Winnipeg

The City of Winnipeg

Winnipeg Sewage Treatment Program

NEWPCC Access Control Guideline

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Approved By:	Duane Griffin, Branch Head WW Planning & Project Delivery	Jan 24, 2020 Date

REVISION REGISTER				
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01	Revised access system control cards/readers	2019-11-07	R. Risley	D. Griffin

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1 INTRODUCTION

This document identifies the standard design requirements that are applicable to access control systems.

1.1 Scope of the Standard

These design requirement apply to the following facilities:

- North End Sewage Treatment Plant (NEWPCC)

1.2 Application

The scope and intent of this document is to convey general design guidance and expectations. This document addresses specifics related to design type, selection, and configuration; however the indicated requirements are presented without knowledge of the specific building implementation. It is not within the scope of this document to provide detailed design direction, and it will be the responsibility of the designers to fully develop the details with general conformance to the concepts presented herein. This standard shall not be construed as comprehensive engineering design requirements or negate the requirement for professional engineer's involvement. Any design must be executed under the responsibility and seal of the respective engineer in each instance, and must be performed in conformance with all applicable codes and standards, as well as good engineering practice.

Existing facilities do not necessarily comply with this standard. The expectations regarding application of this standard to maintenance and minor upgrades at existing facilities must be assessed on a case-by-case basis; however general guidelines for application are presented as follows:

- All new buildings are expected to comply with this standard.
- All major upgrades to a building are expected to comply with this standard; however in some cases, compromise with the configuration of the existing facility design may be required.
- All minor upgrades should utilize this standard as far as practical for new work; however in some cases, compromise with the configuration of the existing facility design may be required.

1.3 Deviations from Standard

It is expected that there will be occasional situations where a deviation from this design guideline could be considered. The rationale for potential deviations from the design guideline may include:

- Evolution of technology,
- Updates to standards and regulations,
- Practical limitations due to existing conditions on site, or
- Significant cost benefits to the City due to specific project constraints.

For each proposed deviation from this standard, fully complete a *WSTP Standards Deviation Form* and submit to the WSTP Project Manager for approval. Do not proceed with the proposed deviation unless approval is received from the WSTP Project Manager.

1.4 Acronyms and Abbreviations

UPS Uninterruptible Power Supply

2 OBJECTIVES

The objectives for access control design at the NEWPCC include:

- Provision of modern card access control to enhance the facility security using technologies compatible with the existing City of Winnipeg facility access control system;
- Provision of additional access control capabilities such as the ability to limit access for specific areas, groups, individuals, or time of day; and
- Provision of a lock & key system based on a master key.

3 COORDINATION

Coordinate with the City prior to design and procurement to ensure that the latest City hardware / software standards are incorporated. Comply with all reasonable changes with no additional cost to the Contract.

4 ACCESS CONTROL SYSTEM

4.1 System

The Access Control System will be consistent with City of Winnipeg facility access control system, which utilizes the Genetec Synergis system.

The access cards to be used for access are the City of Winnipeg Employee Identification Access Cards, which are based on HID technology.

Installation in hazardous environments must follow all applicable codes, standards, regulations, etc.

4.2 Cabinet

Utilize the following cabinet to allow for compatibility with the access control architecture:

- Lifesafety FPO 150/150-C8D8E2

The size of the cabinet may change depending on the size and number of interface modules.

4.3 Interface Module

Utilize the following interface modules to allow for compatibility with the access control architecture:

- Genetec MR52

4.4 Controller

Utilize the following controller boards to allow for compatibility with the access control architecture:

- Genetec LP1502 Controller card

4.5 Power Supply

The Access Control System and all associated components shall be powered by an EATON UPS. The UPS may be shared with other systems, unless precluded by other requirements.

4.6 Door Hardware

4.6.1 Card Reader

The card readers shall be multiCLASS SE® Readers: RP40 or RK40 for dual authentication.

4.6.2 Electric Door Strike

The electric door strike shall be:

- HES Electric Strike or Von Duprin Door hardware;
- Astragal plate for latch

All exterior doors with Card Access Control shall be configured "fail secure". Mechanical panic bars shall be provided for egress.

4.6.3 Door Monitoring Contact

Provide door single pole monitoring contacts for all doors with access control, or as required by other specifications.

4.6.4 Interior Door Exit Detector

All interior doors with card access control shall be provided with a T-REX exit detector.

4.7 Cabling

Provide Honeywell profusion access cable for compatibility with the existing access control scheme. Wiring for the electric door strike must be sized appropriately for the voltage drop. In addition, provide Category 6 cable (CAT-6) for future Power over Ethernet technology to each door.

5 LOCK & KEY SYSTEM

5.1 Hardware

The Lock & Key system will be a Medico key system. Utilize a Schlage heavy duty key in knob set with Medico keyway, Satin Chrome finish.

The keyway for all new locks will be keyed by the locksmith identified by the City.

5.2 Keying System

The key structure shall be as follows:

- Grand Master Key (GMK): The key can open all the doors in the NEWPCC facility.
- Master Key: The key can open selected groups of doors.
- Change Key: Each lockable room will have its own Change Key.

Coordinate the keying system with the City.

6 COMMISSIONING

Coordinate commissioning with the City.