STORMWATER POLLUTION PREVENTION PLAN

Designed in accordance with the Missouri State Operating Permit

New Longview Townhomes

Permit Tracking #

Owner:

Box Real Estate Development
3152 SW Grandstand Circle
Lee's Summit, MO 64081
913.735.9861

Prepared by:

Olsson
1301 Burlington, Suite 100
North Kansas City, MO 64116
816.361.1177

June 2021

SWPPP Certification (to be signed by permittee):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

olsson

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SECTION 1

Delegation Statements & Contractor Certifications

Delegation Statement(s) for applicable personnel should be kept in this section. Contractor Certification Statements that contain contact information for those responsible for specific activities on the project should also be kept here.

Delegation of Authority

I,_____, hereby designate the person(s) or specifically described position(s) below to be a duly authorized representative(s) for the purpose of overseeing compliance with environmental requirements, including the Missouri State Operating Permit.

Duly Authorized Representative:

Name or Position: _____

Company: _____

Address: _____

Phone: _____

Email: _____

By signing the certification below, I certify that I meet the signing requirements J.5.a of the Missouri State Operating Permit, 40 CFR 122.22 and 10 CSR 20-6.010 for this project.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Permittee Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

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Permittee Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

Contractor/Subcontractor Certification

Project Name: _____

Permit Number: _____

Project Owner: _____

As a contractor/subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review upon request.

Each contractor/subcontractor engaged in activities at the construction site that could impact stormwater should be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP.

This certification is hereby signed in reference to the project named above:

Service Provided: _____

Company Name: _____

Address: _____

_____

Telephone: _____

Representative: _____

Title: _____

Signature: _____

Date: _____

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Service Provided: _____

Company Name: _____

Address: _____

_____

Telephone: _____

Representative: _____

Title: _____

Signature: _____

Date: _____

SECTION 2

Permit Authorization & Missouri State Operating Permit

Permit authorization from the MDNR and a copy of the Missouri State Operating Permit will be kept in this section.

The Application for Land Disturbance Stormwater General Permit was completed through the Missouri Gateway for Environmental Management at https://dnr.mo.gov/mogem/.

SECTION 3

SWPPP Narrative

SWPPP NARRATIVE CONTENTS

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1.0. PROJECT CONTACT INFORMATION

Parties directly related to the compliance of the site are listed below. Any blank contacts were not known at the time of SWPPP creation and should be filled in when contractors are assigned.

Owner

Box Real Estate Development
Russell Pearson
3152 SW Grandstand Circle
Lee's Summit, MO 64081
913.735.9861
rpearson@boxdevco.com

General Contractor

Granite Build
Travis Townsley
913.208.2648
travis@granitebuild.com

SWPPP Preparer

Olsson
Stephen Saylor
1301 Burlington, Suite 100
North Kansas City, MO 64116
816.361.1177
ssaylor@olsson.com

SWPPP Inspections

Best Management Practices (BMP) Installation

BMP Maintenance

Should any of the above personnel change, tables will be updated and noted on the Amendment Log found in Section 7 and additional Contractor Certification Sheets will be added to Section 1 of this SWPPP.

2.0. INTRODUCTION AND DEFINITIONS

This document was created to comply with the Missouri State Operating Permit (MO-RA) in compliance with the Missouri Clean Water Law (Chapter 644 R.S. Mo. as amended) and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress). Relevant local ordinances are incorporated in Section 8 of this SWPPP. Permit language incorporated into this document will be denoted by *italics*.

The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of best management practices (BMPs) in order to prevent sediment and other pollutants in stormwater discharges associated with the land disturbance activities; compliance with the Missouri Water Quality Standards; and compliance with the terms and conditions of the general permit.

2.1. ACRONYMS

AST..... aboveground storage tank
BMP..... best management practice
MDNR..... Missouri Department of Natural Resources
ESA ..... environmental site assessment
ESC ..... erosion and sediment control
MO-RA..... Missouri State Operating Permit
MS4 ..... municipal separate storm sewer system
NRC..... National Response Center
NRCS ..... Natural Resources Conservation Service
REC ..... recognized environmental condition
SPCC..... spill prevention control and countermeasures plan
SVOC ..... semivolatile organic compound
SWPPP..... stormwater pollution prevention plan
TMDL..... total maximum daily load
TOC..... total organic carbon
VOC..... volatile organic compound
WSS ..... Web Soil Survey

2.2. DEFINITIONS

Department
The Missouri Department of Natural Resources

Duly Authorized Representative

The representative authorized by the permittee. The duly authorized representative is responsible for the overall operation of the facility from which the discharge occurs. The authorization is made in writing by the permittee and is submitted to the director.

Permit

Missouri State Operating Permit (MO-RA)

Signatory Requirements

All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified (MDNR 2017).

- Signatory for a corporation: an individual having responsibility for the overall operation of the regulated facility or activity, such as the plant manager, or by an individual having overall responsibility for environmental matters at the facility.
- Signatory for a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- Signatory for a municipal, state, federal, or other public facility: either a principal executive officer or an individual having overall responsibility for environmental matters at the facility.

Documents submitted to the MDNR should be certified by the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3.0. SITE DESCRIPTION

Project Name: New Longview Townhomes

Project Location: 451 SW Longview Blvd, Lee's Summit, MO 64081

Total project area: 7.31 Acres

Area to be disturbed: 6.83 Acres

Anticipated start date: June 2021

Anticipated end date: July 2021

Past use: Vacant residential land

Endangered Species Information: The endangered Indiana Bat and Gray Bat and the threatened Northern Long-eared Bat may be present within the project area. To "not adversely affect" these listed species, trees must not be cut or cleared during the bats' active season of April 1 – October 31. The U.S. Fish and Wildlife Service review can be found in Section 10.

Existing conditions: The existing site is open land with some trees and overgrown vegetation. The site is primarily Greenton Silty Clay Loam and Udarents-Urban Land – Sampsel Complex. Refer to the soils map in SWPPP binder Section 4 for additional information about the location and types of soils. Drainage onsite runs via overland flow eastward to a 42" storm pipe that directs water under SW Kessler Drive to an existing offsite detention basin.

Description of Construction Activity: Mass grading and infrastructure. Once completed, the site will be used to build townhomes.

Table 1. Anticipated Sequence of Construction.

EROSION CONTROL STAGING CHART				
PROJECT STAGE	BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC-01
	A2	SEDIMENT BASIN	C	INSTALL PER APWA DETAIL ESC-11 AND ESC-12
	A3	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC-06
B – INTERIM	B1	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC–06
	B2	SILT FENCE	C	INSTALL PER APWA DETAIL ESC–03
	B3	TEMPORARY DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC–05
ANY AREAS BROUGHT TO FINAL GRADE SHALL RECIEVE TREATMENT FOR FINAL STABILIZATION (STAGE C BELOW). ALL OTHER AREAS SHALL BE TEMPORARILY STABILIZED. SEE PLAN SETS FOR PUBLIC ROADWAY PLANS & SITE DEVELOPMENT PLANS FOR ADDITIONAL STAGES.				
C – DISTURBED AREA STABILIZATION	C1	SEED, SOD AND STABILIZE ALL DISTURBED AREAS AND INSTALL ALL PLANTINGS PER LANDSCAPE PLAN		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2400. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.
	C2	DETENTION BASIN		CONVERT SEDIMENT BASIN TO DETENTION BASIN AND REMOVE SKIMMER

Location of nearby or on-site surface waters: There are no on-site or nearby surface waters.

Table 2. Outfalls.

#	Type	Location	Drainage Area
1	Existing storm pipe system	38°54’36.80” N 94°26’45.53” W	6.79 Acres

Receiving Waters: The receiving water for the project is Cedar Creek.

4.0. EROSION AND SEDIMENT CONTROLS

Temporary BMPs used during active construction of the project will be listed below. Specific erosion and sediment control requirements found in the permit are also located here and should be addressed in the erosion and sediment control (ESC) plan sheets located in Section 5 of this SWPPP.

Table 3. Anticipated BMPs.

BMP	
Site Preparation	
SWPPP Sign	☒
Construction exit	☐
Wash rack	☐
Temporary stream crossing	☐
Surface roughening	☐
Tree protection	☐
Erosion Control	
Dust control	☐
Mulch	☐
Erosion control blankets	☐
Temporary seeding	☐
Permanent seeding	☐
Hydroseeding	☐
Sodding	☐
Slope protection	☐

BMP	
Sediment Control	
Silt fence	☒
Inlet protection	☒
Diversion berm	☒
Filter berm	☐
Outlet protection	☐
Check dam	☐
Sediment trap	☐
Sediment basin	☒
Pollution Prevention	
Stockpile	☐
Concrete washout	☐
Solid waste management	☐
Sanitary waste management	☐
Material staging areas	☐
	☐

Specification and detail sheets can be found in Section 6 of this SWPPP.

During construction, if additional BMPs not listed in Table 3 are required, the SWPPP will be amended. The BMP specification and detail sheets of the new BMPs should be added to Section 6 of this SWPPP, the locations noted on the BMP Tracking Map located in Section 5, and the change noted in the Log of Amendments located in Section 7 of this SWPPP.

4.1. EROSION AND SEDIMENT CONTROL DESIGN REQUIREMENTS

ESC plans for the project can be found in Section 5 of this SWPPP. Excerpts of these plans will be used as the basis of the BMP Tracking Map located in Section 5 of this SWPPP.

Ensure the design, installation and maintenance of effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

a. *Control stormwater volume and velocity within the site to minimize soil erosion;*
b. *Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;*
c. *Minimize the amount of soil exposed during construction activity;*
d. *Minimize the disturbance of steep slopes;*
e. *Minimize sediment discharges from the site. Design, install and maintain erosion and sediment controls that address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle size expected to be present on the site;*
f. *Provide and maintain natural buffers around surface waters as detailed in 8.f* (of the permit)*, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration and filtering, unless infeasible; and*
g. *Minimize soil compaction and, unless infeasible, preserve topsoil.*
h. *Capture or treat a 2-year, 24-hour storm event. A 2-year, 24-hour storm event shall be determined for the project location using the National Oceanic and Atmospheric Administration's National Weather Service Atlas 14 which can be located at http://hdsc.nws.noaagov/hdsc/pfds/* (MDNR 2017).

4.2. TREE AND VEGETATION PRESERVATION

Areas where existing trees and vegetation are preserved on-site can be found on the ESC plan sheets located in Section 5 of this SWPPP.

4.3. NATURAL BUFFERS

When applicable, natural buffers will be identified on the ESC plans located in Section 5 of this SWPPP.

For surface waters of the state, defined as "all waters within the jurisdiction of this state, including all rivers, streams, lakes and other bodies of surface and subsurface water lying within or forming a part of the boundaries of the state which are not entirely confined and located completely upon lands owned, leased or otherwise controlled by a single person or by two or more persons jointly or as tenants in common, located on or adjacent to the site, the permittee must:

a. *Provide and maintain a 50-foot undisturbed natural buffer;*

b. *Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or*
c. *If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.*
d. *Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:*
    a. *The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of the water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or*
    b. *The edge of the stream or river bank, bluff, or cliff, whichever is applicable* (MDNR 2017).

4.4. STABILIZATION REQUIREMENTS

The permit requires specific stabilization schedules depending on activity level and slope characteristics.

Table 4. Stabilization Requirements.

Situation	Stabilization Requirement
Soil-disturbing activities that have temporarily ceased on any portion of the site and will not resume for more than 14 calendar days.	Construct BMPs to establish interim stabilization; stabilization must be initiated immediately and completed within 14 calendar days. *
Soil-disturbing activities that have permanently ceased.	Final stabilization of disturbed areas must be initiated immediately and completed within 14 calendar days. *
Slopes with a greater than 3:1 ratio or slopes greater than 3% and greater than 150 feet in length.	Establish interim stabilization within 7 days of ceasing operations.

**Allowances to the 14-day completion period for temporary and final stabilization may be made because of weather and equipment malfunctions. The use of the allowances shall be documented in the SWPPP* (MDNR 2017) and can be found in Section 5 of this SWPPP.

5.0. STORMWATER MANAGEMENT CONTROLS

When applicable, permanent stormwater management BMPs will be listed and described here. Design specifications and details can be found in Section 6 of this SWPPP if applicable. These BMPs will remain in place to provide for stormwater management after construction has completed and the permit terminated.

Table 5. Post Construction Stormwater Management BMPs.

N/A

6.0. POLLUTION PREVENTION AND SPILL REPORTING

Good housekeeping practices shall be maintained at all times to keep waste from entering waters of the state. Below are lists of prohibited discharges, authorized non-stormwater discharges, and potential pollutants that will likely be on-site during construction. Suggested BMPs to help resolve potential discharges from non-stormwater discharges as well as potential pollutants are discussed.

6.1. PROHIBITED DISCHARGES

- *Any hazardous material, oil, lubricant, solid waste or other non-naturally occurring substance from the site, including fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;*
- *Soaps or solvents used in vehicle and equipment washing;*
- *Hazardous substances or petroleum products from an on-site spill or handling and disposal practices;*
- *Wash and/or rinse waters from concrete mixing equipment including ready mix concrete trucks, unless managed by an appropriate control. Any such pollutants must be adequately treated and addressed in the SWPPP, and cannot be discharged to waters of the state;*
- *Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;*
- *Domestic wastewaters, including gray waters; or*
- *Industrial stormwater runoff* (MDNR 2017).

6.2. AUTHORIZED NON-STORMWATER DISCHARGES

The below signified discharges are anticipated to occur on-site.

☒ *De-watering activities if there are no contaminants other than sediment present in discharge, and the discharge is treated as specified in Section C.8.m of the permit*
☒ *Flushing water hydrants and potable water lines*
☒ *Water only (i.e., without detergents and additives) rinsing of streets and buildings*
☒ *Site watering to establish vegetation*

Potential BMPs used for authorized non-stormwater discharges:

<u>Dewatering activities if there are no contaminants other than sediment present in discharge, and the discharge is treated as specified in Section C.8.m of the permit</u>
Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Estimations of the volume of water discharged from these dewatering activities can be recorded in Section 5 of this SWPPP.

Dewatering of sediment-laden water should be discharged to a temporary or permanent sediment basin when possible, so the sediment may be allowed to settle out of suspension. If basins will be used, the existing water level should be inspected and drawn down if necessary.

Dewatering bags may also be used to filter sediment out of the water. They should be placed on a level surface away from slopes to prevent scouring, and water should ideally flow to a vegetated area toward perimeter controls. Premanufactured dewatering bags should be installed and maintained per manufacturer's recommendations.

Flushing water hydrants and potable water lines
Waters from hydrants and waterline flushing can be erosive and can lead to perimeter controls being overwhelmed. These waters should ideally be directed to clean, paved streets where water may enter the storm sewer system. On projects where this is not possible, diffusers should be used to prevent erosive water velocities, and flush water should be directed to relatively flat, vegetated portions of the project or to temporary or permanent basins.

Water only (i.e., without detergents and additives) rinsing of streets and buildings
Streets should be inspected to confirm sediment and spills have been removed before they are rinsed with water. Inlet protections should remain in place, so water may be filtered before leaving the site.

Stabilization typically occurs before buildings are washed down. Washwater should be directed to stabilized areas or perimeter controls. Water that escapes through paved surfaces should be treated by inlet protections before leaving the site.

Site watering to establish vegetation
Efforts should be taken to time watering activities that are intended to help establish vegetation so watering does not occur prior to or during precipitation. Areas should be watered only in amounts necessary for vegetation to establish or thrive. Irrigated areas should be monitored for overwatering and, if identified, amounts and timing of watering should be adjusted.

6.3. POTENTIAL POLLUTANTS

Potential pollutant sources that are anticipated to be on-site during the project can be found in the table below.

Table 6. Anticipated Potential Pollutants.
The below listed suggested BMPs are meant as initial examples and should be adjusted as site conditions necessitate different BMPs. The table should be amended should additional pollutants and BMPs be utilized onsite that were not originally anticipated.

Material/Activity	Potential Pollutants	Suggested BMPs
Concrete Curing Substances	Sediment, metals, hydrocarbons	Provide secondary containment in preparation and cleanup areas.

		Leftover curing substances should to be removed from the site or disposed of in a designated washout bin or pit designed to contain curing substances. Do not use materials during or directly prior to an anticipated rain event, and ensure excess materials are stored in a covered area to minimize contact with stormwater. Curing compounds should not be washed into a gutter, onto the ground, or into a storm drain inlet.
Concrete Washwater and Masonry Washwater	pH, heavy metals, silica	Concrete washwater will be controlled /contained at a designated location on-site such as a leak-proof container or settling basin of adequate size. Refer to Concrete Washout Specification located in Section 6 of this SWPPP for proper design criteria and use of concrete washout area. The concrete washout area should be cleaned out when it has reached 75% capacity, and dried concrete material should be disposed of in accordance with state and local regulations.
Detergents	pH, chlorine, surfactant	Use of detergents on-site should be discouraged. Washing of vehicles or equipment that requires the use of detergents should occur off-site.
Drywall and Joint Compound	Vinyl acetate, acetaldehyde, calcium sulfate dehydrate, formaldehyde, silica	Drywall and joint compound will be used on the interior of structures. Ideally these materials should be stored inside the structure out of contact of stormwater. If storage inside the structure is not practical, the materials should be placed in a storage container, contractor vehicle, or trailer or otherwise covered to minimize contact with stormwater. Waste products can be disposed of with construction debris as soon as possible and should not be allowed to accumulate on lots.
Fertilizers	Nutrients	Fertilizers can be kept on-site in amounts necessary for immediate use. In the event fertilizers must remain on-site longer, they should be stored in a covered area to minimize contact with precipitation. Refer to the manufacturer's recommendations for application and disposal. Do not over apply or apply before an anticipated runoff-producing rain event.
Form Release Oil	Petroleum hydrocarbons	Do not remove the original product label from container. Store containers in a covered area or in contractor vehicles to minimize contact with stormwater. Follow the manufacturer's recommended usage instructions.

		Do not use before or during any precipitation event. Use all of the product before disposing of the container and only place in a waste receptacle designated to receive this type of waste.
Fuels and Oils	Petroleum hydrocarbons and distillates	If aboveground storage tanks (ASTs) are required, locations will be tracked on the SWPPP map. A separate spill prevention containment and countermeasure (SPCC) plan will be developed should one or more of the following be present on-site: • A single AST for oil with 660 gallons or more capacity • Two or more ASTs with an aggregate of 1,320 gallons or more capacity (include storage vessels stored above ground with a capacity of 55 gallons or more with the aggregate total capacity) • Belowground oil storage vessels of 42,000 gallons or more Smaller fuel containers and gas-powered equipment should be kept in secondary containment vessels to prevent spills or leaks during fueling and operation. Small gas cans can be kept in the back of trucks when not in use. Drip pans should be used for parked vehicles where leaks have been identified. Soil stained with fuel or other petroleum products should be removed and disposed of in compliance with federal, state, and local requirements.
Grease / Lubricants	Petroleum hydrocarbons	If grease is to be stored on-site, it should be stored in a covered location to minimize contact with stormwater. The application of lubricants should be conducted off-site or in an area with sufficient secondary containment measures to contain any leaks or spills. Lubricants should not be applied in rain or on exposed areas of machinery when precipitation is expected.
Glue / Adhesives	Organic aromatic compounds, semivolatile organic compounds (SVOC)	Glue and adhesives may be used on-site for construction in interior work. Adhesives should be stored in covered areas and out of contact of precipitation. Materials will be used and disposed of in accordance with manufacturers recommendations. Exterior adhesives should not be applied during or immediately before anticipated precipitation events.
Landscape Materials	Nutrients, sediment, pH	Landscape materials include—but are not limited to—items such as topsoil, compost, mulch, polymers, gypsum, and lime.

		If the materials are to be stored on-site they should be stored in a covered area or covered with plastic sheeting, tarps, or similar products to minimize contact with stormwater. Soil amendments should not be used before anticipated runoff producing rain events.
Material Storage	Solid waste, hydrocarbons, nutrients, sediment, hazardous materials	As necessary and as space on the project allows, material storage areas should be dedicated on-site. The number of access points to the material storage area should be limited, and materials should be stored away from drainage courses and low areas. Hazardous materials should be stored in containers or structures or otherwise covered to minimize contact with stormwater. Secondary containment should be provided for the area not only to contain spills but also to limit multiple access points.
Paint	pH, ethylene glycol, titanium oxide, volatile organic compounds (VOC)	Paint washwater should be properly contained on-site in a designated area and handled similarly to concrete washwater. Used materials (i.e., soiled brushes, rollers, sprayers) and dried latex paint should be disposed of in appropriate waste receptacles, preferably off-site. Unused quantities of paint should be removed from site by trades and not disposed of on-site. Any quantities stored on-site should be stored in covered areas to minimize contact with stormwater.
Pesticides, Herbicides	Organophosphates, carbamates, triazines, chloroacetanilides, salts, heavy metals	Pesticides and herbicides should be used and disposed of per manufacturer's recommendations. Avoid overapplying products and avoid applying products before anticipated runoff-producing storm events. Storage of pesticides and herbicides on-site should be discouraged. Should storage on-site be required, items should be stored in covered areas to minimize contact with precipitation and stormwater. Spilled material should be promptly cleaned up per manufacturer's recommendations.
Refrigerants	Various -fluoroethanes and -fluoromethanes	Refrigerants will be used in heating, ventilation, and air-conditioning (HVAC) systems in built structures on-site. Refrigerants should not be stored on-site other than the volume needed for the HVAC systems. Refrigerants will be handled and disposed of by properly trained technicians.
Sanitary Waste	Bacteria, viruses, parasites	Sanitary stations should be located where accidental discharge cannot flow to storm drains, gutters, surface waters, or conveyance channels.

		Locate stations on a level, permeable surface, away from drainage courses and low areas. These stations should not be located on streets, sidewalks, or on top of inlets. Stations will be inspected and maintained by a qualified person at frequent and regular intervals to assure cleanliness and proper operation.
Sediment / Total Suspended Solids	Turbidity, nutrients	Surface water impairments caused by sediment and total suspended solids will have a higher risk of occurring in areas where soils have been disturbed for construction activities. Temporary controls are described in this SWPPP to control and contain this potential pollutant during land-disturbing activities of the project. Vegetation (temporary or permanent stabilization) is a very efficient BMP for controlling sediment and should be used whenever possible.
Solid Waste	Floatable and blowable trash and debris	Solid waste created from construction activities (including but not limited to scrap building material, product/material shipping waste, food containers, and cups) should be properly contained on-site and removed frequently from the site for disposal. Dumpsters should to be emptied at regular intervals and as needed during times of high activity on the site. Efforts should be taken to minimize exposure of solids wastes generated on the site to stormwater.
Solvents	VOC, SVOC	If solvents are stored on-site, they should be stored in a covered and secured area to prevent spills and minimize contact with stormwater. The materials will be used and disposed of per manufacturer's recommendations and federal, state, and local regulations.
Stains, Stucco, and Associated Materials	Ethylene glycol, SVOC, VOC, silica, pH	Secondary containment should be provided in mixing and cleanup areas. Leftover materials should be removed from the site or disposed of in an area designated to receive this type of waste. Do not use materials during a precipitation event, and ensure all excess materials are stored in a covered area to minimize contact with stormwater. Materials should not be washed into a gutter, on the ground, or into a storm drain inlet. If washing on-site, consider using a designated containment bin or pit for washwater.
Vehicle Washing, Wheel Washwater	Sediment, petroleum hydrocarbons, heavy metals	If vehicle washing and/or wheel washing is to occur on-site, it should be done in designated areas where washwater can collect in a basin or alternative control. Use of detergents should be discouraged.

Washing on paved surfaces should be discouraged unless water can be sufficiently treated before leaving the site.

6.4. NONREPORTABLE SPILL PROTOCOL

Most spills can be cleaned up following manufacturer's recommendations. Absorbent materials, sealable containers, plastic bags, and shovels/brooms are suggested as minimum spill response items that should be available at this location.

- Check for hazards (flammable material, noxious fumes). If flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present, leave the area and call 911.
- Make sure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any person.
- Stop the spill source.
- Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers.
- If possible, stop the spill from entering drains (use absorbent or other material as necessary).
- Stop spill from spreading (use absorbent or other material).
- If spilled material has entered a storm sewer, contact the locality at the below number.
- Clean up spilled material according to manufacturer's specifications. For liquid spills, use absorbent material and do not flush the contaminated area with water.
- Properly dispose of cleaning materials and used absorbent material according to manufacturer specifications.

6.5. REPORTABLE SPILLS

Requirements for reporting spills of hazardous materials and typical site pollutants and spill report documentations can be found in Section 9 of this SWPPP.

Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the Stormwater Pollution Prevention Plan (SWPPP) and made available to the department upon request. The department may also require the submittal of a written or electronic report detailing measures taken to clean up the spill within five (5) days of the spill. Such a report must include the type of material spilled, volume, date of spill, date clean-up was completed, clean-up method, and final disposal method. If the spill occurs outside normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. Leaving a message on a department staff member voice-mail does not satisfy this reporting requirement (MDNR 2017).

Table 7. Spill Reporting Contact

Name/Position	Contact Number
311 Action Center	311 or 816-513-1313

Report to:	Contact Number
Kansas City Regional Office 500 NE Colbern Road Lee's Summit, MO 64086-4710	816.251.0700
MDNR 24-Hour Spill Response	573.634.2436
National Response Center (NRC)	800.424.8802

7.0. SWPPP IMPLEMENTATION

7.1. PUBLIC NOTIFICATION

The locations of the site posting will be noted on the site BMP Tracking Map located in Section 5 of this SWPPP. The location will be updated should the posting move.

The permittee shall post a copy of the public notification sign described by the Department at the main entrance to the site. The public notification sign must be visible from the public road that provides access to the site's main entrance. An alternate location is acceptable provided the public can see it and it is noted in the SWPPP. The public notification sign must remain posted at the site until the permit has been terminated (MDNR 2017).

7.2. INSPECTIONS

Site inspections should be conducted by qualified personnel at the frequency indicated below. Site inspection reports can be stored in Section 12 of this SWPPP unless otherwise noted.

The permittee (or a representative of the permittee) shall conduct regularly scheduled inspections. These inspections shall be conducted by a qualified person, one who is responsible for environmental matters at the site, or a person trained by and directly supervised by the person responsible for environmental matters at the site. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. All stormwater outfalls shall be inspected for evidence of erosion or sediment deposition. When practicable the receiving stream shall also be inspected for 50 feet downstream of the outfall. Any structural or maintenance problems shall be noted in an inspection report and corrected as soon as possible but no more than seven calendar days after the inspection. All BMPs must be inspected in accordance to one of the two schedules listed below, and any changes to the frequency of inspections, including switching between the options listed below, must be documented in the SWPPP:

☐ *At least once every seven calendar days and within 48 hours after any storm event equal to or greater than a 2-year, 24-hour storm has ceased during a normal work day and within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday;*

or

☐ *Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches of precipitation or greater, or the occurrence of runoff from snowmelt. To determine a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on site, or obtain the storm event information from a weather station for your location.*

a. *Inspections are only required during the project's normal working hours.*
b. *You must conduct an inspection within 24 hours once a storm event has produced 0.25 inches within a 24 hour period, even if the storm event is still continuing.*

c. *If you have elected to inspect every 14 calendar days and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm* (MDNR 2017).

7.3. CORRECTIVE ACTIONS

Structural or maintenance problems with BMPs used in this project and noted as a result of an inspection shall be corrected as soon as possible but no more than seven calendar days after the inspection.

7.4. MODIFICATION AND AMENDMENTS

Modifications and amendments to the SWPPP can be tracked in Section 7 of this SWPPP. Below are minimum guidelines for when the SWPPP should be updated.

The permittee shall amend the SWPPP at a minimum whenever the:

a. *Design, operation, or maintenance of BMPs is changed;*
b. *Design of the construction project is changed that could significantly affect the quality of the stormwater discharges;*
c. *Permittee's inspections indicate deficiencies in the SWPPP or any BMP;*
d. *Department notifies the permittee in writing of deficiencies in the SWPPP;*
e. *SWPPP is determined to be ineffective in minimizing or controlling erosion and sedimentation (e.g., there is visual evidence of excessive site erosion or excessive sediment deposits in streams or lakes); and/or*
f. *Department determines violations of water quality standards may occur or have occurred* (MDNR 2017).

7.5. TRANSFER OF OWNERSHIP

As necessary, permit transfers or records of sale should be placed in Section 2 of this SWPPP.

If the permittee sells any portion of the permitted site to a developer for commercial, industrial, or residential use, this land remains a part of the common sale and the new owner must obtain a permit prior to conducting any land disturbance activity. Therefore, the original permittee must amend the SWPPP to show that the property has been sold and therefore no longer under the original permit coverage.

If the entire tract is sold to a single entity, then this permit shall be terminated when the new owner obtains a new land disturbance permit for the site (MDNR 2017).

7.6. TERMINATION OF PERMIT

When the project is completed and has reached final stabilization, a copy of the notice of termination and confirmation from the MDNR should be placed in Section 14 of this SWPPP.

This permit may be terminated when the project is stabilized. The project is considered to be stabilized when perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetation cover shall be at least 70% over 100% of the site. In order to terminate the permit, the permittee shall notify the Department by submitting Form H Request for Termination of a General Permit (MDNR 2017).

7.7. RECORDS

When the project is complete, and the notice of termination has been accepted by the MDNR, records should be removed from the site and retained.

The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis and all site inspection records required by this general permit. The records shall be accessible during normal business hours. The records shall be retained for a period of at least three years from the date of the Letter of Termination.

The permittee shall provide a copy of the SWPPP to the Department, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties.

The permittee shall provide a copy of the SWPPP to those who are responsible for installation, operation, or maintenance of any BMP. The permittee, their representative, and/or the contractor(s) responsible for installation, operation and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site (MDNR 2017).

8.0. REFERENCES

California Stormwater Quality Association. (November 2009). *Stormwater Best Management Practice Handbook Portal: Construction*. Retrieved from http://www.buenapark.com/home/showdocument?id=2557.

Missouri Department of Natural Resources. (February 2017). *Missouri State Operating Permit*. Retrieved from https://dnr.mo.gov/env/wpp/permits/issued/docs/RA00000.pdf.

Missouri Department of Natural Resources, ABC's of BMP's LLC and Shockey Consulting Services. (January 2011). *Protecting Water Quality: A field guide to erosion, sediment and stormwater best management practices for development sites in Missouri and Kansas*. Retrieved from https://dnr.mo.gov/env/wpp/wpcp-guide/docs/wpcp-guide.pdf.

United States Environmental Protection Agency. (May 2007). *Developing Your Stormwater Pollution Prevention Plan, A Guide for Construction Sites*. Retrieved from https://www.epa.gov/sites/production/files/2015-10/documents/sw_swppp_guide.pdf.

Virginia Department of Environmental Quality. (July 2014). *Single Family Residence Common Plan of Development or Sale Stormwater Pollution Prevention Plan Template*. Retrieved from http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx.

SECTION 4

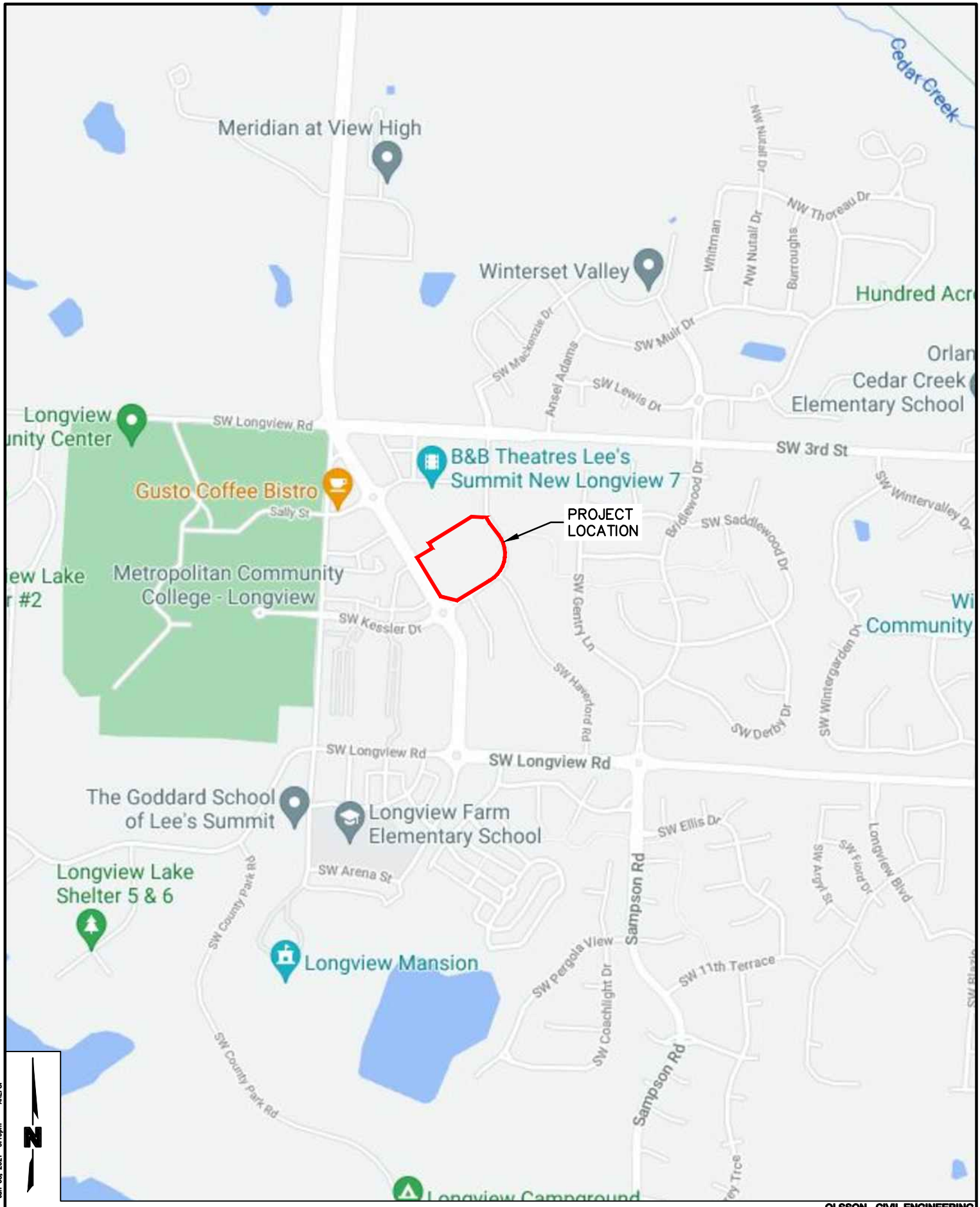
Location/Topographical Map(s), FIRM Maps & Soils Maps

This section contains:

-Required Location, Vicinity and Topographical Maps (as needed)

-FIRM Maps

-Soils Maps if needed



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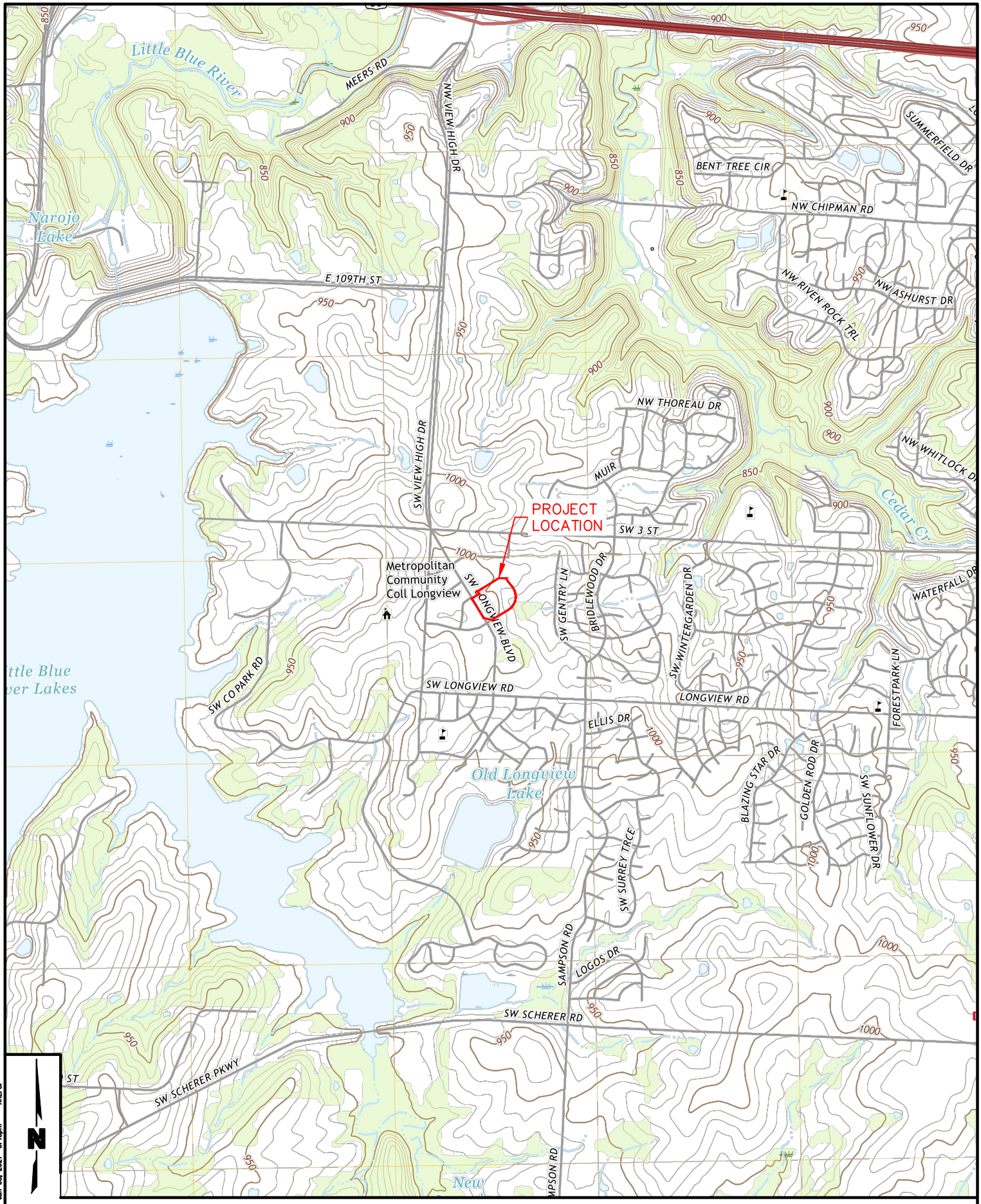
OLSSON - CIVIL ENGINEERING
MISSOURI CERTIFICATE OF AUTHORITY # 001592

PROJECT NO: 021-02987	NEW LONGVIEW LEE'S SUMMIT, MO SITE PLAN	olsson	EXHIBIT
DRAWN BY: SMS		1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 FAX 816.361.1888	1
DATE: 6/8/2021			



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OLSSON - CIVIL ENGINEERING
MISSOURI CERTIFICATE OF AUTHORITY # 001592

PROJECT NO: 021-02987	NEW LONGVIEW LEE'S SUMMIT, MO USGS MAP	olsson	EXHIBIT
DRAWN BY: SMS		1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 FAX 816.361.1888	2
DATE: 6/8/2021			

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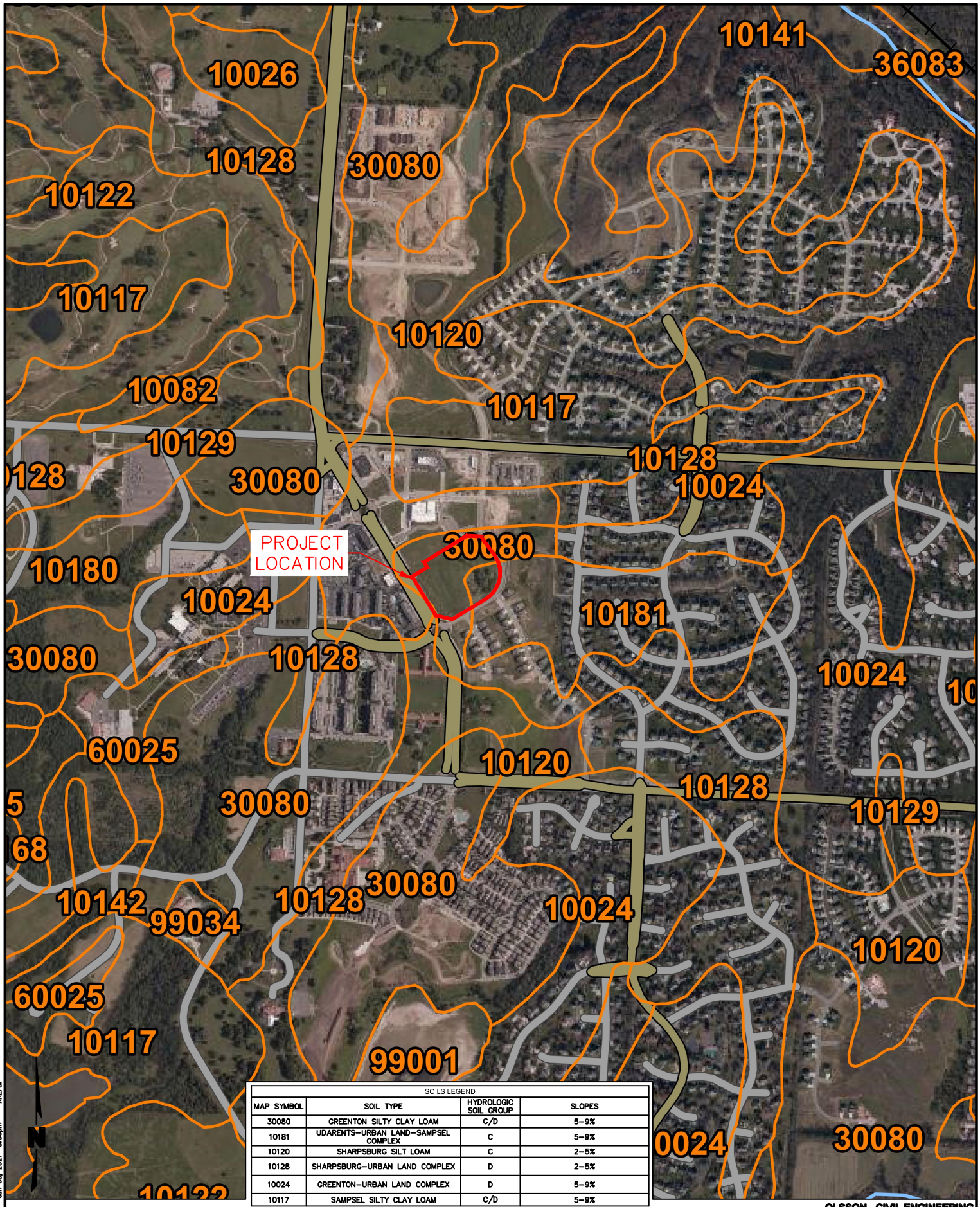
SCALE: 1" = 1000'

OLSSON - CIVIL ENGINEERING
MISSOURI CERTIFICATE OF AUTHORITY # 001592

PROJECT NO: 021-02987 DRAWN BY: SMS DATE: 6/8/2021	NEW LONGVIEW LEE'S SUMMIT, MO AERIAL MAP	olsson	1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 FAX 816.361.1888	EXHIBIT 3



SOILS LEGEND			
MAP SYMBOL	SOIL TYPE	HYDROLOGIC SOIL GROUP	SLOPES
30080	GREENTON SILTY CLAY LOAM	C/D	5–9%
10181	UDARENTS–URBAN LAND–SAMPSEL COMPLEX	C	5–9%
10120	SHARPSBURG SILT LOAM	C	2–5%
10128	SHARPSBURG–URBAN LAND COMPLEX	D	2–5%
10024	GREENTON–URBAN LAND COMPLEX	D	5–9%
10117	SAMPSEL SILTY CLAY LOAM	C/D	5–9%

SCALE: 1" = 1000'

OLSSON - CIVIL ENGINEERING
MISSOURI CERTIFICATE OF AUTHORITY # 001592

PROJECT NO: 021-02987	NEW LONGVIEW LEE'S SUMMIT, MO SOILS MAP	olsson	1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 FAX 816.361.1888	EXHIBIT
DRAWN BY: SMS				4
DATE: 6/8/2021				

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DATE: Jun 08, 2021 3:36pm XREFS:

National Flood Hazard Layer FIRMette

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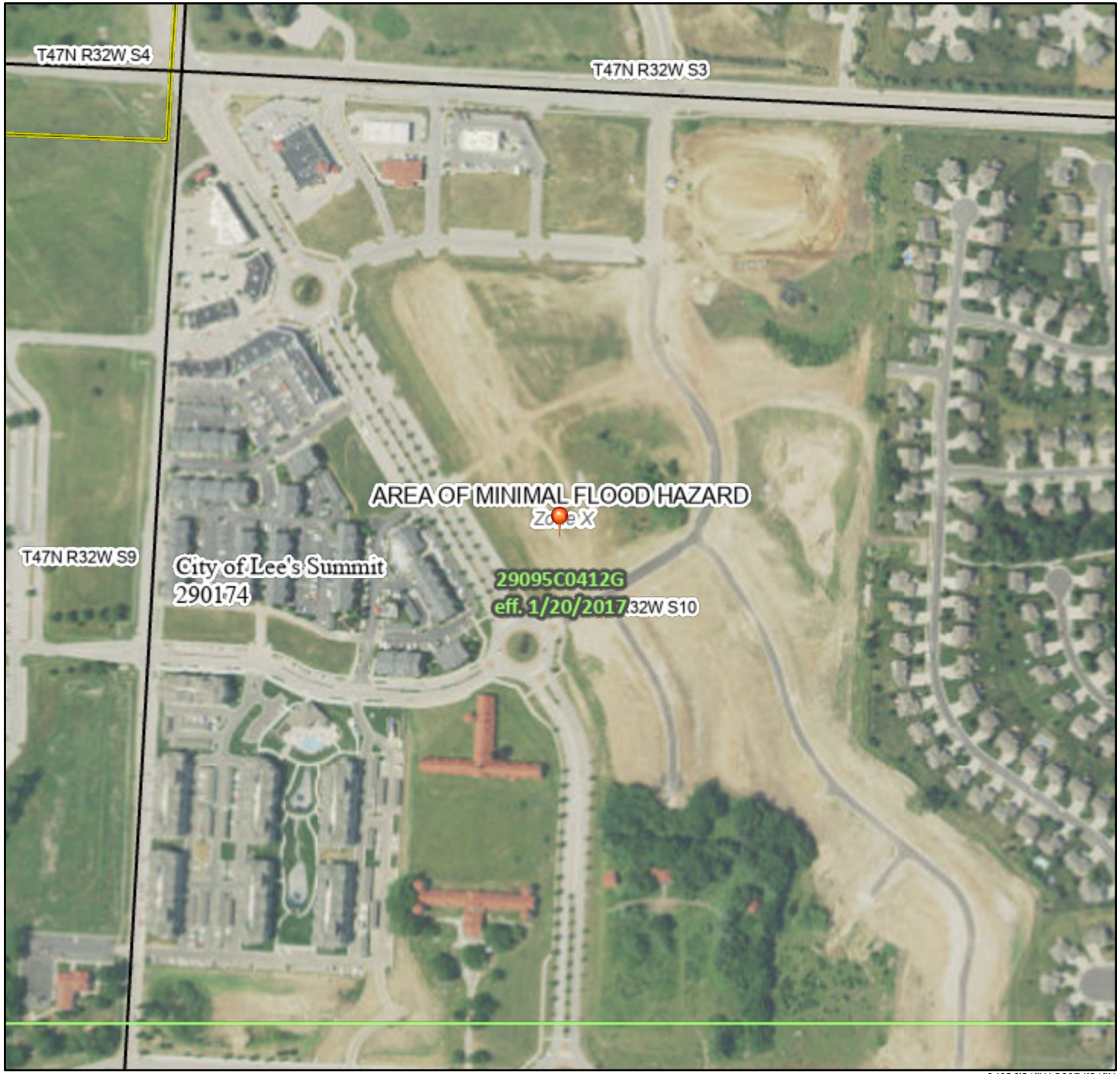


94°26'31"W 38°54'21"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/8/2021 at 3:03 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

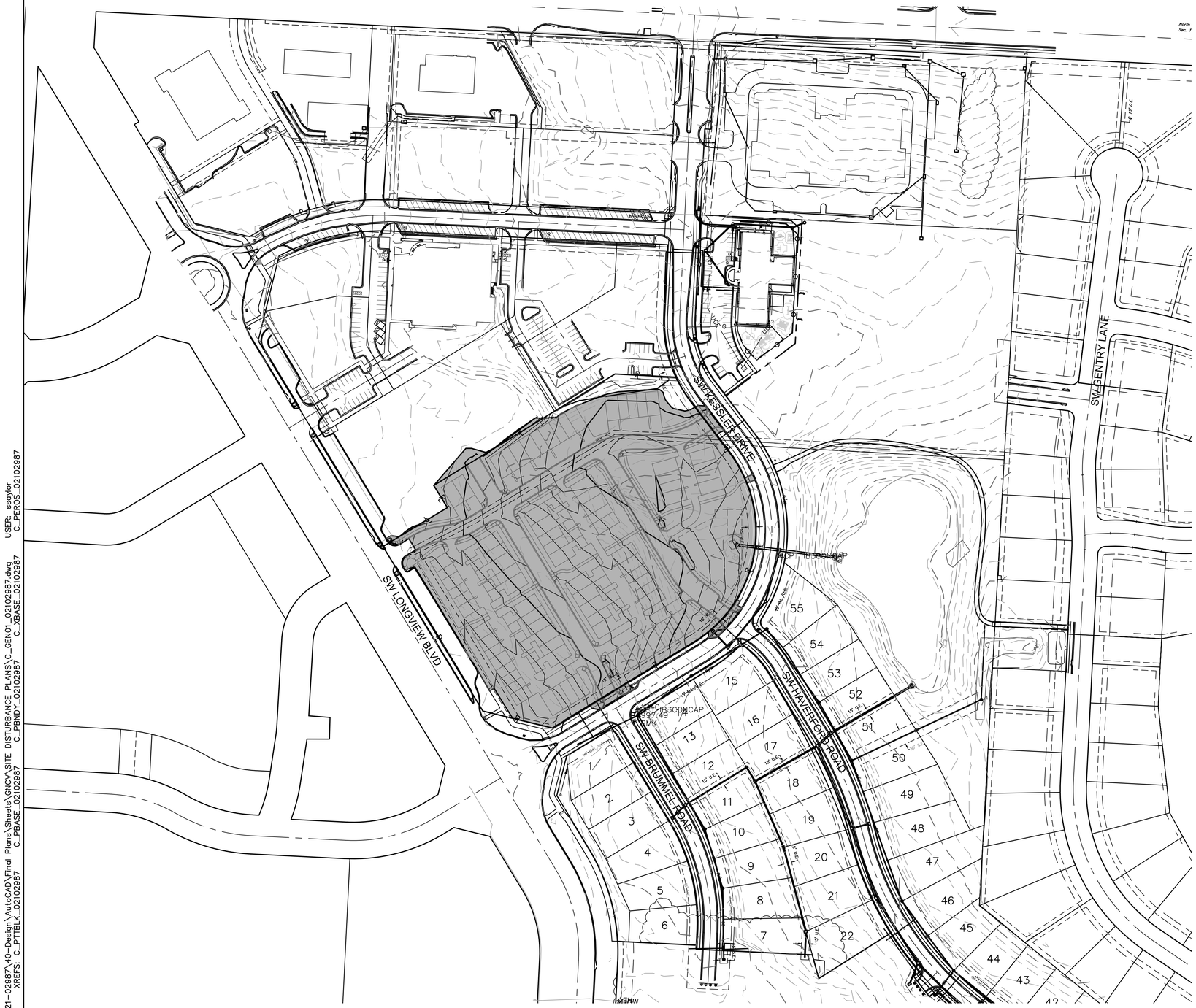
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

SECTION 5

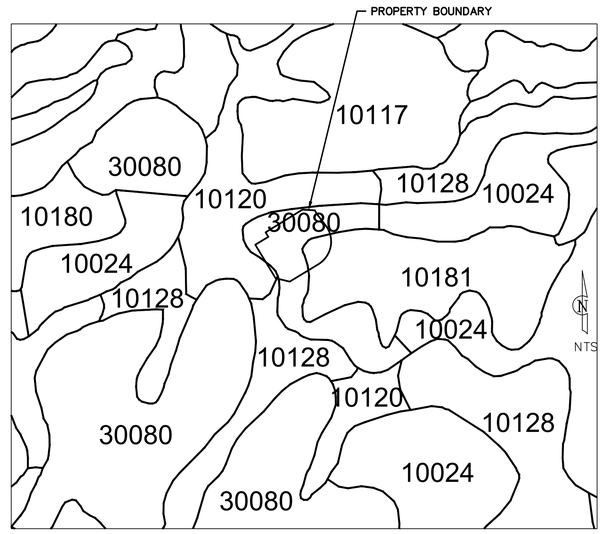
BMP Tracking Map & Land Disturbance Tracking Log

This section contains:

- -Erosion and Sediment Control Plan sheet excerpts
- -Post Construction Stormwater Management Plan sheets if applicable
- -BMP Tracking Map (Working SWPPP Map)
  - -Record of Land Disturbance, Stabilization and BMP installation and removal
  - -Record of Dewatering Activities (e.g. dates and estimated volume of water discharged)



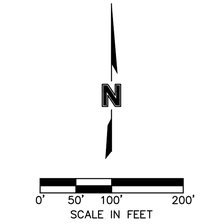
DISTURBED AREA & PRESERVED VEGETATION



N.T.S.

Soil Classification from Soil Maps published in the Soil Surveys of Jackson County, Missouri, categorize soil in this watershed as:

Hydrologic Soil Group – C/D Greenton Silty Clay Loam	Symbol – 30080 5 to 9% Slopes
Hydrologic Soil Group – C Udarents–Urban Land– Sampsel Complex	Symbol – 10181 5 to 9% Slopes
Hydrologic Soil Group – C Sharpsburg Silt Loam	Symbol – 10120 2 to 5% Slopes
Hydrologic Soil Group – D Sharpsburg–Urban Land Complex	Symbol – 10128 2 to 5% Slopes
Hydrologic Soil Group – D Greenton–Urban Land Complex	Symbol – 10024 5 to 9% Slopes
Hydrologic Soil Group – C/D Sampsel Silty Clay Loam	Symbol – 10117 5 to 9% Slopes



olsson
1535 RALEIGH STREET, SUITE 400
DENVER, CO 80204
TEL 303.237.2072
www.olsson.com

NOT FOR CONSTRUCTION

REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

GENERAL LAYOUT
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_GEN01_02102987
date:	06.16.2021

SHEET
C502

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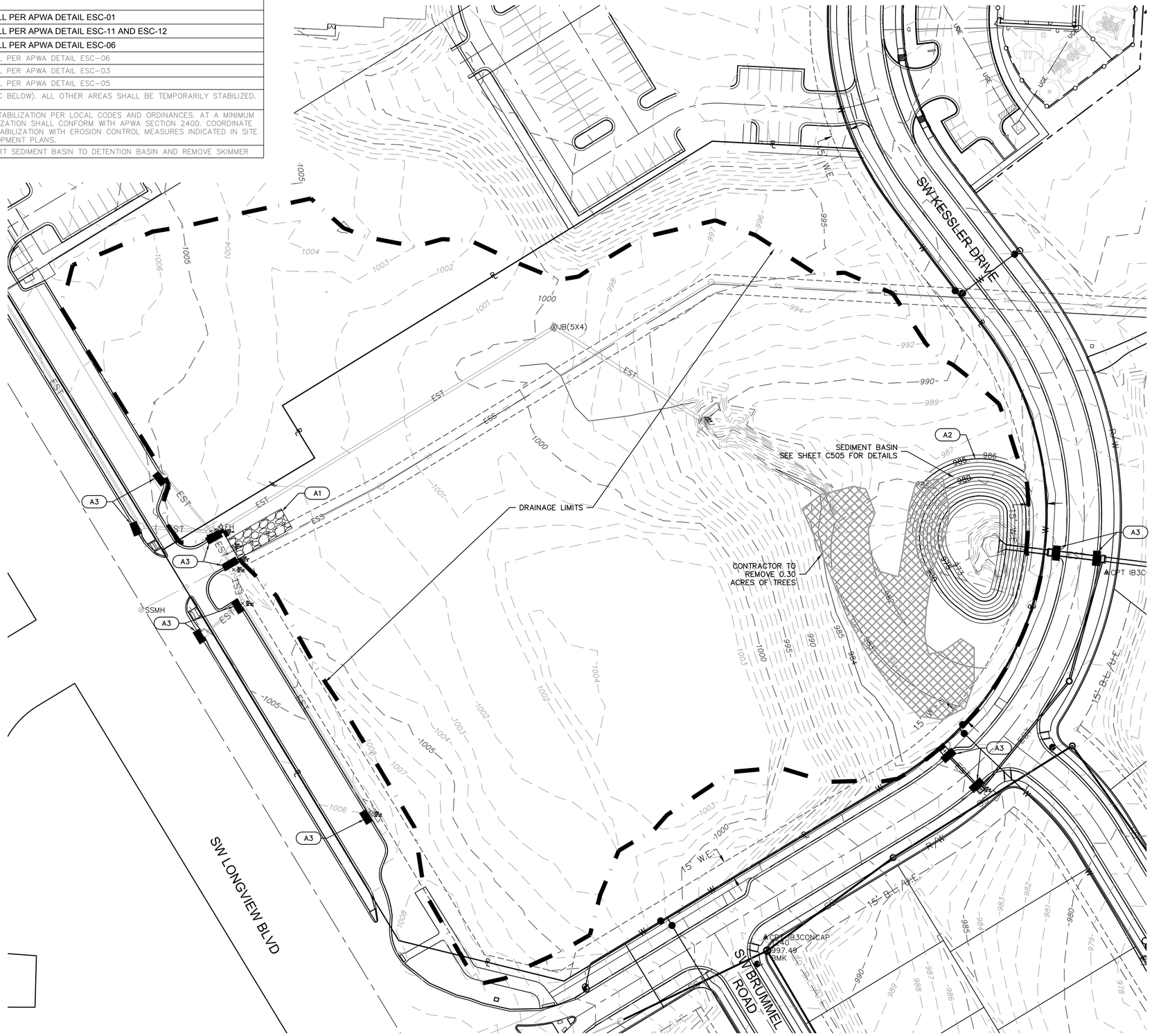
DATE: Jun 10, 2021 12:26pm
XREFS: C_PTTBLK_02102987 C_PBASE_02102987 C_PBNDY_02102987 C_XBASE_02102987 C_PEROS_02102987
USER: ssaylor

EROSION CONTROL STAGING CHART

PROJECT STAGE	BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC-01
	A2	SEDIMENT BASIN	C	INSTALL PER APWA DETAIL ESC-11 AND ESC-12
	A3	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC-06
B – INTERIM	B1	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC-06
	B2	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03
	B3	TEMPORARY DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC-05
ANY AREAS BROUGHT TO FINAL GRADE SHALL RECIEVE TREATMENT FOR FINAL STABILIZATION (STAGE C BELOW). ALL OTHER AREAS SHALL BE TEMPORARILY STABILIZED. SEE PLAN SETS FOR PUBLIC ROADWAY PLANS & SITE DEVELOPMENT PLANS FOR ADDITIONAL STAGES.				
C – DISTURBED AREA STABILIZATION	C1	SEED, SOD AND STABILIZE ALL DISTURBED AREAS AND INSTALL ALL PLANTINGS PER LANDSCAPE PLAN		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2400. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.
	C2	DETENTION BASIN		CONVERT SEDIMENT BASIN TO DETENTION BASIN AND REMOVE SKIMMER

LEGEND	
PHASE 1	
	DRAINAGE LIMITS
	STORM DRAIN INLET PROTECTION
	TEMPORARY STONE CONSTRUCTION ENTRANCE
	TREE CLEARING



N

0' 20' 40' 80'
SCALE IN FEET

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1535 RALEIGH STREET, SUITE 400
DENVER, CO 80204
TEL 303.237.2072
www.olsson.com

NOT FOR CONSTRUCTION

REVISIONS			
REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

EROSION CONTROL PLAN - PHASE 1
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021.02987
drawing no.:	C_ERC01_02102987
date:	06.16.2021

SHEET
C504

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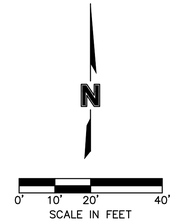
01 SCALE: 1"=20'
SEDIMENT BASIN DETAIL
PER ESC-11 AND ESC-12

SEDIMENT BASIN DESIGN DATA SUMMARY

TITLE: New Longview Development
JOB #: 021-02987

Design Item:	Basin #1	Units	Notes:
Site Data:			
Tributary Drainage Area to Pond:	6.79	Acres	
Disturbed Tributary Drainage Area to Pond:	6.79	Acres	
50% (2 yr) Design Flow:	17.69	cfs	
4% (25 yr) Design Flow:	31.42	cfs	
Pond Data:			
Minimum Sediment Storage Volume:	910	cu. yd.	134 cy/acre minimum
Provided Sediment Storage Volume:	1252	cu. yd.	134 cy/acre minimum
Bottom Elevation:	973.00	Ft	
Sediment Cleanout Elevation:	976.49	Ft	Elevation Equal to 50% of Original Design Volume.
Top of Riser Elevation:	978.69	Ft	Top of Dry Storage Volume
Emergency Spillway Elevation:	980.69	Ft	at or Above Q-2 elev. 1.0 ft min above principal spillway
Q-25 year Elevation:	981.08	Ft	
Top of Dam Elevation:	983.00	Ft	1.0 ft min above Q-25 elev
Basin Shape Data:			
A= Area at Normal Pool	2377.00	SF	
L = Length of Flow Path	45.00	Ft	
We = Effective Width = A/L	52.82	Ft	
Length to Width Ratio = L/We	0.85		If Length to Width Ratio is less than 2, baffles are reguired
Principal Spillway Data:			
Riser Pipe Diameter or Length x Width:	42	in	15-inch min. Size for 2 year flow minimum
Barrell Pipe Diameter:	42	in	15-inch min. Size for 2 year flow minimum
Riser Pipe Base Size:	1.50	cu. yd.	Size to Prevent Flotation. 1.25 safety factor required.
**Skimmer Size:	2.50	in	Skimmer sized to dewater in 24 to 48 hours
**Orifice Diameter (if reduced from standard):		in	**Based on ASP Enterprises Faircloth Skimmer Design Guide
Emergency Spillway Data:			
Design Width of Spillway:	50.00	Ft	
Design Flow Depth in Spillway:	0.39	Ft	Use $Q_{25yr}=C_s bH^{3/2}$ where C_s=2.63, b is the Width of Spillway
Design Velocity in Spillway:	1.63	Ft/sec	
Lining Material:	Rip Rap-6"	N/A	



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REVISIONS

SEDIMENT BASIN DETAILS
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL01_02102987
date: 06.16.2021

SHEET
C505

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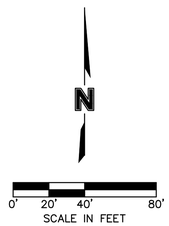
EROSION CONTROL STAGING CHART

PROJECT STAGE	BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A – PRE–MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC–01
	A2	SEDIMENT BASIN	C	INSTALL PER APWA DETAIL ESC–11 AND ESC–12
	A3	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC–06
B - INTERIM	B1	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC-06
	B2	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03
	B3	DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC-05
ANY AREAS BROUGHT TO FINAL GRADE SHALL RECIEVE TREATMENT FOR FINAL STABILIZATION (STAGE C BELOW). ALL OTHER AREAS SHALL BE TEMPORARILY STABILIZED. SEE PLAN SETS FOR PUBLIC ROADWAY PLANS & SITE DEVELOPMENT PLANS FOR ADDITIONAL STAGES.				
C – DISTURBED AREA STABILIZATION	C1	SEED, SOD AND STABILIZE ALL DISTURBED AREAS AND INSTALL ALL PLANTINGS PER LANDSCAPE PLAN		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2400. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.
	C2	DETENTION BASIN		CONVERT SEDIMENT BASIN TO DETENTION BASIN AND REMOVE SKIMMER

LEGEND		
PHASE 1	PHASE 2	
	SF	SILT FENCE
	<<	TEMPORARY DIVERSION BERM
		DRAINAGE LIMITS
		STORM DRAIN INLET PROTECTION
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		TREE CLEARING



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EROSION CONTROL PLAN - PHASE 2
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

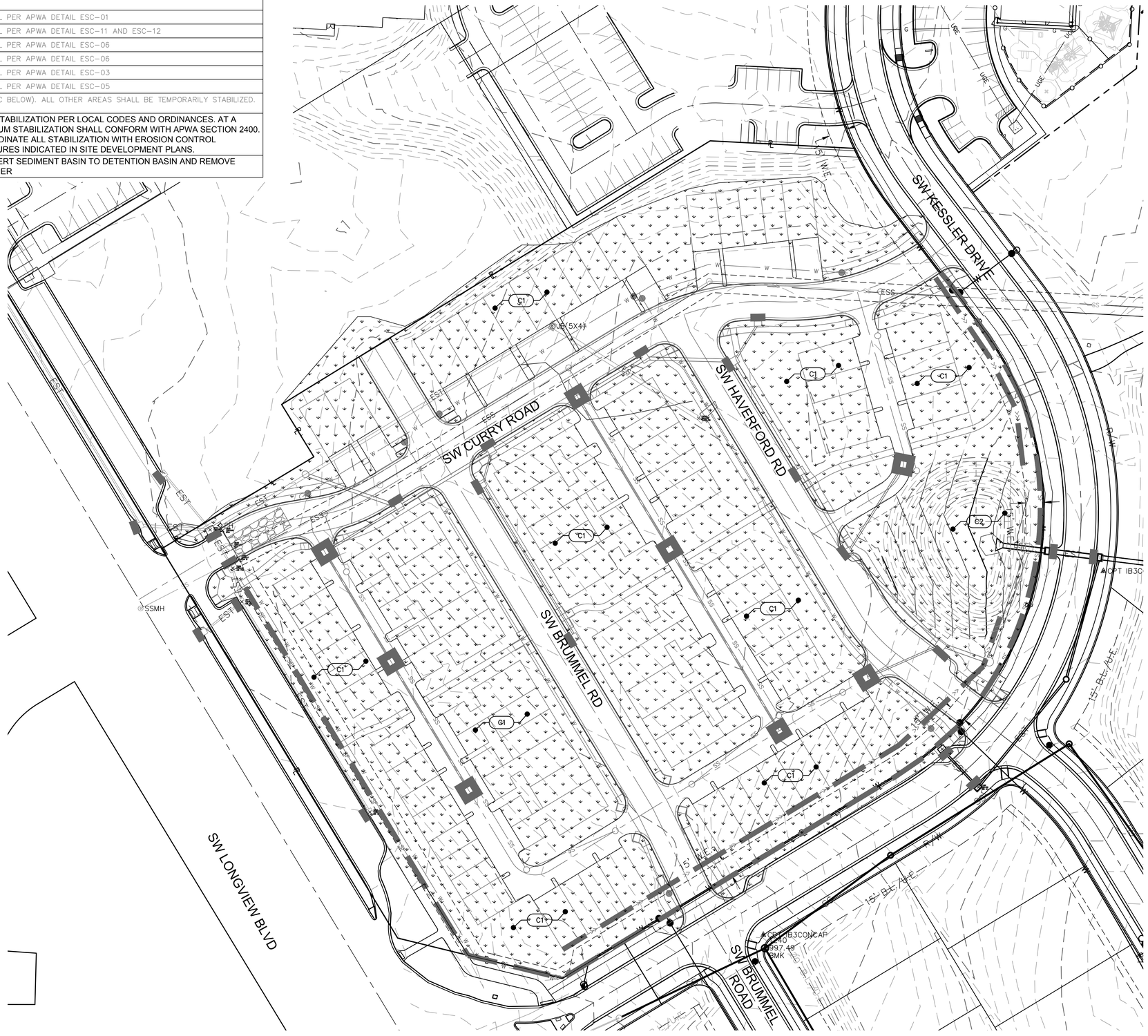
drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_ERC02_02102987
date: 06.16.2021

SHEET
C506

EROSION CONTROL STAGING CHART

PROJECT STAGE	BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A – PRE–MASS GRADING	A1	CONSTRUCTION ENTRANCE	C	INSTALL PER APWA DETAIL ESC–01
	A2	SEDIMENT BASIN	C	INSTALL PER APWA DETAIL ESC–11 AND ESC–12
	A3	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC–06
B – INTERIM	B1	CURB INLET PROTECTION	C	INSTALL PER APWA DETAIL ESC–06
	B2	SILT FENCE	C	INSTALL PER APWA DETAIL ESC–03
	B3	DIVERSION BERM	C	INSTALL PER APWA DETAIL ESC–05
ANY AREAS BROUGHT TO FINAL GRADE SHALL RECIEVE TREATMENT FOR FINAL STABILIZATION (STAGE C BELOW). ALL OTHER AREAS SHALL BE TEMPORARILY STABILIZED. SEE PLAN SETS FOR PUBLIC ROADWAY PLANS & SITE DEVELOPMENT PLANS FOR ADDITIONAL STAGES.				
C - DISTURBED AREA STABILIZATION	C1	SEED, SOD AND STABILIZE ALL DISTURBED AREAS AND INSTALL ALL PLANTINGS PER LANDSCAPE PLAN		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2400. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.
	C2	DETENTION BASIN		CONVERT SEDIMENT BASIN TO DETENTION BASIN AND REMOVE SKIMMER

LEGEND		
PHASE 1 & 2	PHASE 3	
SF		SILT FENCE
<<		TEMPORARY DIVERSION BERM
		DRAINAGE LIMITS
		STORM DRAIN INLET PROTECTION
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		TREE CLEARING
		TURF GRASS SEEDING



0' 20' 40' 80'
SCALE IN FEET

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REV NO	DATE	REVISIONS DESCRIPTION	BY

EROSION CONTROL PLAN - PHASE 3
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_ERC03_02102987
date:	06.16.2021

SHEET
C507

Grading, Stabilization and Dewatering Activities Log

Date Activity Initiated	Description of Grading/Dewatering Activity	Date Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures Initiated	Description of Stabilization Measure and Location

Grading, Stabilization and Dewatering Activities Log

Date Activity Initiated	Description of Grading/Dewatering Activity	Date Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures Initiated	Description of Stabilization Measure and Location

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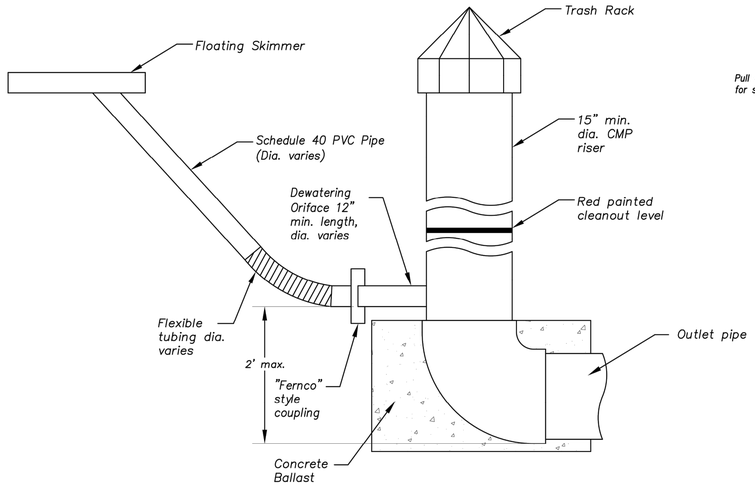
Grading, Stabilization and Dewatering Activities Log

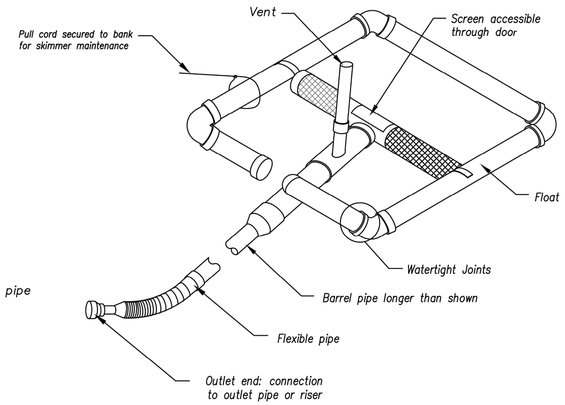
Date Activity Initiated	Description of Grading/Dewatering Activity	Date Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures Initiated	Description of Stabilization Measure and Location

SECTION 6

BMP Specification & Detail Sheets

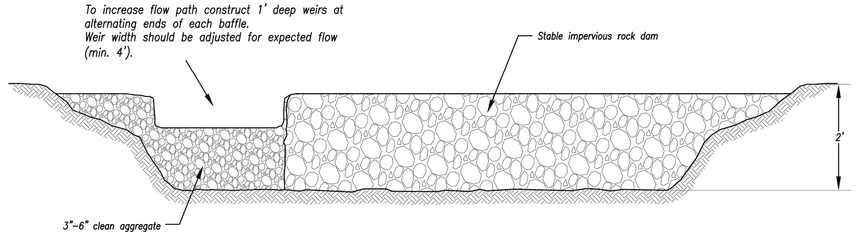


PRINCIPAL SPILLWAY DETAIL

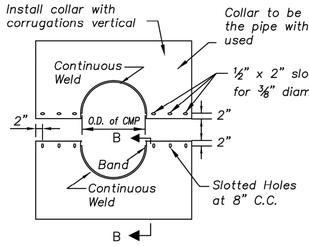


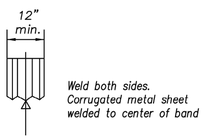
SKIMMER DETAIL (Typ.) *

* Designer to provide specific details per application (e.g. pipe sizes, screen sizes, perforation, etc.) as required.



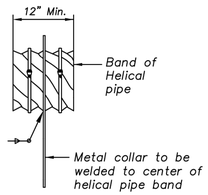
Option A – Rock with Weir



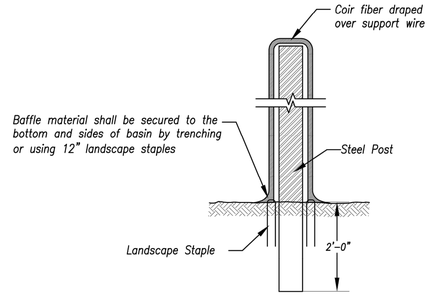


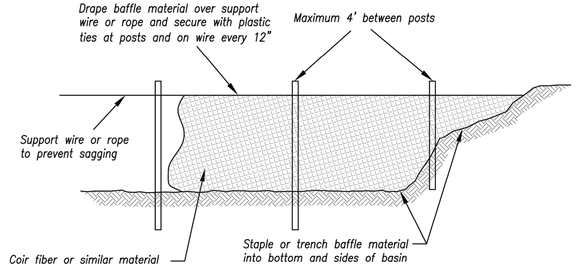
SECTION B–B

Size and spacing of slotted openings shall be the same as shown for CM collar. Use rods and lugs to clamp bands securely to pipe.



PARTIAL ELEVATION

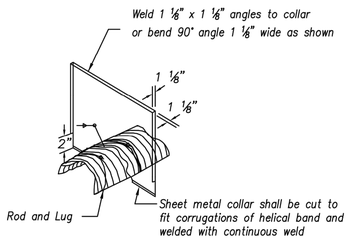




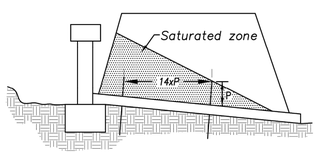
Option B – Coir Fiber Material

BAFFLE DETAILS

Not to Scale



ISOMETRIC VIEW



ANTI–SEEPAGE COLLAR LOCATIONS

CORRUGATED METAL ANTI–SEEPAGE COLLAR DETAIL

Not to Scale

Anti–Seepage Collar Notes:

1. Connections between the anti–seepage collar and the barrel must be watertight.
2. P = projection distance. Sized as required to achieve at least a 10% increase in seepage length.
3. 14xP = Max. spacing between collars.
4. Collars shall generally be placed in the middle third of the embankment, and within the saturated zone.
5. All materials to be in accordance with construction material specifications.
6. When specified on the plans, coating of collars shall be in accordance with construction material specifications.
7. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
8. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at the time of installation.
9. Each collar shall be furnished with two (2) ½" diameter rods with standard tank lugs for connecting the collars to the pipe.
10. For bands and collars, modification of the details shown may be used providing equal water tightness is maintained and detailed drawings are Submitted and approved by the Engineer prior to delivery.
11. Two other types of anti–seep collars are:
    a. Corrugated metal, similar to above, except shop welded to a 4 ft. section of the pipe and connected to the pipe with connecting bands.
    b. Concrete, 6 inches thick, formed around the pipe with #3 rebar spaced 15".

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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KANSAS CITY METRO CHAPTER

SEDIMENT BASIN - DETAILS

STANDARD DRAWING NUMBER ESC-12

ADOPTED: 10/24/2016

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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EROSION CONTROL DETAILS
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL01_02102987
date: 06.16.2021

SHEET C508

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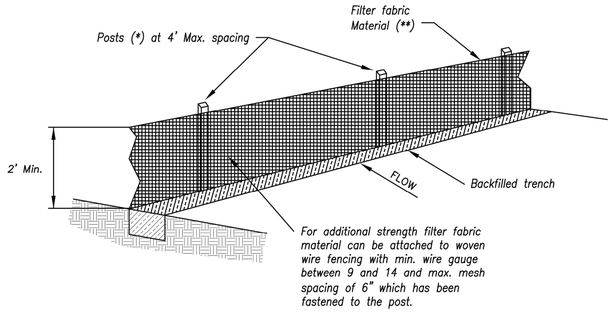
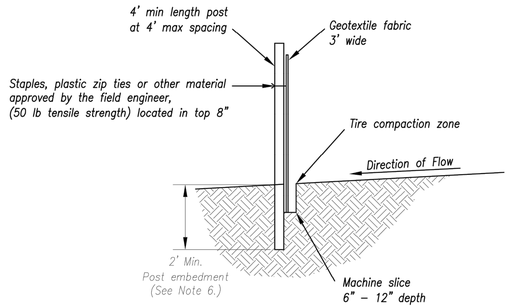
USER: ssaylor





(*) POSTS

- MIN, LENGTH 4'
- HARDWOOD 1 3/16" x 1 3/16"
- NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
- STEEL 1.33 LB/FT

(**) – Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS

Not to Scale

Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ⅓ the height of silt fence.
2. Repair as necessary to maintain function and structure.

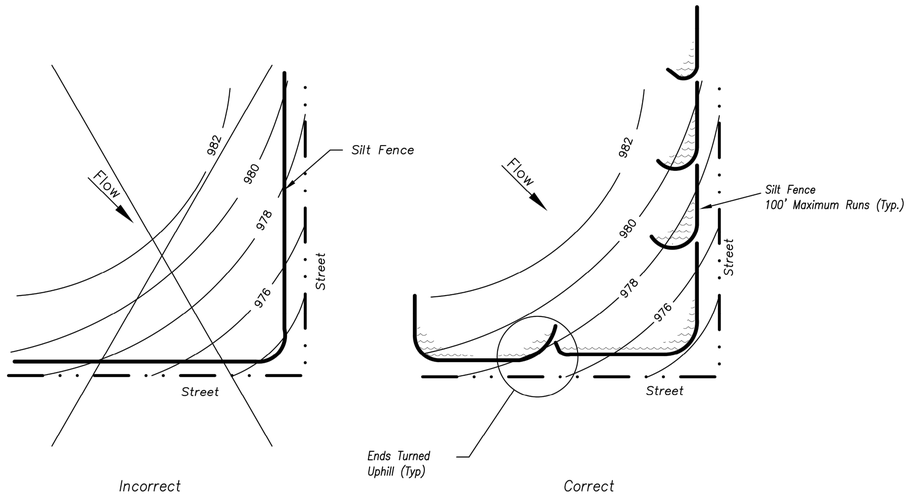
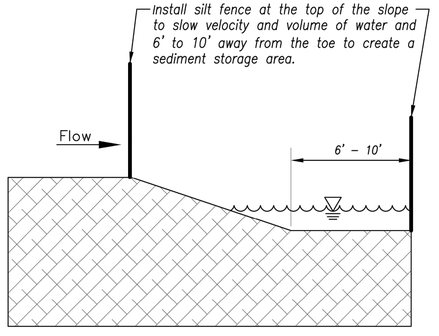
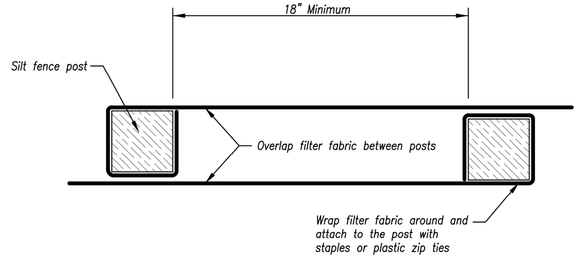


Figure A

SILT FENCE LAYOUT

Not to Scale





JOINING FENCE SECTIONS

Not to Scale

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

SILT FENCE

STANDARD DRAWING NUMBER ESC-03

ADOPTED: 10/24/2016

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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EROSION CONTROL DETAILS
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

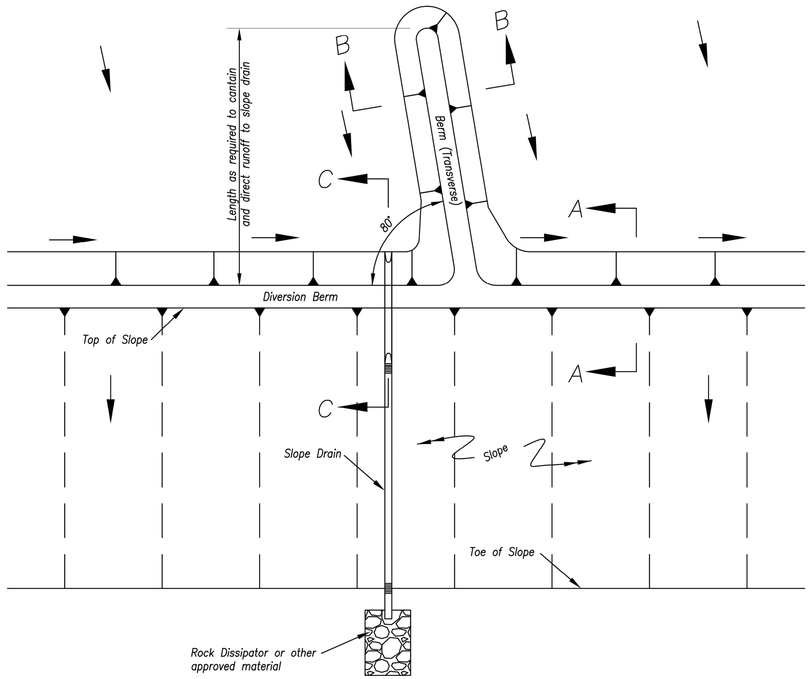
LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL01 02102987
date: 06.16.2021

SHEET C509

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNC\SITE DISTURBANCE PLANS\C_DTL01_02102987.dwg USER: ssaylor
DATE: Jun 10, 2021 12:29pm XREFS: C_PTTBLK_02102987 C_PUTIL_02102987 C_PBASE_02102987 C_PBNDY_02102987 C_XBASE_02102987



TYPICAL PLAN VIEW OF DIVERSION BERM AND SLOPE DRAIN

Notes for Diversion Berm:

1. Slope drains are optional, but may be required by the engineer if the berm is at the top of a steep slope.
2. Diversion berms must be installed as a first step in the land-disturbing activity and must be functional prior to upslope land disturbance.
3. The berm should be adequately compacted to prevent failure.
4. Temporary or permanent seeding and mulch shall be applied to the berm immediately following its construction.
5. Place the berm so to minimize damages by construction operations and traffic.
6. The berm must discharge to a temporary sediment trap or stabilized area.
7. All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of diversion.
8. The diversion shall be excavated or shaped to line, grade and cross-section as required to meet the criteria specified herein, free of irregularities which will impede flow.
9. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the completed diversion. Fill shall be composed of soil which is free from excessive organic debris, rocks or other objectionable materials.

Maintenance:

1. Berm shall be reshaped, compacted, and stabilized as necessary to maintain its function.
2. Breaches in the berm shall be repaired immediately.

Notes for Slope Drain:

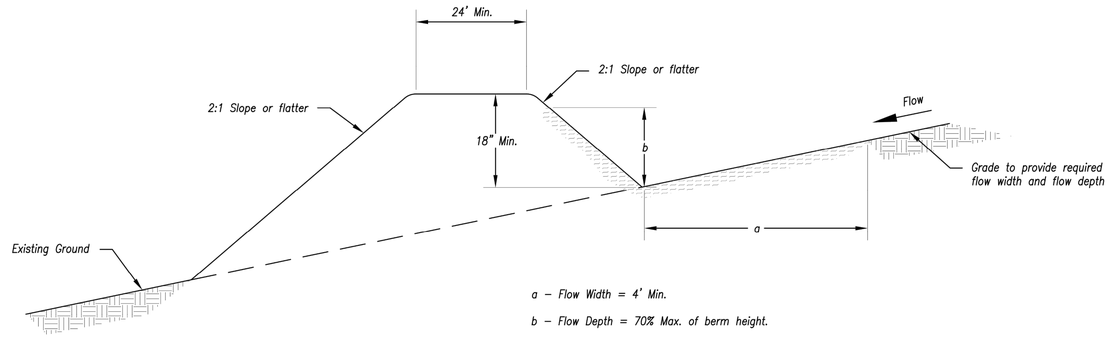
1. Slope Drain and Diversion Berm may be used on either project foreslopes or project backslopes.
2. Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
3. Pipe shall be secured in place as approved by Engineer.

Maintenance:

1. Accumulation of any visible sediment at the inlet and outlet shall be removed promptly.
2. Outlet conditions shall be repaired if scour is observed. Leaking or damaged section of pipe shall be repaired immediately.
3. Barriers directing water to the inlet shall be monitored for continuity and effectiveness.

TYPICAL PROFILE OF DIVERSION BEAM

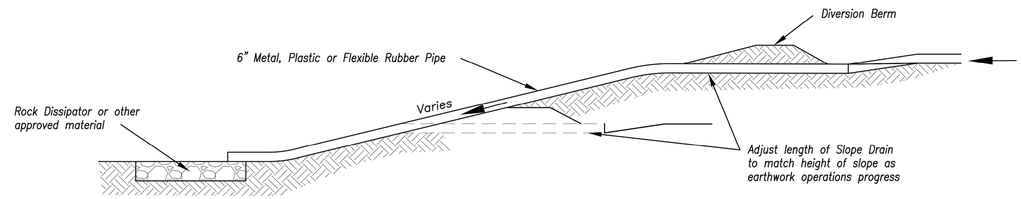
Not to Scale

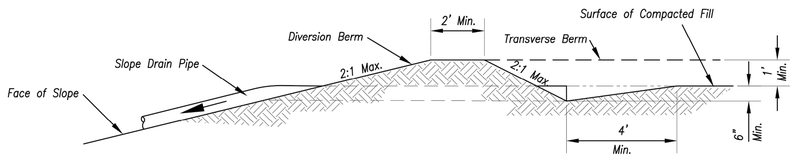


a – Flow Width = 4' Min.

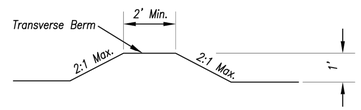
b – Flow Depth = 70% Max. of berm height.

TYPICAL PROFILE OF DIVERSION BERM





Section C–C



Section B–B

TYPICAL PROFILE OF DIVERSION BERM WITH SLOPE DRAIN

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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DIVERSION BERMS AND SLOPE DRAINS

STANDARD DRAWING NUMBER ESC-05

ADOPTED: 10/24/2016

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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EROSION CONTROL DETAILS
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL01_02102987
date: 06.16.2021

SHEET
C510

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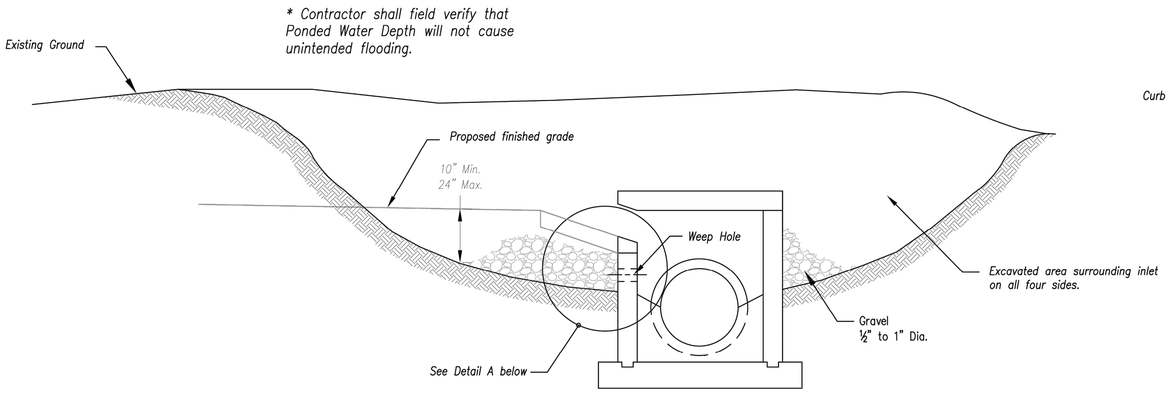
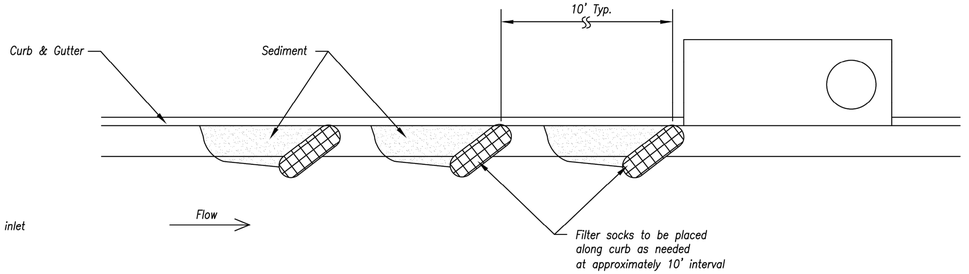
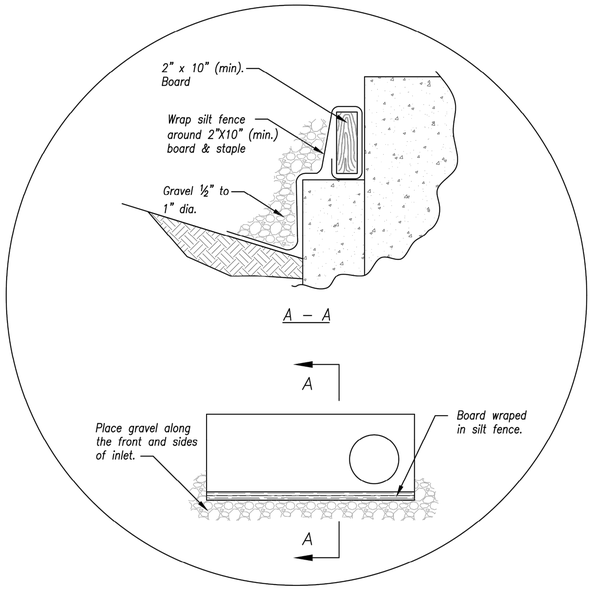




On Grade Curb Inlet Protection



Detail A

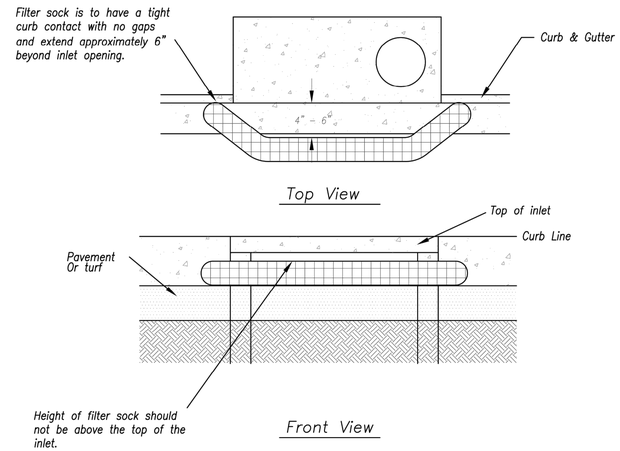
EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

Notes:

1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
3. Contractor to field verify ponding water shall not create a traffic hazard.

Maintenance:

1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.



Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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CURB INLET PROTECTION

STANDARD DRAWING NUMBER ESC-06
ADOPTED: 10/24/2016

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REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

EROSION CONTROL DETAILS
SITE DISTURBANCE PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

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drawing no.: C_DTL01_02102987
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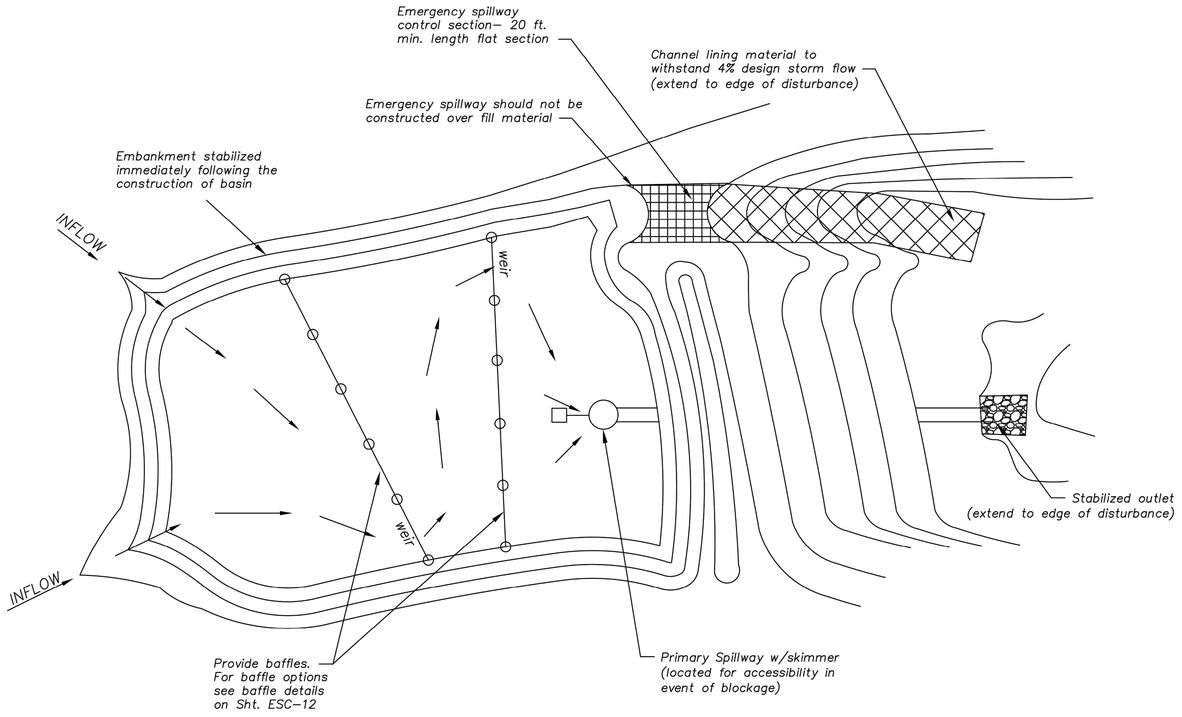
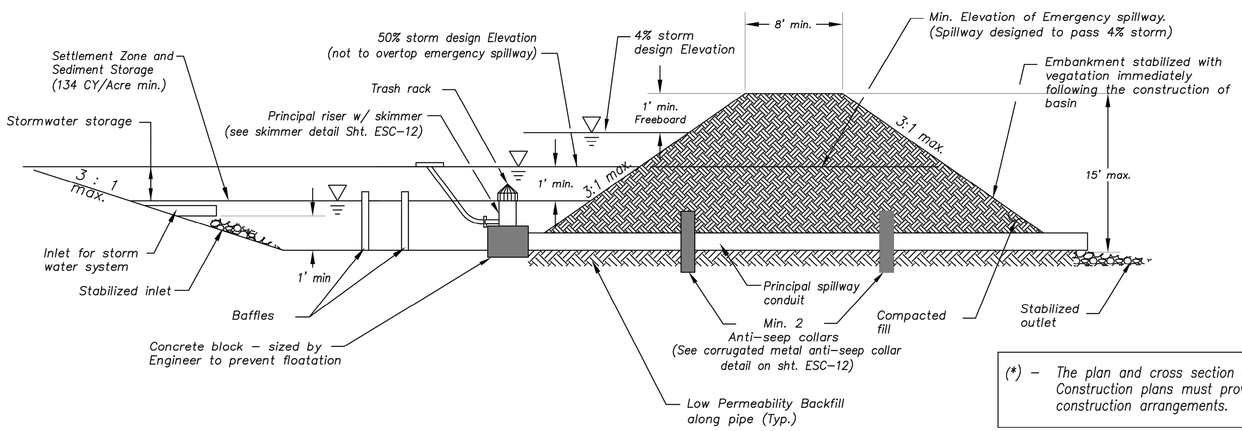


Plan View (*)

Not to Scale



Cross Section (*)

Not to Scale

(*) – The plan and cross section are schematic in nature. Construction plans must provide specific site construction arrangements.

Sediment Basin Design Summary (**)

Design Item	Basin #1	Basin #2	Units	Notes
Site Data:				
Tributary Drainage Area to Pond			Acres	
50% (2 yr) Design Flow			cfs	
4% (25 yr) Design Flow			cfs	
Pond Data:				
Minimum Sediment Storage Volume			cu yd	134 cy/acre required minimum
Provided Sediment Storage Volume			cu yd	
Bottom Elevation			Ft	
Sediment Cleanout Elevation			Ft	Elevation equal to 20% of original design volume
Top of Riser Elevation			Ft	Top of dry storage volume
Emergency Spillway Elevation			Ft	at or above Q–2 elevation. 1.0 ft min above principal spillway
Top of Dam Elevation			Ft	1.0 ft min above Q–25 elevation
Basin Shape Data:				
A = Area at Normal Pool			SF	
L = Length of Flow Path			Ft	
We = Effective Width = A/L			Ft	
Length to Width Ratio = L/We				
Principal Spillway Data:				
Riser Pipe dia			in	15" min. Size for 2 year flow minimum
Barrel Pipe dia			in	15" min. Size for 2 year flow minimum
Concrete Base size for Riser Pipe			CY	Size to prevent flotation. 1.25 safety factor required
Skimmer Size				Designer to provide specific details and calculations per application to dewater in 48 to 72 hours
Emergency Spillway Data:				
Design Depth in Spillway			ft	
Design Velocity in Spillway			ft/sec	
Lining Material				Designer to provide specific details and calculations per application

(**) – Required on all Sediment Basin Plan Sheets

Sediment Basin Notes:

1. Interior baffles shall be provided to reduce short–circuiting of the basin. See Sht. ESC–12 for approved baffle options.
2. Emergency spillways to be located in a non–fill location when feasible and shall be lined with a non–erodible material such as Riprap or Turf Reinforcement Mat.
3. When directed, sediment basins shall be fenced using construction fence or other material for safety reasons and include warning signs, reading: "Danger – KEEP OUT".

Maintenance:

1. Check temporary sediment basins after periods of significant runoff.
2. Remove sediment and restore the basin to its original dimensions when sediment accumulates to 20% of the storage capacity.
3. Immediately repair any erosion damage to the embankment and outlets.
4. Repair and/or replace baffles as necessary to maintain function and integrity of installation.
5. Keep outlet, skimmer and pool area free of all trash and other debris.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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Kansas City Metro Chapter APWA AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

SEDIMENT BASIN

STANDARD DRAWING NUMBER ESC-11

ADOPTED: 10/24/2016

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SITE DISTURBANCE PLAN

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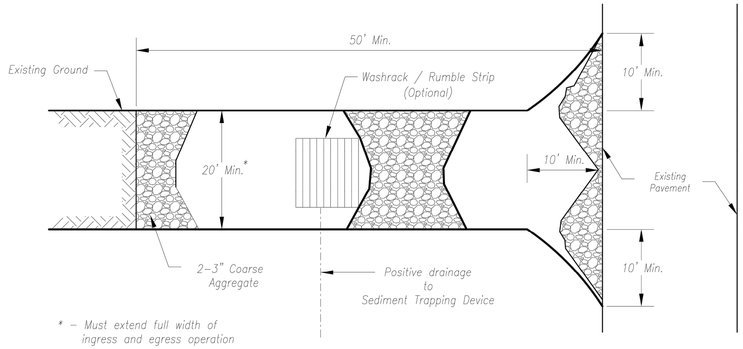

Plan View

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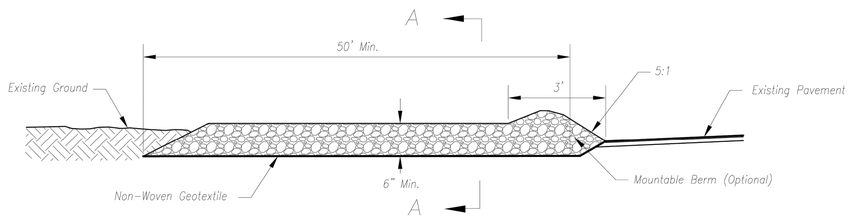

Side Elevation

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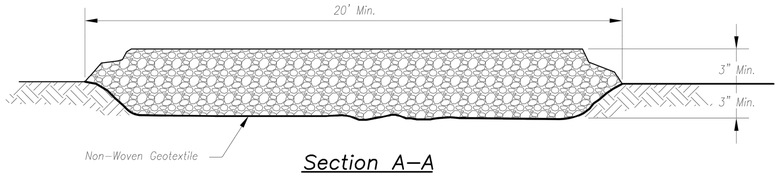


Section A–A

Not to Scale

Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6– to 8–inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate as needed.

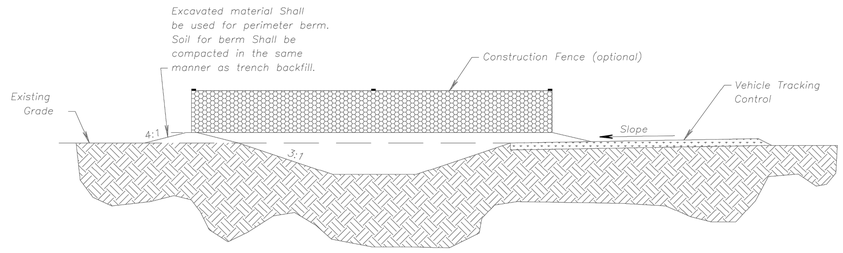
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one–piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water–tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

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CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING NUMBER ESC-01

ADOPTED: 10/24/2016

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SECTION 7

Log of Amendments

The permittee shall amend the SWPPP at a minimum whenever the:

a. *Design, operation, or maintenance of BMPs is changed;*
b. *Design of the construction project is changed that could significantly affect the quality of the stormwater discharges;*
c. *Permittee's inspections indicate deficiencies in the SWPPP or any BMP;*
d. *Department notifies the permittee in writing of deficiencies in the SWPPP;*
e. *SWPPP is determined to be ineffective in minimizing or controlling erosion and sedimentation (e.g., there is visual evidence of excessive site erosion or excessive sediment deposits in streams or lakes); and/or*
f. *Department determines violations of water quality standards may occur or have occurred.*

SWPPP Amendment Log

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Authorized by [Name(s) and Title]

SWPPP Amendment Log

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Authorized by [Name(s) and Title]

SECTION 8

Local Regulations & Additional Permits

Local Ordinances can be located here for reference only. Additional permits (i.e. 404, NWP, grading permits if required, etc.) can be kept here for reference only.

SECTION 9

Spill Response

This section contains Missouri Code of State Regulations as they pertain to hazardous substances and emergency response. Contained within are:

Division 24 - Hazardous Substance Emergency Response Office

- -10 CSR 24-1.010 - Organization
- -10 CSR 24-2.010 - Definitions
- -10 CSR 24-3.010 - Emergency Notification Procedures

Spill Report Forms

Rules of
Department of Natural Resources
Division 24—Hazardous Substance Emergency Response Office
Chapter 1—Organization

Title		Page
10 CSR 24-1.010	General Organization	3

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 24—Hazardous Substance Emergency Response Office
Chapter 1—Organization

10 CSR 24-1.010 General Organization

PURPOSE: This rule explains the organization and responsibilities of the Hazardous Substance Emergency Response Office. Also explained is how to obtain additional information regarding these activities and where to make submittals to this office.

(1) The Department of Natural Resources is authorized under sections 260.500–260.550, RSMo to administer the state's Hazardous Substance Emergency Response Office. The director of the Department of Natural Resources appoints a director and staff who provide day-to-day operation of the Hazardous Substance Emergency Response Office.

(A) Among its operations, the Hazardous Substance Emergency Response Office performs the following administrative and technical functions: develop and adopt rules relating to hazardous substance emergencies; develop and update the state Hazardous Substance Emergency Response plan in cooperation with other state agencies and other affected persons; respond to, investigate, document and take action regarding hazardous substance emergencies in accordance with sections 260.500–260.550, RSMo; provide technical assistance to other state agencies, to political subdivisions of the state and to other persons upon request for the prevention, control and response to hazardous substance emergencies; enter into agreements with state, local and federal agencies and with other persons as necessary to develop and implement the Hazardous Substance Emergency Response Plan and to implement sections 260.500–260.550, RSMo; monitor the statewide telephone used to notify Missouri whenever a hazardous substance emergency occurs; notify appropriate agencies of hazardous substance emergencies; and cooperate with appropriate units of government and other persons to prevent the occurrence and improve response to hazardous substance emergencies.

(B) Requests for copies of rules, reports of incident investigations, technical information and assistance and any other submissions are to be made to the department's Hazardous Substance Emergency Response Office, Environmental Services Program, P.O. Box 176, Jefferson City, MO 65102. The telephone number during office hours is (573) 526-3348. For emergencies, the Hazardous Substance Emergency Response Office can be contacted any time at (573) 634-2436.

(2) Information.

(A) The mailing address for the Hazardous Substance Emergency Response Office is: Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102.

(B) The Hazardous Substance Emergency Response Office files, except trade secrets as provided for in section 260.550, RSMo, are public information and are located at 2710 West Main Street, Jefferson City, MO 65109.

(C) Anyone wishing to review information in the Hazardous Substance Emergency Response Office files is requested to make an appointment by calling (573) 526-3348. There is no fee for reviewing file information. There is a copying fee if copies of file information are made, and it must be paid by check, money order or exact change.

(D) Any request for information shall be in writing. All requests for information shall be available during normal business hours for inspection by the public.

(E) Nonemergency information can be obtained by contacting the department at the post office box listed previously or by calling (573) 526-3348.

(F) The number to contact the department for emergency release notifications under section 260.505, RSMo is (573) 634-2436. This is for emergencies only.

AUTHORITY: section 260.520, RSMo (Supp. 1995). Original rule filed Nov. 30, 1983, effective April 12, 1984. Emergency amendment filed Dec. 2, 1992, effective Jan. 1, 1993, expired April 20, 1993. Amended: Filed Oct. 5, 1992, effective April 8, 1993. Amended: Filed June 14, 1994, effective Jan. 29, 1995. Amended: Filed July 22, 1996, effective Feb. 28, 1997.*

**Original authority 1983, amended 1993, 1995.*

Rules of
Department of Natural Resources
Division 24—Hazardous Substance Emergency Response Office
Chapter 2—Definitions

Title		Page
10 CSR 24-2.010	Definitions	3

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 24—Hazardous Substance Emergency Response Office
Chapter 2—Definitions

10 CSR 24-2.010 Definitions

PURPOSE: This rule provides definitions for terms used in 10 CSR 24.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.

(1) Administrator—the administrator of the United States Environmental Protection Agency.

(2) Cleanup—all actions necessary to contain, collect, control, identify, analyze, cleanup, treat, disperse, remove or dispose of a hazardous substance.

(3) Cleanup costs—all costs incurred by the state or any of its political subdivisions or their agents or by any other person participating with the approval of the Department of Natural Resources in the prevention or mitigation of damages from a hazardous substance emergency or the cleanup of a hazardous substance involved in a hazardous substance emergency.

(4) Department—the Department of Natural Resources.

(5) Director—director of the Department of Natural Resources.

(6) Extremely hazardous substance—a substance listed under 40 CFR part 355 by the administrator.

(7) Hazardous substance—any substance or mixture of substances that presents a danger to the public health or safety or the environment and includes:

(A) Any hazardous waste identified or listed by the department under sections 260.350–260.430, RSMo;

(B) Any element, compound, mixture, solution or substance designated pursuant to Sections 101(14) and 102 of the Comprehensive Environment Response, Compensation and Liability Act (CERCLA) of 1980 or designated pursuant to section 304 of the Federal Emergency Planning and Community Right-to-Know Act of 1986; and

(C) Any hazardous material designated by the secretary of the United States Department of Transportation under the Hazardous Materials Transportation Act.

(8) Hazardous substance emergency and emergency involving a hazardous substance—

(A) Any release of hazardous substances or extremely hazardous substances in quantities equal to or in excess of those determined pursuant to section 101(14) or 102 of the CERCLA of 1980 or section 304 of the Federal Emergency Planning and Community Right-to-Know Act of 1986;;

(B) Any release of petroleum including crude oil or any fraction, natural gas, natural gas liquids, liquefied natural gas or synthetic gas usable for fuel (or mixture of natural gas and synthetic gas) in excess of fifty (50) gallons for liquids or three hundred (300) cubic feet for gases;

(C) Any release of a hazardous waste which is reportable under sections 260.350–260.430, RSMo;

(D) Any release of a hazardous substance which requires immediate notice under 49 CFR part 171; and

(E) The department shall promulgate rules identifying the substances and the quantities of substances which, if released, constitute a hazardous substance emergency.

(9) Hazardous Substance Emergency Response Plan—the plan, as specified in section 260.505, RSMo, developed and maintained by the Missouri Department of Natural Resources for response to hazardous substance emergencies.

(10) Local Emergency Planning Committee (LEPC) or committee—the people appointed by the Missouri Emergency Response Commission (MERC) for the purpose of improving hazardous chemical safety and preparedness.

(11) Local government—any county, township, municipal corporation, school district or other governmental body of equivalent rank.

(12) Person—any individual, partnership, copartnership, firm, company, public or private corporation, association, joint stock company, trust, estate, political subdivision or any agency, board, department or bureau of the state or federal government or any other legal entity which is recognized by law as the subject of rights and duties.

(13) Person having control over a hazardous substance—any person producing, handling, storing, transporting, refining or disposing of a hazardous substance when a hazardous substance emergency occurs, including bailees, carriers and any other person in control of a hazardous substance when a hazardous substance emergency occurs, whether they own the hazardous substance or are operating under a lease, contract or other agreement with the legal owner.

(14) Release—any threatened or real emission, discharge, spillage, leakage, pumping, pouring, emptying or dumping of a substance into or onto the land, air or waters of the state unless done in compliance with the conditions of a federal or state permit, unless the substance is confined and is expected to stay confined to property owned, leased or otherwise controlled by the person having control over the substance or unless, in the case of pesticides, application is done in accordance with the product label.

(15) State of Missouri Basic Emergency Operations Plan—the state plan, its annexes and appendices as developed or maintained by the state emergency management agency for response to natural and man-made disasters in this state.

(16) Waters of the state—all rivers, streams, lakes and other bodies of surface and subsurface water lying within or forming a part of the boundaries of the state which are not entirely confined and located completely upon lands owned, leased or otherwise controlled by a single person or by two (2) or more persons jointly or as tenants in common and include waters of the United States lying within the state.

AUTHORITY: section 260.520, RSMo Supp. 1993. Original rule filed Nov. 30, 1983, effective April 12, 1984. Emergency amendment filed Dec. 2, 1992, effective Jan. 1, 1993, expired April 30, 1993. Amended: Filed Oct. 5, 1992, effective April 8, 1993.*

Amended: Filed June 14, 1994, effective Jan. 29, 1995.

**Original authority: 260.520, RSMo 1983, amended 1993.*

Rules of
Department of Natural Resources
Division 24—Hazardous Substance Emergency Response Office
Chapter 3—Emergency Notification Procedures

Title		Page
10 CSR 24-3.010	Notification Procedures for Hazardous Substance Emergencies and for Emergency Notification of Releases of Hazardous Substances and Extremely Hazardous Substances	3

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 24—Hazardous Substance Emergency Response Office
Chapter 3—Emergency Notification Procedures

10 CSR 24-3.010 Notification Procedures for Hazardous Substance Emergencies and for Emergency Notification of Releases of Hazardous Substances and Extremely Hazardous Substances

PURPOSE: This rule establishes a statewide emergency telephone number to notify Missouri whenever a hazardous substance emergency occurs and specifies the requirements for emergency notification and follow-up written notices in the event of a hazardous substance emergency, the release of a reportable quantity of a hazardous substance and the release of a reportable quantity of an extremely hazardous substance.

PUBLISHER'S NOTE: The publication of the full text of the material that the adopting agency has incorporated by reference in this rule would be unduly cumbersome or expensive. Therefore, the full text of that material will be made available to any interested person at both the Office of the Secretary of State and the office of the adopting agency, pursuant to section 536.031.4, RSMo. Such material will be provided at the cost established by state law.

(1) Any person having control over a hazardous substance shall contact Missouri by telephone at (573) 634-2436 or the National Response Center at (800) 424-8802 at the earliest practical moment upon discovery of an emergency involving a hazardous substance under his/her control. Information to be provided to Missouri to the best ability of the person having control over the hazardous substance includes: substance(s) involved, an indication of whether the substance is an extremely hazardous substance; the medium or media into which the release occurred; any known or anticipated acute or chronic health risks associated with the release and, where appropriate, advice regarding medical attention necessary for exposed individuals; proper precautions to take as a result of the release, including evacuation; amount of the substance(s) released or in danger of being released; location of the hazardous substance emergency and directions to the site; names, addresses and phone numbers of persons that may have information on the substances involved; when the hazardous substance emergency occurred, duration of the release and when it was discovered; actions taken to cleanup the hazardous substance and to end the hazardous substance emergency and when those actions will be taken; and any other pertinent information requested by Missouri, or as specified in the Missouri hazardous waste management commission regulations at 10 CSR 25-7.264(2)(D) and (E) and 10 CSR 25-7.265(2)(D) and (E). Federal reporting requirements for releases of hazardous substances can be found in 40 CFR parts 302 and 355. In addition, state reporting requirements contained in 11 CSR 40-4.030 reference these regulations, and require that certain information be provided to Local Emergency Planning Committees (LEPCs) for reportable releases of hazardous substances and extremely hazardous substances.

(2) The person monitoring the statewide emergency telephone shall notify appropriate agencies of the hazardous substance emergency as designated in the Hazardous Substance Emergency Response Plan.

(3) Upon request, written follow-up notifications are required for releases of hazardous substances and extremely hazardous substances as listed in 40 CFR parts 302 and 355. If requested, the person having control of the hazardous substance or extremely hazardous substance shall provide a written follow-up emergency notice (or notices, as more information becomes available) to the department setting forth and updating the information with respect to—

(A) Information required in section (1);

(B) Actions taken to respond to and contain the release;

(C) Any known or anticipated acute or chronic health risks associated with the release; and

(D) Where appropriate, advice regarding medical attention necessary for exposed individuals.

(4) If requested, a written report shall be provided to the department for any other hazardous substance emergency. The requested reports shall contain the information as specified in sections (1) and (3) of this rule and any other pertinent information as requested by the department. In addition, state reporting requirements in 11 CSR 40-4.030 require that written follow-up reports be provided to the Department of Public Safety and appropriate LEPCs for any reportable releases of hazardous substances or extremely hazardous substances.

AUTHORITY: section 260.520, RSMo (Supp. 1995). Original rule filed Nov. 30, 1983, effective April 12, 1984. Emergency amendment filed Dec. 2, 1992, effective Jan. 1, 1993, expired April 30, 1993. Amended: Filed Oct. 5, 1992, effective April 8, 1993. Amended: Filed June 14, 1994, effective Jan. 29, 1995. Amended: Filed July 22, 1996, effective Feb. 28, 1997.*

**Original authority 1983, amended 1993, 1995.*

SECTION 10

Endangered Species Documentation

Missouri Department of Conservation

Missouri Department of Conservation's Mission is to protect and manage the forest, fish, and wildlife resources of the state and to facilitate and provide opportunities for all citizens to use, enjoy and learn about these resources.

Natural Heritage Review Level Three Report: Species Listed Under the Federal Endangered Species Act

There are records for species listed under the Federal Endangered Species Act, and possibly also records for species listed Endangered by the state, or Missouri Species and/or Natural Communities of Conservation Concern within or near the the defined Project Area. Please contact the U.S. Fish and Wildlife Service and the Missouri Department of Conservation for further coordination.

Foreword: Thank you for accessing the Missouri Natural Heritage Review Website developed by the Missouri Department of Conservation with assistance from the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, Missouri Department of Transportation and NatureServe. The purpose of this website is to provide information to federal, state and local agencies, organizations, municipalities, corporations and consultants regarding sensitive fish, wildlife, plants, natural communities and habitats to assist in planning, designing and permitting stages of projects.

PROJECT INFORMATION

Project Name and ID Number: New Longview Townhomes #9260
Project Description: The project is located at 451 SW Longview Blvd, Lee's Summit, MO, Jackson County. The project is within the Cedar Creek watershed.
Project Type: Residential, Commercial and Governmental Building Development
Contact Person: Stephen Saylor
Contact Information: ssaylor@olsson.com or (816) 442-6061

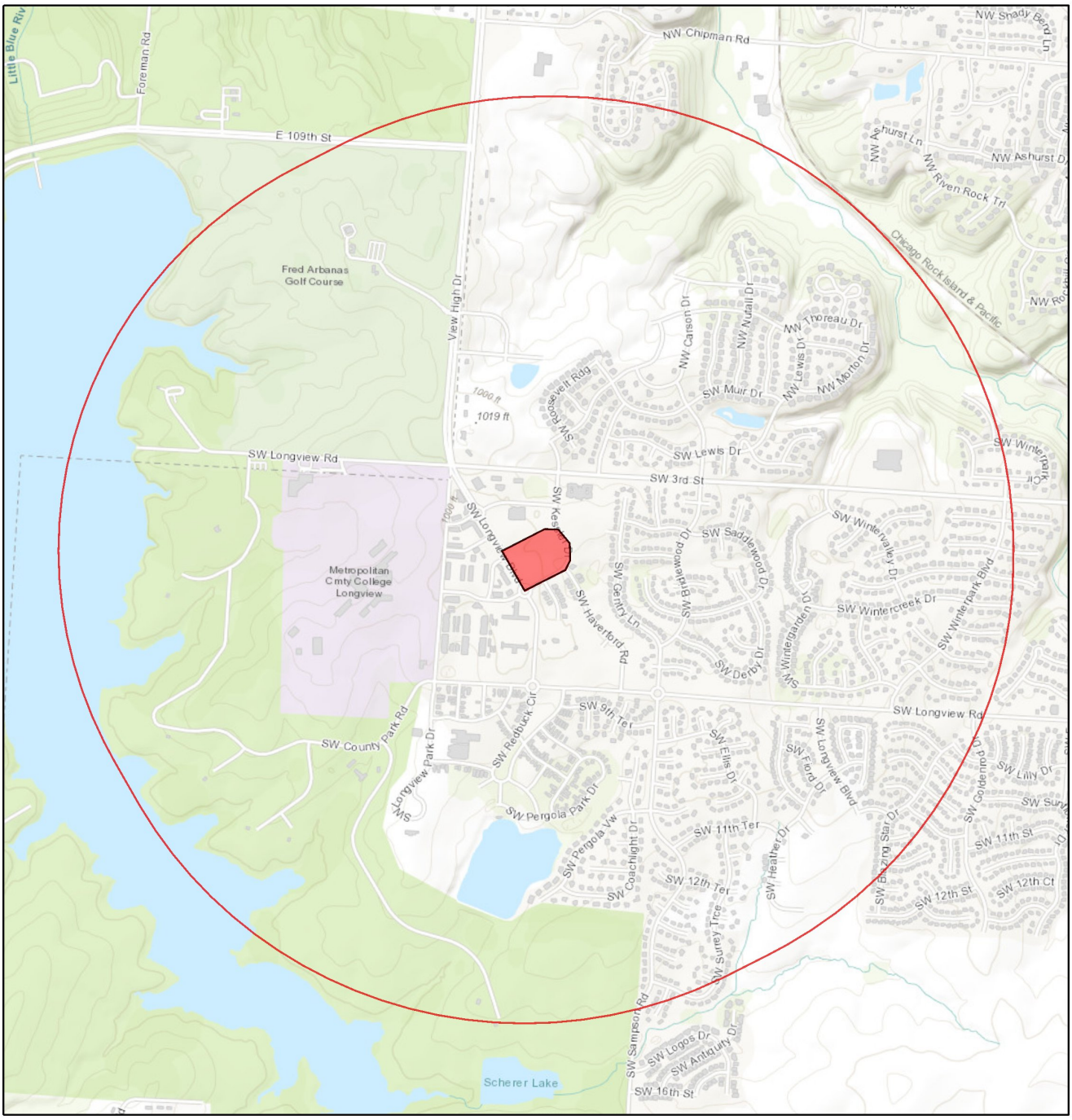
Disclaimer: The NATURAL HERITAGE REVIEW REPORT produced by this website identifies if a species tracked by the Natural Heritage Program is known to occur within or near the area submitted for your project, and shares suggested recommendations on ways to avoid or minimize project impacts to sensitive species or special habitats. If an occurrence record is present, or the proposed project might affect federally listed species, the user must contact the Department of Conservation or U.S. Fish and Wildlife Service for more information. The Natural Heritage Program tracks occurrences of sensitive species and natural communities where the species or natural community has been found. Lack of an occurrence record does not mean that a sensitive plant, animal or natural community is not present on or near the project area. Depending on the project, current habitat conditions, and geographic location in the state, surveys may be necessary. Additionally, because land use conditions change and animals move, the existence of an occurrence record does not mean the species/habitat is still present. Therefore, Reports include information about records near but not necessarily on the project site.

The Natural Heritage Report is not a site clearance letter for the project. It provides an indication of whether or not public lands and sensitive resources are known to be (or are likely to be) located close to the proposed project. Incorporating information from the Natural Heritage Program into project plans is an important step that can help reduce unnecessary impacts to Missouri's sensitive fish, forest and wildlife resources. However, the Natural Heritage Program is only one reference that should be used to evaluate potential adverse project impacts. Other types of information, such as wetland and soils maps and on-site inspections or surveys, should be considered. Reviewing current landscape and habitat information, and species' biological characteristics would additionally ensure that Missouri Species of Conservation Concern are appropriately identified and addressed in planning efforts.

U.S. Fish and Wildlife Service – Endangered Species Act (ESA) Coordination: Lack of a Natural Heritage Program occurrence record for federally listed species in your project area does not mean the species is not present, as the area may never have been surveyed. Presence of a Natural Heritage Program occurrence record does not mean the project will result in negative impacts. The information within this report is not intended to replace Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) for listed species. Direct contact with the USFWS may be necessary to complete consultation and it is required for actions with a federal connection, such as federal funding or a federal permit; direct contact is also required if ESA concurrence is necessary. Visit the USFWS Information for Planning and Conservation (IPaC) website at https://ecos.fws.gov/ipac/ for further information. This site was developed to help streamline the USFWS environmental review process and is a first step in ESA coordination. The Columbia Missouri Ecological Field Services Office may be reached at 573-234-2132, or by mail at 101 Park Deville Drive, Suite A, Columbia, MO 65203.

Transportation Projects: If the project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or www.modot.mo.gov/ehp/index.htm for additional information on recommendations.

New Longview Townhomes



June 9, 2021

1:20,293

0 0.175 0.35 0.7 mi

0 0.275 0.55 1.1 km

- Project Boundary
- Buffered Project Boundary

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Species or Communities of Conservation Concern within the Area:

There are records for species listed under the Federal Endangered Species Act, and possibly also records for species listed Endangered by the state, or Missouri Species and/or Natural Communities of Conservation Concern within or near the the defined Project Area. Please contact the U.S. Fish and Wildlife Service and the Missouri Department of Conservation for further coordination.

MDC Natural Heritage Review
Science Branch
P.O. Box 180
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65102-0180
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U.S. Fish and Wildlife Service
Ecological Service
101 Park Deville Drive
Suite A
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65203-0007
Phone: 573-234-2132

Other Special Search Results:

No results have been identified for this project location.

Project Type Recommendations:

New construction, maintenance and remodeling, including government, commercial and residential buildings and other structures. Fish, forest, and wildlife impacts can be avoided by siting projects in locations that have already been disturbed or previously developed, where and when feasible, and by avoiding alteration of areas providing existing habitat, such as wetlands, streams, forest, native grassland, etc. The project should be managed to minimize erosion and sedimentation/runoff to nearby wetlands, streams and lakes, including adherence to any “Clean Water Act Permit” conditions. Project design should include stormwater management elements that assure storm discharge rates to streams for heavy rain events will not increase from present levels. Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species compatible with the local landscape and wildlife needs. Annual ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crownvetch and sericea lespedeza. Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages, and monitor the site after rain events and until a well-rooted ground cover is reestablished.

Project Location and/or Species Recommendations:

Endangered Species Act Coordination - Indiana bats *(Myotis sodalis*, federal- and state-listed endangered) and **Northern long-eared bats** (*Myotis septentrionalis,* federal-listed threatened) may occur near the project area. Both of these species of bats hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in wooded areas, often riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats or Northern long-eared bats, especially from September to April. **If any trees need to be removed for your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132 ext. 100 for Ecological Services) for further coordination under the Endangered Species Act.**

Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment. Please inspect and clean equipment thoroughly before moving between project sites. See http://mdc.mo.gov//9633 for more information.

- Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
- Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (>140° F, typically available at do-it-yourself car wash sites), and dry in the hot sun before using again.

Streams and Wetlands – Clean Water Act Permits: Streams and wetlands in the project area should be protected from activities that degrade habitat conditions. For example, soil erosion, water pollution, placement of fill, dredging, in-stream activities, and riparian corridor removal, can modify or diminish aquatic habitats. Streams and wetlands may be protected under the Clean Water Act and require a permit for any activities that result in fill or other modifications to the site. Conditions provided within the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit (http://www.nwk.usace.army.mil/Missions/RegulatoryBranch.aspx) and the Missouri Department of Natural Resources (DNR) issued Clean Water Act Section 401 Water Quality Certification (http://dnr.mo.gov/env/wpp/401/index.html), if required, should help minimize impacts to the aquatic organisms and aquatic habitat within the area. Depending on your project type, additional permits may be required by the Missouri Department of Natural Resources, such as permits for stormwater, wastewater treatment facilities, and confined animal feeding operations. Visit http://dnr.mo.gov/env/wpp/permits/index.html for more information on DNR permits. Visit both the USACE and DNR for more information on Clean Water Act permitting.

For further coordination with the Missouri Department of Conservation and the U.S. Fish and Wildlife Services, please see the contact information below.

MDC Natural Heritage Review
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P.O. Box 180
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Ecological Service
101 Park Deville Drive
Suite A
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65203-0007
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Miscellaneous Information

FEDERAL Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.

STATE Concerns are species/habitats known to exist near enough to the project site to warrant concern and that are protected under the Wildlife Code of Missouri (RSMo 3 CSR 1 0). "State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR 1 0-4.111. Species tracked by the Natural Heritage Program have a "State Rank" which is a numeric rank of relative rarity. Species tracked by this program and all native Missouri wildlife are protected under rule 3CSR 10-4.110 General Provisions of the Wildlife Code.

Additional information on Missouri's sensitive species may be found at http://mdc.mo.gov/discover-nature/field-guide/endangered-species . Detailed information about the animals and some plants mentioned may be accessed at http://mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx . If you would like printed copies of best management practices cited as internet URLs, please contact the Missouri Department of Conservation.

Missouri Department of Conservation

Natural Heritage Review Report

Science Branch
P. O. Box 180
Jefferson City, MO 65102
Prepared by: Hannah Roos
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(573) 522 - 4115 ext. 3182

Stephen Saylor
Olsson
ssaylor@olsson.com

NHR ERT ID:	9260	NHR ERT Level:	3
Project type:	Construction		
Location/Scope:	451 SW Longview Blvd, Lee's Summit, MO		
County:	Jackson		
Query reference:	New Longview Townhomes		
Query received:	6/10/2021		

This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially affected by the proposed project. On-site verification is the responsibility of the project. Natural Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information is at https://mdc.mo.gov/discover-nature/places/natural-areas and https://mdc12.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx

Level 3 issues: Records of federal-listed (these are also state-listed) species or critical habitats near the project site:

Natural Heritage records indicate several Bald Eagle nests within 2 miles of the project area.

- **Bald Eagles:** Bald Eagles (*Haliaeetus leucocephalus*) nest near streams or water bodies in the project area. Nests are large and fairly easy to identify. While no longer listed as endangered, eagles continue to be protected by the federal government under the Bald and Golden Eagle Protection Act. Work managers should be alert for nesting areas within 1500 meters of project activities, and follow federal guidelines at: https://www.fws.gov/midwest/eagle/permits/index.html if eagle nests are seen.

FEDERAL LIST species/habitats are protected under the Federal Endangered Species Act. Contact the U.S. Fish and Wildlife Service (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132) for Endangered Species Act coordination and concurrence information).

Level 2 issues: Records of state-listed (not federal-listed) endangered species AND / OR state-ranked (not state-listed endangered) species and natural communities of conservation concern. The Department tracks these species and natural communities due to population declines and/or apparent vulnerability.

Natural Heritage records identify no state-listed endangered species within the project area.

Natural Heritage records indicate the following state-ranked species/natural communities near the project area:

Scientific Name	Common Name	State Rank	Proximity (miles)
Crotaphytus collaris	Eastern Collared Lizard	S4	1.16
Mustela frenata	Long-tailed Weasel	S3	2.06
Perimyotis subflavus	Tri-colored Bat	S2	3.7
Taxidea taxus	American Badger	S3	2.29

State Rank Definitions:

- S1: Critically imperiled in the state because of extreme rarity of or because of some factor(s) making it especially vulnerable to extirpation from the state. Typically, 5 or fewer occurrences or very few remaining individuals (<1,000).
- S2: Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state (6 to 20 occurrences or few remaining individuals).
- S3: Vulnerable in the state either because rare and uncommon, or found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
- S4: Uncommon but not rare, and usually widespread in the nation or state. Possible cause of long-term concern. Usually more than 100 occurrences and more than 10,000 individuals.

There are no regulatory requirements associated with this status, however we encourage voluntary stewardship to minimize the risk of further decline that could lead to listing.

STATE ENDANGERED species are listed in and protected under the Wildlife Code of Missouri (3CSR10-4.111). See https://mdc.mo.gov/sites/default/files/mo_nature/downloads/2021_SOCC.pdf for a complete list of species and communities of conservation concern.

General recommendations related to this project or site, or based on information about the historic range of species (unrelated to any specific Natural Heritage records):

- **Construction:** The project should be managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Act Permit" conditions (Missouri DNR or US Army Corps of Engineers). Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species compatible with the local landscape and wildlife needs. Annual ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as Crown Vetch and *Sericea lespedeza*. Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages and monitor those after rain events and until a well-rooted ground cover is reestablished. Please reference https://mdc.mo.gov/sites/default/files/downloads/page/Streams.pdf for Best Management Practices regarding Construction Projects near streams or rivers.

- **Indiana Bats and Northern Long-eared Bats** could occur in the project area. Indiana Bats *(Myotis sodalis*, federal and state-listed endangered) and Northern Long-eared Bats (*Myotis septentrionalis,* federal-listed threatened) hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana Bats and/or Northern Long-eared Bats, especially from September to April. **If any trees need to be removed by your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132 Ext. 100 for Ecological Services) for further coordination under the Endangered Species Act.**

- Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.
  - Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.

- Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (≥140° F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.

➢ **Karst:** Jackson County has known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area. See https://live-mdcd8.pantheonsite.io/sites/default/files/2020-06/Karst.pdf for best management recommendations.

These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Natural Heritage records largely reflect sites visited by specialists in the last 30 years. Many privately owned tracts have not been surveyed and could host remnants of species once but no longer common.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Missouri Ecological Services Field Office
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
Phone: (573) 234-2132 Fax: (573) 234-2181

In Reply Refer To: June 10, 2021
Consultation Code: 03E14000-2021-SLI-1813
Event Code: 03E14000-2021-E-04818
Project Name: New Longview Townhomes

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. N**ote that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days.** The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Refer to the Midwest Region S7 Technical Assistance website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects: projects in developed areas, HUD, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

Federally Listed Bat Species

Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

Gray bats - Gray bats roost in caves or mines year-round and use water features and forested riparian corridors for foraging and travel. If your project will impact caves, mines, associated riparian areas, or will involve tree removal around these features – particularly within stream corridors, riparian areas, or associated upland woodlots –gray bats could be affected.

Indiana and northern long-eared bats - These species hibernate in caves or mines only during the winter. In Missouri the hibernation season is considered to be November 1 to March 31. During the active season in Missouri (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥5 inches diameter at breast height (dbh) for Indiana bat, and ≥3 inches dbh for northern long-eared bat, that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Tree species often include, but are not limited to, shellbark or shagbark hickory, white oak, cottonwood, and maple. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas;
- Trees found in highly-developed urban areas (e.g., street trees, downtown areas);
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees; and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see #3 below) – then project proponents can conclude the proposed activities **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species through the S7 Technical Assistance website.

3. If IPac returns a result that one or more federally listed bat species (Indiana bat, northern long-eared bat, or gray bat) are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** these bat species **IF** one or more of the following activities are proposed:

a. Clearing or disturbing suitable roosting habitat, as defined above, at any time of year;
b. Any activity in or near the entrance to a cave or mine;
c. Mining, deep excavation, or underground work within 0.25 miles of a cave or mine;
d. Construction of one or more wind turbines; or
e. Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on listed bat species. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

If any of the above activities are proposed in areas where one or more bat species may be present, project proponents can conclude the proposed activities **may affect** one or more bat species. We recommend coordinating with the Service as early as possible during project planning. If your project will involve removal of over 5 acres of suitable forest or woodland habitat, we recommend you complete a Summer Habitat Assessment prior to contacting our office to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the Range-wide Indiana Bat Summer Survey Guidelines.

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area

please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

Next Steps

Should you determine that project activities **may affect** any federally listed species or trust resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Karen Herrington

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Missouri Ecological Services Field Office
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
(573) 234-2132

Project Summary

Consultation Code: 03E14000-2021-SLI-1813
Event Code: 03E14000-2021-E-04818
Project Name: New Longview Townhomes
Project Type: DEVELOPMENT
Project Description: New Longview Townhomes is located at 451 SW Longview Blvd, Lee's Summit, MO. The project includes grading, infrastructure, and townhomes.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.91019095,-94.44707812279788,14z

Counties: Jackson County, Missouri

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat *Myotis grisescens*	Endangered
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	
Indiana Bat *Myotis sodalis*	Endangered
There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949 General project design guidelines: https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6868.pdf	
Northern Long-eared Bat *Myotis septentrionalis*	Threatened
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 General project design guidelines: https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6868.pdf	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

SECTION 11

Inspection Reports

-Log of Inspections
-Inspection Reports
-Inspector Credentials

Log of Inspections

Inspection Date	Inspector Name	Type of Inspection

Inspection Date	Inspector Name	Type of Inspection

Stormwater Construction Site Inspection Report

General Information			
Project Name		**Date of Inspection**	
Permit Number		**Time of Inspection**	
Inspector's Name(s)		**Inspector's Title**	
Inspector's Contact Information			
Describe present phase of construction			
Type of Inspection:	❑ Routine ❑ Post-storm event		

Weather Information
Has there been a storm event since the last inspection? ❑Yes ❑No **If yes, provide:** Storm Start Date: Approximate Amount of Precipitation (in):
Weather at time of this inspection? ❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds ❑ Other: Temperature:
Were any discharges noted at the time of inspection? ❑Yes ❑No **If yes, describe:**

BMP Effectiveness
Were BMPs operating effectively during inspection? ❑Yes ❑No **If no, does SWPPP need to be amended?**
List any non-effective BMPs in the corrective action log on the next page.
List any amendments to the SWPPP that were identified as being necessary during inspection:

Areas Where Land Disturbance Operations Have Permanently or Temporarily Stopped		

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print name and title: _____

Signature: _____ **Date:**_____

#	BMP Location	Corrective Action Needed	Date Corrected	Corrective Actions Taken

Stormwater Construction Site Inspection Report

General Information			
Project Name		**Date of Inspection**	
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Print name and title: _____

Signature: _____ **Date:**_____

#	BMP Location	Corrective Action Needed	Date Corrected	Corrective Actions Taken

SECTION 12

Regulatory Correspondence

Pertinent correspondence from regulatory agencies relating to this project can be located here.

SECTION 13

Notice of Termination

This section contains the Notice of Termination form for the project. The form should be filled out, signed and sent to the applicable MDNR regional office (see map).

Documentation of acceptance from the DNR should also be kept here and all documents must be retained for 3 years after the date of NOT acceptance.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH

REQUEST FOR TERMINATION OF OPERATING PERMIT

(REPLACES TERMINATION FORMS H AND J)

FOR OFFICE USE ONLY
DATE RECEIVED

IF A FACILITY OR SITE HAS BEEN SOLD, BUT PERMITTED ACTIVITIES HAVE NOT CEASED, A TRANSFER OF OWNERSHIP FORM (MO 780-1517) MUST BE COMPLETED RATHER THAN A TERMINATION FORM.

ALL APPLICABLE SECTIONS OF THIS FORM MUST BE COMPLETED.

1. FACILITY INFORMATION

PERMIT NUMBER	COUNTY		
NAME OF FACILITY			
PHYSICAL ADDRESS	CITY	STATE	ZIP CODE
FACILITY CONTACT NAME	FACILITY CONTACT TELEPHONE NUMBER	FACILITY CONTACT EMAIL	

2. OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE		
ADDRESS	CITY	STATE	ZIP CODE
EMAIL			

3. CONTINUING AUTHORITY

NAME	TELEPHONE NUMBER WITH AREA CODE		
ADDRESS	CITY	STATE	ZIP CODE
EMAIL			

4. REASON FOR TERMINATION REQUEST (CHECK ONE)

☐ Permitted activities have ceased, or facility is closed (must select facility type in section five and attach photographs or any other supporting documents as required).

☐ General Permit MO-G _____or MO-R _____ has been issued and covers all regulated activities.

☐ Site specific permit MO- _____ has been issued and covers all regulated activities.

☐ Facility has obtained a “No Exposure” certification, MO-NX_____.

☐ Industrial activity (SIC Code # _____) is not regulated.

☐ For CAFOs, facility size is unregulated (Class II and smaller operations only).

☐ Other (Specify).

5. FACILITY TYPE (CHECK ONE FACILITY TYPE, COMPLETE ONLY IF PERMITTED ACTIVITY HAS CEASED OR FACILITY HAS CLOSED)

☐ For land disturbance sites, the area is stabilized; perennial vegetation, pavement, buildings or other permanent structures cover all areas that have been disturbed; no further land disturbance activities are planned; all building construction (commercial or residential) is completed; temporary best management practices are removed, and construction equipment is removed. With respect to areas that have been vegetated, vegetation cover shall be at least 70 percent over 100 percent of the site not covered in impervious material. Attach photographs showing stabilized areas.

☐ For wastewater treatment plants, the treatment plant is removed and sludge was removed and properly disposed of, and a closure plan in accordance with 10 CSR 20-6.010(12) or 10 CSR 20-6.015(5) was approved and implemented. Attach documentation required by the approved closure plan and photographs of the closed area. See the *Water Treatment Plant Closure* -PUB2568 fact sheet at dnr.mo.gov/pubs/pub2568.htm for more information on closure requirements for wastewater treatment plants.

☐ For industrial facilities, regulated activities have ceased, no "significant materials" remain on-site and disturbed areas are properly stabilized or vegetated. The area is stabilized when perennial vegetation, pavement, buildings or structures using permanent materials cover all areas that have been disturbed. Vegetation cover shall be at least 70 percent over 100 percent of the site not covered in impervious material. Attach applicable closure documents and photographs of the closed area that demonstrate no permitted activities or materials remain.

☐ For quarries or sand and gravel operations, submit documentation of release from the department's Land Reclamation Program.

☐ For landfills, official closure has been received from department's Solid Waste Management Program (SWMP); cap is vegetated as required by SWMP; and any additional industrial activities are permitted appropriately (i.e., transfer stations, mulching operations, land disturbance, etc.). Attach the official SWMP closure letter and permit numbers of any continuing active industrial or land disturbance activities.

☐ For CAFOs

- ☐ Class I CAFOs must properly close lagoons and waste storage structures per a closure plan in accordance with 10 CSR 20-6.300(6) and approved by the department. Attach photographs of closed lagoons. Also attach any additional information that supports closure of the facility.
- ☐ Class II CAFOs must close waste storage structures in accordance with 10 CSR 20-6.300(6)(B), or shall continue to maintain all storage structures so there is no discharge to waters of the state. Attach photographs of closed or re-purposed lagoons, or an explanation of "no discharge" methods. Also attach any additional information that supports closure of the facility.

6. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
SIGNATURE	DATE SIGNED

7. MAIL COMPLETED COPY TO:

For Site Specific (MO-), Abandoned Mine And Land Reclamation (MO-G05), Land Disturbance By County Or City (MO-R100), Pesticide Application (MO-G87), Sewer Extension Construction (MO-GC) and CAFO (MO-G01, MO-GS1) Permit Terminations:

Missouri Department of Natural Resources
Water Protection Program
Water Pollution Control Branch
Attn: Operating Permits Section
P.O. Box 176
Jefferson City, MO 65102-0176

For General Permit Terminations (MO-G or MO-R):

Send to the appropriate regional office.
Regional office is determined based on the county where the facility is physically located.

To determine the correct regional office for the permitted facility, see **dnr.mo.gov/regions.**

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality Regional Offices

Kansas City Area

Kansas City Regional Office
500 NE Colbern Rd.
Lee's Summit, MO 64086-4710
816-251-0700 FAX: 816-622-7044

St. Louis Area

St. Louis Regional Office
7545 S. Lindbergh, Ste 210
St. Louis, MO 63125
314-416-2960 FAX: 314-416-2970

Northeast Area

Northeast Regional Office
1709 Prospect Drive
Macon, MO 63552-2602
660-385-8000 FAX: 660-385-8090

Southwest Area

Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
417-891-4300 FAX: 417-891-4399

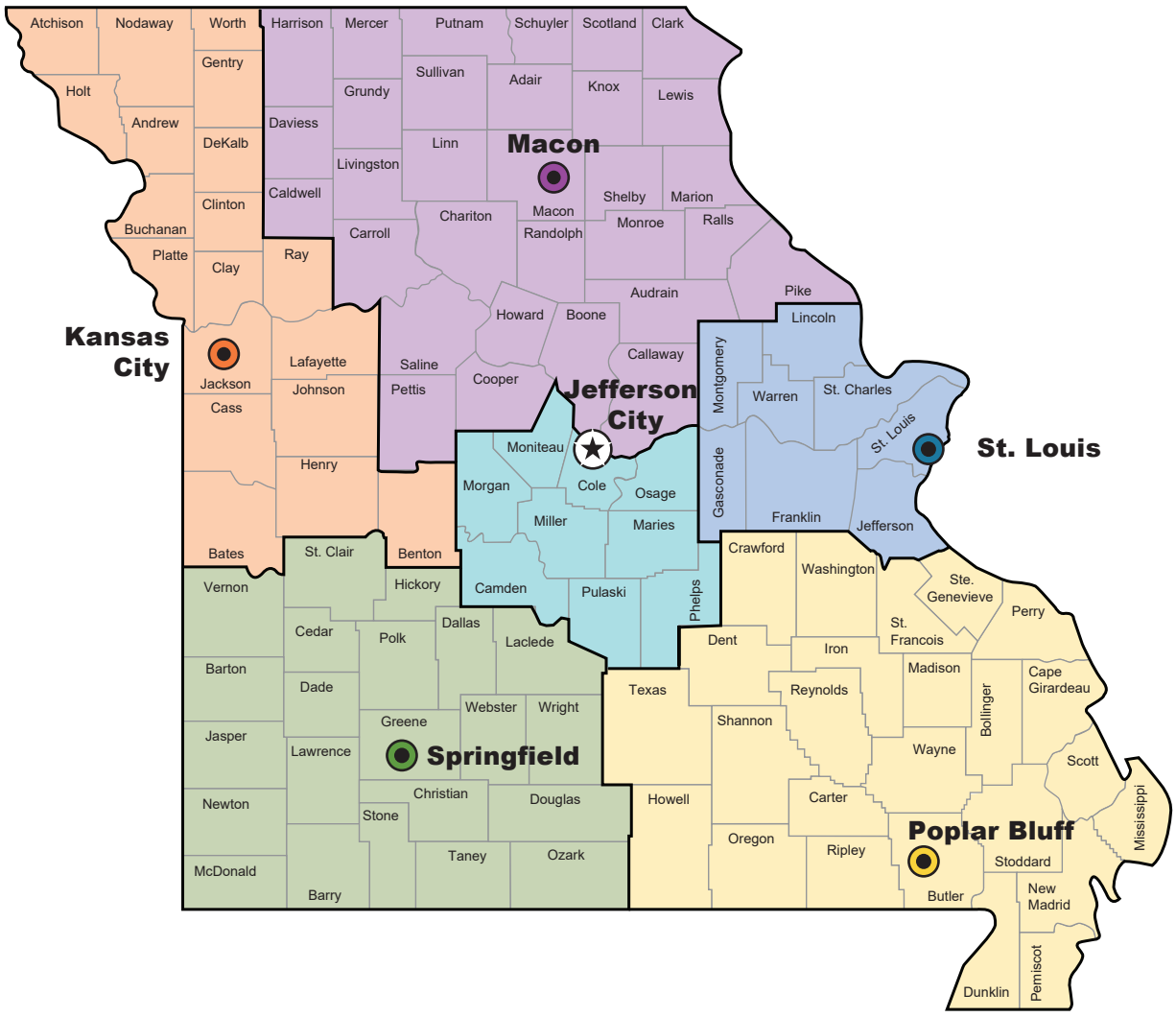
Southeast Area

Southeast Regional Office
2155 North Westwood Blvd.
Poplar Bluff, MO 63901
573-840-9750 FAX: 573-840-9754

Central Area

Department Central Offices
P.O. Box 176
Jefferson City, MO 65102-0176
573-751-3443

Central Field Operations
P.O. Box 176
Jefferson City, MO 65102-0176
573-522-3322 FAX: 573-522-3522



6/25/19

For more information on the department, visit dnr.mo.gov or call 800-361-4827