW D-US.
 - (b) Construction shall be in accordance with KCMO PW 2302.
 - 4. Concrete Driveways abutting Unimproved Street: Concrete driveway entrances that abut unimproved streets shall be reconstructed in accordance with the following standards:
 - (a) KCMO PW D-US, except that the material for construction shall be concrete.
 - (b) Construction shall be in accordance with KCMO PW 2301.
 - (c) The concrete thickness shall be a minimum of 6 inches.
 - (d) Expansion and contraction joints shall conform to the details shown on KCMO PW D-1
 - (e) New joints shall match existing joint patterns (finished the same as existing), but shall be spaced at a maximum distance of 10 feet in both directions (≤ 100 square feet).

3.10 DRIVEWAY PATCHING

- A. Driveway patching will be allowed if any of the following conditions are met:
 - 1. The Work does not require the removal of the driveway flare.
 - 2. The Contractor does not damage the driveway flare/approach.
 - 3. As indicated on the Drawings.
 - 4. As specified in Section 01015 Specific Project Requirements.
 - 5. As requested in writing from the City.

- B. The Contractor may remove and replace a portion of the driveway necessary to facilitate the Work and the existing driveway flare may remain. Pavement shall be removed and replaced in accordance with the following:
 - 1. To the Nearest Joint:
 - (a) The Contractor shall remove and replace damaged driveway surfaces from the joint of the driveway flare/approach to the nearest joint of the driveway.
 - i. If the nearest joint is beyond the right-of-way or easement, the Contractor may saw cut the driveway if permitted by the City/Design Professional. In no case shall the joint created by saw cutting be less than 3 feet from an existing joint.
 - 2. The Contractor shall saw cut the full depth of pavement to be removed.
- C. Subgrades for driveway patching shall be in accordance with Section 02200 Earthwork, paragraph BACKFILL AND COMPACTION.
- D. The Contractor shall replace all paved surfaces damaged or removed for the Work.
- E. Concrete Driveways:
 - 1. Construction shall be in accordance with KCMO PW 2301.
 - 2. The thickness of the concrete shall be the same as the pavement removed or 6 inches; whichever is greater.
- F. Asphalt Driveways:
 - 1. Construction shall be in accordance with KCMO PW 2302.
 - 2. The thickness of the concrete shall be the same as the pavement removed or 6 inches; whichever is greater.

3.11 ASPHALTIC CONCRETE PAVEMENT

- A. Construction of asphaltic concrete pavement shall conform to KCMO PW 2200.
- B. The limits of asphaltic concrete replacement shall be noted on the Drawings.
- C. Applicable details for asphaltic concrete pavement reconstruction shall be as indicated on the Drawings or Section 01015 Specific Project Requirements.

3.12 PORTLAND CEMENT CONCRETE PAVEMENT

- A. Construction of Portland Cement Concrete pavement shall be in accordance with KCMO PW 2200. The limits of asphalt concrete replacement shall be noted on the Drawings.
- B. The limits of Portland Cement Concrete pavement replacement shall be as indicated on the Drawings.
- C. Applicable details for Portland Cement Concrete pavement reconstruction shall be as indicated on the Drawings or Section 01015 Specific Project Requirements.

3.13 SUBSTANTIAL COMPLETION/ACHIEVEMENT OF FULL OPERATION

A. When the Contractor considers the Work ready for its intended use, the Contractor shall notify the City in accordance with Section 00700 – General Conditions, Article 14 – Payments to the Contractor and Completion.

3.14 CLEANUP

A. Cleanup operations shall be conducted in accordance with Section 01566 – Cleanup Operations.

3.15 SAFETY SIGNS, BARRICADES, LIGHTS AND PROJECT SIGNS

A. Maintain adequate safety signs, barricades and lights in accordance with Section 01000 – General Project Requirements, Section 01700 – Traffic Control and Section 01015 – Specific Project Requirements until final restoration is completed.

B. The Contractor shall install and maintain all project signs in accordance with Section 01580 – Project Signs and Section 01015 – Specific Project Requirements for the duration of the Work.

3.16 MAIL BOXES

A. Mail boxes shall be maintained through the duration of the project in accordance with Section 01000 – General Project Requirements, paragraph MAIL BOXES.

END OF SECTION