Returned @ Counter

AFTER RECORDING RETURN TO:

City of Klamath Falls
City Recorder's Office
500 Klamath Avenue
Klamath Falls, OR 97601

2011-003382
Klamath County, Oregon

00098691201100033820130135

03/09/2011 10:23:57 AM Fee: $97.00

DEED OF DEDICATION AND AGREEMENT

This conveyance is made between the:

City of Klamath Falls
P.O. Box 237, 500 Klamath Avenue
Klamath Falls, Oregon 97601
Phone: 541-883-5314
Fax: 541-883-5399
("City" herein as Deed grantee)

and

TimberMill Shores, Inc.
P.O. Box 257
Klamath Falls, Oregon 97601
Phone: 541-884-3177
Fax: 541-884-2697
("Developer" and "Grantor" herein)

RECITALS

CITY GEOTHERMAL SYSTEM: The City operates and maintains a system of geothermal wells and distribution and return piping that supplies geothermally-heated water to its customers ("City Geo System"). The City Geo System is used for space heating, potable water heating and, when existing system capacity is available and the use is otherwise feasible, for sidewalk snowmelt systems.

Given the limited capacity of the City's Geo System for meeting customer demands during peak usage, all new service connections, including those within the TimberMill Shores Development, shall be required to implement a more efficient use of the geothermal water as detailed in the City's "connection and service agreement for high performance buildings." Provisions exist for the City, in its sole discretion, to temporarily curtail or shut off service to customers or its geothermal system, if needed to conserve heat for building heating and to meet other previous heating demands.

TIMBERMILL SHORES DEVELOPMENT: As part of the Tract 1430 TimberMill Shores development ("Development"), Grantor constructed a geothermal heat exchanger building to receive geothermally-heated water from the City's system for the purpose of supplying heat to

a sidewalk snow-melt system that was designed to heat public right-of-way sidewalks and private access sidewalks within the Development ("Development Snowmelt System") as well as that portion of the lake front trail along Lake Ewauna in TimberMill Phases I and II. The City also desires to use the system to provide heat to the area of the Veterans Memorial in Veterans Park.

Based on information contained in a "Draft Process Control Narrative" report from Brian Brown Engineering, dated October 14, 2008, attached as Exhibit C and incorporated herein by this reference, City and Developer agree the snowmelt system design basis of the Development Snowmelt System to be 9,000,000 Btu per hour of sidewalk heating capacity. This capacity is adequate to supply 150,000 square feet of sidewalk surface with a design heat output of 60 Btu per hour per square foot. The City agrees to reserve that design heating capacity for properties within the TimberMill Shores Phase I and II development. Snowmelt service extensions outside the TimberMill Shores development are subject to the capability of the system to provide the additional required heat. Developer agrees that it will reserve enough of the existing capacity of the System to provide snow-melt heat for the dedicated public sidewalks, the Lake Ewauna recreational trail and dedicated public pedestrian easements anticipated in Phases I and II of the Development. The parties acknowledge, however, that the provision of snow melt heat to Phase II is contingent on the City's geothermal system providing sufficient heated fluid to the heat exchanger facility to allow the use of the snow melt system in Phase II.

VETERANS MEMORIAL: The City and its community partners constructed a Veterans Memorial at Veterans Park ("Memorial"), which includes approximately 5,200 square feet of concrete surface that was constructed with tubing for future connection to a sidewalk snowmelt system. There is no nearby geothermal heat source that is feasible to provide heat to operate the Memorial snowmelt system at this time, except for the Development heat exchanger facilities. To improve public access in the area, connection of the Memorial snowmelt system to Development facilities would add an additional 1, 200 square feet of sidewalk connecting from the Memorial to the lakefront trail in the Development, bringing the total to approximately 6,400 square feet of additional sidewalk snowmelt system needed to accommodate the memorial snowmelt system and all additional lakefront trail areas leading to the memorial. Adding this 6,400 square feet of sidewalk to the Development heat exchanger facilities system will require adding 6 plates to the already installed 131 plates in the heat exchanger building in the Development (for a total of 139 plates of the maximum designed 171, with no needed modifications to the existing pumping system).

Grantor and City intend by this Deed of Dedication that Grantor shall dedicate to the City the Development geothermal heat exchange building and certain other appurtenant facilities and equipment, subject to the various terms and conditions set forth herein.

DEDICATION AND AGREEMENT

The Parties hereby incorporate the Recitals set forth above as material and contractual terms of this Agreement. In consideration of the foregoing Recitals, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

On the date signed by Grantor below, Grantor hereby grants and dedicates to the City: the 20' X 12' (Twenty-foot by twelve-foot) geothermal heat exchanger building, including the curtilage area owned by the Grantor (if any) surrounding the building necessary to access the building for maintenance, repairs and replacement; all associated appurtenances, valves, equipment and boxes; and all supply and return piping (but not any sidewalk snowmelt tubing), including, without limitation, the pumps and the return and supply piping located within the 16' utility easement on the northwesterly property line of Lot 12, Tract 1430-TimberMill Shores (collectively, the "Property"). The Property is further described and depicted in attached Exhibits A (the utility easement referenced in Section 1 below) and B (a diagram depicting the Property location), both of which are incorporated herein by this reference. The dedicated Property may be used by City for all geothermal heating system purposes, including, without limitation, the construction, installation, inspection, maintenance, repair, replacement and use of geothermal facilities, including all necessary appurtenances in, upon, over, across and under the dedicated area.

This dedication is subject to the following terms and conditions:

1) Subject to the Grantor's right to access the area to operate, maintain, improve and replace the existing landscaping water supply system, City shall have first priority for use of the existing 16' utility easement, located on the northwest portion of lot 12 in the Development, in City's sole and exclusive discretion. (See attached Exhibit A for a description of the original easement). Grantor, property owners within the Development, and other utilities shall not utilize the easement area, unless express written permission for use is granted by the City.
2) City shall assume all operating and maintenance costs and responsibilities for all Property dedicated herein, but not for any sidewalk snowmelt tubing that is part of the Development Snowmelt System. Grantor/Developer shall assume all operating, maintenance and replacement costs and responsibilities in connection with the remainder of the Development Snowmelt System.
3) City shall install, at its expense, a SCADA system for purposes of remotely monitoring and controlling the system. Promptly following the execution of this agreement, City shall pay to Developer from Lakefront Urban Renewal District funds the sum of $13,328.08 to reimburse Developer for the SCADA equipment purchased by Developer and which is now in the possession of City.
4) City shall add an additional 6 plates to the heat exchanger at or before the time the Development Snowmelt System applications/connections approach the design capacity of 150,000 square feet of sidewalk snow melt.

5) Grantor shall not add to the Development Snowmelt System any additional plaza's, sidewalks, or other area which exceeds the Grantor's anticipated 150,000 square feet of public sidewalk, including the Lake Ewauna recreational trail, that utilize the snowmelt system within the Development, without the prior written approval of the City. Any and all capacity of the Development geothermal heat exchange facilities in excess of the 150,000 square feet of public and private access sidewalks is hereby dedicated to the City and shall be used in the sole and exclusive discretion of the City.

6) Grantor shall execute the standard City Geothermal Energy Service Agreement for the provision of sidewalk snowmelt heating services for the Development Snowmelt System, and Grantor shall abide by all terms and conditions provided therein.

7) Prior to the execution of this Deed of Dedication and Agreement, Grantor shall provide City with current, accurate "as-built" drawings for all geothermal facilities dedicated herein.

8) The Grantor attests and certifies that: a) Grantor is the owner of the Property dedicated herein; b) the Property is free of all liens and encumbrances; c) Grantor has good and legal right to grant and dedicate its rights in the above-described Property; d) Grantor will pay all taxes and assessments due and owing on the Property up to the date of dedication; and e) Grantor and its successors and assigns shall warrant and forever defend the said Property against the claims and demands of all persons claiming by, through, or under the Grantor.

9) No consideration stated in dollars has been paid for this conveyance; however, the actual consideration consists of or includes other property or value given and identified herein which is the entire consideration.

10) In construing this Deed and where the context requires, the singular includes the plural and all grammatical changes shall be implied to make the provisions hereof apply equally to corporations and to individuals.

11) The terms of this Agreement are the product of negotiations between the Parties with the advice of their own legal counsel. Therefore, the Parties agree that any rule of construction which provides that any ambiguities in the Agreement be construed against the draftsperson shall not apply.

12) In the event suit or action is initiated to enforce the terms of this Agreement, the prevailing party is entitled to recover reasonable attorney fees and all other fees, cost and expenses incurred in connection with the suit or action, including all appeals. If the court awards relief to both parties, each party will bear their own respective costs in their entirety.

13) No person or entity, who or which is not a party to this Agreement, has any right of action under this Agreement including, without limitation: a trustee in bankruptcy, lenders, lot or home buyers, materialmen, laborers, or others providing work, services, or materials for the Grantor. Nor does any such person or entity have any interest in or claim to any security provided by the Grantor to the City.

By signing below, City (Deed Grantee herein) hereby accepts the conveyance and dedication made herein, subject to the terms and conditions provided herein.

IN WITNESS WHEREOF, the GRANTOR has executed this instrument this day 7th of March, 2011; and has caused its name to be signed by its officers, duly authorized thereto by order of its board of directors.

NOTICE: No stamp or corporate seal is allowed over any typed information.

TimberMill Shores, Inc.

By: _____

Robert J. Shaw, President
P.O. Box 257
Klamath Falls, OR 97601

STATE OF OREGON)
)ss.
County of Klamath)

This instrument was acknowledged before me on the 7th day of March, 2011 by Robert J. Shaw as President of TimberMill Shores, Inc., an Oregon Corporation, on behalf of said corporation as its voluntary act and deed.

Nickole M. Barrington
Notary's Signature
My Commission Expires: 5-8-2013

OFFICIAL SEAL
NICKOLE M. BARRINGTON
NOTARY PUBLIC - OREGON
COMMISSION NO. 438587
MY COMMISSION EXPIRES MAY 8, 2013

Accepted on behalf of the City of Klamath Falls this 7th day of March, 2011 on the conditions and representations set forth herein.

GRANTEE: CITY OF KLAMATH FALLS

By: _____
Rick Whitlock, City Manager

STATE OF OREGON)
)ss
County of Klamath)

On the 7th day of March, 2011, personally appeared Rick Whitlock, who, being first duly sworn, did acknowledge that he is the City Manager of the City of Klamath Falls, an Oregon municipal corporation, that this instrument was signed on behalf of the City and that this instrument was the City's voluntary act and deed.

BEFORE ME:

OFFICIAL SEAL
NICKOLE M. BARRINGTON
NOTARY PUBLIC - OREGON
COMMISSION NO. 438587
MY COMMISSION EXPIRES MAY 8, 2013

_____
Notary Public for Oregon
My Commission Expires: 5-8-2013

2007-009355
Klamath County, Oregon

00023111200700093550040041

05/23/2007 03:22:08 PM Fee: $36.00

After Recording Return to

Timber Mill Shores
P. O. Box 257
Klamath Falls, OR 97601

79445-KR

UTILITY EASEMENT

KNOW ALL MEN BY THESE PRESENTS, that PINE CONE, L.L.C., AN OREGON LIMITED LIABILITY COMPANY (Grantor), does hereby grant bargain, sell and convey to any and all necessary utility companies (Grantee), permanent non-exclusive easement for public utilities including geothermal and all necessary appurtenances in, into, upon, over, across and under a strip of land described and shown as follows:

SEE EXHIBIT 'A' and 'B' ATTACHED HERETO

The Easement Area lies within the real property owned by Grantor that is legally described as follows:

> Lot 12, Tract 1430 – TIMBERMILL SHORES, according to the Official plat thereof on file in the office of the County Clerk of Klamath County, Oregon

Together with the rights of ingress and egress over Grantor's adjoining lands for the purpose of Grantee's enjoyment of this easement.

Grantor retains the right to utilize the Easement Area for any purposes that do not conflict with utilities. Although this easement is non-exclusive, Grantor agrees that any other use of the Easement Area or the ingress/egress area permitted by Grantor shall not interfere with Grantee's use of those areas authorized herein.

IN CONSIDERATION OF THIS GRANT OF EASEMENT, Grantee agrees to the following:

1. **Indemnification by Grantee.** Grantee shall indemnify, defend and hold Grantor harmless from and against any and all claims, demands, damages, losses, liens, liabilities, penalties, fines, lawsuits and other proceedings asserted by third parties against Grantor and Grantor's heirs, successors and assigns (including attorney's fees, costs and expenses) that arise from or out of the Grantee's use of the Easement Area or the Property at any time.

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2. **Notice Prior to Entry.** This easement shall include the perpetual right to enter upon the Property at any necessary time, so long as Grantee uses it's best effort to coordinate such access with Grantor so as not to interfere with Grantor's ongoing business.

3. **Restoration of Property.** Upon the completion of Grantee's installation of utilities, or upon completion of grantee's ongoing maintenance or inspection of the utilities that are installed in the Easement Area. Grantee shall restore the Easement Area and the Property to the same condition as existed prior to Grantee's entry into the Easement Area or onto the property

This document shall be binding upon all subsequent purchasers of the Property, the Grantee, and the heirs, successors and assigns, of both.

IN WITNESS WHEREOF, I/we have hereunto set our hands the 21st day of May, 2007.

PINE CONE, L.L.C.
By: Robert J. Shaw

State of Oregon
County of Klamath

This instrument was acknowledged before me this 23rd day of May, 2007 by Robert J. Shaw as Operating Manager of PINE CONE, L.L.C., an Oregon Limited Liability Company.

Patricia G. Palone
Notary Public for Oregon

My commission expires 7-14-09

OFFICIAL SEAL
PATRICIA G. PALONE
NOTARY PUBLIC-OREGON
COMMISSION NO. 394918
MY COMMISSION EXPIRES JUL. 14, 2009

W&H PACIFIC
An AKEWI Company

1604 Main Street
Klamath Falls, Oregon 97601-5813
541.884.3042
Fax 541.885.2105

MAY 22, 2007

TIMBERMILL SHORES LEGAL DESCRIPTION
16.00' WIDE GEO-THERMAL & UTILITY EASEMENT PROJECT NO. 30056

EXHIBIT "A"

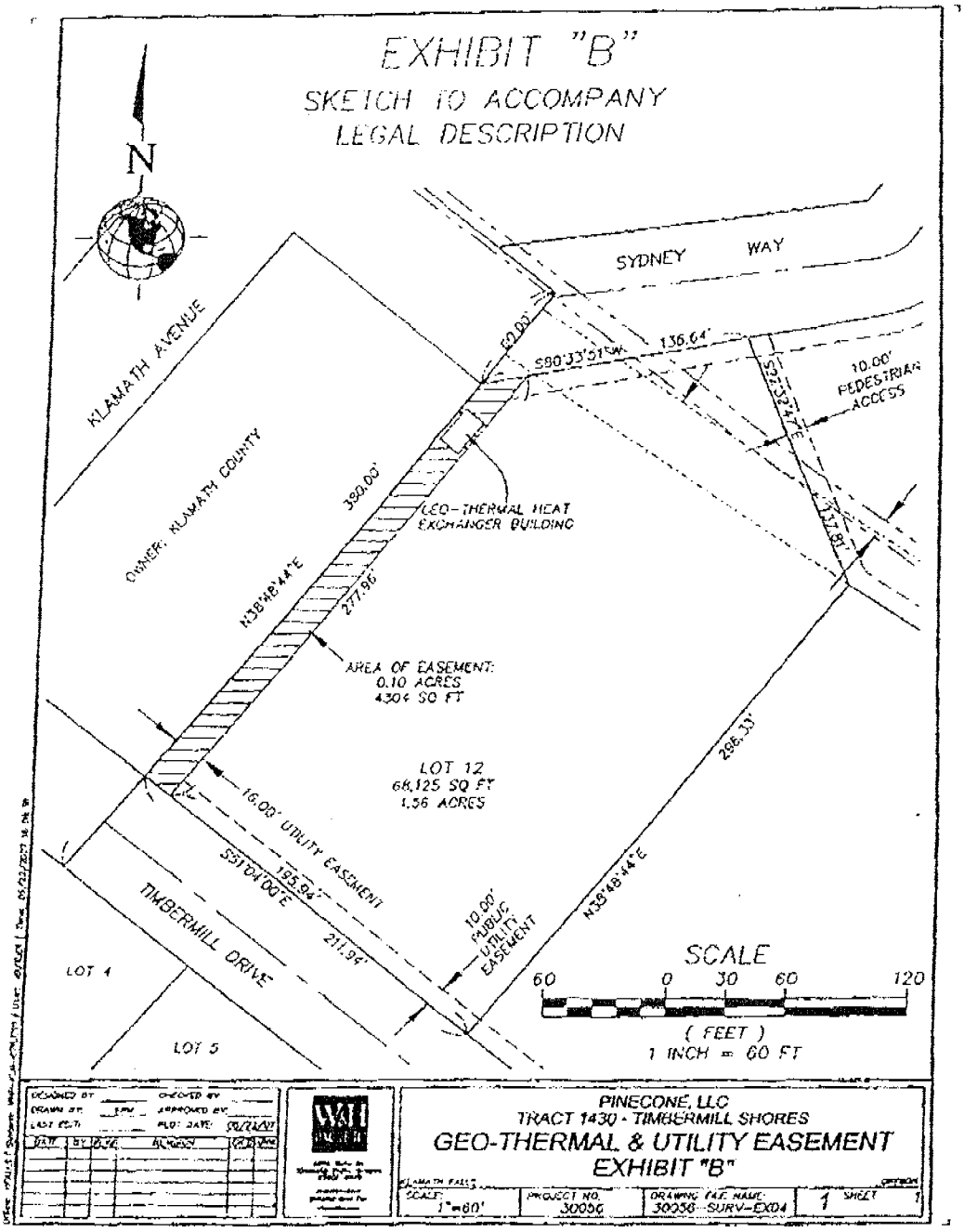
A 16.00 FOOT WIDE STRIP OF LAND, LOCATED IN LOT 12 OF "TRACT 1430-TIMBERMILL SHORES" OF THE KLAMATH COUNTY SURVEY RECORDS, AND SITUATED IN THE NORTHEAST ONE-QUARTER OF SECTION 32, TOWNSHIP 38 SOUTH, RANGE 9 EAST, WILLAMETTE MERIDIAN, CITY OF KLAMATH FALLS, KLAMATH COUNTY, OREGON, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE NORTHWESTERLY 16.00 FEET OF LOT 12 OF SAID "TRACT 1430-TIMBERMILL SHORES", AND SHOWN ON THE ATTACHED EXHIBIT "B".

CONTAINING APPROXIMATELY 4,304 SQUARE FEET OR 0.09 ACRES, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR
OREGON
JULY 21, 1992
JACK A. BUTLER
2550
RENEWAL: 12-31-07

P:\Pine Core LLC\030056\Survey\Documents\LOT 12 UTILITY ESMT052107.doc



15-OR-07

6/14/07

TOTAL P.004

DATE: October 14, 2008

REVISED DATE:

SUBJECT: **Draft Process Control Narrative**

Introduction

This process control narrative provides a description of the operation of the proposed automatic control system for the Timbermill Shores snowmelt system. The narrative starts with an overview of the controls for each unit process, followed by a more detailed description of process operation and control, monitoring, and failure modes.

Overview

The Timbermill Shores snowmelt system utilizes heat from the Klamath Falls geothermal district heating loop through a heat exchanger and closed snowmelt circulation loop to provide snowmelt and deicing for the sidewalk surfaces in the Timbermill Shores development. The snowmelt system is designed to maintain a sidewalk surface temperature of about 38°F at an ambient air temperature of about 24°F, with a heat output of about 50 BTU per square foot of sidewalk surface. The system is not intended to keep up with high snowfall rates or maintain design surface temperature in extremely cold temperatures.

The system operates when enabled and the outside air temperature is below a start set-point or operation can be initiated by the operator for adjustable time duration prior to a forecast snow event.

The Timbermill Shores snowmelt system operates primarily using residual heat in the district heating loop return water. Loop return water is circulated to the snowmelt heat exchanger with an adjustable speed pump, controlled to maintain the snowmelt loop supply temperature setpoint. If there is inadequate heat in the return water, then district heating supply water can be added to meet the snowmelt load, controlled by a flow control valve. During peak heating loads, operation of the snowmelt system can be curtailed to conserve heat for building heating.

Adjustable speed pumps circulate the snowmelt loop to heat the sidewalk. The pump speed is varied to maintain a pressure difference set-point, which is reset based on snowmelt loop temperature drop.

Timbermill Shores Snowmelt System

Operation of the system can be initiated manually for an adjustable run time or fully automatically controlled by outside air temperature, subject to availability of heat from the district heating system.

District heating loop return water is circulated to the snowmelt heat exchanger with an adjustable speed pump [P-3], controlled to maintain the snowmelt loop supply temperature setpoint. Additional heat can be supplied by supplying district heat supply water through a control valve [TCV-1-1]

Adjustable speed pumps [P-1, P-2] circulate the snowmelt loop to heat the crosswalk and sidewalk surfaces. The pump speed is controlled to maintain a pressure differential set-point, which is reset based on snowmelt loop temperature drop.

Snowmelt Automatic Operation

Start system operation when enabled through the HMI and the outside air temperature remains below a start setpoint (40°F) for an adjustable time delay. (30 min). Stop operation when the outside air temperature remains above a stop setpoint (42°F) for an adjustable time delay. (30 min).

Snowmelt circulation pumps [P-1, P-2] are controlled in a lead-lag basis with alternating starts and pump speed control to operate one or both pumps to meet flow and pressure requirements. On activation, start the lead snowmelt circulation pump and ramp to a startup differential pressure [PE-2-2 minus PE-2-1] (10 psid). After a time delay (60 min) slowly reset the pressure differential set-point (5-20 psid) to maintain a snowmelt return temperature [TE-2-1] setpoint. Calculate the return temperature set-point based on supply temperature and design temperature drop:

SMR setpoint °F = SMS setpoint - 30 , 60°F min.

On activation, start the district heating return loop pump [P-3] and ramp to a startup speed (25%). After a time delay (2 min) begin modulating pump [P-3] speed to maintain a snowmelt supply temperature [TE-2-2] setpoint. Calculate the setpoint based on outside air temperature, subject to a load-shed temperature reset:

SMS setpoint °F = 80 + (load shed reset) ÷ (40 – OSA)* 1.2, 60°F min, 130°F max.

Monitor the district heating return temperature [TE-1-1] during P-3 startup, and record maximum temperature. Continue to monitor TE-1-1 while ramping up P-3 speed. Limit P-3 speed if TE-1-1 drops more than 10°F below the maximum temperature recorded during startup (indicating recirculation) and drops below 130°F.

If operation of P-3 alone fails to achieve SMS set-point, after a time delay (120 min), subject to a load shed override, begin modulating the control valve [TCV-1-1] to introduce district heating supply water as required to meet the SMS set-point. Continue to operate P-3 at maximum non-recirculation speed if [TE-1-1] > [SMS set-point]. Operate P-3 at minimum speed (25%) if [TE-1-1] < [SMS set-point].

Load Shed

Operation of the snowmelt system is subject to adequate heat availability from the district heating system. Operation of the snowmelt system is inhibited through the SCADA system if the district heating system is not operating.

The priority for the district heating system is building heating. Heat load for the snowmelt system can be curtailed when the heat is needed for buildings by sending a load shed reset value through the SCADA system to the snowmelt control. The reset can be calculated based on the ability of the district heating system to meet the supply temperature set-point.

Reset = 0 when DHS temp = set-point; (-50) when (DHS) = (set-point) -10°F

Inhibit use of supply water [TCV-1-1] when [(DHS) = (set-point) -5°F]

Manual Initiate / Boost

Successful operation of the snowmelt system requires the sidewalks be somewhat warm prior to initiation of the snowfall, because it takes several hours to warm up the system. Normally the automatic operation will be sufficient. However a timed manual initiation of the system prior to a forecast snowstorm could be used to make sure the system is already warm when it starts snowing. The operator could manually initiate snowmelt operation when the outside air is above the normal start temperature, with a time-out on the override start command. The snowmelt supply temperature could also be overridden by sending a positive value (+10°F) using the load shed reset function.

Failure Modes

Alarm and shut down snowmelt system if snowmelt supply temperature [TE-2-2] exceeds a high alarm setpoint. (140°F)

Alarm and shut down if snowmelt supply pressure [PE-2-2] exceeds a high pressure set-point. (90 psi)

Alarm if snowmelt return pressure [PE-2-2] is below a low pressure setpoint. (10 psi)

Alarm pumps are called to run and not running.