



Commercial Building Permit Application

CITY

INFORMATION REQUIRED FOR OBTAINING A BUILDING PERMIT AS APPLICABLE

Our goal is to review all plans within a two (2) week period from the time all required information has been submitted.

☐ A Building Permit Application

- ☐ All Civil Drawings To Be Submitted In PDF Format
- ☐ Please Contact City Engineer Prior to Starting Design Work. Tim Schoonhoven or Pete Sarberg at 320-762-8149

☐ Two (2) Complete Sets of Plans & Specifications & Other Relevant Documents Necessary to Evidence Code Compliance.

NOTE: All plans, and the title page of the specification book, shall bear the stamp of the appropriate licensed design professional.

All Plan Submittals Shall Include:

- Full code review and calculations.
- Floor plans showing all rooms, dimensions, names and/or uses for occupancy.
- Wall and building sections showing floors, walls, and roof construction for all types.
- Construction and location of all fire barriers, fire partitions, floor/ceiling and ceiling/roof assemblies, and their fire ratings along with appropriate listing numbers.
- Fire details for penetrations – F & T ratings.
- Door and window schedules, which include fire ratings, hardware types and locations. Any tempered or fire- rated glazing to be identified on plans.
- Emergency lighting, both interior and exterior.
- Exit lighting and signs.

☐ Mechanical Drawings Including:

- Documentation of MN Energy Code Compliance.
- Location of combustion air, return air & supply opening.
- Furnace/boiler locations along with venting, BTU input/output ratings.
- Smoke/Fire damper locations and installation details.
- Flame spread ratings of all insulated ducts.
- Gas piping sizes and locations and support.
- Class I hoods and ducts and associated fire protection systems.
- Shaft construction sections and appropriate system shut offs locations.

☐ A Site Plan (New & Additions Only) Including:

- Property lines and setbacks.
- Easements.
- Location of all buildings on the site.
- Site drainage with existing and proposed contours shown at two (2) foot intervals. (NAVD 88 elevations)
- Location and size of watermains/lines.
- Location and size of sewer mains/lines.
- Stormwater control features along with calculations.
- Approaches.
- The location of all access roads.
- Location of all fire hydrants.
- Public and private sidewalks.
- Accessible route.
- Parking spaces and sizes.
- Building floor elevations.
- Landscape plans.
- Recycling space.

☐ Plumbing Drawings Including:

- State plan submittal/approval information.
- Location and sizes of all water heaters.
- Diagram showing water and waste piping locations and sizing.
- Grease/oil separator or grease trap locations.
- Location and sizes for water and sewer taps.
- Types of material being used.

☐ Details Of Any Unique Items/Unique Construction

☐ Other Information As Deemed Necessary By The Building Official.

☐ Construction Stormwater Permit Application

No structure shall be used, occupied, or furnished until a Certificate of Occupancy has been issued by the Building Department.



COMMERCIAL/RESIDENTIAL BUILDING PERMIT APPLICATION

Address of Building Site:	Parcel Number:
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Legal Description:	
Type of Improvement:	<input type="checkbox"/> New <input type="checkbox"/> Alteration <input type="checkbox"/> Addition <input type="checkbox"/> Repair <input type="checkbox"/> Reroof <input type="checkbox"/> Raze <input type="checkbox"/> Move
Project Description:	Estimated Cost:
Applicant is: <input type="checkbox"/> Owner <input type="checkbox"/> Licensed Contractor <input type="checkbox"/> Architect/Engineer <input type="checkbox"/> Project Manager <input type="checkbox"/> Other	

Property Owner Name:			
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:	Email:	

Applicant Name:		License Number:	
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:	Email:	

Contractor Name:		License Number:	
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:	Email:	

Designer Name:		License Number:	
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:		

Excavator Name:			
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:		

Mechanical Contractor Name:			
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:		

Plumbing Contractor Name:			
Street Address:	City:	State:	Zip:
Contact Person:	Telephone Number:		

Signature of Applicant or Agent: _____ Date: _____



ALEXANDRIA FIRE DEPARTMENT

302 FILLMORE STREET

ALEXANDRIA, MN 56308

Phone: 320-763-6489 Fax: 320-762-9723



- ☐ Commercial ☐ Industrial ☐ Institutional
☐ Multi-Family ☐ Public Facility

FIRE SUPPRESSION/DETECTION SYSTEM PERMIT APPLICATION

Date: _____

Permit Number: _____

Building Address _____

Owner's Name _____

Address _____

Phone # _____

Contractor's Name: _____

Address _____

Phone # _____ State License # _____

Type of Work (check one): ☐ New ☐ Addition ☐ Repair ☐ Alteration

System Valuation

Total Fire Suppression/Protection System Contract Amount: _____

Permit Fee: \$50

Payable to: City of Alexandria
302 Fillmore St
Alexandria, MN 56308

A Set of approved plans by the MN State Fire Marshal and SFM documentation approval are required.

This permit does not relieve the contractor from compliance with appropriate Federal, State or Local regulations concerning this installation. The contractor certifies that the above information is correct.

Applicant Signature: _____

Fire Chief Signature: _____



MINNESOTA DEPARTMENT OF
LABOR & INDUSTRY

Special Structural Testing and Inspection Program Summary Schedule

Reset

PROJECT NAME

PROJECT NO.

LOCATION

PERMIT NO. _____

[illegible]

(If not otherwise specified, assumed program will be "Guidelines for Special Inspection & Testing" as contained in the State Building Code and as modified by the state adopted IBC.)

A complete specification-ready program can be downloaded directly by visiting CASE/MN at www.cecm.org

- (1) Permit No. to be provided by the Building Official
- (2) Referenced to the specific technical scope section in the program.
- (3) Use descriptions per IBC Chapter 17, as adopted by Minnesota State Building Code.
- (4) Special Inspector – Technical (SIT); Special Inspector – Structural (SIS)
- (5) Weekly, monthly, per test/inspection, per floor, etc.
- (6) Name of Firm contracted to perform services.

ACKNOWLEDGEMENTS

(Each appropriate representative shall sign below)

Owner: _____	Firm: _____	Date: _____
Contractor: _____	Firm: _____	Date: _____
Architect: _____	Firm: _____	Date: _____
SER: _____	Firm: _____	Date: _____
SI-T _____	Firm: _____	Date: _____
SI-S: _____	Firm: _____	Date: _____
TA: _____	Firm: _____	Date: _____
F: _____	Firm: _____	Date: _____

If requested by engineer/architect of record or building official, the individual names of all prospective special inspectors and the work they intend to observe shall be identified as an attachment.

Legend: SER = Structural Engineer of Record SI-T = Special Inspector - Technical TA = Testing Agency
SI-S = Special Inspector - Structural F = Fabricator

Accepted for the Building Department By _____ Date _____
This material can be made available in different forms, such as large print, Braille or on a tape. To request, call 1-800-342-5354 (DIAL-DLI) Voice or TDD (651) 297-4198.

Project: _____

Required Inspection	Date completed	<i>Final Inspection Checklist</i>	
		1	Final fire alarm system inspection by the Fire Chief. (Final 2010-NFPA 72 <i>Alarm System Record of Completion</i> form submittal required from installing contractor.)
		2	Final fire sprinkler system testing and inspection by the Fire Chief. Auto-phone-dialer/monitoring system fully established. (Final 2010-NFPA 13 <i>Above Ground Material and Test Certification</i> form submittal required from installing contractor.)
		3	Final fire sprinkler system fire-pump start-up inspection by the Fire Chief. (Final 2010-NFPA 13 and 2010-NFPA 20 <i>Fire Pump Installation, Start-up and Flow Certification</i> form submittal required from contractor.)
		4	Final emergency generator start-up and operational inspection by Fire Chief and/or State Electrical Inspector. (A final start-up and installation certification letter must be submitted by the installing contractor.)
		5	Final class I kitchen hood operational inspection by Fire Chief. (Final 2014-NFPA 96 installation and testing certification letter must be submitted to the state building inspector - by hood fire protection contractor.)
		6	Final kitchen and/or food prep area sanitary health inspection. (A copy of the final sanitarian/health inspection report must be submitted to the Building Official.)
		7	Final elevator, LULA lift, escalator, or moving walk inspection by State Elevator Inspectors.
		8	Final high-pressure-piping, ammonia system piping and/or boiler inspection completed by the appropriate state or insurance inspector. (A copy of the final boiler start-up reports must be submitted to the Building Official for final inspection.)
		9	Final Electrical Inspection by State Electrical Inspector.
		10	Final Plumbing Inspection.
		11	Final Mechanical/HVAC inspection.
		12	Final fuel-burning-equipment start-up inspection, testing, and certification completed by the installing contractor(s). (Final inspection/start-up forms are required for each piece of fuel burning equipment – to be submitted by the installing contractors at final mechanical/HVAC inspection.)
		13	Final balancing report is required for each piece of mechanical equipment and/or the entire new HVAC system. (A final balancing report must be submitted prior to or at the final project mechanical inspection.)
		14	Final HVAC/MECH. and ELECTRICAL Systems “Commissioning Report” document from either a third party commissioning agency - or Equipment Commissioning Report signed-off by the project Architect, Mechanical and Electrical Engineer(s) is required to be submitted for final inspection (per the MN Commercial Energy Code, Section C408). (All new mechanical/electrical equipment for this project must be tested and adjusted for verification of proper functionality and performance to ensure that all control elements are calibrated and in proper working condition, and that all components, equipment, systems, and interfaces between systems, conform to the construction documents and the energy code).
		17	Final Special Inspection & Testing Summary report completed and submitted to Building Official. (From each respective project special inspection and testing agency.)
		18	All gas piping, process piping, medical gas piping, mechanical equipment piping, plumbing piping, etc. - pressure tested and approved by the appropriate third party and/or inspector. (A final medical gas piping inspection/approval report must be submitted by the respective third party inspection agency.)
		19	Exterior site utilities final tested, inspected, sanitized, flushed, and approved - by City Engineer.
		20	Final septic system inspection for areas without sanitary sewer service required.
		21	Final well inspection by State MDH Well Inspector required.
		23	Final local zoning inspection approval – by the local zoning administrator.
		24	OTHER REQUIRED INSP: _____
		25	Final building Inspection for the Certificate of Occupancy (All previously listed inspections and/or required paperwork must be completed and submitted to the Building Official prior to scheduling this inspection. The Certificate of Occupancy will not be issued until all required paperwork has been submitted.)

All above must be checked/completed prior to issuance of the Certificate of Occupancy. No furnishings may be placed within the building and no person shall occupy the building until a Certificate of Occupancy has been issued in accordance with MSBC 1300.0220.

NOTES:



ALEXANDRIA FIRE DEPT

Knox Program Coordinator:

Jeff Karrow, 320-763-6488, jkarrow@alexandriamn.city

How to Order Knox Products

1 ORDER ONLINE

Step 1

Go to

www.knoxbox.com/6345

Step 2

Select your product & add
to cart

Step 3

Confirm product
installation address then
complete your purchase or
continue shopping

2 ORDER BY PHONE

800.552.5669

For online ordering assistance, please contact
Knox Customer Service at 800.552.5669

Do I Need to Have a Licensed Design Professional (aka: Architect/Engineer) Design my Project?

The Minnesota Board of Architecture & Engineering has Building Type and Size Limitations on what can be Designed (drawn) by an Unlicensed Individual (draftsman). These Limitations are Identified Below:

1800.5900 CLASSES OF BUILDINGS.

In accordance with Minnesota Statutes, sections [326.02](#), subdivision 5, and [326.03](#), subdivision 2, the following classes of buildings are exempt subject to the limitations of the elements listed below:

Classifications

Elements that must be met to be exempt*

Assembly (as defined by the MSBC under occupancy group A2: Dining and drinking less than 50 persons)

Not greater than one story with no basement; and
Seating for not more than 20 persons; and
Not greater than **1,000** gross square footage (GSF)

Business (as defined by the MSBC under occupancy group B)

Not greater than two story with a basement; and
Not greater than **2,250** GSF

Factory (as defined by the MSBC under occupancy group F2)

Not greater than one story with no basement; and
Not greater than **3,000** GSF

Mercantile (as defined by the MSBC under occupancy group M)

Not greater than two story with a basement; and
Not greater than **1,500** GSF

Residential (as defined by the MSBC under occupancy group R)

Apartment houses/condominiums (**three units or less**), dwellings, lodging houses, attached single-family dwellings/townhomes, and congregate residences (each accommodating ten persons or less)

Storage (as defined by the MSBC under occupancy group S1: Aircraft hangars and helistops)

Not greater than one story with no basement; and
Not greater than **3,000** GSF

Storage (as defined by the MSBC under occupancy group S2 except for parking garages, open or enclosed)

Not greater than one story with no basement; and
Not greater than **5,000 GSF**

Utility (as defined by the MSBC under occupancy group U except for fences higher than 8', tanks and towers, and retaining walls with over 4' of vertical exposed face)

Not greater than one story with no basement; and
Not greater than **1,000 GSF**

Subd. 2. Practice of Architecture.

Any person shall be deemed to be practicing architecture, within the meaning of sections [326.02](#) to [326.15](#), who holds out as being able to perform or who does perform any professional service, such as planning, design, or supervision of construction for the purpose of assuring compliance with specifications and design, in connection with any private or public buildings, structures or projects, or the equipment or utilities thereof, or the accessories thereto, wherein the safeguarding of life, health, or property is concerned or involved, when such professional service requires the application of the art and science of construction based upon the principles of mathematics, aesthetics, and the physical sciences, acquired by education or training, and by experience. For the purposes of this subdivision "supervision" is a professional service as distinguished from superintending of construction and means the performance or the supervision thereof, of reasonable and ordinary on the site observations to determine that the construction is in substantial compliance with the approved drawings, plans and specifications.

*It is illegal to practice architecture per this part without being a
LICENSED DESIGN PROFESSIONAL. It is punishable by law!*



Construction Stormwater Permit Application

**CITY OF ALEXANDRIA
Building Department 704 Broadway
Alexandria, MN 56308
(320) 763-6678 – Phone / (320) 763-3511 – Fax**

Land Disturbing Activities shall comply with the Minnesota Pollution Control Agency's Best Management Practices (BMPs).

The purpose of requiring this information as a part of the permit application process is to minimize both short-term and long-term erosion, contain sediment on site and manage post construction runoff.

The Following Land Disturbing Activities Require an *Erosion and Sediment Control Plan Sketch*.

- ☐ **Category 1** - Construction activities disturbing less than ½ acre that include new construction, demolition, remodel/addition, accessory structure and/or landscaping/retaining walls.

The Following Land Disturbing Activities Require a *Stormwater Management Plan*.

- ☐ **Category 2** – Construction disturbing equal to or greater than ½ acre, but less than 1 acre; or construction on riparian lake lots (except attached decks and 2020 Minnesota Building Code, Section 1300.0120, Subp. 4. Work Exempt from Permit); or construction that is determined by the City Engineer to present a substantial risk to neighboring private properties, public infrastructure or waterways/wetlands.
- ☐ **Category 3** – Construction activities disturbing equal to or greater than 1 acre. (Also requires separate MPCA Construction Stormwater Permit)

☐ **Category 1 Plan Submittal Requirements:**

- **The Following Must be Included in or Attached to the *Erosion and Sediment Control Plan Sketch***
 - A clearly legible and complete Alexandria Construction Stormwater Permit application.
 - Location and type of perimeter erosion control.
 - Temporary construction site vehicle exit location and material that it will be constructed of.
 - Location and type of other erosion prevention and sediment control BMPs.
 - Location and type of storm drain inlet protection for all storm sewer inlets downstream of the site within one block or as directed by City Engineer.
 - Spot elevations (using an assumed datum) at:
 - Street edge at center of driveway or other appropriate benchmark
 - Existing ground within 10' radius of lot corners
 - Existing ground defining areas of steeper than 3:1 slopes
 - Plan elevations for structure (using an assumed datum) at:
 - Garage Floor, if applicable
 - Top of House Foundation, if applicable
 - Basement Floor, if applicable
 - Construction activity disturbance area
 - Standard illustrations (details) of proper installation of erosion prevention and sediment control BMPs. (MnDOT details provided for reference, pages 7-15)
- **The Following Notes Must be Placed on Plan Sketch and Adhered to as Applicable:**
 - The street shall be swept clean before the end of each day of active construction, when sediment is tracked onto the street.
 - Areas with slopes greater than 3:1 and areas adjacent to wetlands/waterbodies disturbed during construction shall be protected with temporary vegetation, mulching or other means as soon as practical.
 - All exposed soil areas shall be stabilized as soon as practical.
 - Unworked soils that remain exposed and not in use for longer than 14-days shall be seeded with temporary seed (grass, oats or wheat) in addition to being stabilized.
 - No concrete washout shall occur on site unless it is done with an approved MPCA device or standard.
 - Stockpiles shall be stabilized and surrounded with adequate perimeter control to prevent sedimentation.
 - Inlet protection for all storm sewer inlets downstream and within one block of the site shall be installed and maintained.
 - Site shall be kept clean at all times and refuse properly controlled.
 - Temporary pumping shall not be permitted without use of an approved MPCA device or standard.
 - Soil compaction shall be minimized.
 - All temporary synthetic BMPs to be removed upon permanent stabilization.

Category 1 Erosion and Sediment Control Plan Sketch

(This page is **not** required for Category 2 or Category 3)

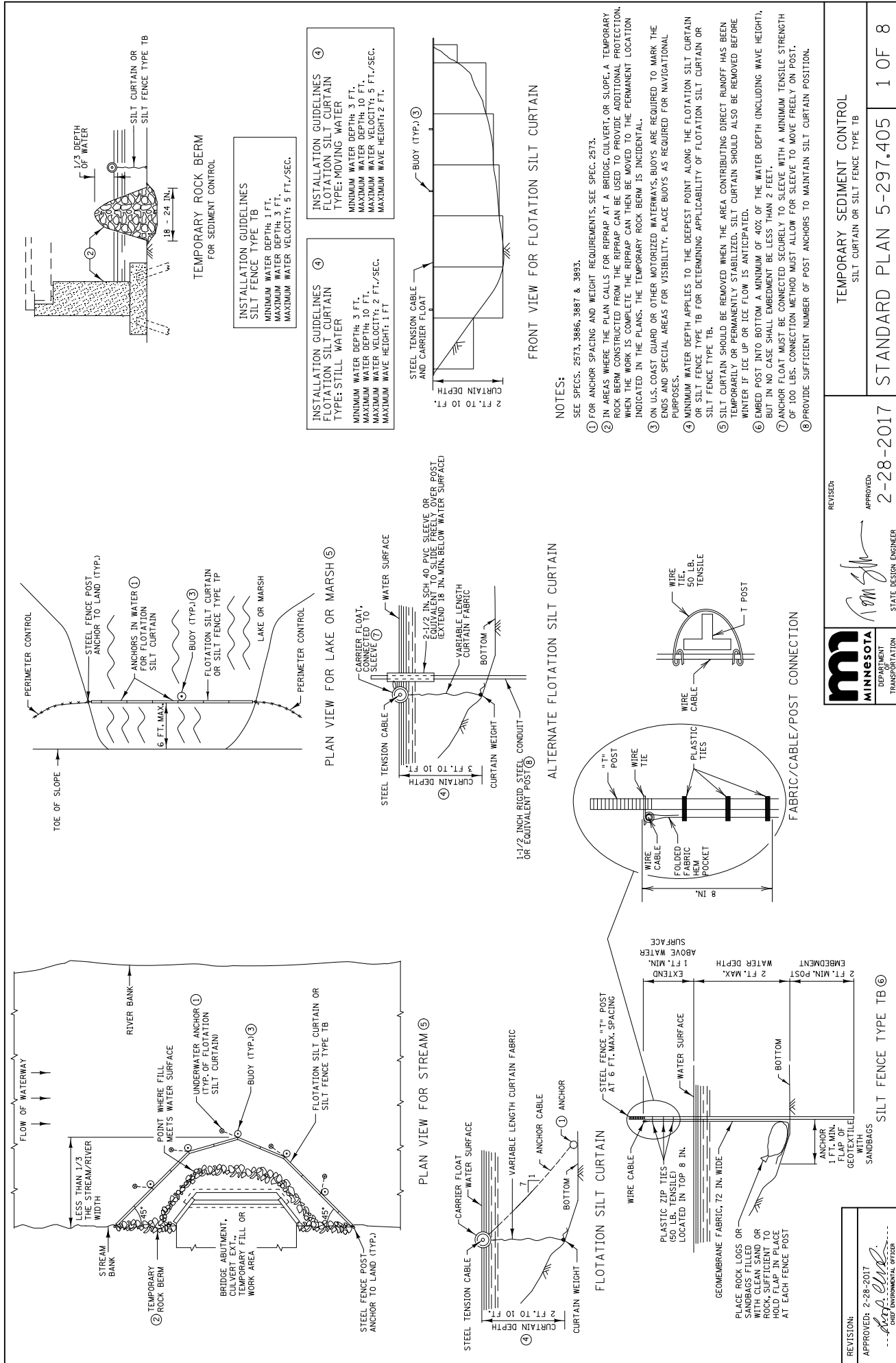
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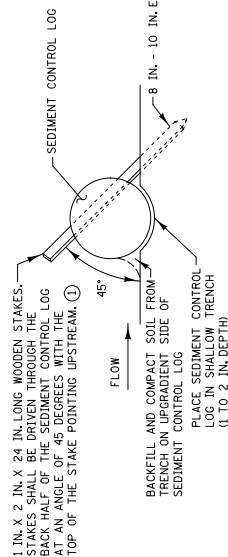
- ☐ Location and type of perimeter control
- ☐ Location and type of construction exit
- ☐ Location and type of other erosion prevention and sediment control BMPs
- ☐ Location and type of inlet protection for all storm sewer inlets within 1 block downstream
- ☐ Name, telephone number and email address of individual responsible for the site and maintenance of the erosion and sediment controls.
- ☐ Spot elevations (see list on page 3)
- ☐ Standard illustrations (details) of proper instillation of erosion prevention and sediment control BMPs

- The street shall be swept clean before the end of each day of active construction, when sediment is tracked onto the street.
- Areas with slopes greater than 3:1 and areas adjacent to wetlands/waterbodies disturbed during construction shall be protected with temporary vegetation, mulching or other means as soon as practical.
- All exposed soil areas shall be stabilized as soon as practical.
- Unworked soils that remain exposed and not in use for longer than 14-days shall be seeded with temporary seed (grass, oats or wheat) in addition to being stabilized.
- No concrete washout shall occur on site unless it is done with an approved MPCA device or standard.
- Stockpiles shall be stabilized and surrounded with adequate perimeter control to prevent sedimentation.
- Inlet protection for all storm sewer inlets downstream and within one block of the site shall be installed and maintained.
- Site shall be kept clean at all times and refuse properly controlled.
- Temporary pumping shall not be permitted without use of an approved MPCA device or standard.
- Soil compaction shall be minimized.
- All temporary synthetic BMPs to be removed upon permanent stabilization.

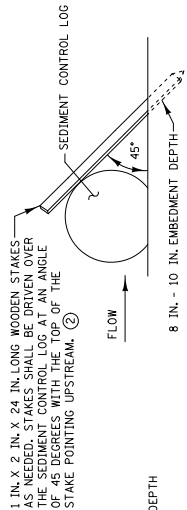
☐ **Category 2 Plan Submittal Requirements:**

- **The Following Must be Included in or Attached to the *Stormwater Management Plan***
- A clearly legible and complete Alexandria Construction Stormwater Permit application.
- Drawings prepared to an easily legible scale, shall be clearly labeled with a north arrow and a date of preparation.
- Names, addresses and phone numbers of the land surveyor, and engineer, if any.
- Project description including property boundaries, areas to be disturbed, and the nature and purpose of the land disturbing activity and the amount of grading involved.
- Spot elevations of proposed grades in relation to existing grades on the subject property and adjacent properties.
- Existing site conditions including topography, vegetation and drainage arrows.
- Areas where finished slope will be steeper than 3:1.
- Critical erosion areas including areas on the site that have potential for erosion problems.
- Erosion and sediment control devices including methods to be used to control erosion on the site, both during and after the construction activity process.
- Location of and type of storm drain inlet protection for all storm sewer inlets downstream of the site within one block or as directed by City Engineer, wetlands, wet sediment basins and lakes.
- Location of material stockpiles.
- Plan for temporary site stabilization.
- Permanent stabilization including how the site will be stabilized after construction is completed, including specifications.
- Temporary construction site vehicle exit location and material that it will be constructed of.
- Adjacent areas including neighboring streams, roads, residential areas, etc. which might be affected by the land disturbing activity.
- Project schedule including a projected timeframe for completion of all site activities.
- Phasing of construction including the nature and purpose of the land disturbing activity, utilities, and building construction.
- Provisions for the removal of temporary synthetic erosion prevention and sediment control BMPs upon establishment of permanent vegetation.
- Surveyed Elevations (using North American Vertical Datum of 1988) at:
 - Benchmark
 - Street edge at center of driveway
 - Existing ground within 10' radius of lot corners
 - Existing ground defining areas of steeper than 3:1 slopes
- Plan elevations for structure (using North American Vertical Datum of 1988) at:
 - Garage Floor, if applicable
 - Top of House Foundation, if applicable
 - Basement Floor, if applicable
 - Construction activity disturbance area
- Standard illustrations (details) of proper installation of erosion prevention and sediment control BMPs (MnDOT details provided for reference, pages 11-19).



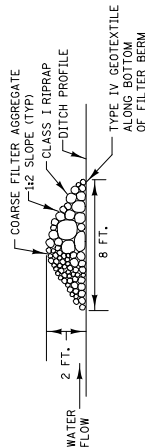


TYPES: STRAW, WOOD FIBER, OR COIR

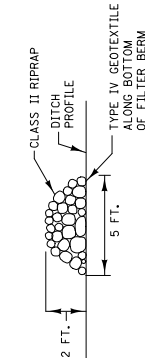


TYPES: WOOD CHIP, COMPOST, OR ROCK

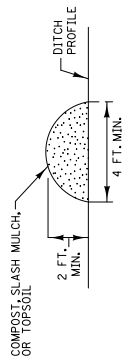
SEDIMENT CONTROL LOGS



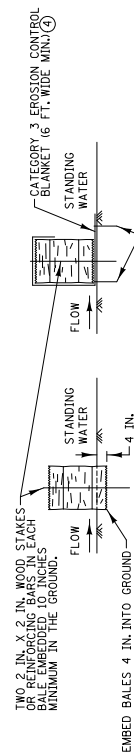
TYPE 3 (ROCK WEEPER)



TYPE 5 (ROCK)
FILTER BERMS



TYPE 1 (COMPOST), TYPE 2 (SLASH MULCH), OR TYPE 4 (TOPSOIL)



EMBEDMENT METHOD

BALE BARRIERS (3)

NOTES:

SEE SPECS. 2573, 3149, 3874, 3882, 3886, & 3897.

- ① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.
- ② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.
- ③ TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6 INCH MAX. DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14 IN. X 18 IN. X 36 IN. LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.
- ④ INSTEAD OF TRENCHING, PLACE BALE ON THE BLANKET AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.

REVISED:

APPROVED:

STATE DESIGN ENGINEER

MINNESOTA
DEPARTMENT OF
TRANSPORTATION

TEMPORARY SEDIMENT CONTROL

FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS

2-28-2017

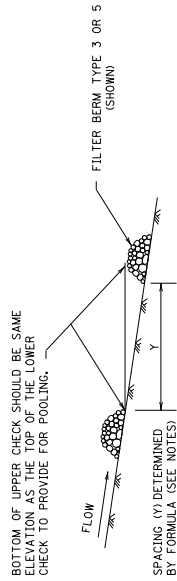
STANDARD PLAN 5-297.405

2 OF 8

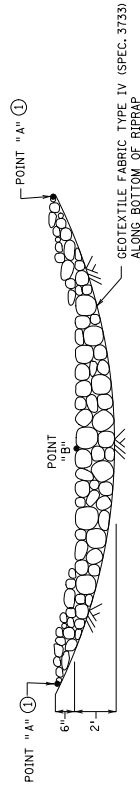
REVISION:

APPROVED: 2-28-2017

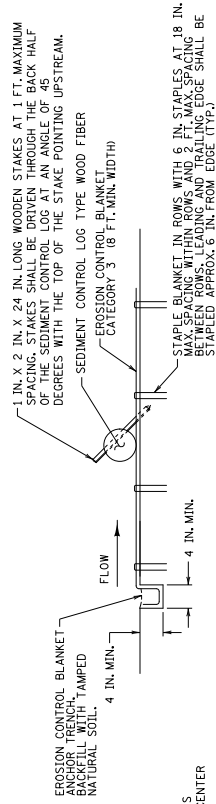
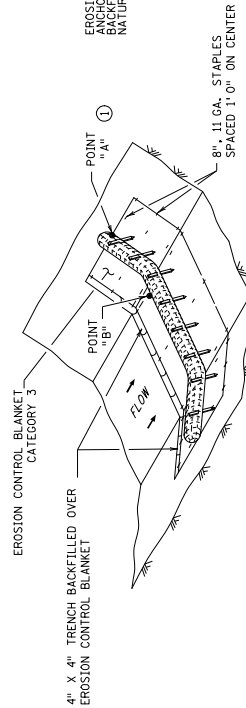
CHIEF ENVIRONMENTAL OFFICER



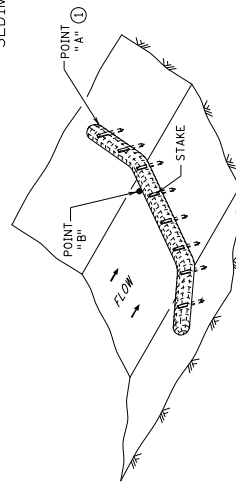
DITCH CHECK SPACING
(FOR ALL FILTER BERM TYPES)



ROCK DITCH CHECKS
FILTER BERMS TYPE 3 (ROCK WEEPER) OR FILTER TYPE 5 (ROCK) ②③
(FOR USE ON ROUGH GRADED AREAS)



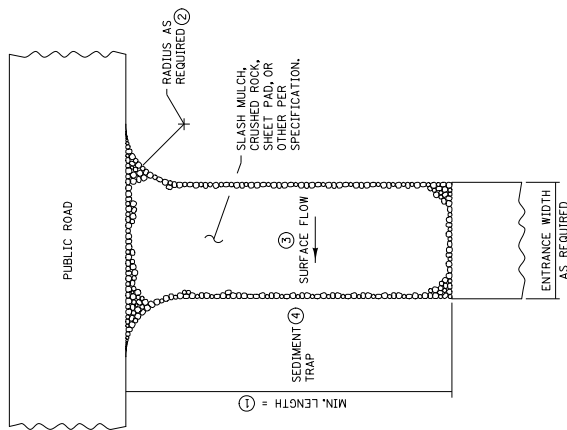
SEDIMENT CONTROL LOG TYPE BLANKET SYSTEM ④



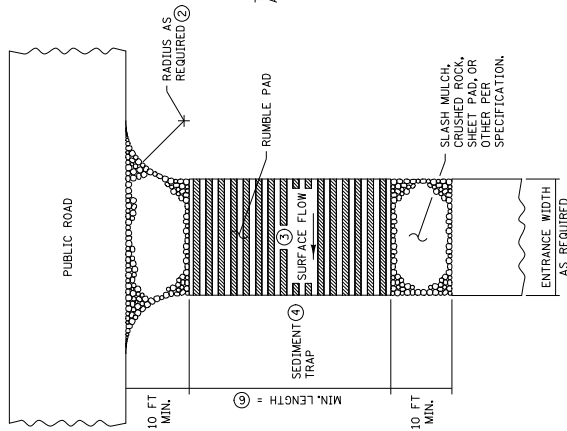
SEDIMENT CONTROL LOG TYPE WOOD FIBER, OR TYPE COMPOST ⑤
(FOR USE ON ROUGH GRADED AREAS)

- NOTES:
- SEE SPECS. 2573, 3601, 3733, 3885, 3886 & 3889.
- FOR DITCH CHECKS, PLACE SEDIMENT CONTROL LOG PERPENDICULAR TO FLOW AND IN A CRESCENT SHAPE WITH THE ENDS FACING UPSTREAM.
- APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:
- APPROXIMATE SPACING OF DITCH CHECKS (FT.) = $Y = \frac{V}{S} \times 100$
- ① POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- ② PERMANENT ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:6 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.
- ③ DITCH GRADE 3% - 5% MAX. FLOW VELOCITY 12 FT./SEC.
- ④ DITCH GRADE 1.5% - 3% MAX. FLOW VELOCITY 4.5 FT./SEC.
- ⑤ DITCH GRADE 1.5% - 3% MAX. FLOW VELOCITY 1.5 FT./SEC.

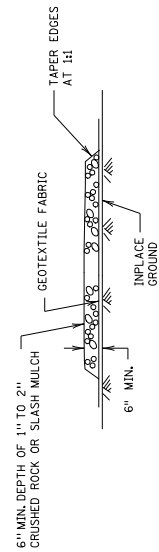
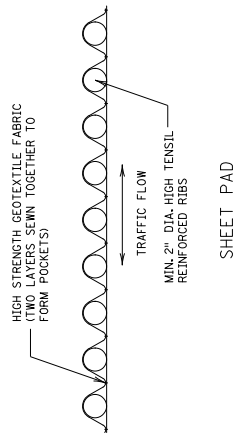
REVISION: APPROVED: 2-28-2017 <i>David L. Olson</i> CHIEF ENVIRONMENTAL OFFICER	 DEPARTMENT OF TRANSPORTATION STATE DESIGN ENGINEER APPROVED: 2-28-2017 <i>Tom G. Johnson</i>	REVISOR: TEMPORARY SEDIMENT CONTROL DITCH CHECK STANDARD PLAN 5-297.405 3 OF 8
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SLASH MULCH, CRUSHED ROCK, OR SHEET PAD CONSTRUCTION EXIT ⑤⑦



RUMBLE PAD CONSTRUCTION EXIT ⑤⑦



SLASH MULCH OR CRUSHED ROCK

NOTES:

SEE SPECS. 2573 & 3882.

- ① MINIMUM LENGTH SHALL BE THE GREATER OF 50 FEET OR A LENGTH SUFFICIENT TO ALLOW A MINIMUM OF 5 TIRE ROTATIONS ON THE PROVIDED PAD. MINIMUM LENGTH SHALL BE CALCULATED USING THE LARGEST TIRE WHICH WILL BE USED IN TYPICAL OPERATIONS.
- ② PROVIDE RADIUS OR WIDEN PAD SUFFICIENTLY TO PREVENT VEHICLE TIRES FROM TRACKING OFF OF PAD WHEN LEAVING SITE.
- ③ IF RUNOFF FROM DISTURBED AREAS FLOWS TOWARD CONSTRUCTION EXITS, PREVENT RUNOFF FROM DRAINING DIRECTLY TO PUBLIC ROAD OVER CONSTRUCTION EXIT BY DRAINING RUNOFF TO A SEDIMENT TRAP OR SEDIMENT BASIN. PROVIDE SUFFICIENTLY INSUFFICIENT PROVIDE OTHER MEANS OF INTERCEPTING RUNOFF.
- ④ IF RUNOFF FROM CONSTRUCTION EXITS WILL DRAIN OFF OF PROJECT SITE, PROVIDE SEDIMENT TRAP WITH STABILIZED OVERFLOW.
- ⑤ IF A TIRE WASH OFF IS REQUIRED, THE CONSTRUCTION EXITS SHALL BE GRADED TO DRAIN THE WASH WATER TO A SEDIMENT TRAP.
- ⑥ MINIMUM LENGTH OF RUMBLE PAD SHALL BE 20 FEET, OR AS REQUIRED TO REMOVE SEDIMENT FROM TIRES. IF SIGNIFICANT SEDIMENT IS TRACKED FROM THE SITE, THE RUMBLE PAD SHALL BE LENGTHENED OR THE DESIGN MODIFIED TO PROVIDE ADDITIONAL VIBRATION, WASH-OFF LENGTH SHALL BE AS REQUIRED TO EFFECTIVELY REMOVE CONSTRUCTION SEDIMENT FROM VEHICLE TIRES.
- ⑦ MAINTENANCE OF CONSTRUCTION EXITS SHALL OCCUR WHEN THE EFFECTIVENESS OF SEDIMENT REMOVAL HAS BEEN REDUCED. MAINTENANCE SHALL CONSIST OF REMOVING SEDIMENT FROM CONSTRUCTION EXITS, REPAIRING EROSION, REPLACING MATERIAL SLASH MULCH OR CRUSHED ROCK OVER SEDIMENT FILLED MATERIAL TO RESTORE EFFECTIVENESS.

REVISED:

APPROVED:

2-28-2017

STATE DESIGN ENGINEER



TEMPORARY SEDIMENT CONTROL

STABILIZED CONSTRUCTION EXIT

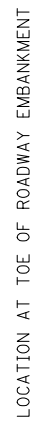
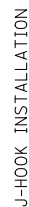
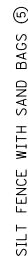
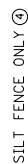
STANDARD PLAN 5-297.405

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REVISION:

APPROVED: 2-28-2017

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CONTRIBUTING SLOPE AREA: 1. ACRE.
WATER COURSE FLOW VELOCITY: 8 TO 15 FT./SEC.


REVISION: _____

APPROVED: 2-28-2017

[Signature]

CHIEF, ENVIRONMENTAL OFFICER




STATE DESIGN ENGINEER

REVISED:

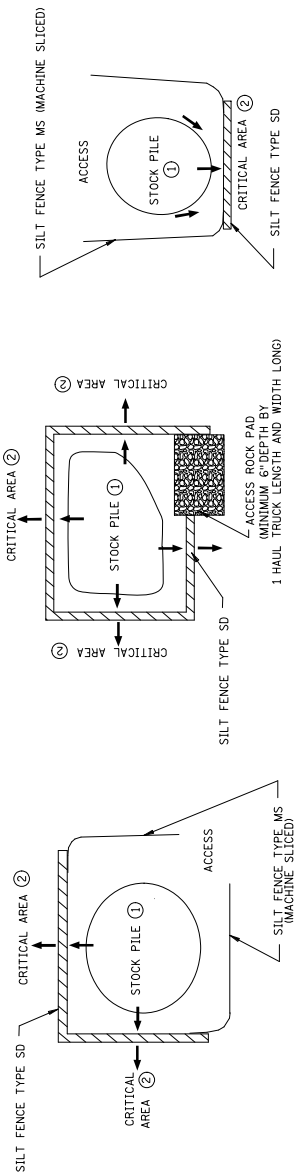
APPROVED: 2-2

TEMPORARY SEDIMENT CONTROL
SILT FENCE

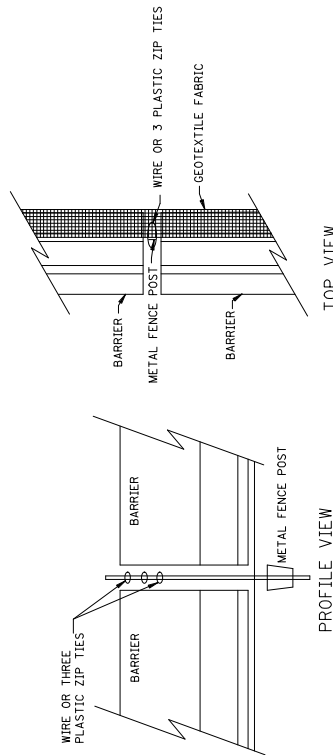
APPROVED: 2-28-2017

STANDARD PLAN 5-297.405

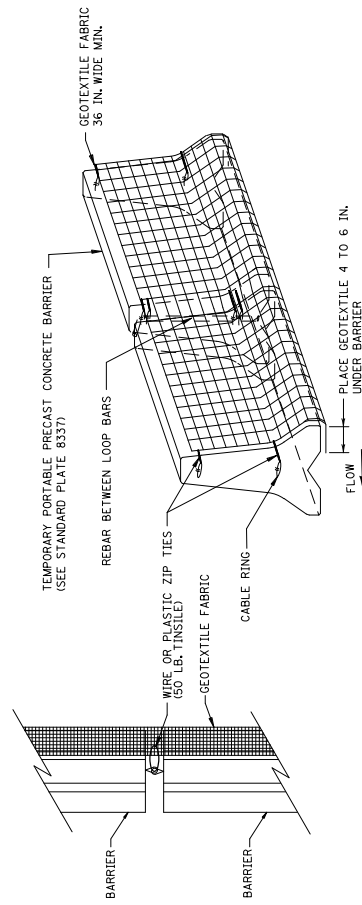
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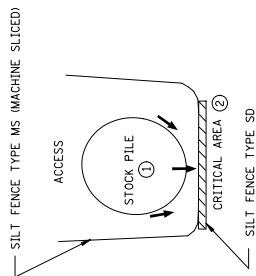
STOCK PILE CONTAINMENT



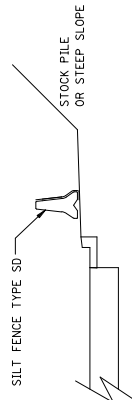
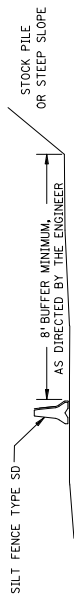
SILT FENCE TYPE SD (SUPER DUTY)
BARRIER WITHOUT LOOP BARS



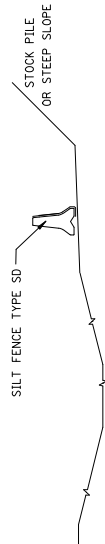
SILT FENCE TYPE SD (SUPER DUTY)
BARRIER WITH LOOP BARS



STOCKPILE SEDIMENT CONTROL



CURB AND GUTTER PROTECTION SYSTEM



DITCH PROTECTION SYSTEM

NOTES:

SEE SPECS. 2533, 2573 & 3886.

SILT FENCE TYPE SD USED TO PROTECT CRITICAL AREAS FROM SHEET FLOW, AND AREAS WHERE OTHER SILT FENCES CANNOT BE PLACED. MAXIMUM CONTRIBUTING AREA: 1 ACRE.

PLACE SILT FENCE TYPE SD ALONG A CONSTANT ELEVATION.

SILT FENCE TYPE SD CAN UTILIZE EITHER A CONCRETE, OR WATER FILLED, TEMPORARY MEDIAN BARRIER.

① PLACING STOCK PILES NEXT TO AN ENVIRONMENTALLY SENSITIVE AREA IS NOT RECOMMENDED. WHEN THERE ARE NO FEASIBLE ALTERNATIVES, PLACE SILT FENCE SD AS SHOWN OR AS DIRECTED BY THE ENGINEER.

② CRITICAL AREAS INCLUDE WETLANDS, JUDICIAL DITCHES, STREAMS, WATER BODIES, AND OTHER AREAS REQUIRING PROTECTION.

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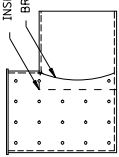
TEMPORARY SEDIMENT CONTROL
SUPER DUTY SILT FENCE

STANDARD PLAN 5-297.405

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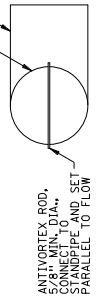
REVISION: 2-28-2017
APPROVED: 2-28-2017
CHIEF ENVIRONMENTAL OFFICER

INSERT 1/3 DIAMETER OF RISER PIPE
BREAK AWAY CONNECTION



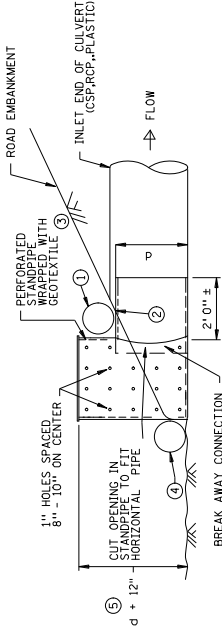
CULVERT STANDPIPE

BREAKAWAY CONNECTION



PLAN VIEW

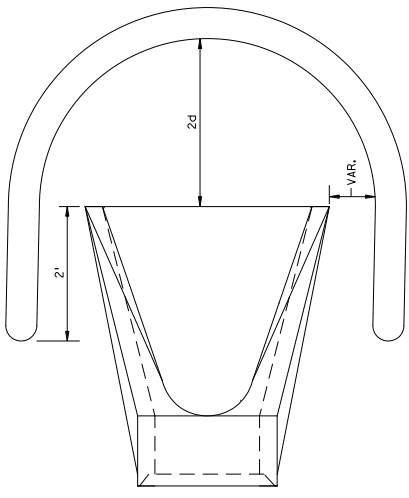
ANTIVORTEX ROD,
8" DIA. x 12' LONG,
CONNECT TO
STANDPIPE AND SET
PARALLEL TO FLOW



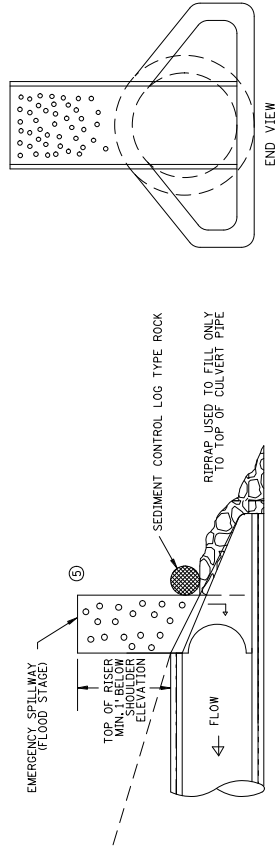
ELEVATION VIEW OF CULVERT INSTALLATION

CULVERT STANDPIPE INSERT (D-RISER)

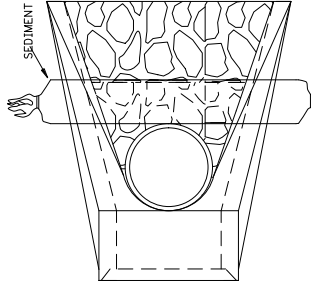
d = CULVERT SIZE: 12" - 36"



SEDIMENT CONTROL LOG WEIR
(COMPOST, WOOD CHIP, OR ROCK)
d = CULVERT SIZE: 12" - 36"



LONGITUDINAL SECTION



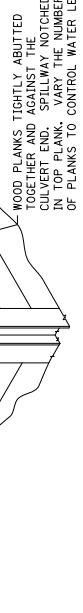
TOP VIEW

CULVERT STANDPIPE INSERT (D-RISER)

NOTE: SEDIMENT CONTROL LOG TYPE ROCK
SHOULD BE WRAPPED AROUND RISER

NOTES:

- SEE SPECS. 2573, 3891 & 3893.
- FOR USE WHEN TEMPORARY PONDING IS NEEDED IN DITCH SECTIONS FOR SEDIMENT CONTROL.
- MANUFACTURED ALTERNATIVES LISTED ON MPOOT'S APPROVED PRODUCTS LIST MAY BE SUBSTITUTED AT NO ADDITIONAL COST.
- ① ROCK LOG OR SANDBAG TO HOLD STANDPIPE AND ACT AS A FILTER BETWEEN RISER PIPE AND CULVERT.
- ② PLACE CULVERT APRON AND SLIDE TEMPORARY STANDPIPE INTO CSP OR RCP CULVERT.
- ③ ALL GEOTEXTILE USED FOR CULVERT PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886 FOR MACHINE SLICED.
- ④ ROCK LOG OR RIP RAP TO HOLD STANDPIPE AND ACT AS A FILTER BETWEEN RISER PIPE AND CULVERT.
- ⑤ NEIGHBORHOODS TO CAUSE FLOODING OF ROAD OR ADJACENT PROPERTIES.



WOOD PLANK WEIR



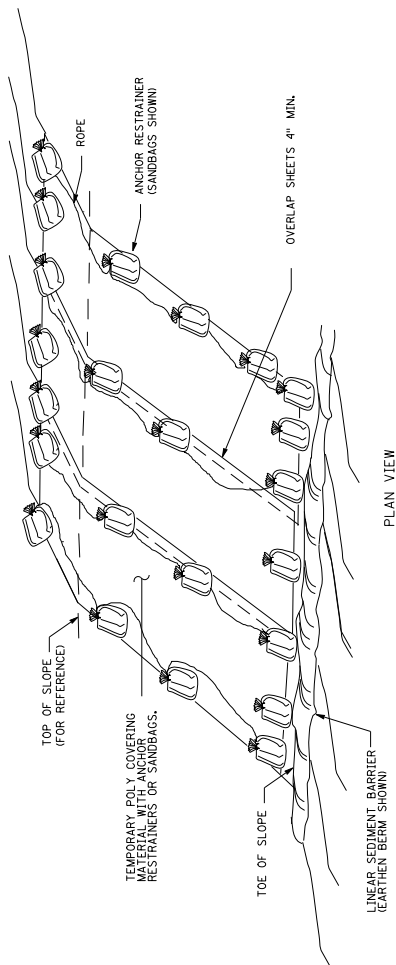
REVISOR: *[Signature]*
APPROVED: *[Signature]*
2-28-2017
STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL
CULVERT END CONTROLS

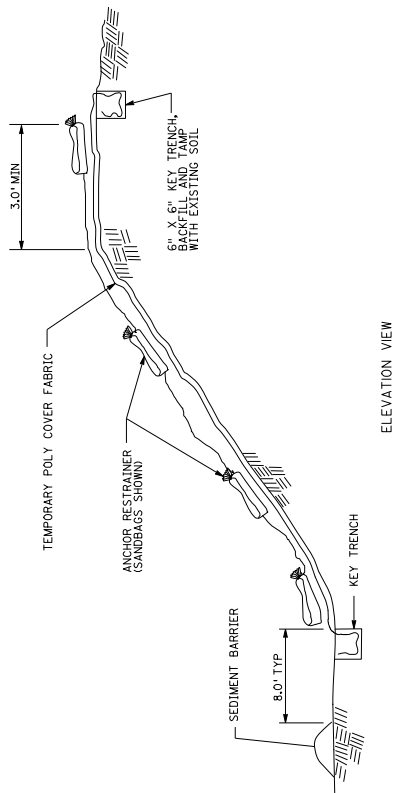
STANDARD PLAN 5-297.405

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REVISION: *[Signature]*
APPROVED: 2-28-2017
CHIEF ENVIRONMENTAL OFFICER

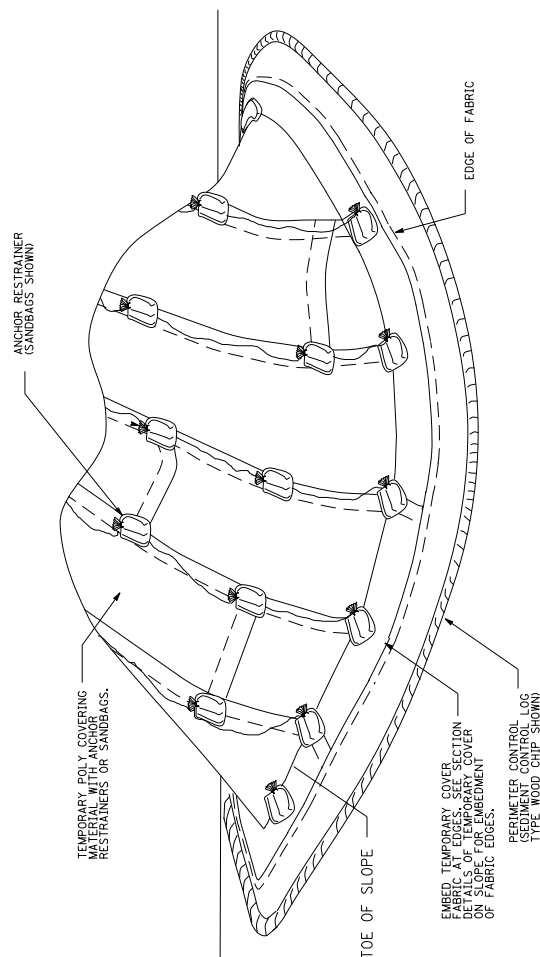


PLAN VIEW

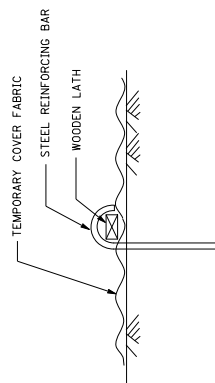


ELEVATION VIEW

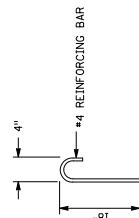
TEMPORARY POLY COVER ON SLOPE



TEMPORARY POLY COVER ON STOCKPILE



ANCHOR RESTRAINER
(STEEL BAR AND WOODEN LATH OPTION)



STEEL REINFORCING BAR DETAIL

NOTES
ANCHOR RESTRAINTERS: TYPE, QUANTITY, AND SPACING ARE INCIDENTAL TO POLY COVER. PROVIDE ON CORNERS AND SEAMS OF POLY COVER MATERIAL TO KEEP FROM BLOWING OFF. NO MINIMUM SPACING REQUIRED.
PERIMETER CONTROL: USE SEDIMENT CONTROL LOGS TYPE WOOD CHIP OR COMPOST, INCIDENTAL.



REVISIONS:
APPROVED: 2-28-2017
STATE DESIGN ENGINEER

TEMPORARY EROSION CONTROL
TEMPORARY POLY COVERINGS

2-28-2017


STANDARD PLAN 5-297.409

1 OF 1

REVISIONS:
APPROVED: 2-28-2017
CHIEF ENVIRONMENTAL OFFICER

☐ **Category 3 Plan Submittal Requirements:**

- The **Following Must be Included in or Attached to the *Stormwater Management Plan***
- A clearly legible and complete Alexandria Construction Stormwater Permit application.
- MPCA Construction Stormwater General Permit MNR100001 Section 5 content.
- Identification and description including:
 1. Project name.
 2. Project type (residential, commercial, industrial, road construction, or other).
 3. Project location.
 4. Parcel identification number (legal description).
 5. Copies of permits or permit applications required by any other governmental entity or agencies including mitigation measures required as a result of any review for the project.
- Existing Conditions - A complete site plan and specifications, signed by a person who is certified to design the plan shall be drawn to an easily legible scale, shall be clearly labeled with a north arrow and a date of preparation, and shall include, at a minimum, the following information:
 1. Property lines and lot dimensions.
 2. Existing zoning classifications for land within and abutting the development, including shoreland, floodway, flood fringe, or general floodplain, and other natural resource overlay districts.
 3. Show ordinary high water marks of all navigable waters, 100-year flood elevations and delineated wetland boundaries, if any. If not available, appropriate flood zone determination or wetland delineation, or both, may be required at the applicant's expense.
 4. Map of infiltration rates, depth to bedrock, and depth to seasonal high water table.
 5. Steep slopes where areas of 33% or more.
 6. Bluff areas meeting the current definition of the MnDNR.
 7. Wooded area and tree survey as defined by the zoning authority.
 8. Agricultural Land preservation area(s), County Biological Survey sites, or other officially designated natural resources.
 9. Hydrologic calculations for volume runoff, velocities, and peak flow rates by watershed, for the 2-yr, 10-yr, and 100-yr 24-hour storm events. These shall include: pre-existing peak flow rates, assumed runoff curve numbers, time of concentration used in calculations, and the 100-year flood elevation with and without the floodway if a flood insurance study has been done by the National Flood Insurance Program.
- Bankfull discharge rate (1.5 year recurrence interval) of creek or stream if there is a waterway on the site or if the site discharges directly to the waterway.
- Proposed Conditions - A complete site plan and specifications, signed by the person who designed the plan shall be drawn to scale appropriate to the site of the project and suitable for the review to be performed, shall be clearly labeled with a north arrow and a date of preparation, and shall include, at a minimum, the following information:
 1. Project map – A map indicating site boundaries and areas not to be disturbed.
 2. Property lines and lot dimensions of plat.
 3. The dimensions and setbacks of all buildings and easements.
 4. Identify all drain tiles that would affect the project site and within one (1) mile of project boundary, including. Show ordinary high water marks of all navigable waters, 100-year flood elevations and delineated wetland boundaries, if any. If not available, appropriate flood zone determination or wetland delineation, or both, may be required at the applicant's expense.
 5. Location and engineered designs for structural stormwater management practices including stormwater treatment devices that remove oil and floatable material (e.g., basin outlets with submerged entrances).
 6. Normal water level, high water level, and emergency overflow elevations for the site.
 7. Floodway and flood fringe boundary, if available.
 8. Any other information pertinent to the particular project that, in the opinion of the City, is necessary for the review of the project.
- All proposed stormwater practices, hydrologic models, and design methodologies shall be reviewed by the City and certified for compliance by the City in accordance with their plans and specifications.
- A pre-construction meeting, preferably at the construction site, including the operator/general contractor, the site grading contractor, the City of Alexandria Stormwater Inspector.

	ALEXANDRIA CONSTRUCTION STORMWATER PERMIT (CSP)	
	City of Alexandria 704 Broadway Alexandria, MN 56308 (320) 763-6678 Telephone (320) 763-3511 Fax	CSP Permit Number: _____ Other Permit Number: _____ Date Issued: _____

Site Information

Project Address: _____ Owners Name: _____

Project Name: _____ Project Type: _____ Acres to be Disturbed: _____

Natural Resource Feature within 100 feet: Yes ☐ No ☐ Storm Drain within 100 feet: Yes ☐ No ☐

If Yes, Identify Natural Resource Feature(s): _____

Proposed Start Date: _____ Proposed Completion Date: _____

<p style="text-align: center;"><u>Scope of Land Disturbance Activity:</u></p> <p><input type="checkbox"/> Category 1 Land Disturbance</p> <p><input type="checkbox"/> Category 2 Land Disturbance</p> <p><input type="checkbox"/> Category 3 Land Disturbance*</p> <p style="padding-left: 20px;">*<u>Separate MPCA Construction Stormwater Permit Required</u></p> <p><input type="checkbox"/> Part of Common Development Plan</p> <p><input type="checkbox"/> Site within 1 mile of Lake Winona</p>	<p style="text-align: center;"><u>Best Management Practices</u></p> <p>Areas not being actively worked to be stabilized within 14 days. **(Areas within 1 mile of Lake Winona 7 days)</p> <p>Install/maintain perimeter controls and sediment barriers. Keep discharge points and receiving waters free of sediment. Protect natural resources (streams, wetlands, mature trees, etc). Properly protect storm drain inlets. Keep sediment from tracking onto street. Keep trash/litter collected and contained. Keep concrete washout areas clearly marked and maintained. Keep fueling, cleaning, maintenance areas free of leaks and spills. Keep potential stormwater contaminants inside or under cover. Make sure previously disturbed areas are/remain stabilized. Properly located and stabilize all stockpiles. Check site for compliance after each ½-inch (+) rain event.</p>
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<p style="text-align: center;"><u>Party Responsible for Installing, Implementing and Maintaining Erosion and Sediment Control per Plan</u></p> <p>Name: _____</p> <p><input type="checkbox"/> Operator/General Contractor</p> <p><input type="checkbox"/> Owner (if Owner is Operator/General Contractor)</p> <p>Contact Person: _____</p> <p>Address: _____</p> <p>City: _____ State: _____ Zip: _____</p> <p>Telephone: _____ Cell: _____</p> <p>Email: _____</p>	<p style="text-align: center;"><u>GENERAL NOTES TO PERMITEE:</u></p> <p>The costs associated with an on-site review by the City Engineer of reported stormwater management violations will be the responsibility of the property owner. Re-inspections of Non-Compliant Erosion and Sediment Control BMPs will be subject to re-inspection fees and may result in a “stop work” order being issued to the site. Any permit issued becomes invalid if the work authorized by the permit is suspended or abandoned for more than 180 days. The 180 days commences the first day the work was suspended or abandoned.</p>
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CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments, 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 of Permit Holder: _____ Date: _____

Approved By: _____ Date: _____