

LOCATION MAP



GOPHER STATE ONE CALL

CALL 48 HOURS BEFORE YOU DIG! TWIN CITY AREA 651-454-0022 MN. TOLL FREE 1-800-252-1166

PROJECT ENGINEER: DEVELOPER: CITY ENGINEER: NPDES OFFICER:

PROJECT CONTACTS

JOEL COOPER, P.E JAMES R. HILL, INC.	(952
ROB ST. SAUVER - SOUTH SHORE DEVELOPMENT, INC	; (952
COLIN MANSON, P.E CITY ENGINEER	(952
PAUL ERDMANN - MPCA	(651)

- 2)-890-6044 (0) 2)-322-8706 (0)
- 2)-953-2400 (0)
- 1)-757-2883 (0)

Sheet Index	
Sheet Title	Sheet Number
TITLE SHEET	1.1
STING CONDITIONS	1.2
TE INFORMATION	1.3
ELIMINARY PLAT	1.4
& SEDIMENT CONTROL	2.1
PLAN	
&SEDIMENT CONTROL	2.2
DETAILS	
g & Drainage plan	3.1
UTILITY PLAN	4.1
TREET PROFILE	5.1
DETAILS	6.1

<u>LEGEND</u>

р Д < Д Д ↓онр	 EXISTING WATERMAIN EXISTING SANITARY SEWER EXISTING STORM SEWER EXISTING TELEPHONE PEDESTAL EXISTING TELEVISION PEDESTAL EXISTING OVERHEAD POWER LINE 	I hereby certify that this pecification or report was prepared by me or under direct supervision and that a duly Licensed Profession Engineer under the laws o State of Minnesota. JOEL G. COOPER Date: 08/21/15 Reg.No
	EXISTING CONCRETE SURFACE	U U
x x x	- FXISTING FENCE	N
G G	- FXISTING GAS MAIN	
m # ()	EXISTING TREE LINE/TREES	SHORI
	EXISTING CURB	RTH N EESOT/ EEOT/ EOF
00 9 00	 EXISTING CONTOUR SOIL BORING LOCATION PROPOSED CONTOUR PROPOSED CURB PROPOSED STORM SEWER PROPOSED PRIVATE 4" PVC SDR 26 NON-PERFORATED DRAINTILE PROPOSED PUBLIC 6" PVC SDR 35 PERFORATED DRAINTILE 	TITLE SHE NOI 2ND ADDITIC APPLE VALLEY, MINNI TITLE SHE FOR FOR NDTJEN FARM DR., LAM
	 PROPOSED WATERMAIN PROPOSED SANITARY SEWER PROPOSED SANITARY SERVICE-4" PVC SDR 26 PROPOSED WATER SERVICE-1" COPPER TYPE K PROPOSED CONCRETE SURFACE 	COBBLES SOUTH SH
	PROPOSED ASPHALT SURFACE	DRAWN BY
·····	PROPOSED MnDOT CATEGORY 3 EROSION CONTROL BLANKET	EPF
	PROPOSED DITCH BLOCKING (MnDOT TYPE 3) -POST GRADING/UTILITY CONSTRUCTION	DATE 08/21/15
••••••	PROPOSED HEAVY DUTY SILT FENCE	REVISIONS
**************************************	PROPOSED DOUBLE ROW HEAVY DUTY SILT FENCE PROPOSED REAR YARD CB PROTECTION -POST STORM SEWER CONSTRUCTION PROPOSED WIMCO-POST STORM SEWER CONSTRUCTION	09/28/15 OWNER REVISIONS 11/12/15 CITY COMMENTS
	PROPOSED TEMPORARY ROCK CONSTRUCTION ENTRANCE	
		CAD FILE
		22241-05-15

blan, my al f the

1.1

S



2241-65-EXC.dwg - 11/12/2015 10:39AI

<u>LEGEND</u>





 \mathbf{C}

1 inch = 50 feet

SCALE IN FEET 50 100



<u>2</u>41-65-SI.dwg - 11/12/2015 10: 41AM









NPDES REQUIREMENTS

II.B. APPLICATION AND DURATION OF COVERAG

Application Required

- a. The owner and operator shall submit a complete and accurate on-line application form with the appropriate fee to the MPCA for each project that disturbs one (1) or more acres of land or for a common plan of development or sale that will ultimately disturb one (1) or more acres. If the
- applicant is not able to apply on-line, contact the MPCA for technical assistance or a waiver. b. For certain projects or common plans of development or sale disturbing 50 acres or more, the application must be submitted at least 30 days before the start of construction activity. This requirement pertains to projects that have a discharge point on the project that is within one mile (aerial radius measurement) of, and flows to, a special water listed in Appendix A, Part B. or waters listed as impaired under section 303(d) of the federal Clean Water Act (see the MPCA's website) where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment). Applicants of projects listed in this part must submit a complete and accurate application form and SWPPP including all calculations for the Permanent Stormwater Management System (see Parts III.A.-D.).
- 2. All persons meeting the definition of owner and operator are Permittees and must be listed on the application. The owner is responsible for compliance with all terms and conditions of this permit. The operator is responsible for compliance with Parts II.B, II.C, III.B-F, IV, V, and applicable construction activity requirements found in Appendix A, Part C. of this permit and is jointly responsible with the **owner** for compliance with those portions of the permit.
- Permit Coverage Effective Date: The commencement of any construction activity (e.g., land disturbing activities) covered under Part I.A. of this permit is prohibited until permit coverage under this permit is effective. a. For projects listed in Part II.B.1.a. permit coverage will become effective seven (7) calendar days after the electro submittal date or the postmarked date of a complete application form
- b. For projects listed in Part II.B.1.b. permit coverage will become effective 30 calendar days after the electronic submittal date, the postmarked date or MPCA date stamp (whichever is first) of the complete application. For incomplete applications (e.g., lack of fees or signature) or incomplete SWPPPs (e.g., missing calculations, Best Management Practice (BMP) specifications, estimated quantities of the BMPs, or timing of BMP installation narrative), the permit becomes effective 30 calendar days after all required information is submitted.

4. Coverage Notification: Permittee(s) will be notified of coverage in a manner as determined by the Commissioner (e.g., e-mail, online notification or letter).

5. Change of Coverage: For construction projects where the owner or operator changes, (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner) the current owner and the new owner or operator shall submit a complete permit modification on a form provided by the Commissioner. The form must be submitted prior to the new owner or operator commencing construction activity on site or in no case later than 30 days after taking ownership of the property. The owner shall provide a SWPPP to the new owner and operator that specifically addresses the remaining construction activity.

II.C. TERMINATION OF COVERAGE

- Termination of coverage when construction is complete: All Permittee(s) must submit a Notice of Termination (NOT) to the MPCA on a form provided by the Commissioner within 30 days after all activities required for Final Stabilization (see Part IV.G.) are complete. The Permittee(s)' coverage under this permit terminates at midnight on the submission date of the NOT.
- Termination of coverage when transfer of ownership occurs: All Permittee(s) must submit a NOT on a form provided by the Commissioner within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a IV.C. SEDIMENT CONTROL PRACTICES site to another party. The Permittee(s)' coverage under this permit terminates at midnight on the submission date of the NOT.
- b. Permittee(s) may terminate permit coverage prior to completion of all construction activity if all of the following conditions are met. After the permit is terminated under this Part, if there is any subsequent development on the remaining portions of the site where construction activity was not complete, new permit coverage must be obtained if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activities of one (1) or more acres in size.
- a. Construction activity has ceased for at least 90 days.
- b. At least 90 percent (by area) of all originally proposed construction activity has been
- completed and permanent cover established on those areas. c. On areas where construction activity is not complete, permanent cover has been
- established.
- d. The site is in compliance with Part IV.G.2. and Part IV.G.3. and where applicable, Part IV.G.4. or Part IV.G.5.

-. Permittee(s) may terminate coverage upon approval by the MPCA if information is submitted to the MPCA

documenting that termination is appropriate because the project is cancelled.

III.B. SWPPP AMENDMENTS

The Permittee(s) must amend the SWPPP as necessary to include additional requirements, such as additional or modified BMPs that are designed to correct problems identified or address situations whenever:

effect on the discharge of pollutants to surface waters or underground waters.

. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant

- 2. Inspections or investigations by site owner or operators, USEPA or MPCA officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or underground waters or that the discharges are causing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2).
- 3. The SWPPP is not achieving the general objectives of minimizing pollutants in stormwater discharges associated with construction activity, or the SWPPP is not consistent with the terms and conditions of this permit.
- 4. At any time after permit coverage is effective, the MPCA may determine that the project's stormwater discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the SWPPP does not incorporate the applicable requirements in Part III.A.8., (Impaired Waters and TMDLs). If a water quality standard changes during the term of this permit, the MPCA will make a determination as to whether a modification of the SWPPP is necessary to address the new standard. If the MPCA makes such determination(s) or any of the determinations in Parts III.B.1.-3., the MPCA will notify the Permittee(s) in writing. In response, the Permittee(s) must amend the SWPPP to address the identified concerns and submit information requested by the MPCA, which may include an individual permit application. If the MPCA's written notification requires a response, failure to respond within the specified timeframe constitutes a permit violation.

III.E RECORD RETENTION

during construction by the Permittee(s) who has/have operational control of that portion of the site. The SWPPP can be kept in either the field office or in an on-site vehicle during normal working hours. All owner(s) must keep the following records on file for three (3) years after submittal of the NOT as outlined in Part II.C. This does not include any records after submittal of the NOT.

1. The final SWPPP

2. Any other stormwater related permits required for the project

3. Records of all inspection and maintenance conducted during construction (Part IV.E. Inspections and Maintenance)

4. All permanent operation and maintenance agreements that have been implemented, including all right-of-way, contracts, covenants and other binding requirements regarding perpetual maintenance and

5. All required calculations for design of the temporary and permanent Stormwater Management Systems.

III.F. TRAINING REQUIREMENTS

The Permittee(s) shall ensure the following individuals identified in this part have been trained in accordance with this Permit's training requirements

1. Who must be trained:

- a. Individual(s) preparing the SWPPP for the project
- b. Individual(s) overseeing implementation of, revising, and amending the SWPPP and individual(s) performing inspections as required in Part IV.E. One of these individual(s) must be available for an onsite inspection within 72 hours upon request by the MPCA.
- c. Individual(s) performing or supervising the installation, maintenance and repair of BMPs. At least one individual on a project must be trained in these job duties.
- 2. Training content: The content and extent of training must be commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit for the project. At least one individual present on the permitted project site (or available to the project site in 72 hours) must be trained in the job duties described in Part III.F.1.b. and Part III.F.1.c.
- 3. The Permittee(s) shall ensure that the individuals are trained by local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater management and 2. All water from dewatering or basin-draining activities must be discharged in a manner that does not cause nuisance the Minnesota NPDES/SDS Construction Stormwater Permit. An update refresher-training must be attended every three (3) years starting three (3) years from the issuance date of this permit.

PART IV. CONSTRUCTION ACTIVITY REQUIREMENTS

IV.A. STORMWATER POLLUTION PREVENTION PLAN

The Permittee(s) must implement the SWPPP and the requirements of this part. The BMPs identified in the SWPPP and in this permit must be selected, installed, and maintained in an appropriate and functional manner that is in accordance with relevant manufacturer specifications and accepted engineering practices.

IV.B. EROSION PREVENTION PRACTICES

- 1. The Permittee(s) must plan for and implement appropriate BMPs such as construction phasing, vegetative buffer 1. The Permittee(s) must ensure that a trained person (as identified in Part III.A.3.a.) will routinely inspect the entire strips, horizontal slope grading, inspection and maintenance of Part IV.E. and other construction practices that minimize construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. Following an inspection that occurs within 24 hours after a rainfall event, the next inspection must erosion as necessary to comply with this permit and protect waters of the state. The location of areas not to be disturbed must be delineated (e.g., with flags, stakes, signs, silt fence etc.) on the project site before work begins. The be conducted within seven (7) days after the rainfall event. Permittee(s) must minimize the need for disturbance of portions of the project that have steep slopes. For 2. All inspections and maintenance conducted during construction must be recorded within 24 hours in writing and these records those sloped areas which must be disturbed, the Permittee(s) must use techniques such as phasing and must be retained with the SWPPP in accordance with Part III.E. Records of each inspection and maintenance activity shall stabilization practices designed for steep slopes (e.g., slope draining and terracing).
- 2. The Permittee(s) must stabilize all exposed soil areas (including stockpiles). Stabilization must be initiated b. Name of person(s) conducting inspections immediately to limit soil erosion whenever any construction activity has permanently or temporarily ceased on c. Findings of inspections, including the specific location where corrective actions are needed any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed d. Corrective actions taken (including dates, times, and party completing maintenance activities) no later than 14 calendar days after the construction activity in that portion of the site has temporarily or e. Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours. Rainfall amounts must be obtained by permanently ceased. For Public Waters that the Minnesota Department of Natural Resources has promulgated a properly maintained rain gauge installed onsite, a weather station that is within 1 mile of your location or a weather 'work in water restrictions" during specified fish spawning time frames, all exposed soil areas that are within 200 feet reporting system that provides site specific rainfall data from radar summaries. of the water's edge, and drain to these waters must complete the stabilization activities within 24 hours during the f. If any discharge is observed to be occurring during the inspection, a record of all points of the property from which there is a restriction period. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate discharge must be made, and the discharge should be described (i.e., color, odor, floating, settled, or suspended solids, stockpiles. demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots foam, oil sheen, and other obvious indicators of pollutants) and photographed. and similar surfaces are exempt from this requirement but must be in compliance with Part IV.C.5.
- 3. If using stormwater conveyance channels, the Permittee(s) must design the channels to route water around unstabilized areas on the site and to reduce erosion, unless infegsible. The Permittee(s) must use erosion controls and velocity dissipation devices such as check dams, sediment traps, riprap, or grouted riprap at outlets within and along the length of any constructed stormwater conveyance channel, and at any outlet, to provide a non-erosive flow velocity, to minimize erosion of channels and their embankments, outlets, adjacent stream banks, slopes, and downstream waters during discharge conditions.
- 4. The Permittee(s) must stabilize the normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water or property edge.

The Permittee(s) shall complete stabilization of the remaining portions of any temporary or permanent ditches or swales within 14 calendar days after connecting to a surface water or property edge and construction in that portion of the ditch has temporarily or permanently ceased.

Temporary or permanent ditches or swales that are being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized during the temporary period of its use as a sediment containment system. These areas must be stabilized within 24 hours after no longer being used as a sediment containment system. Applying mulch, hydromulch, tackifier, polyacrylamide or similar erosion 5. The Permittee(s) must inspect all erosion prevention and sediment control BMPs and Pollution Prevention prevention practices is not acceptable stabilization in any part of a temporary or permanent drainage ditch or swale.

5. Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to asurface water.

6. Unless infegsible due to lack of pervious or vegetated areas, the Permittee(s) must direct discharges from BMPs to vegetated areas of the site (including any natural buffers) in order to increase sediment removal and maximize stormwater infiltration. The Permittee(s) must use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

- 1. The Permittee(s) must employ Sediment control practices as necessary to minimize sediment from entering surface waters, including curb and gutter systems and storm sewer inlets.
- a. Temporary or permanent drainage ditches and sediment basins that are designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions b. If the down gradient sediment controls are overloaded (based on frequent failure or excessive maintenance
- requirement), the Permittee(s) must install additional upgradient sediment control practices or redundant d. Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. BMPs to eliminate the overloading, and the SWPPP must be amended to identify these additional practices as Tracked sediment must be removed from all paved surfaces both on and off site within 24 hours of discovery, or if applicable, required in Part III.B 1.-3. within a shorter time to comply with Part IV.C.6.
- 2. Sediment control practices must be established on all down gradient perimeters and be located upgradient of any buffer zones. The perimeter sediment control practice must be in place before any upgradient land-disturbing activities begin. These practices shall remain in place until Final Stabilization has been established in accordance with Part IV.G. A floating silt curtain placed in the water is not a sediment control BMP to satisfy perimeter control 6. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the requirements in this part except when working on a shoreline and below the waterline. In those cases, a floating silt curtain can be used as a perimeter control practice if the floating silt curtain is installed as close to shore as possible. Immediately after the short term construction activity (e.g. installation of rip rap along the shoreline) in that area is complete, an upland perimeter control practice must be installed if exposed soils still drain to the surface water.
- 3. The Permittee(s) shall re-install all sediment control practices that have been adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity has been completed. The Permittee(s) shall complete any short-term activity that requires removal of sediment control practices as quickly as possible. The Permittee(s) must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete.
- 4. All storm drain inlets must be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified by the Permittee(s) or the jurisdictional authority (e.g., city/county/township/MnDOT engineer). The Permittee(s) must document the need for removal in the SWPPP.
- 5. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in any natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.
- 6. Where vehicle traffic leaves any part of the site (or onto paved roads within the site): a. The Permittee(s) must install a vehicle tracking BMP to minimize the track out of sediment from the construction site. Examples of vehicle tracking BMPs include (but are not limited to) rock pads, mud mats, slash mulch, concrete or steel wash racks, or equivalent systems. b. The Permittee(s) must use street sweeping if such vehicle tracking BMPs are not adequate to prevent
- sediment from being tracked onto the street (see Part IV.E.5.d.).
- 7. The Permittee(s) must install temporary sedimentation basins as required in Part III.C. of this permit.
- The SWPPP (original or copies) including, all changes to it, and inspections and maintenance records must be kept at the site 8. The Permittee(s) must minimize soil compaction and, unless infeasible, preserve topsoil. Minimizing soil compaction is not required where the function of a specific area of the site dictates that it be compacted.
 - 9. The Permittee(s) must preserve a 50 foot natural buffer or (if a buffer is infeasible on the site) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basing The Permittee(s) is/are not required to enhance the quality of the vegetation that already exists in the buffer or provide vegetation if none exist. However, Permittee(s) can improve the natural buffer with vegetation.

10. If the Permittee(s) intend to use polymers, flocculants, or other sedimentation treatment chemicals on the project site, the Permittee(s) must comply with the following minimum requirements:

- a. The Permittee(s) must use conventional erosion and sediment controls prior to chemical addition to ensure 4. Concrete and other washouts waste: The Permittee(s) must provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds and other construction effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment materials) related to the construction activity. The liquid and solid washout wastes must not contact the ground, and the control system which allows for filtration or settlement of the floc prior to discharge. containment ust be designed so that it does not result in runoff from the washout operations or areas. iquid and solid wastes b. Chemicals must be selected that are appropriately suited to the types of soils likely to be exposed during must be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that construction, and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.
- treatment system or area.
- c. Chemicals must be used in accordance with accepted engineering practices, and with dosing specifications and sediment removal design specifications provided by the manufacturer or provider/supplier of the applicable chemicals

IV.D. DEWATERING AND BASIN DRAINING

- 1. The Permittee(s) must discharge turbid or sediment-laden waters related to dewatering or basin draining (e.g., L. All soil disturbing activities at the site have been completed and all soils are stabilized by a uniform perennial vegetative cover pumped discharges, trench/ditch cuts for drainage) to a temporary or permanent sedimentation basin on the project with a density of 70 percent of its expected final growth density over the entire pervious surface area, or other equivalent means site unless in feasible. The Permittee(s) may discharge from the temporary or permanent sedimentation basins to necessary to prevent soil failure under erosive conditions. surface waters if the basin water has been visually checked to ensure adequate treatment has been obtained in the basin and that nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. If the water 2. The permanent stormwater management system is constructed, meets all requirements in Part III.D. and is operating as cannot be discharged to a sedimentation basin prior to entering the surface water, it must be treated with the designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins appropriate BMPs, such that the discharge does not adversely affect the receiving water or downstream properties. If have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are the Permittee(s) must discharge water that contains oil or grease, the Permittee(s) must use an oil-water stabilized with permanent cover. separator or suitable filtration device (e.g. cartridge filters, absorbents pads) prior to discharging the water. The Permittee(s) must ensure that discharge points are adequately protected from erosion and scour. The discharge 3. All temporary synthetic and structural erosion prevention and sediment control BMPs (such as silt fence) have been must be dispersed over natural rock riprap, sand bags, plastic sheeting, or other accepted energy dissipation removed on the portions of the site for which the Permittee(s) is/are responsible. BMPs designed to decompose on site (such as some compost logs) may be left in place.
- 4. For residential construction only, individual lots are considered finally stabilized if the structure(s) are finished and conditions, erosion in receiving channels or on downslope properties, or inundation in wetlands causing significant temporary erosion protection and downgradient perimeter control has been completed and the residence has been sold adverse impact to the wetland. to the homeowner. Additionally, the Permittee has distributed the MPCA's "Homeowner Fact Sheet" to the homeowner to inform the homeowner of the need for, and benefits of, permanent cover.
- 3. If the Permittee(s) is/are using filters with backwash water, the Permittee(s) must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water 5. For construction projects on agricultural land (e.g., pipelines across crop, field pasture or range land) the disturbed land has into the site in a manner that does not cause erosion. The Permittee(s) may discharge backwash water to the sanitary been returned to its preconstruction agricultural use. sewer if permission is granted by the sanitary sewer authority. The Permittee(s) must replace and clean the filter media used in dewatering devices when required to retain adequate function.

IV.E. INSPECTIONS AND MAINTENANCE

- a. Date and time of inspections

- g. Any amendments to the SWPPP proposed as a result of the inspection must be documented as required in Part III.B. within seven (7) calendar days.

Inspection frequency adjustment

- a. Where parts of the project site have permanent cover, but work remains on other parts of the site, the Permittee(s) may reduce inspections of the areas with permonent cover to once per month. b. Where construction sites have permanent cover on all exposed soil areas and no construction activity is occurring
- anywhere on the site, the site must be inspected during non-frozen ground conditions at least once per month for a period street construction is anticipated to be completed within 8 weeks from of twelve (12) months. Following the twelfth month of permanent cover and no construction activity, inspections may be terminated until construction activity is once again initiated unless the Permittee(s) is/are notified in writing (Gas/Telephone/Electric/Cable) will be installed after street by the MPCA that erosion issues have been detected at the site and inspections need to resume.
- c. Where work has been suspended due to frozen ground conditions, the inspections may be suspended. The required inspections and maintenance schedule must begin within 24 hours after runoff occurs at the site or 24 hours prior to resuming construction, whichever comes first.

4. The Permittee(s) is/are responsible for the inspection and maintenance of temporary and permanent water quality management BMPs, as well as all erosion prevention and sediment control BMPs, until another Permittee has obtained coverage under this Permit according to Part II.B.5. or the project has undergone Final Stabilization, and an NOT has been submitted to the MPCA.

- Management Measures to ensure integrity and effectiveness during all routine and post-rainfall event inspections. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow access unless another time frame is specified below. The Permittee(s) must investigate and comply with the following inspection and maintenance requirements:
- a. All perimeter control devices must be repaired, replaced, or supplemented when they become nonfunctional or the sediment the grade orientation and design. This can be controlled by heavy reaches one-half (1/2) of the height of the device. These repairs must be made by the end of the next business day after discovery, or thereafter as soon as field conditions allow access
- b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches one-half (1/2) the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access (see Part IV.D.).
- c. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of erosion and sediment deposition during each inspection. The Permittee(s) must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal grades certified, and erosion blanket installed as per the plan. results in exposed soil. The removal and stabilization must take place within seven (7) days of discovery unless precluded by Contractor shall coordinate these steps to be carried out in a timely legal, regulatory, or physical access constraints. The Permittee(s) shall use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. The Permittee(s) is/are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters.
- e. Streets and other areas adjacent to the project must be inspected for evidence of off-site accumulations of sediment. If sediment is present, it must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets)

infiltration area. All infiltration areas must be inspected to ensure that equipment is not being driven across the infiltration area.

IV.F. POLLUTION PREVENTION MANAGEMENT MEASURES

The Permittee(s) shall implement the following pollution prevention management measures on the site:

- 1. Storage, Handling, and Disposal of Construction Products, Materials, and Wastes: The Permittee(s) shall comply with the following to minimize the exposure to stormwater of any of the products, materials, or wastes. Products or wastes which are either not a source of contamination to stormwater or are designed to be exposed to stormwater are not held to this
- a. Building products that have the potential to leach pollutants must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with stormwater
- b. Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover (e.g., plastic sneeting or temporary roots) to preve the discharge of pollutants or protected by similarly effective minimize contact with stormwater.
- c. Hazardous materials, toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste or hazardous materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.
- d. Solid waste must be stored, collected and disposed of properly in compliance with Minn. R. ch. 7035.
- e. Portable toilets must be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.
- 2. Fueling and Maintenance of Equipment or Vehicles; Spill Prevention and Response: The Permittee(s) shall take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. The Permittee(s) must conduct fueling in a contained area unless infeasible. The Permittee(s) must ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. The Permittee(s) must report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible
- 3. Vehicle and equipment washing: If the Permittee(s) wash the exterior of vehicles or equipment on the project site, washing must be limited to a defined area of the site. Runoff from the washing area must be contained in a sediment basin or other similarly effective controls and waste from the washing activity must be properly disposed of. The Permittee(s) must properly use and store soaps, detergents, or solvents. No engine degreasing is allowed on site.

IV.G. FINAL STABILIZATION

The Permittee(s) must ensure Final Stabilization of the site. Final Stabilization is not complete until all requirements of Parts IV.G.1-5. are complete:

DEVELOPMENT SUMMARY

COBBLESTONE LAKE NORTH SHORE 2ND ADDITION - APPLE VALLEY, MN

TYPE OF PROJECT: 47 Lot Single Family Residential Construction

11.51 AC

TYPE OF WORK : Mass Grading, Utility and Street Construction, Paving. Subsequently, Joint Trench and Home construction will occur

TOTAL PLATTED AREA :	

OTAL DISTURBED AREA :	10.01 AC
XISTING IMPERVIOUS AREA :	0.00 AC
ROPOSED (DESIGN) IMPERVIOUS AREA :	4.51 AC

SPECIAL WATERS: There are no special or impaired water within one mile of the site.

CONSTRUCTION PHASING

The project is expected to be constructed in a single phase, within one construction season. Mass grading is anticipated to be completed within 6 weeks from commencement of work. Utility and commencement of work. Private utilities

construction is complete. Followed by final site stabilization.

Upon completion of grading the streets to the sub-grade elevation, the contractor may utilize the street subcut to construct temporary sediment traps at strategic drainage capture points.

POTENTIONAL FOR EROSION AND DISCHARGE OF SEDIMENT As the site will be stripped of topsoil and vegetation for a period of several weeks during construction, the potential for erosion will increase. The proposed stormwater basins and street subcut will serve as temporary sediment basins during construction.

The risk of discharge of sediment off of the site is moderate, due to duty silt fence, buffer strips, erosion control blanket, and temporary sediment basins.

Contractor will be required to manage completion of 3:1 slopes such that soil exposure is minimized. After excavation and embankments are completed, slopes shall be re-spread with topsoil, the slope

EROSION CONTROL BMPs

The construction plans anticipate the use of, but are not limited to, the following Erosion Control BMPs:

- 1. Perimeter delineation to minimize disturbed areas 2. Temporary Rock Construction Entrance
- 3. Temporary straw mulch as needed.
- 4. Seed and mulch/sod
- 5. Erosion Control Blanket
- 6. Minimize active or disturbed work areas 7. Turf reinforcement mat (TRM)
- 8. Horizontal slope grading

SEDIMENT CONTROL BMPs

The construction plans anticipate the use of, but are not limited to, the following Sediment Control BMPs

- 1. Sediment traps constructed in street subcut 2. Utilize permanent stormwater basin as Temporary Sediment
- 3. Silt Fence at project perimeter or toe of slopes
- 4. Inlet protection on existing catch basins
- 5. Inlet protection on existing culverts 6. Inlet protection after utility construction
- 7. Linear control along back of new curb and gutter (bioroll or silt fence)
- 8. Routine street sweeping adjacent to construction entrance. Ditch checks

Refer to plans for designated locations of BMPs, details and implementation notes.

BASIN AND TRAP DEWATERING BMPs

Should the need arise for basin or trap dewatering, contractor shall utilize a floating skimmer pump intake, such that the water is drawn from the surface of the basin. Pumped effluent shall not be discharged into Surface Waters in a turbid state. Turbid effluent shall be filtered with mechanical devices, chemical

filtering, or a combination thereof, to a state of 50 NTUs or less.

STABILZATION BMPs

- following Stabilization BMPs:
- anticipated.)
- control blanket can be applied. 3. Rip rap at pipe outfalls
- 4. Permanent seed and erosion control blanket on basin slopes after grade certified.
- remaining building pads and boulevard area not already stabilized
- 6. Sod placement, as appropriate.

POLUTION CONTROL BMPs

- be required to implement BMPs for onsite re-fueling of equipment.
- 2. Concrete Washout: A suggested washout area will be specified
- provide alternative washout containment.

SEED & MULCH SPECIFICATIONS Seed placed for permanent cover or final stabilization requires 6" minimum topsoil cover. Exception: Infiltration/Filtration basins - see basin details for soil type). Multiple site visits will be required to accommodate permanent or temporary stabilization as required during the phases of construction.

(1) General Seed & Mulch A. Seed: MNDOT 25-141 at a rate of 59 lb/acre

- B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre C. Mulch: MNDOT Type 1 at a rate of 2 tons/acre
- A. Seed: MNDOT 34-262 at a rate of 14.5 lb/acre
- C. Mulch: MNDOT Type 3 at a rate of 2 tons/acre (3) Stormwater/Filtration Bank (Stormwater Basin & Filtration Basin OLE to HWL)
- A. Seed: MNDOT 33-261 at a rate of 35 lb/acre B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre C. Mulch: MNDOT Type 3 at a rate of 2 tons/acre (4) Upland Buffer
- A. Seed: MNDOT 33-261 at a rate of 35 lb/acre B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre C. Mulch: MNDOT Type 3 at a rate of 2 tons/acre
- (5)<u>Temporary Cover Crop (Ponding/Filtration/Adjacent Slope Areas</u> A. Seed: MNDOT 21-112 at a rate of 100 lb/acre B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre
- C. Mulch: MNDOT Type 3 at a rate of 2 tons/acre

INSPECTION AND MAINTENANCE OF BMPs Routine Inspection

- 1. Rock Entrance Inspect weekly. If rock becomes filled with
- 2. Silt fence Inspect weekly, particularly for damaged sections,
- restore capture capacity. 3. Sediment traps and basins - Inspect weekly. Where capacity is
- restore capture capacity within 72 hours of discovery 4. Inlet Protection - Inspect weekly or more frequently as needed compromised. Where capacity is filled to more than 50% of
- depth, sediment shall be removed to restore capture capacity. 5. Inspect other site specific BMP's on a weekly basis minimum.

ADDITIONAL SWPPP NOTES

specifications.

contract.

amendments.

advise the Engineer and Contractor for SWPPP and BMP

The construction plans anticipate the use of, but are not limited to, the

1. After lot pads are grade certified, permanent seed and mulch can be applied, generally from the front of the building pad, extending to the rear of the lot (areas where no further utility construction is

2. After 3:1 slopes on lots are certified, permanent seed and erosion

5. After curbs are backfilled, apply permanent seed and mulch to

1. Fueling: A fixed fueling station is not anticipated. Contractor will

on the plan. The developer has the ability to adjust location or to

3. There is not an anticipated need for storing chemicals, paints, solvents or other potentially toxic or hazardous materials on site

(2) <u>Stormwater/Filtration Basins (</u>Aquatic Bench & Filtration Basin Only)

B. Fertilzer: Type 3 slow release 10-10-10 at a rate of 200 lb/acre

sediment and tracked material to the extent the purpose ceases to function, remove the contaminated rock and replace with new

breaches, down-gradient areas, flow concentration points, scour areas and sections adjacent to sensitive areas. Where capacity is filled to more than 50% of depth, sediment shall be removed to

filled to more than 50% of depth, sediment shall be removed to after multiple rainfalls less than 0.5". Verify intake capacity is not

Rain Event Inspection - Mandatory, within 24 hours after a rain event 0.5" or greater. Complete all items associated with Routine Inspection. Furthermore, inspect site for breaches, failures, scours and gullying. Take corrective actions as necessary to restore functionality to the BMP's. If a given situation is discovered to be prone to repetitive failure,

1. All Erosion and Sediment Control facilities shall be maintained by the contractor during the construction operations. Any temporary facilities which are to be removed as called for on these plans and specifications shall be removed by the contractor at the time directed by the engineer. The contractor shall then restore the subsequently disturbed areas in accordance with these plans and

2. Wherever practical and feasible, the contractor shall protect and preserve existing natural trees, grass and other vegetative cover

- in effort to provide natural buffering and filtering of runoff. 3. Contractor shall be adaptable in adjusting construction schedules in anticipation of weather forecasts of precipitation, in order to
- minimize risk of erosion and sediment transport. 4. It is the responsibility of the contractor to keep public streets,
- travel ways, parking lots and trails utilized for ingress to and egress from the construction site free of dirt, sediment and debris, resulting from construction activity. Cost for this shall be

considered incidental to the contract. 5. Adequate control of dust shall be maintained by the contractor.

Cost for dust control shall be considered incidental to the

ADDITIONAL SWPPP NOTES (continued) 6. Perimeter controls shall not be removed until final stabilization of

- areas draining toward the control devices. 7. When temperatures do not exceed 40 degrees F, areas that require seed and mulch stabilization shall be dormant seeded.
- Application rate shall be two times the normal rate. No dormant seeding shall be done on ice or snow greater than 2" in depth.
- 8. Any areas that were seeded that do not achieve 70% coverage shall be reseeded at the contractor's expense, where coverage limitation is caused by lack of seed germination and growth.

MPCA STORMWATER PERMIT - RESPONSIBILITY The Contractor will be required to become the Permittee for the

project, until final stabilization and transfer of responsibility is completed. Transfer of responsibility shall be completed with the Permit Modification Form.

OWNER Rob St. Sauver - South Shore Development, INC. - (952) 322-8706 PERMITTEE:

OPERATOR

OTHER CONTACTS ENGINEER:

Joel G Cooper, PE, Proj. Mgr - James R. Hill, Inc. - (952) 890-6044 TRAINING REQUIREMENTS

Joel G. Cooper, P.E. Design of Construction SWPPP (Certification(2014-2017)) University of Minnesota Instructors : John Chapman

LGU CONTACT: Colin Manson, P.E. - City of Apple Valley - (952) 953-2400

MPCA COMPLIANCE:

Paul Erdmann - MPCA - (651)-757-2883

The Contractor shall follow the implementation sequence as described on these plans. Amendments shall be made as site conditions change. Amendments shall be proposed by contractor and reviewed by the engineer.

All BMP's selected and implemented shall be appropriate for the time of year, the current site conditions and for the estimated duration of

These plans shall be considered part of the project SWPPP. A copy of the SWPPP shall remain on site throughout active construction.

ROCK CONSTRUCTION ENTRANCE WITH FABRIC	1 EA
HEAVY-DUTY SILT FENCE INCL MAINTENANCE	650 LF
SEED & MULCH - MnDOT 25-141 (GENERAL SEED MIX) - 1.5X	8 AC
SEED & MULCH - MnDOT 33-261 (STORMWATER BASIN-OLE TO HWL)	0 AC
SEED & MULCH - MnDOT 34-262 (STORMWATER BASIN-FILTRATION/AQUATIC BENCH)	0 AC
SEED & MULCH - MnDOT 21-112 (TEMPORARY COVER CROP)	5 AC
EROSION BLANKET - MnDOT CATEGORY 3	1,100 SY
TEMPORARY MULCH - MnDOT TYPE 1	0 AC
CATEGORY F3 SEDIMENT CONTROL LOG/CATEGORY 3 EROSION	
CONTROL BLANKET SYSTEM - DITCH CHECKS	2 EA
WIMCOS	16 EA
INLET PROTECTION (POST-CONSTRUCTION - REAR YARD)	5 EA



2.2







22241-65-U.dwg - 11/12/2015 10:45AI

<u>LEGEND</u>



•	EXISTING WATERMAIN EXISTING SANITARY SEWER EXISTING STORM SEWER EXISTING TELEPHONE PEDESTAL
	EXISTING TELEVISION PEDESTAL EXISTING OVERHEAD POWER LINE
	EXISTING ASPHALT SURFACE
	EXISTING CONCRETE SURFACE
_	EXISTING FENCE
-	EXISTING GAS MAIN
	EXISTING TREE LINE/TREES
=	EXISTING CURB
-	PROPOSED CURB
•	PROPOSED STORM SEWER
•	PROPOSED PRIVATE 4" PVC SDR 26
•	PROPOSED PUBLIC 6" PVC SDR 35 PERFORATED DRAINTILE

------ PROPOSED WATERMAIN ------- PROPOSED SANITARY SEWER



PROJECT NO.

22241–65

4.1







2241-65-D.dwg - 11/12/2015 10:46AM

GENERAL GRADING NOTES:

- 1. SPECIFICATIONS WHICH APPLY ARE THE MOST RECENT EDITIONS OF THE MUNICIPALITY IN WHICH THE WORK IS LOCATED AND THE MINNESOTA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY CONSTRUCTION UNLESS MODIFIED HEREIN ON THESE CONTRACT DOCUMENTS.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UTILIZE THE "GOPHER STATE ONE CALL" EXCAVATION NOTICE SYSTEM AS REQUIRED UNDER MINNESOTA STATUTE CHAPTER 216D, 72 HOURS PRIOR TO PERFORMING ANY EXCAVATION (PHONE 651-454-0002 IN THE TWIN CITIES METRO AREA OR TOLL FREE 1-800-252-1166).
- 3. GRADING CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- 4. ALL CONSTRUCTION AS CALLED FOR ON THESE CONTRACT DOCUMENTS SHALL BE PERFORMED IN ACCORDANCE WITH ALL OSHA REQUIREMENTS.
- 5. ALL LOT AND EASEMENT DIMENSIONS ARE SUBJECT TO FINAL PLAT.
- 6. ALL EROSION CONTROL MEASURES CALLED FOR ON THESE PLANS AND SPECIFICATIONS, WHICH MAY INCLUDE FILTER FENCE, SEDIMENTATION BASINS OR TEMPORARY SEDIMENT TRAPS, SHALL BE CONSTRUCTED AND SERVICEABLE IN THE FOLLOWING ORDER, AS REQUIRED.
- a. ROCK CONSTRUCTION ENTRANCES.
- c. TEMPORARY CULVERTS.
- d. TEMPORARY SEDIMENTATION BASINS AND OUTFALL FACILITIES. e. STORM WATER POND CONSTRUCTION.
- f. COMMON EXCAVATION AND EMBANKMENT (GRADING CONSTRUCTION).
 g. SEED AND MULCH (SEE NOTE 14).
 h. STRAW BALE BARRIERS IN FINISHED GRADED AREAS.
- i. INLET AND OUTLET FACILITIES SUBSEQUENT TO STORM SEWER CONSTRUCTION.
- 7. GRADING CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL EROSION CONTROL MEASURES AS SHOWN ON THESE PLANS AND SPECIFICATIONS AND IMPLEMENT ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY IN ORDER TO PROTECT ADJACENT PROPERTY.
- 8. ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED BY THE GRADING CONTRACTOR DURING GRADING OPERATIONS. ANY TEMPORARY FACILITIES WHICH ARE TO BE REMOVED AS CALLED FOR ON THESE PLANS AND SPECIFICATIONS SHALL BE REMOVED BY THE GRADING CONTRACTOR WHEN DIRECTED BY THE ENGINEER. THE GRADING CONTRACTOR SHALL THEN RESTORE THE SUBSEQUENTLY DISTURBED AREA IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
- 9. IT IS THE RESPONSIBILITY OF THE GRADING CONTRACTOR TO DISPOSE OFF-SITE ALL TREES, STUMPS, BRUSH, OR OTHER DEBRIS THAT EXISTS WITHIN THE CONSTRUCTION AREAS. TREES TO REMAIN SHALL BE DESIGNATED BY THE ENGINEER.
- 10. THE GRADING CONTRACTOR SHALL SCHEDULE THE SOILS ENGINEER SO THAT CERTIFICATION OF ALL CONTROLLED FILLS CAN BE FURNISHED TO THE OWNER DURING AND UPON COMPLETION OF THE PROJECT.
- 11. DENSITY TESTS SHALL BE TAKEN TO EVALUATE THE COMPACTION WITHIN THE STREETS, TRAVEL WAYS OR PARKING LOTS. WITHIN THE UPPER 3 FEET OF STREET SUB GRADE, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN ONE PERCENTAGE POINT OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 100% OF STANDARD PROCTOR DENSITY BE PROVIDED. IN AREAS BELOW THE UPPER THREE FEET OF SUBGRADE OF THE STREETS, TRAVEL WAYS OR PARKING LOTS, THE CONTRACTOR SHALL INSURE THAT ALL SOILS BE NOT MORE THAN THREE PERCENTAGE POINTS OVER THE SOIL'S STANDARD PROCTOR OPTIMUM MOISTURE CONTENT, AND THAT COMPACTION TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY BE PROVIDED. THE GRADING TOLERANCE FOR THESE AREAS SHALL BE WITHIN 0.1'±.
- 12. LOT GRADING AND/OR THE PREPARATION OF BUILDING PADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE GRADING TOLERANCE SHALL BE 0.25'±. ALL EARTHWORK OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE HUD-FHA DATA SHEET 79G "LAND DEVELOPMENT WITH CONTROLLED EARTHWORK", PROVIDING FOR A MINIMUM OF 95% STANDARD DENSITY, OR AS OTHERWISE SPECIFIED BY THE GEO-TECHNICAL ENGINEER.
- 13. BUILDING PADS SHOWN ON EACH LOT ARE TYPICAL ONLY. THE DEPTH OF THE PAD FROM FRONT TO BACK SHALL BE GRADED THROUGHOUT THE FULL WIDTH OF THE LOT OR AS NECESSARY TO ALLOW FOR CONSTRUCTION OF A BUILDING AT THE MINIMUM SIDE YARD SETBACKS. (REFER TO THE PLANS FOR SPECIFIC SETBACK DISTANCES.) IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED WITHIN A PROPOSED BUILDING PAD THAT CANNOT BE CORRECTED OR REMOVED, IT IS THE RESPSONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF THE CONDITIONS AND TO LOCATE THE LIMITS OF THE UNSUITABLE AREAS.
- 14. UNLESS OTHERWISE SPECIFICALLY NOTED, THE FOLLOWING SITE RE-VEGETATION TECHNIQUES SHALL BE IMPLEMENTED. ALL DISTURBED AREAS, EXCEPT STREETS, SHALL BE COVERED WITH A MINIMUM OF 6" TOPSOIL AND SHALL BE SEEDED WITH MnDOT #50B MIX AT 100LBS./ACRE. SEEDED AREAS SHALL BE MULCHED WITH MnDOT TYPE 1 AT 2 TONS/ACRE AND DISC ANCHORED. SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 2 WEEKS AFTER EARTH MOVING OPERATIONS ARE COMPLETED. ALL SLOPES THAT EXCEED 3(H):1(V) SHALL BE SEEDED WITH A WOOD FIBER BLANKET. FERTILIZER SHALL BE 20-0-10 OR EQUIVALENT AND APPLIED AT 400 POUNDS PER ACRE. FERTILIZER IS TO BE INCORPORATED INTO THE TOP 3 TO 4 INCHES BY DISCING OR SOME OTHER SUITABLE MEANS. WHEN SEEDING AFTER NOVEMBER 1, OR WHEN TEMPERATURES DO NOT EXCEED 40 DEGREES FAHRENHEIT, THE CONTRACTOR SHALL DORMANT SEED ALONG ALL DISTURBED AREAS. DORMANT SEED BED PREPARATION, SEEDING RATES, AND MULCH REQUIREMENTS SHALL BE THE SAME AS THOSE DESCRIBED IN THIS SECTION EXCEPT THAT NO SEED SHALL BE PLACED ON SNOW OR ICE WHICH IS GREATER THAN 2 INCHES IN DEPTH. ANY SEEDED AREAS WHICH DO NOT BECOME ESTABLISHED SHALL BE RE-SEEDED AT THE CONTRACTOR'S EXPENSE.
- 15. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP PUBLIC STREETS, TRAVEL WAYS, PARKING LOTS AND TRAILS FREE OF DIRT AND OTHER DEBRIS WHICH RESULTS FROM SAID GRADING CONSTRUCTION.

