

STORM WATER POLLUTION PREVENTION PLAN

HEARTLAND MARKET
LEE'S SUMMIT, MISSOURI

Prepared:

May 2023

PREPARED BY:
Adam Schwartz



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Project Information

Project Name: Heartland Market

Address: 940 NE Colbern Road
Lee's Summit, Missouri 64064

Owner: The Great American Dream IV, LLC
PO Box 200
Raymore, MO 64083

Project Representative/Superintendent:

Name: Jack Hopkins

Phone: 816-265-6937

Owner's Representative:

Name: Same as Project Representative

Phone:

General Information

This Storm Water Pollution Prevention Plan (SWPPP) is prepared for the above-mentioned project. The proposed Heartland Market in Lee's Summit is located in the City of Lee's Summit, Jackson County, Missouri, in Section 29 Township 48, Range 31. Activities include the construction of a 5,400 sf C-Store, parking lot and associated infrastructure. Approximately 1.95 acres of the 1.7 ac lot will be disturbed with this project.

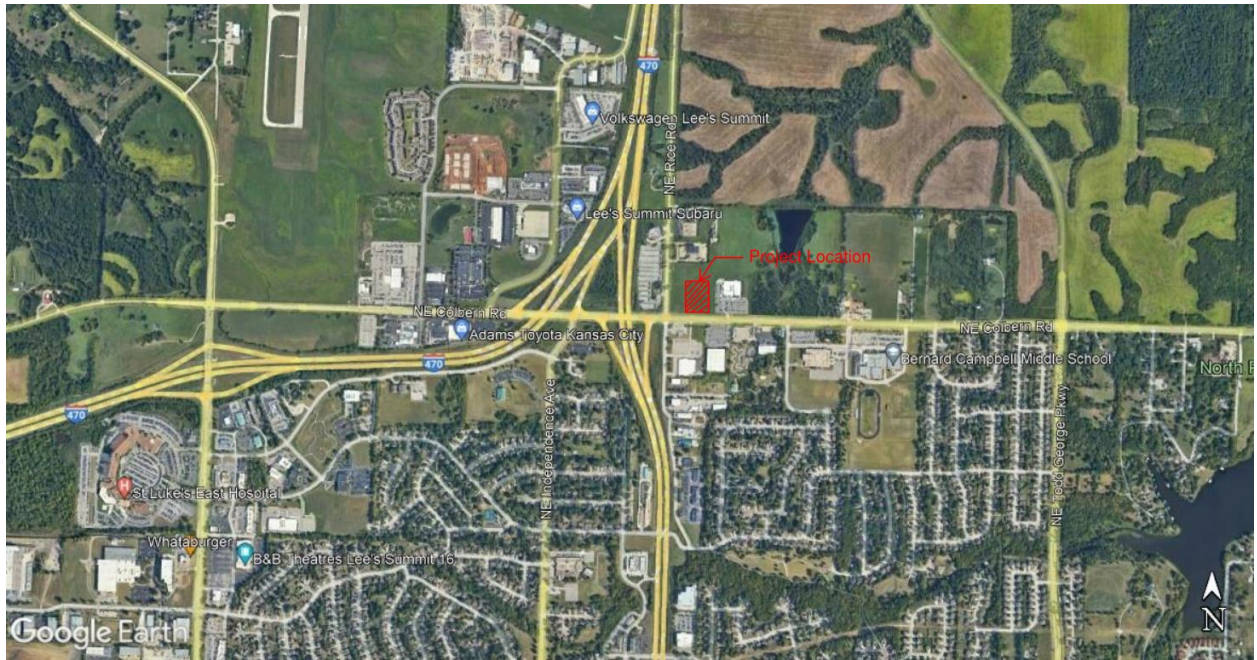
Prior to any construction of this project, the contractor will be required to place erosion control fence along the downhill side of each disturbed area, as discussed more specifically in the site land disturbance plan. After final grading of the site, erosion control measures shall be maintained until turf/vegetation has been established.

The Erosion Control / Land Disturbance Plan shows erosion control/stabilization practices typical for the project location. These measures may need to be altered or additional measures put into place during construction. The Erosion Control / Land Disturbance Plan and this Storm Water Pollution Prevention Plan will be updated as needed throughout the development.

The use of a 404/401 Clean Water Act Permit is not foreseen as there is no impact to the jurisdictional waters of the Army Corps of Engineers that fall within the site's property.

Project Location

Aerial view of proposed site.



Project Location

Aerial view of proposed site.



BEST MANAGEMENT PRACTICES / CONTROL MEASURES

WASTE DISPOSAL:

Waste Materials (see on-site materials later in this report as sources of pollution)

All waste materials will be collected and stored in a secured, covered trash receptacle. The dumpster will meet all local and State of Missouri solid waste management regulations. Trash will be disposed of in the proper manner in accordance with applicable local ordinances. No construction waste materials will be buried onsite. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer and the general contractor will be responsible for seeing that these procedures are followed.

Hazardous Waste

All hazardous materials shall be contained in original containers on-site and shall also be stored in a secondary containment structure or unit. All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices and the general contractor will be responsible for seeing that these practices are followed.

Sanitary Waste

All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed sanitary waste management contractor, as required by local regulation. Number of portable units shall be adequate for number of personnel on the site and may need to be adjusted throughout the development process.

Offsite Vehicle Tracking:

A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be cleaned as needed to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin. Entrance to the site shall be restricted to the stabilized construction entrance throughout construction activities.

TIMING OF CONTROL MEASURES

As indicated in the Sequence of Major Activities on the associated Erosion Control/Land Disturbance Plans, the construction entrance will be constructed prior to clearing or grading of any other portions of the site. Upon implementation of site development and land disturbance activities, all erosion control amenities, as specified in the associated Erosion Control/Land Disturbance Plans shall be installed and functional. Erosion control measures referenced herein, include but are not limited to silt fencing, inlet protection, sediment basin, gravel construction entrances, and any other amenities indicated on the associated Erosion Control/Land Disturbance Plans.

Upon initiation of land disturbance, all erosion control amenities, as specified in the associated Erosion Control/Land Disturbance Plans, and all updates to those plans, shall be installed and functional. Areas where construction activity temporarily ceases for more than 14 days will be stabilized with a temporary seed and mulch within 7 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. After the entire site is stabilized or substantially portions, silt fences and straw bale dikes may be removed subject to approval of the engineer.

The general sequence of major soil disturbing activities is expected to be as follows:

- A. Install erosion control measures.
- B. Clearing and grubbing.
- C. Mass Grading.
- D. Installation of sanitary sewer service.
- E. Installation of storm sewers.
- F. Building Construction.
- G. Installation of water service and other utilities.
- H. Final site grading.
- I. Upon establishment of turf, removal of erosion control measures.

The general sequence may be altered during construction, and actual start dates will be reflected in the Major Construction Activity Log.

DESCRIPTION OF CONTROL MEASURES

Erosion control measures to be utilized on site where appropriate include but are not limited to:
silt fencing; (Temporary)
gravel filter bags (Temporary)
sodding and landscaping; (Temporary and Permanent)
gravel construction entrances; and (Temporary)
any other amenities indicated on the associated erosion control/land disturbance plans.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The storm water pollution prevention plan reflects Federal requirements for storm water management and erosion and sediment control, as established in EPA Document # 832-R-92-0005. To ensure compliance, this plan was prepared in accordance with the guidance set forth by the Missouri Department of Natural Resources. The Storm Water Pollution Prevention Plan and the attached site development plans reflect City of Lee's Summit requirements for storm water management and erosion and sediment control.

MAINTENANCE/INSPECTION PROCEDURES

Erosion and Sediment Control Inspection and Maintenance Practices

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls.

- The temporary cover crop will be maintained until permanent vegetation is installed.
- All control measures will be inspected at least once per two weeks and/or within 24 hours of any 0.5-inch rainfall during construction activities.
- All measures will be maintained in good working order; if a deficiency is noted by the report, the permittee shall promptly notify site contractors responsible for operation and maintenance of BMP's and require repair within seven (7) calendar days.
- Built up sediment will be removed from silt fences when it has reached one-third the height of the fence.
- Silt fences will be inspected for depth of sediment, for tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be made after each inspection.
- The owner or general contractor will select qualified individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- Sedimentation/Silt basins shall be monitored and maintained throughout construction activities and shall be re-graded and cleaned out once the basin has reached 1/3 of its full capacity. Material removed from the silt basin shall be stored in spoil areas as designated on the associated Erosion Control/Land Disturbance Plans.

The owner will be responsible for inspection and maintenance of BMP's. Personnel selected for inspection and maintenance responsibilities will have received training necessary for inspection and maintenance. They will have been trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

Non-Storm Water Discharges

It is expected that the following non-storm water discharges will occur from the site during the construction period:

- Water from water line flushing.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater (from dewatering excavations).

Sediment from Non-Storm Water Discharges is expected to be controlled through proper installation and maintenance of on-site controls including silt fences, straw bales, and inlet protection.

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present onsite during construction:

Concrete
Asphalt
Gravel
Wood
Steel Framing
Paint
Fertilizer
Detergents

PVC Pipe
Petroleum Based Products
Polyethylene Pipe
Tar
Cleaning Solvents
Masonry Blocks
Roofing Shingles

SPILL PREVENTION

Material Management Practices

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff.

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job.
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials onsite.

Hazardous Materials:

These practices are used to reduce the risks associated with hazardous materials.

- Products will be kept in original containers unless they are not resealable.
- Original labels and material safety data will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

Product Specific Practices

The following product specification will be followed onsite:

Petroleum Products:

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts as recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer, will be transferred to a sealable plastic bin to avoid spills.

Concrete Trucks:

Concrete trucks are limited to designated controlled area to wash out or discharge surplus concrete or drum wash water on the site. Proper signage shall be installed and maintained on site defining directions to and locations of the specified wash out area. If a wash out area cannot be designated or maintained on site, concrete wash out and disposal may be prohibited at the owner's discretion.

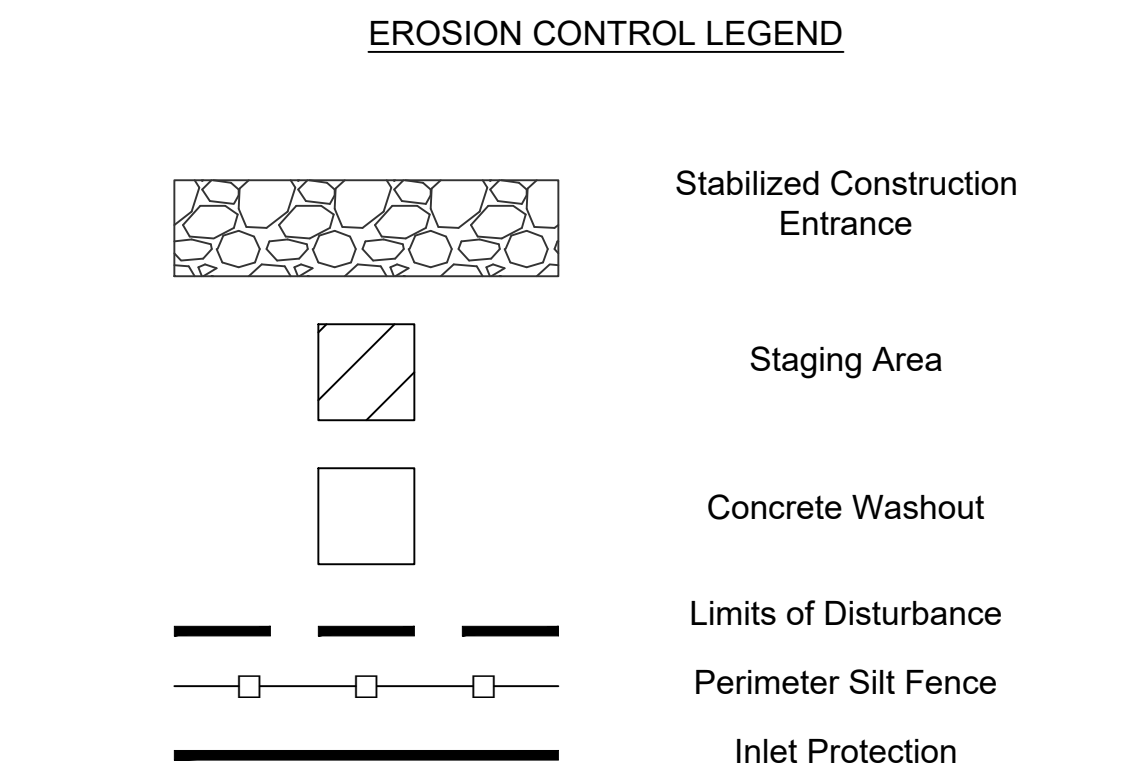
SPILL CONTROL PRACTICES

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup.

- Manufacturers' recommended methods for spill cleanup will be available at the site office and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.
- The general contractor will be the spill prevention and cleanup coordinator.

Post Construction Storm Water Control and Project Closeout

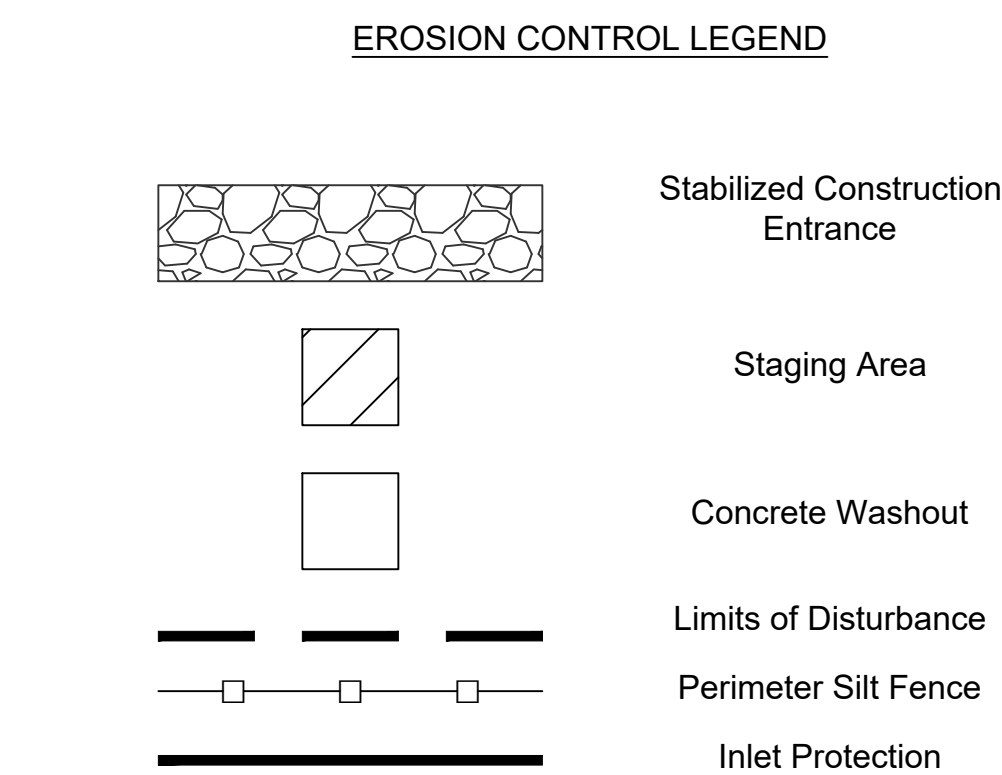
The final grading for the overall development has been designed to accommodate local storm water runoff requirements regarding public storm sewer systems, consisting of open drainage channels and associated grading. Upon completion of the development, storm water runoff from the previously disturbed areas will be handled and maintained via public storm sewer systems that have been designed, reviewed, approved and inspected by the City of Lee's Summit, Mo.



1. All work in public easements and right-of-way and all erosion control work must comply with the latest specifications set forth by the City of Lee's Summit, MO, the Kansas City Chapter of American Public Works Association (APWA). If any of the specification and/or general notes conflict with the requirements provided by the City of Lee's Summit, the City of Lee's Summit's standards shall override.
2. The contractor shall provide all materials, tools, equipment, and labor as necessary to install and maintain adequate erosion control, keep the streets clean of mud and debris, and prevent soil from leaving the project site. The contractor's erosion control measures shall conform to the City of Lee's Summit, MO, the Kansas City Chapter of American Public Works Association (APWA), Standards and Specifications.
3. Erosion control plan modifications shall be required if the plan fails to substantially control erosion and offsite sedimentation.
4. The contractor shall be responsible for maintaining erosion control devices and removing sediment until a minimum of 70% of permanent vegetation has become stabilized and established. Erosion control devices shall remain in place until the 70% established vegetation is met, or the duration of the project, whichever is the later date.
5. The contractor shall temporarily seed and mulch all disturbed areas if there is to be no construction activity on them for a period of fourteen (14) calendar days.
6. Install "J" Hooks on silt fence every 100 LF
7. Contractor to install all Phase I erosion control devices prior to construction.
8. Contractor shall replace disturbed area with seed or sod, as indicated on the plans, and shall be installed within 14 days after paving completion and final topsoil grading.
9. Topsoil replacement shall be 6" thick.
10. Silt fence to be installed in accordance with the City of Lee's Summit MO.
11. Contractor shall remove mud and debris from City Streets and Outer Roadway within 4 hours of notification by City staff that it is a nuisance.

1. **Implement Pre-Construction Plan:**
All temporary structural BMP's shown on the BMP plan must be in place before any site disturbance. Clearing necessary to place temporary structural BMP's is the minimum required for installation. Coordinate clearing necessary to place temporary structural BMP's with local weather forecast so that clearing and placement may be completed within a forecast dry period. Stabilize all erosion control measures after installation. Temporary Barrier Fence shall be in Place, around areas not to be disturbed, prior to any construction activities. This area includes Stream Corridor.
2. **Clear and Stabilize Work Areas:**
Grade contractor areas and place all-weather surface on contractor areas.
3. **Clearing and Grubbing:**
After Phase I BMP's are installed, contractor may clear, grub, and demo required areas as necessary.

	PROJECT STAGE	PLAN REFERENCE NUMBER	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES
Phase I	A-Prior to Construction	1	Construction Entrance	II	Install Construction Entrance in accordance with APWA Standard Detail ESC-01
		2	Staging Area	II	Install Staging Area
		3	Perimeter Silt Fence	III	Install Silt Fence in accordance with APWA Standard Detail ESC-03
		4	Concrete Washout	II	Install Concrete Washout as Shown on Plans Prior to Pouring Any Concrete in accordance with APWA Standard Detail ESC-01
		5	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase II	B-During Land Disturbance and Storm Infrastructure Installation	6	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase III	C-Final Stabilization	7	Establish Perennial Vegetation	N/A	Redistribute Topsoil and Seed and Mulch all Disturbed Area. Stabilization Complete when 100% of Disturbed Area is Established with Perennial Vegetation with a Density of 70%

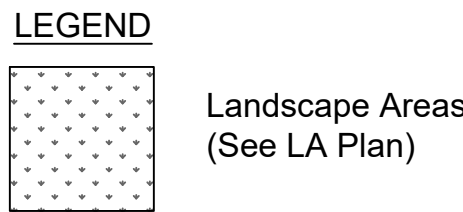
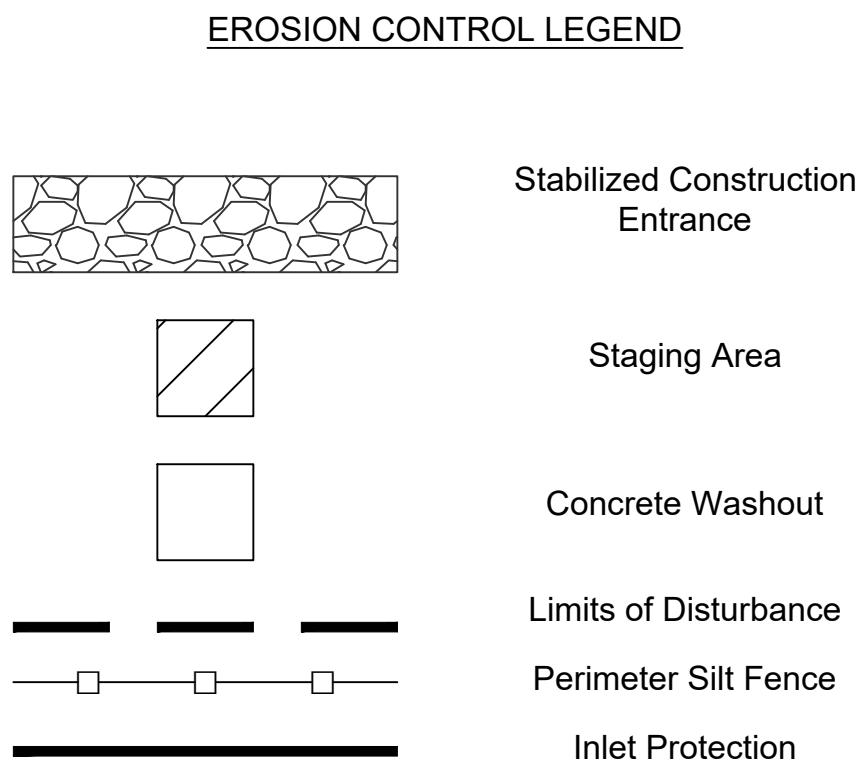
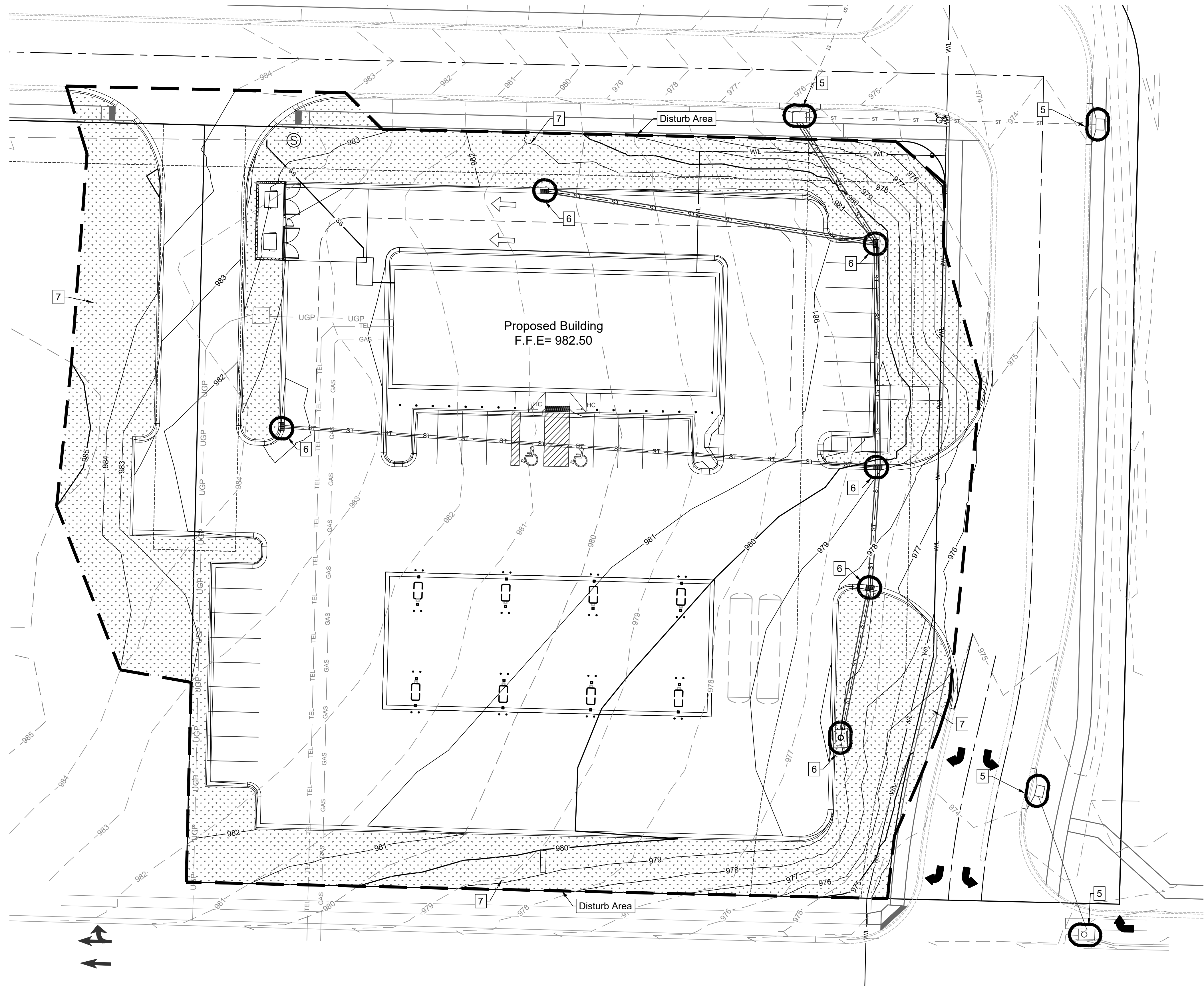


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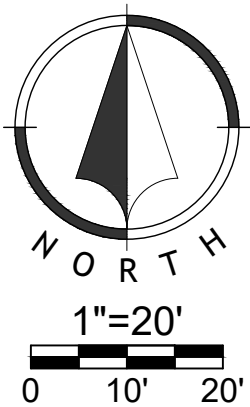
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Disturbed Area for Site Improvements : 1.95 Acres



NO.	DATE	REVISION

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