

Permit Application Review

Permit No. 2018-120  
Received complete: November 20, 2018

Applicant: Jennifer Rehder.; Dow DuPont  
Consultant: Tim Setala; Pierce Pini and Associates  
Project: Parking Lot Expansion for Film Tec  
Location: 7215 Cahill Road: Edina  
Rule(s): 4,5,11,12  
Reviewer: BCO

### **General Background & Comments**

The project proposes the construction of a 77 stall parking lot behind (east) of the existing Film Tec building located at 7215 Cahill Road in Edina.

The project site information is:

- Total Site Area: 5.52 acres
- Existing Total Site Impervious Area: 3.85 acres (167,706 square feet)
- New Impervious Area: 6,534 square feet
- New Total Site Impervious Area : 174,240 square feet
- 3.9% increase in the percentage of site impervious area
- Total disturbed area: 34,848 square feet

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on a parcel or will increase the imperviousness of the parcel by more than 50%, storm water management will apply to the entire project parcel. Otherwise, the storm water requirements will apply only to the disturbed areas and additional impervious area on the parcel. Since the increase in site impervious area is 3.9%, storm water management is required for the 34,848 square feet of disturbed area that includes 6,634 square feet of new impervious area.

The District's requirements for both storm water management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5000 square feet or more surface area disturbed, Rules 4.2.1a and b and 5.2.1a and b.

Volume retention, rate control and water quality management will be provided within the foundation rock section of permeable pavers used for 40 of the proposed 77 parking stalls constructed.

Sediment logs, installed at the limits of construction, will provided erosion control.

Exhibits

1. Permit Application dated October 15, 2018.
2. Plans dated September 28, 2018, latest revision November 20, 2018, prepared by Pierce Pini & Associates.
3. Storm Water Management calculations dated October 15 and revised November 20, 2018, prepared by Pierce Pini & Associates.
4. Soil boring information dated October 30, 2018 prepared by Braun Intertec.
5. E-mail correspondence dated October 22, 2018 outlining seven (7) items that needed to be addressed for the submittal to be considered complete.

The submittal is now complete.

**4.0 Stormwater Management**

Stormwater management, volume retention, rate control and water quality management will be provided within the section of permeable pavers to be used for 40 of the 77 proposed parking stalls to be constructed.

The existing and proposed 2, 10 and 100 year frequency discharges from the site are:

<b>Frequency</b>	<b>Existing Discharge to the east c.f.s.</b>	<b>Proposed Discharge to the east c.f.s.</b>
2 year	1.5	<1.0
10 year	3.0	<1.0
100 year	6.8	1.5

There is one discharge point leaving the site from the area disturbed. The existing discharge from the other locations on the site will not be affected by the project and will not change from existing conditions. Rule 4.3.1b is met.

An infiltration volume of 599 cubic feet is required from the 6,534 square feet of new impervious area. The soils information provided indicates the underlying soils is poorly graded sand (SP) having an infiltration rate of 0.45 inches/hour using the Minnesota Storm Water Manual. A volume of 2,892 cubic feet will be provided by the permeable pavers section (599 cubic feet required). An area of 333 feet is required, an area of 11,626 square feet provided, for volume retention using this infiltration rate. This is based on a maximum allowable

inundation depth of 1.8 feet within the paver subbase with a required drawdown in 48 hours (4.3.1a (ii)).

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of a P8 model submitted indicates the paver section provides an annual removal efficiency of 97% for total suspended solids (331 lbs.) and an annual removal efficiency of 69.4% for total phosphorus (0.8 lbs.). Rule 4.3.1c is met.

The geotechnical information submitted indicates that groundwater was encountered at elevation 826 M.S.L. The bottom of the rock section for the pavers is 830.3 M.S.L., a separation of 4.3 feet. A three (3) foot separation is required between the bottom of an infiltration facility and groundwater.

The HydroCAD modeling provided shows elevation 833.1 M.S.L. as the calculated 100-year frequency flood elevation within the paver system. The finished floor of the existing building is 837.8 M.S.L., a 4.7 foot separation. District Rule 4.3.3 states that a stormwater management facility must be constructed at an elevation that ensures that no adjacent habitable building will be brought into noncompliance with a standard in subsections 4.3.3 c, requiring at least two feet of separation provided between the 100-year high water elevation of a constructed facility and the low floor elevation of a structure. Rule 4.3.3 is met.

In accordance with Rule 4.3.1a (i), the pre-treatment of runoff prior to the infiltration area will be provided within the rock subbase for the permeable pavers.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

### **5.0 Erosion and Sediment Control**

The submitted erosion and sediment control plan includes sediment logs at the limits of construction. The project contact is Tim Setala, Pierce Pini & Associates.

### **11.0 Fees**

Fees for the project are:

Rules 2.0-6.0	\$1,500
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### **12.0 Financial Assurances**

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 333 sq. ft. x \$12/sq. ft. = \$3,996	\$3,996
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Chloride Management:	\$5000
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Rule 5: Sediment logs: 650 L.F. x \$5/L.F. = \$3,250	
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Site restoration: 0.8 acres x \$2500/ acre = \$2,000	\$5,250
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Contingency and Administration	\$4,054
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### **Findings**

The proposed project includes the information necessary, plan sheets and erosion control plan, for review.

1. Rules 4 and 5 are met.

**Recommendation**

Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of \$18,300 - \$13,300 for stormwater management, erosion control and site restoration and \$5,000 for compliance with the chloride management requirements.
3. Submission of documentation that a drainage easement over the stormwater-management facility has been submitted to Edina (4.5.4i), if such easement is required by the city, and a receipt showing recordation of a maintenance declaration for the on-site storm water management facility. A draft of the declaration must be approved by the District prior to recordation.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Per Rule 4.5.6, an as-built drawing of the storm water facilities, including a stage-volume relationship in tabular form, for the retention area within the permeable paver section conforming to the design specifications as approved by the District must be submitted.
2. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
3. For the release of the \$13,300 financial assurance required in Recommendation #2, Rule 12.4.1b requires demonstration and confirmation that the storm water management facilities have been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the storm water facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

**Board Action**

It was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_ to approve permit application No. 2018-120 with the conditions recommended by staff.

**Permit #:** 2018-120  
**Project Name:** Parking Expansion – FilmTec; 7215 Cahill Road: Edina  
**Approval Date:** December 19, 2018

## General Provisions

1. All temporary erosion control measures shown on the erosion and sedimentation control plans must be installed prior to commencement of surface or vegetation alteration and be maintained until completion of construction and vegetation is established as determined by NMCWD.

If silt fence is used, the bottom flap must be buried and the maximum allowable spacing between posts is 4-foot on center. All posts must be either 2-inch x 2-inch pine, hardwood, or steel fence posts. If hay bales are used, all bales must be staked in place and reinforced on the downstream side with snow fence.

2. All areas altered because of construction must be restored with seed and disced mulch, sod, wood fiber blanket, or be hard surfaced within two weeks after completion of land alteration and no later than the end of the permit period.
3. Upon final stabilization, the permit applicant is responsible for the removal of all erosion control measures installed throughout the project site.
4. At the entryway onto the site, a rock filter dike being a minimum of two feet in height and having maximum side slopes of 4:1 must be constructed. This rock filter dike will enable construction traffic to enter the site and also provide an erosion control facility.
5. If dewatering is required and sump pumps are used, all pumped water must be discharged through an erosion control facility prior to leaving the construction site. Proper energy dissipation must be provided at the outlet of the pump system.
6. The NMCWD must be notified a minimum of 48 hours prior to commencement of construction.
7. The NMCWD, its officers, employees and agents review, comment upon, and approve plans and specifications prepared by permit applicants and their consultants for the limited administrative purpose of determining whether there is reasonable assurance that the proposed project will comply with the regulations and criteria of the NMCWD. The determination of the NMCWD that issuance of this permit is appropriate was made in reliance on the information provided by the applicant.
8. The grant of this permit shall not in any way relieve the permittee, its engineer, or other professional consultants of responsibility, nor shall it make the NMCWD responsible for the technical adequacy of the engineer's or consultant's work. The grant of this permit shall not relieve the permittee from complying with all conditions and requirements of the permit which shall be retained by the permittee with the permit.
9. The issue of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
10. This permit is permissive only. No liability shall be imposed upon the NMCWD or any of its officers, agents or employees, officially or personally, on account of the granting of this permit or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors.

11. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly-owned lands or improvements or interests, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property, rights, and interest.
12. The permit is transferable only with the approval of the NMCWD (see NMCWD Rule 1.0). The permittee shall make no changes, without written permission previously obtained from the NMCWD, in the dimensions, capacity, or location of any items of work authorized by this permit.
13. The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the NMCWD for inspection of the work authorized by this permit.
14. This permit may be terminated by the NMCWD at any time deemed necessary in the interest of public health and welfare, or for violation of any of the provisions of this permit.
15. Construction work authorized under this permit shall be completed on or before date specified above. The permittee may, in writing, request that the NMCWD extend the time to complete the project in accordance with NMCWD Rule 1.0.



## Permit No.2018-120

Is hereby issued to Jennifer Rehder, Dow DuPont, subject to the conditions specified in the attached form:

For parking lot expansion for FilmTec located at 7215 Cahill Road in Edina.

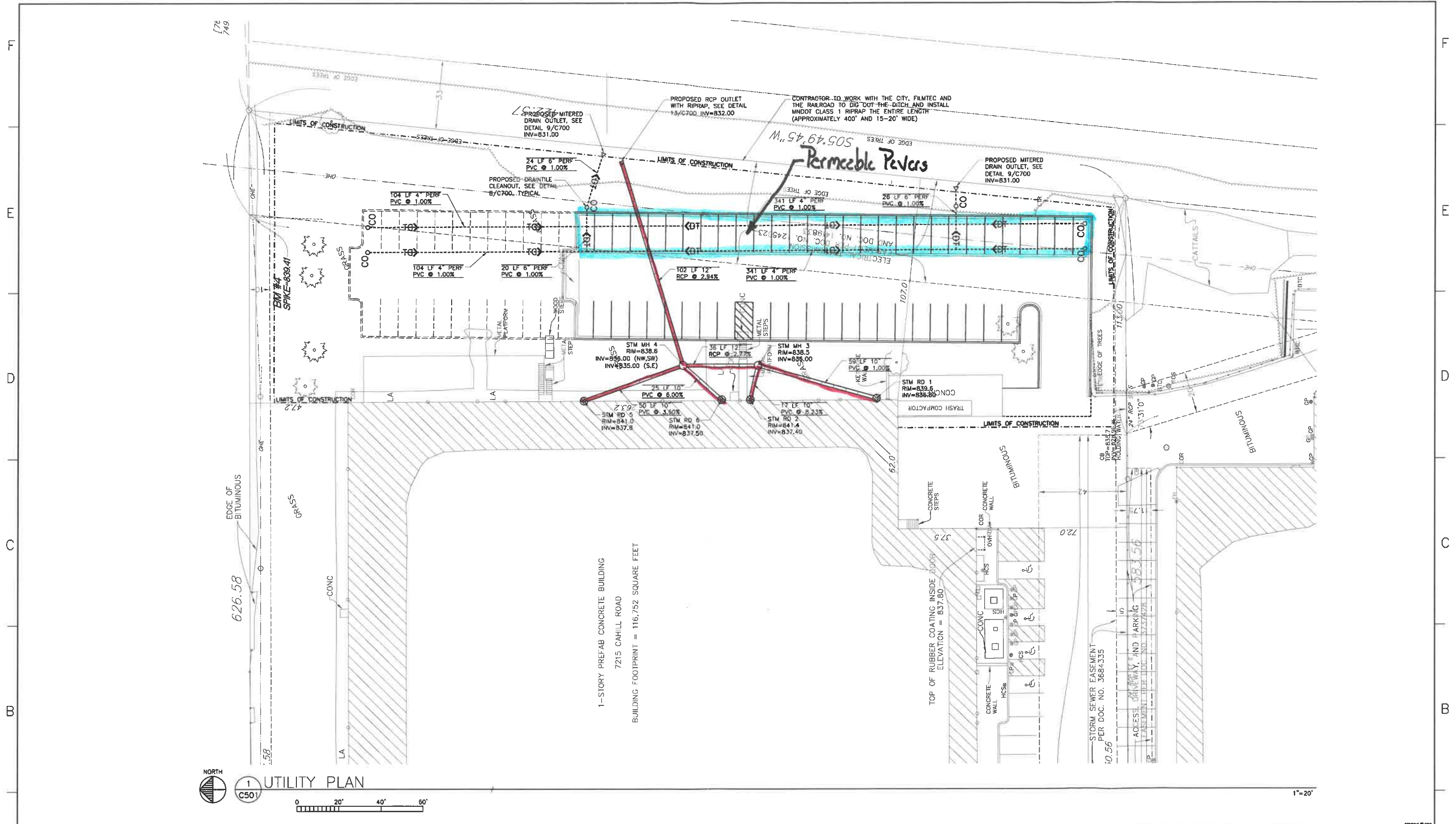
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Steve Kloiber, Chair  
Nine Mile Creek Watershed District

This permit expires on: January 1, 2020







**1 UTILITY PLAN**  
 NORTH  
 0 20' 40' 60'  
 1"=20'

I HEREBY CERTIFY THAT THIS PLAN OR DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: <b>TIM SETALA</b> SIGNATURE: <i>Tim Setala</i> DATE: <b>09/28/2018</b> LICENSE #: <b>53552</b> STAMP/SEAL PROPRIETARY INFORMATION: THIS DRAWING IS THE PROPERTY OF AMEC E&C SERVICES, INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF AMEC E&C SERVICES, INC.										APPROVED FOR CONSTRUCTION GF TGR DJC CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.			AREA FILMTEC INC. 7215 CAHILL ROAD EDINA, MINNESOTA		<b>PIERCE PINI &amp; ASSOCIATES, INC.</b> <b>Consulting Civil Engineers</b>		CLIENT DWG. NO.		REV. 1
PROJECT PHASE CONSTRUCTION DOCUMENTS PROJECT NO. 145518 ACTIVITY NO. XX PACKAGE CODE SCALE NOTED ON PLAN BY D/M/Y 28/9/18 DSN. TPS DRN. DPM										SUBJECT <b>UTILITY PLAN</b>		DRAWING NO. <b>C501</b>		REV. 1					
ISSUED FOR 2 20/11/18 WATERSHED UPDATES 1 REF NUMBER REFERENCES										CADD FILE ADDRESS <b>#12018-120</b>		1		1					

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