



**ALBERTA TRANSPORTATION
PEACE REGION (PEACE RIVER / HIGH LEVEL)
INSTRUMENTATION MONITORING RESULTS**

FALL 2020

SECTION C

SITE PH069-1: PEACE RIVER HOSPITAL

1. OBSERVATIONS

1.1 Field Program and Instrumentation Status

One slope inclinometer (SI-1) and three vibrating wire piezometers (VW10015, VW10016 and VW10019) were read at the Peace River Hospital site on October 11, 2020 by Mr. Niraj Regmi, G.I.T. and Mr. Long Le, both of Thurber Engineering Ltd.

The SI was read using an RST Digital Inclinometer probe with a 2 ft. wheelbase and a RST Pocket PC readout. Inclinometer reading depths were defined as per cable markings with respect to the top of the inclinometer casing. The vibrating wire piezometers were read using an RST VW2106 vibrating wire readout.

2. INTERPRETATION

2.1 General

SI plots for A and B directions are presented in Section D and are summarized below in Table PH069-1-1.

2.2 Zones of Movement

No new zones of movement were observed in SI-1 since the spring of 2020 readings.

2.3 Interpretation of Monitoring Results

SI-1 continued to show no discernible movement.

Vibrating wire piezometers VW10015 and VW10016 and VW10019 showed decreases in groundwater level of 0.01 m, 0.14 m, and 0.15 m, respectively, since the spring of 2020 readings. The piezometer readings are summarized in Table PH069-1-2, and are plotted in Figure PH069-1-1 in Section D.

3. RECOMMENDATIONS

3.1 Future Work

The instruments should be read again during the spring of 2021 program.

3.2 Instrumentation Repairs

No instruments need repair at this site.

**TABLE PH069-1-1
FALL 2020 – PEACE RIVER HOSPITAL
SLOPE INCLINOMETER INSTRUMENTATION READING SUMMARY**

Date Monitored: October 11, 2020

INSTRUMENT #	DATE INITIALIZED	TOTAL CUMULATIVE RESULTANT MOVEMENT SINCE INITIAL READING (mm)	MAXIMUM RATE OF MOVEMENT (mm/yr)	CURRENT STATUS	DATE OF PREVIOUS READING	INCREMENTAL MOVEMENT SINCE PREVIOUS READING (mm)	CURRENT RATE OF MOVEMENT (mm/yr)	CHANGE IN RATE OF MOVEMENT SINCE PREVIOUS READING (mm/yr)
SI-1	May 27, 2009	No discernible movement	N/A	Operational	June 9, 2020	N/A	N/A	N/A

Drawing 13351-PH069-1-1 in Section D shows the approximate location of SI-1, VW 10015, VW10016 and VW10019.

**TABLE PH069-1-2
FALL 2020 – PEACE RIVER HOSPITAL
VIBRATING WIRE PIEZOMETERS INSTRUMENTATION READING SUMMARY**

Date Monitored: October 11, 2020

INSTRUMENT	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEV. (m)	CURRENT GROUNDWATER ELEV. (m)	PREVIOUS GROUNDWATER ELEV. (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
VW10015	May 27, 2009	455.15	538.36	Operational	478.23 m on May 27, 2009 (60.13 mBGS)	473.75 (64.61 mBGS)	473.76 (64.60 mBGS)	-0.01
VW10016	May 27, 2009	459.71	538.35	Operational	486.47 m on May 27, 2009 (51.88 mBGS)	480.99 (57.36 mBGS)	481.13 (57.22 mBGS)	-0.14
VW10019	May 27, 2009	450.57	538.35	Operational	472.17 m on May 27, 2009 (66.18 mBGS)	471.34 (67.01 mBGS)	471.49 (66.86 mBGS)	-0.15

Drawing 13351-PH069-1-1 in Section D shows the approximate location of SI-1, VW 10015, VW10016 and VW10019.



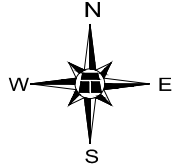
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**SECTION D
DATA PRESENTATION**

SITE PH069-1: PEACE RIVER HOSPITAL

H:\13000\13351 Geohazard Assessment - Peace River\High Level (CON0017602)\Drafting\2018\INST - SPRING\13351-PH069-1-1.dwg - Layout1 - Jul. 05. 2018



HWY 2

SI-1 / VW10015 / VW10016 / VW10019



101 AVE

68 STREET

PEACE RIVER HOSPITAL

HWY 743 (74 STREET)

LEGEND

 INSTRUMENTS



PEACE REGION (PEACE RIVER / HIGH LEVEL) 2018

**PH069-1: PEACE RIVER HOSPITAL
INSTRUMENT LOCATIONS**

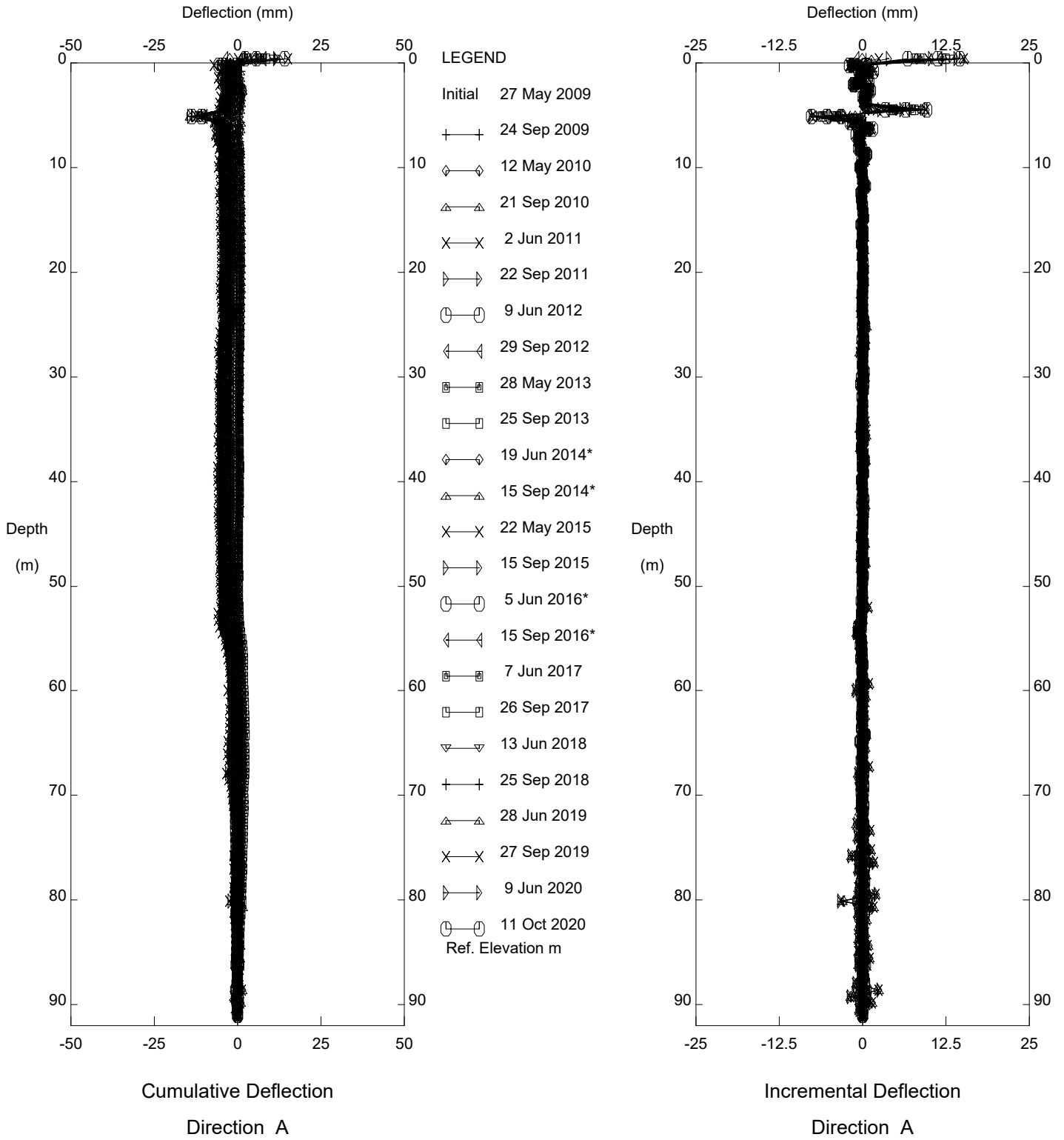
DWG No. 13351-PH069-1-1

DRAWN BY	ML
DESIGNED BY	BWN
APPROVED BY	DWP
SCALE	N.T.S.
DATE	JULY 2018
FILE No.	13351



THURBER ENGINEERING LTD.

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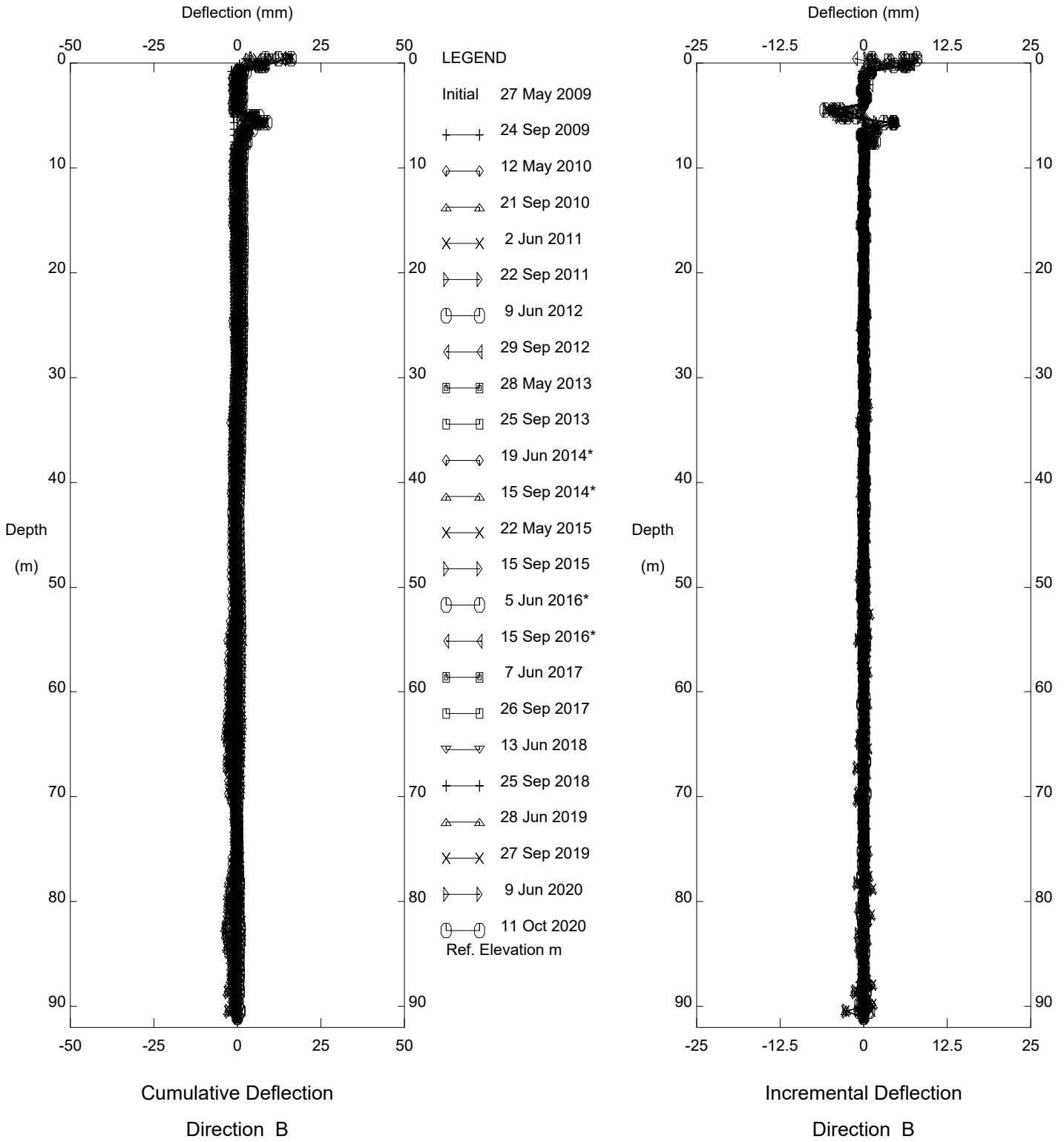


PH069-1 PEACE RIVER HOSPITAL, Inclinometer SI-1

Alberta Transportation

Sets marked * include zero shift and/or rotation corrections.

Thurber Engineering Ltd.



PH069-1 PEACE RIVER HOSPITAL, Inclinometer SI-1

Alberta Transportation

Sets marked * include zero shift and/or rotation corrections.

FIGURE PH069-1-1
PEACE RIVER HOSPITAL - VIBRATING WIRE PIEZOMETERS

