PROJECT REFERENCE NO.	SHEET NO.
B-4722B (38496.1.1)	2G-3

GEOTECHNICAL ENGINEER

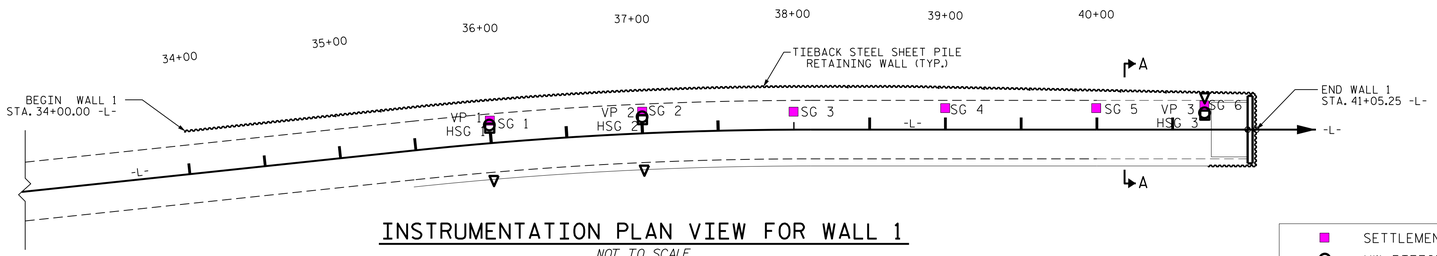
NORTH CAROLINA PROFESSIONAL SEAL 032171 ENGINEER JINYOUNG PARK

DocuSigned by: 1/8/2015

SIGNATURE DATE

ENGINEER

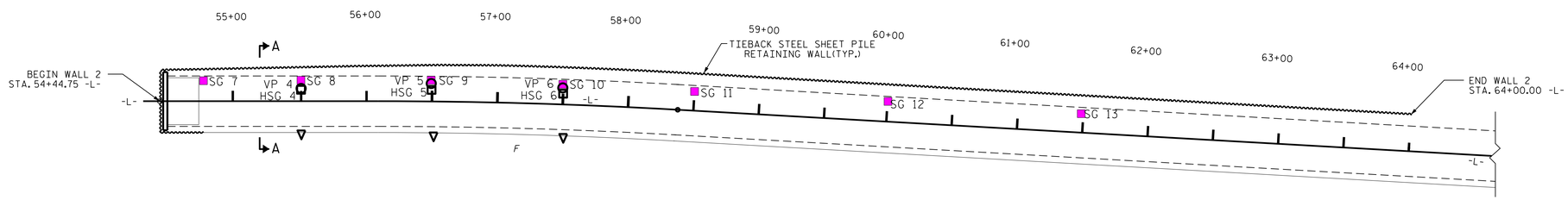
SIGNATURE DATE



INSTRUMENTATION PLAN VIEW FOR WALL 1

NOT TO SCALE

- SETTLEMENT GAUGE (SG)
- VW PIEZOMETER (VP)
- HYDRAULIC SETTLEMENT GAUGE (HSG)
- RESERVOIR FOR HSG



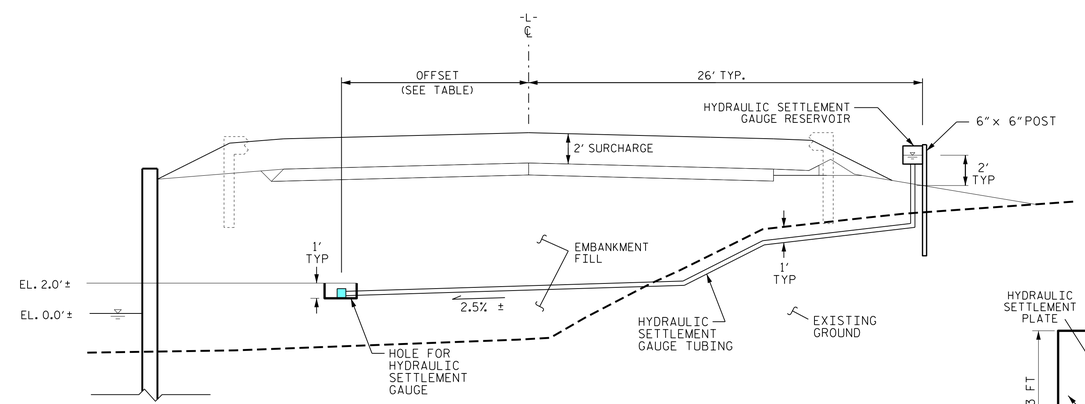
INSTRUMENTATION PLAN VIEW FOR WALL 2

NOT TO SCALE

HYDRAULIC SETTLEMENT GAUGES			
ID	STATION	OFFSET (FT)	APPROX. TUBE/CABLE LENGTH (FT)
HSG 1	36+00±	20± LT.	60.0
HSG 2	37+00±	20± LT.	60.0
HSG 3	40+75±	16± LT.	55.0
HSG 4	55+50±	17± LT.	55.0
HSG 5	56+50±	20± LT.	60.0
HSG 6	57+50±	20± LT.	60.0

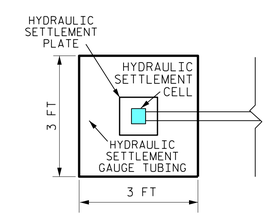
VW PIEZOMETERS				
ID	STATION	OFFSET (FT)	ELEVATION (FT)	MIN. CABLE LENGTH (FT)
VP 1	36+00±	22± LT.	-12.0±	130.0
VP 2	37+00±	22± LT.	-12.0±	130.0
VP 3	40+75±	18± LT.	-12.0±	80.0
VP 4	55+50±	19± LT.	-17.0±	190.0
VP 5	56+50±	22± LT.	-17.0±	90.0
VP 6	57+50±	22± LT.	-17.0±	190.0

SETTLEMENT GAUGES		
ID	STATION	OFFSET (FT)
SG 1	36+00±	24± LT.
SG 2	37+00±	24± LT.
SG 3	38+00±	24± LT.
SG 4	39+00±	24± LT.
SG 5	40+00±	21± LT.
SG 6	40+75±	20± LT.
SG 7	54+75±	20± LT.
SG 8	55+50±	21± LT.
SG 9	56+50±	23± LT.
SG 10	57+50±	24± LT.
SG 11	58+50±	24± LT.
SG 12	60+00±	24± LT.
SG 13	61+50±	24± LT.



HYDRAULIC SETTLEMENT GAUGE TYPICAL SECTION

NOT TO SCALE



HOLE FOR HYDRAULIC SETTLEMENT GAUGE TYPICAL PLAN VIEW

NOT TO SCALE

QUANTITIES	
EMBANKMENT SETTLEMENT GAUGES	13 EACH
VW PIEZOMETER	6 EACH
HYDRAULIC SETTLEMENT GAUGES	6 EACH

NOTES

1. FOR VW PIEZOMETERS (VP) AND HYDRAULIC SETTLEMENT GAUGES (HSG), SEE EMBANKMENT INSTRUMENTATION SPECIAL PROVISION.
2. FOR SETTLEMENT GAUGES, SEE STANDARD EMBANKMENT MONITORING DETAIL DRAWING (STANDARD DETAIL NO. 1804.01) AND EMBANKMENT SETTLEMENT GAUGES PROVISION.
3. PLACE STEEL/WOOD BASE FOR SETTLEMENT GAUGES AT ELEVATION 1.0 FT.

PREPARED BY: J. PARK	DATE: 1 / 2015
REVIEWED BY: J. BATTS	DATE: 1 / 2015

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

EMBANKMENT MONITORING INSTRUMENTATIONS

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		